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A Grammar of Ghomara Berber

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A Grammar of Ghomara Berber

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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 inferrabale from the translation gloss. Where visible only state distictions 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
DC	=	Deictic clitic
DIST	=	Distal postnominal clitic
DO	=	Direct object
EL	=	État libre
F	=	Feminine
FR.	=	French
FUT	=	**š**
I	=	Imperfective
IMP	=	Imperative
IMPF	=	Imperfect
IMPP	=	Imperfective particle **ka**-
INDEF	=	Indefinite pronoun

INTJ	=	Interjection
IO	=	Indirect object
EXST	=	Existential **kayen**
EA	=	État d'annexion
M	=	Masculine
MA	=	The element **ma**
NEG	=	Negation
ONM	=	Onomatopei
P	=	Perfective
PASS	=	Passive prefix / infix
PDO	=	Preverbal indicator of the direct object **t** / **d**
PF	=	Perfect
PL	=	Plural
PP	=	Passive participle
PR	=	Present relevance particle
PRES	=	Presentative particle
PRH	=	Pronominal head
PRX	=	Proximate
PST	=	Past marker
Q	=	Question particle **ka** / **waš**
REL	=	Berber relative marker
RF	=	Relative form
S	=	Singular
sp.	=	Species
SP.	=	Spanish
VOC	=	The vocative element **a**

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 *šš*elḥa 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),

[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 online[3].

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 Ɛṛuṣ), 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 Yaḥya Aɛṛab* (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 Yaḥya Aɛṛab*. 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

[3] 2008: http://www.scribd.com/doc/46042206/Ghomara-Berber-a-Brief-Grammatical-Survey-by-J-El-Hannouche
2010: http://www.scribd.com/doc/46039741/Arabic-Influence-in-Ghomara-Berber-by-J-El-Hannouche

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 *Iɛṛaḇen* 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 *Iɛṛaben*, 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 *Iɛṛaben* there are some lexical differences with the variant spoken in Beni Mensour (often they would refer to the variant spoken in *Isuḳa*, the biggest Berber speaking village in Beni Mensour). Such differences are **tawfiḳt** instead of **tafuḳt** 'sun' in *Iɛṛaben*, **aḳfeṭ** instead of **ayeffeṭ** 'cattle', **niḳnam** instead of **nuḳna** 'we', **diha** 'here' instead of **dha** 'here', but also different lexemes such as **sɣeyyu** instead of **ɣewweṯ** 'to scream'. Furthermore, there is a difference in the instrumental preposition with a pronominal suffix: **sis**- in Beni Mensour versus **iḏ**- in *Iɛṛaben*. The present study is essentially a grammar of the *Iɛṛaben* dialect, but where I know of dialectal differences these have been indicated.

1.6. Arabic influence

Arabic has influenced Ghomara Berber to a great extent. The lexicon and the grammar are profoundly influenced by Arabic. In the Swadesh 100 wordlist, 34% is Arabic whereas 66% is Berber. Only very few languages in the world have this kind of extreme borrowing of basic lexicon (Kossmann, 2013: 108). Among others the following Arabic etyma have been borrowed: 'who', 'what', 'not', 'all', 'two', 'skin', 'flesh', 'head', 'nose', 'liver', 'bite', 'night', 'star', 'rain', 'smoke', 'fire', 'red', 'green', 'yellow', 'hot'.

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:

fṛeq 'to separate, to divide'

	Aorist	**Perfective**	**Imperfective**
1S	*feṛq-ax*	*feṛq-ax*	*feṛṛq-ax*
2S	*t-feṛq-et*	*t-feṛq-et*	*t-feṛṛq-et*
3MS	*i-fṛeq*	*i-fṛeq*	*i-feṛṛeq*
3FS	*te-fṛeq*	*te-fṛeq*	*t-feṛṛeq*
1PL	*ne-fṛeq*	*ne-fṛeq*	*n-feṛṛeq*
2PL	*t-feṛq-em*	*t-feṛq-em*	*t-feṛṛq-em*
3PL	*feṛq-en*	*feṛq-en*	*feṛṛq-en*

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.

ʕṛeq ‘to sweat’

	Perfect	**Imperfect**
1S	*ʕṛeq-t*	*n-eʕṛeq*
2S	*ʕṛeq-t ~ti*	*d-eʕṛeq*
3MS	*ʕṛeq*	*y-eʕṛeq*
3FS	*ʕeṛq-eṯ*	*d-eʕṛeq*
1PL	*ʕṛeq-na*	*n-ʕeṛq-u*
2PL	*ʕṛeq-tum*	*d-ʕeṛq-u*
3PL	*ʕeṛq-u*	*i-ʕeṛq-u*

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 *šš*elḥa (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 *šš*elḥa. 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 **ɛṛeq** ‘to sweat’, **ɛṭeš** ‘to be thirsty’ **ḥšem** ‘to be ashamed’, **qṛa** ‘to learn, to read’ **ṭleb** ‘to ask for’ and **fleḥ** ‘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**-prefixed 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 **tfeṛṛež** ‘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 mḵ a ka-ṯe-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-tfeṛṛež* (p. 53)
3MS-begin:P IMPP-3MS:IMPF-watch
‘He began to watch.’

(3) *ka-y-tferrž-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 **fḥanna** ‘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, iɣems = 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 **ifeṛṛš = as, iɣeṭṭy = as** are used. Similarly, **azel** 'to run' was used up until recently by older speakers, but has now been replaced by **žerri** 'to run'. Another example of replacement is **ṣum** 'to fast' for **ẓum** 'to fast' which is still used by old people[4]. Another archaism is **mṭi** 'to eat lunch'. Many young and middle-aged people know this verb from the phrase **hala a mṭit** '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 **tɣedda** 'to eat lunch'. Examples of nouns are **aɣef** 'head' which is replaced by the borrowing **ḍḍmaɣ** '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 uḡḍi. i-nn = as: ʻšenni ɣa*

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-ɛebbi a ɛemmi ddiḇ ka qlaɛqlaɛ, ka ḥerrefḥerref?

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

[4] Note that **ẓum** 'to fast' is also of Arabic origin, but a much older loanword (see Kossmann & van den Boogert, 1997).

jackal, the roots of the leaves?

a ye-nn = as: *‘qayṯ- a fi-ya’* *i-nn = as:* *‘daḏa ɣa ne-ddi*

INTJ 3MS-say:P = 3S:IO do:AP-FS in-1S 3MS-say:P = 3S:IO now FUT 1S:IMPF-take

He said: ‘I was fooled’. He said: ‘Now I am going to take

qlaɛqlaɛ.’

roots

the roots.’

Another instance of conventionalised code-switching are negative oaths following **weḷḷa** ‘by God’. An example is (in italics):

(5) *i-nn = as:* *‘te-ḡḡa-t = tet* *ga-y* *meṛṛa* *t-ayeṭ,* *amella weḷḷa fi-ya*

3MS-say:P = 3S:IO 2S-do:P-2S = 3FS:DO in-1S time FS-other now:EL by.God in-1S

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

ma t-gewwez = a.’

NEG 2S:IMPF-pass = 3FS

fool me.’

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.

(6) *ka-y-dden* *u* *ka-y-qṛa*

IMPP-3MS:IMPF-call.prayer and IMPP-3MS:IMPF-read

‘He calls for prayer and he reads.’

(7) *ššelḥa ma ɛemmṛ-a de-nqteɛ,* *ššelḥa ɛemmr-a ma de-nqteɛ*

Berber NEG never-3FS 3FS:IMPF-stop Berber never-3FS NEG 3FS:IMPF-stop

‘Berber will never die, Berber will never die.’

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) *haḍ l-mus*
S:PRX DEF-knife
'this knife'

(9) *lmus = aḍ*
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

Chart 1 Simple Consonants[5]

	Lab	Interd	Alv	Post-Alv	Pal	Vel	Vel-Lbd	Uvu	Uvu Lbd	Phr	Lar
vcl. stop	**p**		**t**			**k**	**k^{w}**	**q**			**(ʔ)**
vcd. stop	**b**		**d**			**g**	**g^{w}**				
vcl. pha. stop			**ṭ**								
pha vcd. stop			**ḍ**								
vcl. fric.	**f**	**t̲**	**s**	**š**		**k̲**	**k̲^{w}**	**x**	**x^{w}**	**ḥ**	
vcl. phr. fric.			**ṣ**								
vcd. fric.	**b̲**	**d̲**	**z**	**ž**		**ḡ**	**ḡ^{w}**	**ɣ**	**ɣ^{w}**	**ɛ**	
vcd. phr. fric.		**d̲̣**	**ẓ**								
vcl. affr.				**č**							
vcd. affr.				**ǧ**							
approx.					**y**		**w**				**h**
tap			**r**								
pha. tap			**ṛ**								
lat. approx.			**l**								
pha.lat.approx.			**(ḷ)**								
nasal	**m**		**n**								

[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

Chart 2 Geminate Consonants

	Lab	Interd	Alv	Post-Alv	Pal	Vel	Vel-Lbd	Uvu	Uvu Lbd	Phr	Lar
vcl. stop	(**pp**)		**tt**			**kk**	**kk^{w}**	**qq**	**qq^{w}**		
vcd. stop	**bb**		**dd**			**gg**	**gg^{w}**				
phr. vcl. stop			**ṭṭ**								
phr. vcd. stop			**ḍḍ**								
vcl. fric.	**ff**		**ss**	**šš**		**xx**				**ḥḥ**	
vcl. phr. fric.			**ṣṣ**								
vcd. fric.			**zz**	(**žž**)		(**ḡḡ**)				**εε**	
phr. vcd. fric.		(**ḍ̲ḍ̲**)	**ẓẓ**								
approx.					**yy**		**ww**				**hh**
trill			**rr**								
phr. trill			**ṛṛ**								
lateral			**ll**								
phr. lateral			(**l̩l̩**)								
nasal	**mm**		**nn**								

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 **b̲**, **t̲**, **d̲**, **ḍ̲**, **k̲**, **k̲^{w}**, **ḡ** and **ḡ^{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 **ḡḡ** which is only attested in the verb with the same form **ḡḡ** '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:

	Aorist	**Imperfective**		
w > *gg*^{w}	*zwir*	*zuggir*	*/zegg^{w}ir/*	‘precede’
ɣ > *qq*	*ɣems*	*qqems* (~ *ɣems*)		‘cover’

Below we will discuss each consonant separately. The major topics are: the status of the spirantised consontants, the status of the **ǧ** 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’ *lpeɣṛiṛ* ‘pan cake’, *ṭṭawpa* ‘rat’.

pp [IPA: p:]

This consonant is only found in medial position.

čappu ‘cap’

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

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

beṛṛa	‘outside’
baqi	‘still’
bezzaf	‘many’
beḵri	‘early’
berreḥ	‘call!’
bellarež	‘stork’
baɛṭiyaṯna	‘between us’
beššṭen	‘they trampled’
berrḏax	‘I made cold’

baḇa	‘father’

The few exceptions with initial **ḇ** are given below. These examples show that there is, marginally, a phonemic opposition in this position.

ḇeddax	‘I stood up’
ḇeẓḏax ~ beẓḏax	‘I urinated’

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

lbaṭil	‘boat’
lbir	‘well’
lbiṯ	‘room’
lbuṛka	‘pond’
lbettix	‘melon’
lbibiru	‘feeding bottle’
itbaɛbaɛ	‘it bleats’
itbeḷbaḷ	‘he cuddles’
tbuweh	‘it mooed’

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

llḇayṭ	‘great-grandchildren’
llḇač	‘sail, wind from the north’
itḇerraḏ	‘he makes cold’
ketḇax	‘I wrote’
tḇaɛ	‘follow’

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

first member of a consonant cluster:

ddebliž	‘bracelet’	vs.
lǧeḇli	‘Jebli man’	

ssḇibṭaṯ	‘little shoes’	vs.
teḇṭut	‘you divided’	

ṭṭebṣil	‘plate’	vs.
taḇṣelt	‘onion’	

second member of a consonant cluster:

ssbiɣa	‘paint’	vs.
ssḇeɛ	‘lion’	

teqbex	‘I pierced’	vs.
taqḇilt	‘village’	

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

intervocalic ḇ

iɛraḇen	‘village of Iraben’
taḇekkiwt	‘worm’
taḇeṛquqt	‘prune’
taḇeṛṛiḵt	‘sheep’
tektaḇax	‘I am writing’

intervocalic b

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

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

qelleḇ	‘to try’
iheṛreḇ	‘he made flee’
itseyyaḇ	‘he throws’
ixṭeḇ	‘he asks to marry’
aḏerraḇ	‘stone’
lǧumb	‘side’

bb [IPA: bː]

bbax ‘I took’; *lḥebb* ‘wheat’

f [IPA: f]
fawen ‘they are in the morning’; *afus* ‘hand’; *tawnaft* ‘bread’

ff [IPA: f:]
ffuɣ /ffeɣ^{w}/ ‘get out’; *ayeffeṭ* ‘cattle’; *afaff* ‘nipple’

m [IPA: m]
mṭel ‘bury’; *aman* ‘water’; *aḡelzim* ‘pickaxe’

mm [IPA: m:]
mmuṯ ‘die!’; *ikemmeṭ* ‘he burns’; *ssemm* ‘poison’

1.2. Interdental and alveolar consonants

Distribution of t [IPA: t] and ṯ [IPA: θ]
Word-initially only the plosive pronunciation **t** occurs. In word-medial position both **ṯ** 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 **ṯ** 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’
tameṭṭuṯ	‘woman’
tammart	‘beard’
tawfalt	‘egg’

medial t

iktebḇ	‘he wrote’
isten	‘it barks’
fteḥ	‘open!’
atay	‘tea’
ameḵter	‘long wooden stick of the plough’
kafatira	‘kettle’

medial ṯ

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

aṯebban	‘trousers’
tlaṯa	‘three’
ttiṯun	‘they go’
ayeṯma	‘brothers’
lexwaṯem	‘rings’
sekṯax	‘I hushed’
meṯqeḇ	‘chisel’
lemṯaɛ	‘property’
tamṯunt	‘yeast’
ɛemmṯiwaṯ	‘aunts’
tafṯilt	‘fuse’

final t

taqḇilt	‘tribe’
tiḏert	‘ear (of wheat)’
taferkiwt	‘small piece of land’
tawnaft	‘baked bread’
taṣefṛawt	‘yellow’
tafirast	‘pear’
taɣezdist	‘rib’

final t̲

lbiṯ	‘room’
lḥanuṯ	‘shop’
taslaṯ	‘bride’
tameṭṭuṯ	‘women’
taḡayzuṯ	‘calve’
muqqṛeṯ	‘big (F./PL)
taneḇduṯ	‘mowing season’
itmettaṯ	‘he dies/is dying’

Post-vocalic final t

In a few cases **t** appears word-finally and postvocalically (cf. III.1.3.2.)[7].

tarḇat	‘girl’
tafriwet	‘wing’

[7] Final -**t** following a vowel could have developped from geminate final -**tt** (cf. Penchoen, 1973: 13-14).

taḡīḡet	‘tree’
taqahat	‘crow’
tilket	‘louse’
taḥebbit	‘grain’
taḏuṭṭ	‘wool’

In the following two Arabic-morphology nouns, which form the plural by inserting a vowel before the final consonant, **t** changes to **ṯ** in final position:

SG	PL	
lqent	*leqnuṯ*	‘corner’
ššent	*lešnaṯ*	‘yoke for donkeys’

t > h ~ 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 ~ 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- ~ t-**.

hetteftaf ~ tteftaf (< *tetteftaf*)	‘she is searching’
hteqqlet ~ teqqlet (<*tteqqlet*)	‘you return’
hettara ~ ttara (< *tettara*)	‘she writes’

Before a **tt- ~ t-** which is part of the verb stem.

hettru ~ ttru (<*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:

saɛa tedda	‘and then she went’
amḵ a hedda (< tedda)	‘when she went’
heqqim	‘she sat’

[8] Lafkioui (2009: 109) notes for Senhaja de Srair: ‘*L’elément ṯ(e)- est en variation libre avec les formes spirantisées h(e)- et Ø- ches 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 **t** in the Aorist disappear after a non-real marker (cf. IV.8.1.1.3.), e.g.

š a ddu (< š a teddu)	'she will go.'
š a ddut (< š a teddut)	'you will go.'

The direct object pronoun **aṯ** has a variant **ah** when preceding deictic clitic **d / id** (cf. III.11.2.1.).

tt [IPA: t:]
tthawed̠ 'talk (to each other)!'; *netta* 'he'; *afatt* 'branch'

ṭ [IPA: tˤ]
aṭil 'grapes'; *aṭg̃am* 'yesterday'; *ikemmeṭ* 'to burn'

There is a tendency in some speakers' speech for **ṭ** to become **d̠**, after a vowel or a voiced consonant, for instance:

ayeffeṭ > ayeffed̠	'cattle'
lmuṭaɛ > lmud̠aɛ	'to a place'
baɛṭem > baɛd̠em	'to each other'
mriṭ > mrid̠	'ill'

ṭṭ [IPA: tˤ:]
ṭṭmaṛ 'date'; *ineṭṭar* 'he flies'; *ṭṭeṭṭ* 'suck'

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

Initial position
Initial **d** and **d̠** 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'
deɣdak̠	'earlier'
daʔimen	'always'
dhad̠inet̠	'here'
das	'there'

dar	‘to’
deggax	‘I do’
dleḡ	‘rub!’
dafeɛ	‘defend!’
derreɛ	‘embrace!’

initial ḏ

ḏrix	‘I passed’

Medial position

Medial **d** appears in consonant clusters as well as intervocalically. After **r** and **n** mostly **d** is found, although after **r** there are a few exceptions where **d** and **ḏ** are in free variation. Intervocalic **d** is rare, one normally finds **ḏ**. 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 **ḏ** appears in postvocalic position. However, there are a few exceptions.

medial d adjacent to a consonant

deɣdaḵ	‘earlier’
meɛdum	‘ill’
lferdi	‘gun’
lkebda	‘liver’
isardunen	‘mules’
issendaw	‘he churns’
ɛdel	‘make!’
itdeḡdaḡ	‘he crushes’
zdu	‘under’
ageždir	‘green lizard’

intervocalic d

lbidu	‘bucket’
abdidu	‘small bucket’
lebradeɛ	‘saddles’
tamezgida (~ tamezgiḏa)	‘mosque’
adideḡ	‘mortar’

medial ḏ adjacent to a consonant

aḡḏi	‘jackal’

tamḏa	‘pond’
qḏim	‘old’
aḏfel	‘snow’
aḏɣes	‘colostrum’
lqaɛḏa	‘part of the plough’
tafḏent	‘toe’
ttaẓḏax	‘I pee’

Intervocalic ḏ

thaḏin	‘this one (F.)’
taxaḏemt	‘ring’
mnaḏem	‘man/person’
taḏunt	‘fat’
aḏem	‘blood’
iḏes	‘with hem/her’
tamuḏa	‘sow’

final d

issend	‘he churned’
aɣižd	‘billy goat’
aṭuḡd	‘finger’
ṣṣehd	‘heat’
lǧeld	‘skin’
lqird	‘monkey’

final ḏ

lberraḏ	‘tea pot’
uhaḏ	‘this one (msc.)’
iḥseḏ	‘he envied’
ɛiḏ	‘still’
seqqeḏ	‘release (goats)’
iheddeḏ	‘he threatens’
aɣeḏ	‘ash’
elqruḏ	‘monkeys’
leǧluḏ	‘skins’
ažebbaḏ	‘elastic’
afuḏ	‘knee’

There are a few exceptions, which have **d** postvocalically.

lwalid	‘father’
zzrud (~ *zzruḏ*)	‘feast meals’
l?aždad	‘ancestors’

dd [IPA: d:]
dder ‘be alive’; *medden* ‘people’; *lḥedd* ‘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’

ḏ [IPA: ðˤ]
The consonant **ḏ** is very rare. In certain cases it is a free variant of **ṭ**. In words such as *ayeṛḏay* ‘mouse’ and *iẓẓaḏ* ‘he grinds’ (I) it could be a result of the spread of pharyngealisation. An example is:
taḏuṭṭ ‘wool’

In some words **ḏ** and **ḍ** are in free variation, for example:
ḥḏi ~ *ḥḍi* ‘keep an eye on’
ṛṛemḏan - *ṛṛemḍan* ‘ramadan’

ḏḏ [IPA: ðːˤ]
ḏḏ is very rare. Apart from **ḥeḏḏi** ~ **ḥeḍḍi** ‘he keeps an eye on’ which are in free variation, only the following noun and verb in our corpus have this geminate consonant.
tiḏḏa ‘leech’; *meḏḏi* ‘to sharpen’

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

ḍḍ [IPA: dːˤ]
This phoneme is restricted to three instances in our corpus:
ḍḍḇaɛ ‘jackal’; *feḍḍi* ‘finish!’; *lɣeḍḍaṛ* ‘traitor’

n [IPA: n]
anas ‘sparkle’; *afenṭuṭ* ‘lip’; *iḥessen* ‘he shaved’

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

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

ss [IPA: sː]
assa ‘nowadays’; *iḥesseḇ* ‘he counts’; *iɛiss* ‘to guard’

ṣ [IPA: sˤ]
ṣum ‘fast!’; *ṣuṣef* ‘spit!’; *ixelleṣ* ‘he payed’

ṣṣ [IPA: sːˤ]
ṣṣebbaṭ ‘shoes’; *aneṣṣaḇ* ‘piece of iron on which bait is put’; *lgeṣṣ* ‘big floor’

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

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

ẓ [IPA: zˤ]
ẓum ‘fast!’; *aẓaṛ* ‘root’; *illuẓ* ‘he is hungry’

ẓẓ [IPA: zːˤ]
ifeẓẓeṛ ‘he cut open’; *iẓẓaṛ* ‘he sees’; *afaẓẓ* ‘edible part of doum leaf’

1.3. Post-alveolar consonants

š [IPA: ʃ]
ašqef ‘snail shell’; *taxšeḇt* ‘trap’; *iɛaš* ‘he lived’

šš [IPA: ʃː]
ššɛaṛ ‘hair’; *šš* ‘eat!’; *iṛešš* ‘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'.

P	**I**	
iḵšem	'he entered'	*ikečem* 'he always enters'

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

čeppuxa 'balloon' *aḥečun* 'vagina', *llḇač* '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:

lčaḇula	'shed'
lčuppa	'lollipop'
lčimineyya	'chimney'
lčeṛqun	'filth on the skin'

ž [IPA: ʒ]
ižni 'he picked'; *lḥaža* 'thing'; *afeṛṛuž* 'rooster'

The phoneme **ž** changes to **ǧ** when following **l**, **n** or **r**. With one exception in our corpus, **ž** is always realised as **ǧ** following the Arabic article **l**. The article does not assimilate to the consonant[9]. Examples of **ǧ** are:

lǧeɛda	'carrot'
lǧeld	'skin'
lǧmel	'camel'

[9] In many varities of Moroccan Arabic the article assimilates to the **žž** (cf. Heath 2002: 169).

lğawf	‘breast’
lbelğ	‘lock’
nğeṛ	‘make furniture’
lxurğa	‘exit’

There are a few exceptions, especially after **r** and very rarely after **l** and **n**[10].

lžaw	‘weather’
nnžem	‘star’
tageržumt	‘Adam’s apple’
lxurža (~ lxurğa)	‘exit’
lmeṛža	‘swamp’

We also find a few instances of **ğ** following **ḥ** and **w**[11].

ameḥğuṛ (PL: *lmḥažeṛ*)	‘orphan’
zzawğa (~ *zzawža*)	‘a pair of animals’

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

SG		PL	
lğumb	‘side’	*ležnaḇ*	‘sides’
lğlaleḇ	‘djellabas’	*ažellaḇ*	‘djellaba’
lğim	‘pocket’	*ležyam*	‘pockets’
amenğuṛ	‘chair’	*lemnažeṛ*	‘chairs’
lğduḏ	‘ancestors’	*žeddi*	‘my grandfather’

An unexplained occurrence of **ğ** is found in the verb **ğeṛğeṛ** ‘glide/drag along the ground’ which corresponds to **žeṛžeṛ** ‘glide/drag along the ground’ in Moroccan Arabic (Harrell, 1966:236). The initial **ğ** could be a geminate counterpart of **ž**. The second second **ğ** follows an **r**. Another case is the collective noun **lğuğeṯ** ‘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 **ğ** can be explained as a realisation of underlying **žy**.

[10] Compare Anjra Arabic (Vicente 2000:45) for a similar situation.

[11] In Chefchaouen Arabic **ğ** also occurs when following **n**, **d**, **ḥ**, **ɣ**, **ɛ**, **š**, **f** (Moscoso, 2002:43).

There is free variation between **ž** and **ǧ** in a limited number of instances, for example:

tɛežb as ~ *tɛeǧb as* 'he liked her'

ǧ [IPA: dʒ]
iǧun 'he has eaten enough'; *weǧeḏ* 'prepare'; *iǧ* 'he left'

Some instances of **ǧ** correspond to **žž**. In the first place, the verb **ǧ** '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*	*ṣṣḇeḥ*
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**	
teǧat 'you left'	*ižž*	'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).

keǧi(n)	'you'	*kežž*	'you'

In Arabic loans, Ghomara **ǧ** often corresponds to **žž** in other variants of Moroccan Arabic, e.g.

Ghomara	Mar. Arab.		
leqmiǧa	*leqmižža*	(Harrell, 1966:109)	'shirt'
lḥaǧ	*lḥažž*	(Harrell, 1966:251)	'pilgrim'
tuǧaṛ	*tužžaṛ*	(Harrell, 1966:163)	'merchant, wealthy man'

In the following verb pairs **ž** and **ǧ** 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 **ǧ**[12].

P		**I**	
wžeḏ	'it is prepared'	*iweǧeḏ*	'he prepares'
ižreḥ	'he is injured'	*iǧruḥ*	'he is always injured'
ižmeɛ	'he gathered'	*iǧmuɛ*	'he gathers'

The consonant **tž** in for example the **t**- derived form **tžewwi** 'be wrapped up' is phonetically the same as **ǧ** but is not considered the same consonant.

There is no length difference between the allophone **ǧ** of **ž** and the phoneme **ǧ** which corresponds to **žž** in other variants of Moroccan Arabic[13]. Therefore there are two phonemes: **ž** and **ǧ**.

We found only one invariable instance of **žž** in our corpus (IPA: ʒː] which is not the result of deaffrication of **ǧ**, namely **ḇežžeṭ** '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'; *berrḏax* 'I froze'; *taḇerriwt* 'animal dropping'

ṛ [IPA: rˤ]
ṛebbi 'raise!'; *lešfaṛ* (*n ṭiwan*) 'eyelids'; *ameṛ* 'send'

ṛṛ [IPA: rːˤ]
ṛṛmel 'sand'; *seṛṛḏen* 'they sent'; *aḇeṛṛey* 'ram'

[12] This is not the result of an assimilation of imperfective **tt** ~ **t** with **ž**. This is a regular morphological Imperfective formation which geminates the first consonant and inserts and **u** before the final consonant.
[13] El Hannouche's data show that there are more exceptions in Amṭiqan with regards to the **ž**. In his texts (2010:177-242) we find for example **lželd**, **lžemɛa**, **lžiran**, but also **(e)lǧri**. Furthermore, we find **amenžur** (273) and **nžum** (65). The phoneme **ǧ** is never realised as **žž** as in **aheǧal** (65), **keǧ** (113) and **aǧaṛ** (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’
tilḵaman ~ *tirḵaman*	‘kind of spinach’
pulpu ~ *purpu*	‘octopus’ (< Spanish)

ll [IPA: l:]
lluẓ ‘be hungry!’; *mellḵen* ‘they marry’; *ggull* ‘swear’

The pharyngealised lateral **ḷ [IPA: lˤ]** does not occur on its own in non-pharyngealised contexts. The geminate **ḷḷ [IPA: l:ˤ]** is only found in words containing **aḷḷa** ‘God’ such as **staɣfiṛuḷḷa** ‘may God forgive’, **weḷḷa** ‘I swear’ and **yaḷḷa** ‘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’
kuɛballa	‘female jackal’
kursi	‘chair’
kamlin	‘all (PL)’
kreh	‘hate!’
keği	‘you (M:SG)’
kerkeḇ	‘roll!’

initial ḵ

ḵma	‘my brother’
ḵra	‘some’
ḵrez	‘plough!’

k̲errek̲	‘lie!’

In word-medial environments, both **k** and **k̲** can occur, both intervocalically and in pre- and postconsonantal position, for example:

medial k

tilket	‘louse’
ilkem	‘he entered’
tiskert	‘garlic’
škun	‘who’
tirkila	‘bitches’
muškil	‘problem’
akeṛkuṛ	‘stone heap’
saket̲	‘quiet’
akeḥlaw	‘black (person)’

medial k̲

melk̲en	‘they married’
tilk̲aman	‘type of spinach’
ssk̲emṭ-awet̲	‘burn!’ (PL)
ak̲enniw	‘twins’
tafuk̲t	‘sun’
lmak̲la	‘food’
ak̲al	‘soil’
bek̲ri	‘early’
ak̲mez	‘nail’
ak̲emmar	‘face’
imuk̲ar	‘thieves’

In word-final position, **k̲** occurs after a vowel (including schwa) and **k** after a consonant. A singular - plural pair like **lmilk** ‘possession’ **amlak̲** ‘posessions’ shows this alternation.

final k

ṭṭaḥk	‘laughter’
ifk	‘he gave’
iwešk	‘he got lost’
aṭužk	‘male partridge’
sselk	‘iron wire’

There are a few exceptions in our corpus with final postvocalic **k**:

lplaṣṭik	‘plastic’
hak	‘here!’

final k̲

deɣdak̲	‘earlier’
lmalik̲	‘king’
nnek̲	‘yours’
itk̲erak̲	‘he lies’
haḏik̲	‘that’
ašrik̲	‘farmer’s assistant’
aḇeddik̲	‘rooster’

kʷ [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).

k̲ʷ [xʷ]
Labialised **k̲ʷ** is found, among others, in **tak̲ʷmamt** ‘muzzle’ and the Aorist of the verb **ak̲ur** (/ak̲ʷer/) ‘steal’.

kk [IPA: k:]
Geminate **kk** stands in morphophonological opposition to **k** in **ilkem** ‘he arrived’ - **ilekkem** ‘he arrives’ as well as to **k̲**, e.g. in **ik̲nes** ‘he argued’ - **ikknes** ‘he argues’.
ikkrez ‘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-awet̲** /kkʷer-awet̲/ ‘get up!’ (PL) and **kkus** /kkʷes/ ‘remove!’ - **ukks-awet̲** /kkʷs-awet̲/ ‘remove!’ (PL).

Distribution of g [IPA: g] and ḡ [IPA: ɣ]
Like **k** and **k̲**, the consonants **g** and **ḡ** have front-velar to mid-velar pronunciation. The consonant **ḡ** therefore has a different pronunciation from **ḡ** 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 **ṭ** and **ẓ**, e.g. **aṭgam** ~ **aṭḡam** ‘yesterday’ and **taẓga** ~ **taẓḡa** ‘forest’.

medial g

targa	‘canal’
angi	‘rain water’
lgebṣ	‘gypsum’
azgazneṭ (~ *azg^{w}azneṭ*)	‘two years ago’
imezgan	‘ears’
tageržumt	‘adam’s apple’
agamgam	‘big rock’
lemnagež	‘earrings’
ngi	‘push!’
ageyyaṛ	‘tree stump’

medial ḡ

aḡḏi	‘jackal’
aḡṭiṭ	‘bird’
taḡiḡet	‘tree’
aḡellu (*awellu*)	‘plough’
taḡursa	‘ploughshare’
aṭuḡd	‘finger’
taḡnawt	‘pumpkin’

asegnu	‘clouds’

The noun **agellu** ‘plough’ has a free variant **awellu**. It is reported by informants that in Beni Mensour the noun **tagiget** ‘tree’ is pronounced **tawiget**.

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

lbergag	‘traitor’
izegzeg	‘it mated’
čerrag	‘tear apart!’
sennig	‘above’
werg	‘dream’
lferg	‘swarm of birds’

final ḡ

ideḡdeḡ	‘he crushed’
nṭeḡ	‘fly!’
amezzuḡ	‘ear’
iḇzeḡ	‘he moisted’
iẓẓeḡ	‘he milked!’
adideḡ	‘mortar’
afraḡ	‘fence’
azzuḡ	‘wetness’

g^{w} [IPA: g^{w}]

This consonant is among others found in the diminutive noun **tag^{w}sisert** ‘small downwards slope’ and in **ag^{w}laf** ‘bee swarm’.

ḡ^{w} [IPA: ɣ^{w}]

This consonant is found in the Aorist verb form **neẓẓuḡ** (/neẓẓeḡ^{w}/) ‘we milked’ and in the Aorist form **nsaḡum** (/nsaḡ^{w}em/) ‘we will wait’.

gg [IPA: g:]

In verbs there is a morphophonological opposition between **g** - **gg** as in **ingi** ‘he pushed’ and **ineggi** ‘he pushes’. cf. also **iggez** ‘he descended’.

gg^{w} [IPA: g:^{w}]
This shows up in **inugg** (/inegg^{w}/) 'it is cooking' where it is the geminate of **w**, and also in the Aorist form **gguz** (/gg^{w}ez /) 'descend!'.

ḡḡ [IPA: ɣɣ]
There is one instance of geminate **ḡḡ** in Ghomara. The **ḡḡ** in this word can become **ww**, *teḡḡet* > *tewwet* 'you did'. This consonant does not have a labialised counterpart.
ḡḡ 'do, make'

Lenition
In some verbs and nouns the consonant **gg^{w}** and **gg** are in free variation with **ḡ** and **k̲** intervocalically. For example:

aggez ~ *uggez* 'recognise!'	> *š a y nuḡuz / š a y nuk̲ez*	'we will recognise him.'
gguz /gg^{w}ez/ 'go down!'	> *ss-ugez / ss-uk̲ez*	'make go down!'
tiggura ~ *tiḡura*		'doors'

1.6. Semi-vowels

y [IPA: j]
ayaw 'grandchild'; *taryalt* 'basket'; *amaẓay* 'canine tooth'

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

yuḡel ~ *iwḡel*	'he hung'
yuk̲i (*yuk̲a*) ~ *iwk̲a*	'he crossed (the water)'

yy [IPA: j:]
The semi-vowel **yy** is only found in word-medial position.
seyyeb̲ 'throw!' ; *keyyel* 'weigh!'

w [IPA: w]
weṛṛek̲ 'lie down!'; *ittawi* 'he brings'; *aḡnaw* 'big pumpkin'

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

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:

nuɣel ~ *newɣel*	‘we are trapped.’
ittewsir ~ *ittusir*	‘he is becoming old’
lewqiṯ ~ *luqiṯ*	‘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.

Aorist	**Imperfective**	
ssku	*sskaw*	‘to dry’
ssnu	*ssnaw*	‘to cook’
sseḥmu	*sseḥmaw*	‘to make hot’

ssani	*ssanay*	'to make/let mount'
ssfi	*ssfay*	'to fester, to overflow'

There is free variation between **yu** and **iw** when the **i**- subject prefix and **u** collide, for example:

yuf ~ iwf	'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 **k̲** (IPA: [x]).
ixebbeɛ 'he has stored'; *nnexla* 'date palm tree'; *fsex* 'untie!'

xʷ [IPA: χʷ]
This consonant appears only in /taxʷest/ which has realisations [taxust] and [taʷxest] and in **taxʷṛaft** 'riddle, story'.

xx [IPA: **χː**]
taxxunt 'ass'; *aduxxan* 'chimney'; *lfexx* 'bird trap'

ɣ [IPA: ʁ]
The consonant **ɣ** is a back-velar fricative, tending towards the uvular domain. It is never confused with the velar fricative **g̲** (IPA: [ɣ]).This consonant is in morphophonological opposition to **qq**, e.g. in the verb **iɣṛes** 'he slaughtered' - **iqqṛes** 'he slaughters'.
ɣṛes 'slaughter!'; *aḏɣes* 'colostrum'; *iḏeɣ* 'heap of grain'

ɣʷ [IPA: ʁʷ]
A number of nouns exist that have labialised **ɣʷ**. It is not found in initial position.
tizɣʷal 'ladles'; *ffuɣ* (/ffeɣʷ/) 'go out!'

q [IPA: q]
quṛṛayes 'type of insect'; *aqezzun* 'dog puppy'; *felleq* 'cut in two pieces!'

qq [IPA: qː]
iqqṛes 'he slaughters'; *taweqqaft* 'door jamb'; *lḥeqq* 'right'

qqʷ [IPA: qːʷ]
This phoneme occurs in the adjective 'be big', e.g. masculine **meqquṛ** /meqqʷeṛ/,feminine/plural **muqqṛeṯ** /meqqʷṛeṯ/. Furthermore, the Aorist of a number of verbs have **qqʷ** e.g. **qqul** /qqʷel/ 'return!' **uqql-aweṯ** /qqʷl-aweṯ/ 'return!' (PL) and **qqun** /qqʷen/ 'tie!' **uqqn-aweṯ** /qqʷn-aweṯ/ 'tie!' (PL).

1.8. Pharyngeal and laryngeal consonants

ɛ [IPA: ʕ]
ɛuryan 'naked'; *taɛeddist* 'belly'; *ixelleɛ* 'he preserved meat'

ɛɛ [IPA: ʕː]
This consonant is not found in initial or final position.
beɛɛeḏ 'go away!'; *aḇeɛɛiš* 'lamb'; *ṛeɛɛeš* 'make shiver!'

ḥ [IPA: ħ]
ḥenni 'stoop!'; *aḥenṭwil* 'tall man'; *ṛṛwaḥ* 'air'

ḥḥ [IPA: ħħ]
This consonant is not found in initial or final position.
imeḥḥa 'he erases'; *seḥḥun* 'they get well'

h [IPA: h]
heṛṛeḇ 'make flee!'; *taheğalt* 'widow'; *neddeh* 'drive, guide!'

hh [IPA: hː]
This consonant is not found in initial or final position.
ifehhem 'he explains/makes understand' *dehheṛ* 'make appear!' *ṭehheṛ* '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, 2010:49-59). Geminates are considered monophonemic as they cannot be split up by schwa insertion. In the first example **qq** can not be split by schwa as would be expected if it behaved as two consonants (compare **ḵešmen** 'they entered').

qqln > *qqlen* (**qeqlen*) '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.

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:

Pre-pausal final		**Non-final**	
ṭaḏuṭ	'wool'	*taḏuṭṭ aḏ*	'this wool'
tamaṭuṭ	'dirty woman'	*tamaṭuṭṭ ahen*	'that dirty woman'
iṭeṭ	'He sucks (breast).'	*iṭṭeṭṭ ahen*	'He sucks them.'
š a s in	'He will say to him.'	*šw a s inna?*	'What did he say to him?'
iggul	'he swore'	*iggull as*	'He swore for him.'
ka-yɛis	'he guards'	*ka-yɛissu*	'they guard'
iṛeš	'he strews'	*iṛešš ahen*	'he strews them (the water)'

[14] Sequences of three homophonous consonants are not allowed. The three consonants are reduced to two e.g. **xeffef** 'be quick, be light' > **txeffet** '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 tendancy 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 **d̲d̲**, **k̲**^{w} et **ḡ**^{w} and **ḡḡ** are very rare. C**ḍ** is not attested):

Initial position	**Medial position**	**Final position**
b - b̲	*b - b̲*	*Cb - Vb̲*
t	*t - t̲*	*Ct - Vt̲*
d - (d̲)	*d - d̲*	*Cd - Vd̲*
ḍ	*ḍ - d̲̣*	*(X - Vd̲̣)*
k - k̲	*k - k̲*	*Ck - Vk̲*
g	*g - ḡ*	*Cg - Vḡ (g)*

1.11. Spread of pharyngealisation

The consonants **t**,**d**, **s**, **z**, **r**, **l** have pharyngealised counterparts **ṭ**, **ḍ**, **ṣ**, **ẓ**, **ṛ**, and marginally **ḷ**. The geminate counterparts of these pharyngealised phonemes are **ṭṭ**, **ḍḍ**, **ṣṣ**, **ẓẓ**, **ṛṛ** 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	>	[lˤbˤɑtˤelˤ]	‘boat’
ṭṭažin	>	[tːˤɑžˤenˤ]	‘tajine’
ayeffeṭ	>	[ayˤəfːˤətˤ]	‘cattle’
taẓuxt	>	[tˤɑzˤoxˤtˤ]	‘milk’
tamelẓiṯ	>	[tˤɑmˤəlˤzˤiṯˤ]	‘type of plant’
alaẓen	>	[alˤɑzˤən]	‘tomorrow’
iṣeṭṭuḥen	>	[isˤətːˤoḥənˤ]	‘sticks’

iḥeṣṣel	>	[iħəsːˤəlˤ]	‘he falls’
ikemmeṭ	>	[ikˤəmːˤətˤ]	‘it burns’

Pharyngealisation that spreads to a clitic:

iqqṛ as	>	[iqːrˤ ɑsˤ]	‘he tells him/her’
šebbṛan as	>	[šˤəbːˤrˤɑnˤ ɑsˤ]	‘they held for him’

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

afeṛṛuž aḏ	>	[afˤəṛːožˤ ɑḏˤ]	‘this rooster’
ṛṛḇiɛ aḏ	>	[ṛːˤḇˤeɛ aḏ]	‘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

close	i		u
mid		*e*	
open		*a*	

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

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

tasaft	‘chestnut tree’
tasift	‘small river’
taslaṯ	‘bride’
asleṯ	‘two years ago’
itɛayan	‘he is searching’
iɛayen	‘he searched’
mul	‘owner’
lmal	‘property’

The vowel *a* [ɛ] is realised as open back unrounded [ɑ] in a pharyngealised environment, for example:

aṭaṛ	[ɑṭɑṛ]	'leg'
aẓaṛ	[ɑẓɑṛ]	'root'

Raising of final a

In Ghomara, final **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.

/g ləhwa/	>	[g-ləhwe]	'in the rain'
/ɛḏima/	>	[ʕḏime]	'weak' (F)
/ṭwila/	>	[tˁwɪle]	'long' (F)
/ṭqila/	>	[tˁqele]	'heavy'
/ləɣḏa/	>	[ləʁðe]	'lunch'
/lɛaṛbiyya/	>	[lʕɑrˁbːɪyːe]	'Arabic'
/mya/	>	[mje]	'hundred'
/taməddа/	>	[tɛmədːe]	'bird of prey'
/tamezgiḏa/	>	[tɛməzgɪðe]	'mosque'
/n tsa/	>	[n-tse]	'of the cow'
/yemma/	>	[jəmːe]	'mother'
/tamuḏa/	>	[tɛmuðe]	'sow'
/g teẓḡa/	>	[g-təẓɣe]	'in the forest'
/assa/	>	[ɛsːe]	'nowadays'

When there is an adjacent (preceding) 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 *Maliḳa* becomes *Maliḳi* in such contexts. In Chefchaouen it is restricted to word-internal position. Its realisation is [æ] (Moscoso, 2002: 27).

/ḍḍṛa/	>	[dːˤrˤɑ]	‘corn’
/rrḥa/	>	[rːħɛ]	‘hand-mill’
/beṛṛa/	>	[bərːˤɑ]	‘outside’
/weḥda/	>	[wəħdɛ]	‘one’ (F)
/lmeqla/	>	[lməqlɛ]	‘frying pan’
/waha/	>	[wɛhɛ]	‘only’
/tameɣṛa/	>	[tɛməʁrˤɑ]	‘wedding’

Examples of verbs are very few in texts, but they do exist as this example shows:

yemma nn-es he-tẓalla [jəmːɛ nːəs hətzˤɑlːe]
mother of-3S 3FS-pray:IMP
‘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:

tizezzraṯan	>	[tɪzəzːrɛθɛn]	‘heyforks’
tiskert	>	[tɪskərt]	‘garlic’
akkil	>	[ɛkːɪl]	‘curdled milk’
inu	>	[ɪnu]	‘my’
aḡḏi	>	[ɛɣðɪ]	‘jackal’
iżi	>	[izi]	‘fly’

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

i - a

ssirḏax	‘I wash’ (AOR)
ssarḏax	‘I washed’ (P)
aḡḏi	‘jackal’
ayḏa	‘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:

teḵṣuṭ	[təxsˁotˁ]	‘she was afraid’

Below we contrast /u/ with schwa.

u - e

iḥḥfuṛ	‘he always digs’
iḥfeṛ	‘he dug’

a-fettiḥ	‘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’
lǧaṭis	[lǧɑtˁɪs]	‘sailing boats’

legraṛus [ləgrˁarˁus] ‘cigarette’

2.2. Diphthongs

A number of nouns which are borrowed from Arabic have the diphthongs **aw** [au] and **ay** [aɪ]. These are historical diphthongs in Arabic (they cannot be constrasted 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

ṛṛawẓ ‘rice’
lḥawṭ ‘vegetable garden’
lḥayṭ ‘wall’
ttawb̲ ‘cloth’
llawn ‘colour’
lmawža ‘wave’

Diphthong ay

lɣays ‘mud’
lxayṭ ‘thread’
lɣayṭa ‘flute’
ssayf ‘sword’

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

An example of a noun which has **aw** ~ **u** is:
ṣṣawṭ ~ *ṣuṭ* ‘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 [ɐ] when immediately preceding **x**, **ɣ**, **ḥ**, **q** and **ɛ**, for example:

lwext	[lwɐxt]	‘time’
mdewwex	[mdəw:ɐx]	‘having a headache’
iffeɣ	[ɪf:ɐʁ]	‘He went out.’
ṣṣḇeḥ	[sˁ:βɐħ]	‘morning’
inneɛneɛ	[ɪn:ɐʕnɐʕ]	‘It flourished.’
ḥmeq	[ħmɐq]	‘crazy’

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

ifekkeṛ	[ɪfək:ɑrˁ]	‘He grabbed.’
inṭeṛ	[ɪntˁɑrˁ]	‘He flew.’

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.

ifeṛṛeḥ	[ɪfər:ˁɑħ]	‘He makes happy.’
itfəṛṛaḥ	[ɪtfər:ˁɑħ]	‘He always makes happy.’

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).

ifeṛṛḥ ahen	[ɪfər:ˁħ ɛhən]	‘He makes them happy.’
itfəṛṛaḥ ahen	[itfər:ˁɑħ ɛhən]	‘He always makes them happy.’

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

xewwef	[xuwwəf]	‘to scare’

seyyeḇ [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 ccc-type as well as other types of nouns, for example:

amḏer ‘branch’
imeḏren ‘branches’

awrez ‘heel’
iwerzen ‘heels’

azreɣmel ‘centipede’
izerɣemlen ‘centipedes’

Some Arabic-morphology nouns abide by the same rule, for example when a feminine suffix is added to a masculine noun:

M:SG		**F:SG**	
lğmel	'male camel'	*lğeml-a*	'female camel'

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[16]. Schwa is not inserted from right to left in a cc-string but can only be analysed as being present underlyingly, as in these examples[17].

lfeṛn	'clay oven'
nnefs	'breath'
ṣṣehd	'heat'
lferg	'swarm'
lweḥš	'animal'

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

azebg	'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 **ameslem** 'muslim' is **tameslemt** 'muslima' instead of the expected ***tamselmet** 'muslima' according to the rules above. In the feminine plural which has plural suffix -**an** schwa appears in the expected position **timselman** 'muslim women'. The number of nouns which have schwa's that change position is quite limited in Ghomara Berber. Another example is:

M:SG		**F:SG**	
azref	'road'	*tazreft*	'path'

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'.

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

[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.

ḥfeṛ	‘dig!’	*ḥefṛ-aweṯ*	‘dig!’	(PL)
fleḥ	‘cultivate!’	*felḥu*	‘cultivate!’	(PL)

Sometimes schwa is found following the first consonant in a ccc-stem resulting in cecc-strings instead of the expected ccec. This type is restricted to the following verbs in our corpus.

iwerg	‘he dreamed’
iwešk	‘he got lost’

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

efk	‘give’
ewṯ	‘hit’

Other cc verbs show the cec form:

ẓeṛ	‘see’
neɣ	‘kill’

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.

perpren	(< **prepren*)	‘they flew’
selsl-aweṯ	(< **slesl-aweṯ*)	‘bake grain’ (PL)
beryz-aweṯ	(< **beryez*)	‘swap’ (PL)

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:

(e)fṛeq	‘divide!’
(e)nda	‘go!’
(e)bb	‘take!’

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

feṛq-aweṯ	‘divide!’ (PL)

qeṛṛeḇ	‘come closer!’

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:

inkeṛ	‘he denied’
inekṛ at	‘He denied her.’
iɣeṛs as i flan	‘He slaughtered for someone.’

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.

iṛfeɛ ašaquṛ ahen	‘He lifted the axe.’
amka iḵšem aḡḏi	‘When the jackal went in.’
iɣṛes taɣaṭṭ	‘He slaughtered a goat.’

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.

rewlen leḥšam nnes	‘His children fled.’
rewlan as (**rewlen as*)	‘They fled from him.’
ṭṭfan as teṯ (**ṭṭfen as teṯ*)	‘They caught her for him.’

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

išebbṛ ay	‘He caught me.’
šebbṛan ay	‘They caught me.’

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'
itdaḡam	>	*iddaḡam*	'he fetches water'

ḏ + t > t

taḇuṣeyyaḏt	>	*taḇuṣeyyat*	'type of snake'
taɛuqqaḏt	>	*taɛuqqat*	'knot'

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

ḏ + t > ṯt

aḥeddaḏ 'a smith'	>	*taḥeddaṯt*	'practice of being a smith'
-	>	*taḥeṛṛuṯt*	'type of insect'

t + d > d

amḵa t d ibb	>	*amḵa d ibb*	'When he brought it.'
tḥemmut dha	>	*tḥemmu dha*	'You are warming up here.'
iğ at das	>	*iğ a das*	'He left her there.'

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

isafeɣ d taɛeyyalt	>	*isafeɣ t taɛeyyalt*	‘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 ḥtaž a d teqqul	>	*ma ḥtaž 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

aɛebbiz	>	*taɛebbist*	‘calf’
amuggaz	>	*tamuggast*	‘stick to pin animals’

ẓ + t > ṣt

amaẓuẓ	>	*tamaẓuṣt*	‘last born’

ž + t > št

ameɛṛaž	>	*tameɛṛašt*	‘someone who limps’

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

ž + š > š š

ma itɛeṛṛaž ši	>	*ma itɛeṛṛaš ši*	‘He does not limp.’

t + ẓ > d ẓ

a tẓall	>	*a dẓall*	‘She will pray.’

š + d > ž d

š deṣṣaḏ	>	*ž deṣṣaḏ*	‘You will hunt/fish.’

s + d > z d

tenn as d a ɛeqlet..	>	*tenn az d a ɛeqlet..*	‘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 > š š

ma ɣṛes ši	>	*ma ɣṛeš ši*	‘He does not have’

z + ž > ž ž

iggez žeḥḥa	>	*iggež žeḥḥa*	‘Zehha went down.’

Finally, there is this irregular assimilation:

bb + ṣ > ppṣ

bbṣel	>	*ppṣel*	‘onions’

3.2. Assimilation to pharyngealised consonants

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

t + ḍ > ḍḍ

ka-tḍɛaf	>	*ka-ḍḍɛaf*	‘She loses weight.’
itḍeṣṣa	>	*iḍḍeṣṣa*	‘He laughs.’

t + ṭ > ṭṭ

itṭewwal	>	*iṭṭewwal*	‘He makes longer.’
itṭeḥḥaḵ	>	*iṭṭeḥḥaḵ*	‘He makes laugh.’

ṭ + t > ṭṭ

tamaṭutt	>	*tamaṭuṭṭ*	‘dirty woman’
tafeṛkutt	>	*tafeṛkuṭṭ*	‘piglet’

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 > ll ~ nn

When the preposition **n** ‘of’ is assimilated to the Arabic article **l**, a geminate **ll** or **nn** is the result, e.g.

tlaṯa n leḥšam	>	*tlaṯa l leḥšam*	‘three children’
ḍḍmaɣ n lefqi	>	*ḍḍmaɣ n nefqi*	‘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	>	*rrennu*	‘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 nnhaṛ	>	*ku nnhaṛ*	‘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 lbir	>	*da lbir*	‘to the well’

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

nqeṭṭɛ	>	*ɴqeṭṭeɛ*	‘We cut.’
š a ngix	>	*š a ŋgix*	‘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-ttiṯu	*a*	*azen = d = te-bb*
3FS-go:I	AD	3PL:IO = DC = 3FS-take:A

'She goes to bring for them.'

te-bba-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 position[18].

a ḵ d nerry ah d	>	*a ḵ 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:

ẓẓeṛq-ax	*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 -**aɣ**, for example:

nn-aɣ = aḵ	*i-ɛella*
say:P-1S = 2MS:IO	3MS-go.up:P

'I told you he went up'

d	*a*	*xebbɛ-aɣ*	*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 Morrocan Arabic dialects the article assimilates to **ž** yielding **žž**. In Ghomara **ž** becomes an affricate **ǧ** 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’
(elᵉ)ppṣaṣeṭ	‘pesetas’
lberdaɛ	‘saddle’
(elᵉ)bbḥar	‘sea’

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

lmaliḵ	‘king’

(el^{e})mmḏina	‘city’
lfellaḥ	‘farmer’
(el^{e})ffḥel	‘bull’
(e)lkelma	‘word, speech’
(el^{e})kksir	‘big field’
(e)lqent	‘corner’
(el^{e})qqḇuṛa	‘graves’

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**, **ḏ** and **ṯ** can disappear. This differs according to speech tempo. Some examples are:

n			
s warsin	>	*s warsi*	‘with hunger’
l			
itseğal	>	*itseğa*	‘It records.’
ḏ			
ɛaweḏ	>	*ɛawe*	‘again’
ṯ			
sskuṯ	>	*ssku*	‘be quiet’

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:

lheḍṛa ahen	>	*lheḍṛa y ahen*	‘that talk’
ɣa aɛeyyal	>	*ɣa y aɛeyyal*	‘only a boy’
idda iḏes	>	*idda y iḏes*	‘He went with him.’

lefqi aḏ	>	*lefqi y aḏ*	‘this imam’
aḡḏi ahen	>	*aḡḏi y ahen*	‘that jackal’

Vowel becomes semi-vowel

a + **i** > **a y**

idda išebbeṛ	>	*idda yšebbeṛ*	‘He went to grab.’
netta isker	>	*netta ysker*	‘he did’
ddwa inši	>	*ddwa ynši*	‘some drugs’

u + **i** > **u y**

š ifelḥu iḇawen	>	*š ifelḥu yḇawen*	‘They are going sow beans.’
zdu izref inši	>	*zdu yzref inši*	‘under some road’

i + **i** > **y** + **i**

maši iḏ izref	>	*mašy iḏ izref*	‘going along the road’

a + **u** > **a w**

ɣa lfurma u ṣafi	>	*ɣa lfurma w ṣafi*	‘Just the form, that is all.’
ya usammer	>	*ya wsammer*	‘a sunny hill’

i + **u** > **i w**

i uɛeyyal	>	*i wɛeyyal*	‘and the boy’

u + **a** > **w a**

iddu am siha daryan	>	*iddw am siha daryan*	‘He goes from here to there.’
hettiṯu azen d ebb	>	*hettiṯw azen d ebb*	‘They go and take for her.’

Vowel loss

a + **a** > **a**

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).

idda argaz	>	*idd argaz*	‘The man went.’
idda aɣižd	>	*idd aɣižd*	‘The billy goat went.’

u + **u** > **u**

zdu ugeğuf	>	*zdu geğuf*	‘under a bush’

4. Labialisation

Ghomara Berber has a number of labialised velar and uvular consonants. The short labialised consonants are **k^{w}**, **k̲^{w}**, **ḡ^{w}**, **g^{w}**, **x^{w}**, **ɣ^{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 >	uGc	
i-suɣn-an	*/i-seɣ^{w}n-an/*	‘ropes’
š a lukm-et	*/ š a lek^{w}m-et/*	‘You will arrive.’

cG^{w}e >	cGu	
a-syun	*/asɣ^{w}en/*	‘rope’
ssenkur	*/ssenk^{w}er/*	‘make stand up’

eG^{w} >	uG	
š a ffuɣ	*/š a ffeɣ^{w}/*	‘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**.

ecG^{w}c >	ucGc	
š a ssunkr-et		‘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 G^w-final clusters the labialisation is transferred to the whole cluster. Rounding of the lips already starts before the velar/uvular consonant is uttered.

G^wcV	>	G^wcV	
a-^{w}ɣlal			‘loam pot’

cG^{w}V	>	c^{w}GV	
ti-^{w}zɣal			‘ladles’

G^wce	>	G^wce	
a-^{w}k̲ser			‘piece of bread’

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.:

ecG^w	>	ucG	
š a ssurɣ-em			‘You will light.’

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

cG	>	wcG	
š a ff^{w}ɣ-em			‘You (PL) will go out.’

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.

š a ffuɣ	/š a ffeɣ^w/	‘He will go out.’
š a ffɣ^w-em	/š a ffɣ^{w}em/	‘You will go out.’

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)qquṛ*	'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-awet̲*	'dry up!'	IMP.PL
B.	*uqql-awet̲*	'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-awet̲	'dry up!'	IMP.PL
B.	*(e)kkur*	'stand up!'	IMP.S
	ukkr-awet̲	'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. /**eqq^{w}el**/, /**ekk^{w}er**/). 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 weɣlem*	'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.	*aɣ^{w}lal*	‘loam pot’

In some words, labialisation is optional:

taɣ^{w}zalt ~ taɣzalt[19]	‘bogue’ (fish sp.)
tizɣal ~ tiz^{w}ɣal	‘ladles’
neɣ ~ nuɣ	‘kill!’
ffeɣ ~ ffuɣ	‘go out!’
š a rɣen ~ š a r^{w}ɣen	‘They will be lit.’
ffɣ-awet̲ ~ uffɣ-awet̲	‘go out!’ (PL)
lkem ~ lkum	‘arrive’

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

taxuṣt ~ ta^{w}xeṣt	‘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.	*taɣuṣmaṛt*	‘jaw’
B.	*tiɣuṣmaṛan*	‘jaws’

There is nothing that allows us to decide whether these forms are phonologically /taɣuṣmaṛt/, /tiɣuṣmaṛan/ or /taɣ^{w}eṣmaṛt/, /tiɣ^{w}eṣmaṛan/.

[19] The Berber-morphology noun **taɣzalt** ‘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:

	Prefix	**Base**	**Suffix**
Categories:	Gender, State, Number	Number/Degree	Number, Gender

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:

M:SG:EL		**F:SG:EL**	
a-ḥmam	‘pigeon’	*ta-ḥmam-t*	‘female pigeon’
a-ḡḏi	‘jackal’	*ta-ḡḏi-ṯ*	‘female jackal’
a-ḇeṛṛey	‘ram’	*ta-ḇeṛṛeḵ-t*	‘ewe’
a-ɣyul	‘donkey’	*ta-ɣyul-t*	‘female donkey’
a-yaw	‘grandson’	*ta-yaw-t*	‘granddaughter’

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

M:SG:EL		**F:SG:EL**	
a-ɛeṣkṛi	‘soldier’	*ta-ɛeṣkṛi-ṯ*	‘female soldier’
a-ẓayẓun	‘deaf man’	*ta-ẓayẓun-t*	‘deaf woman’
a-rifi	‘riffian man’	*ta-rifi-ṯ*	‘riffian woman’

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-morpholgy, the Arabic-morphology or the non-affix class, for example:

M:SG(:EL)		**F:SG(:EL)**	
a-rgaz	‘man’	*ta-mɣaṛ-t*	‘women’
ḵma	‘brother’	*uleṯma*	‘sister’
a-serdun	‘mule’	*le-bhima*	‘mule’ (F.)
žeddi	‘grandfather’	*le-ɛziza*	‘grandmother’
le-fḥel	‘bull’	*ta-sa*	‘cow’
a-feṛṛuž	‘rooster’	*ta-fulus-t*	‘chicken’
a-qḇay	‘billy-goat’	*ta-ɣaṭ-t*	‘goat’
a-ṭužk (~ l-ɣeštul)	‘partridge’	*ta-sekkur-t*	‘partridge’ (F.)
a-lef	‘boar’	*ta-muḏa*	‘boar’ (F.)

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:

M:SG:EL		**F:SG:EL**	
a-fenṭuṭ	'lip'	*ta-fenṭuṭ-t*	'small lip'
a-maras	'valley, stream'	*ta-maras-t*	'small valley, stream'
a-maleḥ	'fish'	*ta-maleḥ-t*	'small fish'
a-kfer	'turtle'	*ta-kfer-t*	'small turtle'

F:SG:EL		**M:SG:EL**	
ta-ɛeddis-t	'belly'	*a-ɛeddis*	'big belly'
ta-mmar-t	'beard'	*a-mmar*	'big beard'

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.

M:SG:EL		**F:SG:EL**	
a-fṛaṭ	'water pool'	*ta-faṛi-t*	'small water pool'
a-ṭaṛ	'leg'	*ta-ṭṭaṛ-t*	'small leg'

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:

F:SG		**F:SG:EL**	
ššelḥa	'Berber'	*ta-šelḥi-ṯ*	'Berber'
lɛaṛbiyya	'Arabic'	*ta-ɛeṛbi-ṯ*	'Arabic'

The following feminine nouns have an idiosyncratic meaning:

M:SG:EL		**F:SG:EL**	
a-sekkaw	'horn'	*ta-sekkaw-t*	'goat fight'
a-syaṛ	'stick'	*ta-syaṛ-t*	'right to a part'

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-k̲al	'earth, soil'
a-ywer	'moon'
a-ṯil	'grapes'
a-d̲les	'kind of plant'
a-tay	'tea'

a-lum	‘hay’

F:SG:EL

t-aḏu-ṯt	‘wool’
t-iḡel-t	‘bush’
ta-ẓemmi-ṯ	‘crushed barley’

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-ḇzaḡ-en	‘beans’

F:PL:EL

ti-ṣuṣaf	‘saliva’
ti-lḳam-an	‘kind of spinach’
ti-meḳṛaṭ	‘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** / **yaṯ** ‘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=ahen*	*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 **yaṯ** ~ **ya** for feminine (cf. III.12.1.2. on numerals).

(4) *i-fk = at* *i* *ya* *t-metṭṭu-t* (EL = *tametṭut*)
3MS-give:P = 3MS:DO to one:F FS:EA-woman-S
'He gave it to a woman.'

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 EL. 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:

	EL	**Example**	**EA**	**Example**	
M:SG	a-	*a-maḵar*	*u-*	*u-maḵar*	'thief'
	a-	*a-ḏfel*	*u-* ~ *i-*	*u-ḏfel* ~ *i-ḏfel*	'snow'
	a-	*a-sif*	*wa-*	*wa-sif*	'river'
	a-	*a-ɣil*	*wa-* ~ *ya-*	*wa-ɣil* ~ *ya-ɣil*	'hill'
	i-	*i-les*	-	*i-les*	'tongue'
	u-	*u-l*	-	*u-l*	'heart'
M:PL	*i-*	*i-muras*	*i-*	*i-muras*	'valleys'
F:SG	*ta-*	*ta-fellun-t*	*t-*	*t-fellun-t*	'frying pan'
	ta-	*ta-la*	*ta-*	*ta-la*	'spring'
	ti-	*ti-rg-et*	*ti-*	*ti-rg-et*	'ember'
F:PL	*ti-*	*ti-ẓugg-an*	*t-*	*t-ẓugg-an*	'forests'
	ti-	*ti-rg-an*	*ti-*	*ti-rg-an*	'embers'
	ta-	*ta-ẓiw-an*	*t-*	*t-ẓiw-an*	'udders'
	ta-	*ta-liw-an*	*ta-*	*ta-liw-an*	'springs'

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:

M:SG:EL	**M:SG:EA**	
a-maras	*u-maras*	‘riverbed’
a-mɣaṛ	*u-mɣaṛ*	‘old man’
a-maḵar	*u-maḵar*	‘thieve’
a-ṣɣaṛ	*u-ṣɣaṛ*	‘stick’
a-ẓṛu	*u-ẓṛu*	‘stone’

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-ṛḥeḇ	‘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-ḡeṛṭ** ~ **a-yḡeṛṭ** only allows for the prefix vowel **i**-. All these nouns consist of a base with three consonant and no plain vowel.

M:SG:EL	**M:SG:EA**	
a-ɣlel	*i-ɣlel ~ u-ɣlel*	‘stalk’
a-ḏfel	*i-ḏfel ~ u-ḏfel*	‘snow’
a-zref	*i-zref ~ u-zref*	‘road’
a-ḏles	*i-ḏles ~ u-ḏles*	‘kind of grass’
a-ḡeṛṭ ~ a-yḡeṛṭ	*i-ḡeṛṭ*	‘neck’

A group of 19 nouns in the corpus mark the EA by means of the prefix **wa**-, for example[22]:

M:SG:EL	**M:SG:EA**	
a-ḵal	*wa-ḵal*	‘soil’
a-sif	*wa-sif*	‘river’
a-ḏan	*wa-ḏan*	‘intestines’
a-ywer	*wa-ywer*	‘moon’
a-rsin	*wa-rsin*	‘hunger’
a-ṭḡam	*wa-ṭḡam*	‘yesterday’
a-lum	*wa-lum*	‘hay’

The noun **ayeffeṭ** ‘cattle’ has the same morphology but has plural agreement[23]. In addition, it has a variant which has the prefix **wi**-.

M:SG:EL	**M:SG:EA**	
a-yeffeṭ	*wa-yeffeṭ ~ w-iffeṭ*[24]	‘cattle’

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.

M:SG:EL	**M:SG:EA**	
a-ɣeḏ	*wa-ɣeḏ ~ ya-ɣeḏ*	‘ash’
a-ḏem	*wa-ḏem ~ ya-ḏem*	‘blood’
a-ɣil	*wa-ɣil ~ ya-ɣil*	‘hill’
a-lef	*wa-lef ~ ya-lef*	‘boar’

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

[22] The other nouns are which have the prefix **wa**- in the EA are: **wa-fel** ‘top’, **wa-kkil** ‘curdled milk’, **wa-laẓen** ‘tomorrow’, **wa-m-an** ‘water’, **wa-mmar** ‘big beard’, **wa-mmas**, **wa-ssa** ‘nowadays’, **wa-ssar** ‘afternoun’, **wa-ywel** ‘platform in a traditional house’, **wa-žuf** ‘stench’, **wa-ṭil** ‘grapes’, **wa-ššin** ‘stable in the house’.

[23] In the Bni Menṣur dialect of Ghomara it is **aḵfeṭ** (El Hannouche 2010: 278).

[24] The latter version is phonologically /**u-yeffeṭ**/ ‘cattle’.

M:SG:EL	M:SG:EA	
a-ḡer	*ya-ḡer*	‘field’

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:

M:SG:EL	M:SG:EA	
i-zi	*i-zi*	‘fly’
i-ḏeɣ	*i-ḏeɣ*	‘sheaf’
i-naɣ	*i-naɣ*	‘palate’
i-les	*i-les*	‘tongue’

One noun in the corpus starts in **u-**. This noun does not mark the EA and does not have a plural form[25].

M:SG:EL	M:SG:EA	
u-l	*u-l*	‘heart’

1.2.3. Masculine plural

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

M:SG:EL	M:SG:EA	M:PL (EL = EA)	
a-maras	*u-maras*	*i-muras*	‘valley’
a-mɣaṛ	*u-mɣaṛ*	*i-mɣaṛ-en*	‘eldery men’
a-maḵar	*u-maḵar*	*i-muḵar*	‘thieves’
a-sɣaṛ	*u-sɣaṛ*	*i-sɣaṛ-en*	‘sticks’
a-mmar	*wa-mmar*	*i-mmira*	‘big beards’
a-lef	*wa-lef ~ ya-lef*	*i-lf-an*	‘boars’

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

M:PL		
i-muras	*bezzaf n i-muras*	‘a lot of valleys’

[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).

i-lf-an	*bezzaf n i-lf-an*	‘a lot of boars’

1.2.4. Feminine singular

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

F:SG:EL	**F:SG:EA**	
ta-zref-t	*t-ezref-t*	‘small road’
ta-mḍa	*t-emḍa*	‘lake’
ta-ẓgā	*t-eẓgā*	‘forest’
ta-fellun-t	*t-fellun-t*	‘frying pan’
ta-mugnan-t	*t-mugnan-t*	‘boiled egg’
ta-muḍa	*t-muḍa*	‘sow’

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

F:SG:EL	**F:SG:EA**	
ta-ɣil-t	*ta-ɣil-t*	‘small mountain’
ta-sif-t	*ta-sif-t*	‘small river’
ta-la	*ta-la*	‘water spring’

There are a few feminine singular nouns that have a prefix **ti-**. The vowel is preserved in the EA[26].

F:SG:EL	**F:SG:EA**	
ti-ṭṭ	*ti-ṭṭ*	‘eye’
ti-ṭṭa	*ti-ṭṭa*	‘nipple’
ti-ṣmeṭ	*ti-ṣmeṭ*	‘cold’
ti-ḍḍa	*ti-ḍḍa*	‘leech’

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.

F:PL:EL	**F:PL:EA**	
ti-zerfawṯ-an	*t-zerfawṯ-an*	‘small roads’

[26] The other feminine singular nouns which have a **ti**- prefix are: **tirgett** ‘embers’, **tikkuk** ‘bird’ (sp.), **tilket** ‘head louse’, **tiziṯ** ‘fly’ (sp.), **tiǧelt** ‘woods’, **timekṛaṭ** ‘scissors’, **tiḍert** ‘ear’, **tiskert** ‘garlic’, **tizelt** ‘berry’ (sp.).

ti-mḏiw-an	*t-emḏiw-an*	‘lakes’
ti-ẓugg-an	*t-ẓuggan*	‘forests’
ti-fellun-an	*t-fellun-an*	‘frying pans’

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:

F:SG:EL	**F:SG:EA**	**F:PL:EL**	**F:PL:EA**	
ta-ḵna	*t-eḵna*	*ta-ḵniw-an*	*t-eḵniw-an*	‘co-wife’
ta-ẓa	*t-ẓa*	*ta-ẓiw-an*	*t-ẓiw-an*	‘udder’
ta-ylal-t	*t-eylal-t*	*ta-ylal-an*	*t-eylal-an*	‘insect (sp.)’
ta-rtiw-t	*t-ertiw-t*	*ta-rtiw-an*	*t-ertiw-an*	‘rheum’

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.

F:SG:EL = EA	**F:PL:EL = EA**	
ta-ɣil-t	*ta-ɣill-an*	‘small mountain’
ta-sif-t	*ta-sif-ṯan*	‘small river’
ta-la	*ta-liw-an*	‘spring’ (water)
ta-yt	*ta-yṯw-an*	‘shoulder’
ta-fuḵ-t	*ta-fuḵ-an*	‘sun’
ti-lk-et	*ti-lk-an*	‘louse’
ti-rg-et	*ti-rg-an*	‘embers’

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

F:SG:EL	**F:SG:EA**	**F:PL:EL**	**F:PL:EA**	
ti-ḍḍa	*ti-ḍḍa*	*ti-ḍḍiw-an*	*t-eḍḍiw-an*	‘leech’
ti-ṭṭ	*ti-ṭṭ*	*ti-ṭṭiw-an*	*te-ṭṭiw-an*	‘eye’

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 **-ṯ** (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 +**k̲**. 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:

Suffix	**Value**	**Change of base**
-**t** ~ -**t̲**	F:SG	- five nouns with base extension +**k̲**
-**et** ~ -**t**	F:SG	-
∅	-	-
-**en**	M:PL	- Four nouns with extension +**aw**, two with +**y**, one with +**w**
-**an**	M:PL / F:PL	- Masculine nouns base-final vowel is apocopated - Some feminine nouns have one of the extensions +**iw**, +**t̲**, +**at̲**, +**t̲w**, +**aw**. - Change of base forms of some nouns

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 ~ -t̲ 'feminine singular'

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

-t

F:SG:EL

ta-mɛilaq-t	'spoon'
ta-maras-t	'little valley'

-**t̲**

F:SG:EL	
ta-sla-t̲	‘bride’
ta-meṭṭu-t̲	‘women’

The following nouns have a base extension +**k̲** 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 +**k̲**.

M:SG(:EL)	**F:SG:EL**	
ssfenğ	*ta-sfenğe* + *k̲-t*	‘donut, (kind of)’
šmuṛṛa	*ta-šmuṛṛe* + *k̲-t*	‘cactus fruit’
a-malu	*ta-malu* + *k̲-t*	‘shady place’
a-b̲eṛṛey	*ta-b̲eṛṛe* + *k̲-t*	‘sheep’[27]

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

F:SG:EL	**F:SG:EL**	
ta-ḡnaw-t	*ta-ḡniw* + *ek̲-t*	‘pumpkin’

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	
ti-rg-et	‘ember’
ta-rqiɛ-et	‘rag’
ta-mušš-et	‘pussy-cat’

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** ~ **-t̲** always has the fricative **-t̲** after a final vowel. These are all the nouns in our corpus:

F:SG:EL	
ta-rba-t	‘girl’
ta-qaha-t	‘crow’

[27] There is no assimilation **yt** > **k̲t**.

ta-saɛɛa-t	‘moment’
ta-b̠ṛa-t	‘letter’

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-md̠a	‘lake’
ta-mya	‘throat’
ti-d̠̲d̠̲a	‘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:

M:SG:EL	**M:PL:EL**	
a-rgaz	*i-rgaz-en*	‘man’
a-rrar	*i-rrar-en*	‘threshing floor’
a-ẓenniṭ	*i-ẓenniṭ-en*	‘tail’
a-fraḡ	*i-fraḡ-en*	‘fence’

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:

M:SG:EL	**M:PL:EL**	
a-zref	*i-zerf + aw-en (~ i-zerf-an)*	‘road’
a-ḡeṛṭ	*i-ḡeṛṭ + aw-en*	‘neck’
a-ṛṣeṭ	*i-ṛeṣṭ + aw-en*	‘pus’
a-ṛḥeb̠	*i-ṛeḥb̠ + aw-en*	‘big piece of land’

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

M:SG:EL	**M:PL:EL**	
a-messak̠i	*i-messak̠i + y-en*	‘non-utilised farmland’
a-ɣumṛi	*i-ɣumṛi + y-en*[28]	‘corner’

[28] This plural has the free variants **i-ɣumṛ-an** ~ **i-ɣumṛa** ‘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 **-en**[29]. 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-ɣaṭ-t	*ti-ɣaṭṭ-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-k̲mez	*i-k̲emz-an*	‘nail’
a-ṭuḡd	*i-ṭuḡd-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-ẓṛ-an*	‘stone’
a-sla	*i-sl-an*	‘bride groom’
a-ḡd̲i	*i-ḡd̲-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. **t̲ɣaṭṭ** PL **t̲iɣeṭṭen**, Beni Snous **tɣaṭṭ** - **tiɣeṭṭen**, Ait Seghrouchen **tɣaṭṭ** - **tiɣeṭṭen**, (Kossmann, 2000:33).

F:SG:EL	**F:PL:EL**	
ta-maẓay-t	*ti-maẓay-an*	‘canine tooth’
ta-ɛebbuṭ-t	*ti-ɛebbuṭ-an*	‘navel’
ta-mesɛay-t	*ti-mesɛay-an*	‘beggar’ (F.)
ta-wriš-t	*ti-wriš-an*	‘sieve’

In a number of cases the plural suffix **-an** is preceded by a base extension. The base extensions are +**iw**, +**t̲**, +**at̲** +**t̲w** and +**aw**. 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.

F:SG:EL	**F:PL:EL**	
ta-mezgiḏa	*ti-mezgiḏ* + *iw-an*	‘mosque’
ta-sarka	*ti-sark* + *iw-an*	‘traditional shoe’
ta-sisma	*ti-sism* + *iw-an*	‘needle’
ta-susna	*ti-sisn* + *iw-an*	‘vespiary’
ta-ḡursa	*ti-ḡers* + *iw-an*	‘ploughshare’
ta-ɣ^{w}ḏa	*ti-ɣḏ* + *iw-an*	‘part of the plough’
ta-qnissa	*ti-qnis* + *iw-an*	‘chicken stomach’

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

F:SG:EL	**F:PL:EL**	
ti-ṭṭ	*ti-ṭṭ* + *iw-an*	‘eye’[30]

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

F:SG:EL	**F:PL:EL**	
ta-b̲eṛṛek̲-t	*ti-b̲eṛṛek̲* + *t̲-an*	‘ewe’
ta-fraw-t	*ti-fraw* + *t̲-an*	‘leaf’
ta-rba-t	*ti-rba* + *t̲-an*	‘girl’

[30] Younger speakers omit the prefix in the plural which results in the form **ṭṭiwan** ‘eyes’.

ta-sla-t̲	*ti-sla* + *t̲-an*	‘bride’
ta-mazir-t	*ti-mazir* + *t̲-an*	‘land’

These are some examples of feminine nouns which end in **-at̲**. This suffix is always preceded by a cluster of two or three consonants.

F:SG:EL	**F:PL:EL**	
ta-ɣuṛ-t	*ti-nuɣṛ* + *at̲-an*	‘stable’
ta-frux-t	*ti-ferx* + *at̲-an*	‘small chicken’
ta-zezzer-t	*ti-zezzr* + *at̲-an*	‘pitchfork’
ta-ɣerdem-t	*ti-ɣerdm* + *at̲-an*	‘scorpion’
ta-k̲b̲er-t	*ti-k̲eb̲r* + *at̲-an*	‘woolen djellaba’

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

F:SG:EL	**F:PL:EL**	
ta-rb̲ib̲-t	*ti-rb̲ib̲-an* ~ *ti-rb̲ib̲* + *t̲-an*	‘stepdaughter’
ta-ɣil-t	*ta-ɣill-an* ~ *ta-ɣil* + *t̲-an*	‘small hill’

There is one noun that has a final **-et** suffix that takes a base extension +**t̲** in the plural.

F:SG:EL	**F:PL:EL**	
ta-fx-et	*ti-fex* + *t̲-an*	‘calf of the leg’

The base extension **-t̲w** occurs once:

F:SG:EL	**F:PL:EL**	
t-ay-t	*t-ay* + *t̲w-an*	‘shoulder’

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

F:SG:EL	**F:PL:EL**	
ta-zref-t	*ti-zerf* + *aw* + *t̲-an*	‘small road’

The two feminine nouns that have a base extension +**k̲** in the singular have the same

extension in the plural.

F:SG:EL	**F:PL:EL**	
ta-sfenğ + ek-t	*ti-sfenğ + k-an*	‘donut’
ta-šmuṛṛ + ek-t	*ti-šmuṛṛ + k-an*	‘cactus fruit’

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

M:SG:EL	**M:PL:EL**	
a-fṛaṭ	*i-feṛṭ-en*	‘water pool’
a-ɣižd	*i-ɣežd-en*	‘billy goat’
a-ḥezzum	*i-ḥezm-en*	‘collection of fire wood’
a-geždir	*i-gežd-en*	‘kind of lizard’

The following noun has degemination of **ww** resulting in **ew** > **u** in the plural.

a-ṭewwal	*i-ṭulan*	‘son-in-law’

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

a-šeṭṭiḇ	*i-šeṭḇ-en* ~ *i-šeṭṭiḇ-en*	‘small bush’

The suffix -an

M:SG:EL	**M:PL:EL**	
a-frux	*i-ferx-an*	‘boy, small bird’
a-zemmur	*i-zemr-an*	‘wild olive’

F:SG:EL	**F:PL:EL**	
ta-ɛaṛeṭ-t	*ti-ɛeṛṭ-an*	‘wooden lock’

The following example has a degemination and depharyngealisation of the consonant **ẓẓ** in the plural.

a-meẓẓuḡ	*i-mezg-an* (~ *i-mezzaḡ*)	‘ear’

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

F:SG:EL	**F:PL:EL**	
ta-sekkur-t	*ti-su̲kr-an*[31]	‘partridge’

M:SG:EL	**M:PL:EL**	
a-ṭuḡd	*i-ṭuḡd-an*	‘finger’
a-ṭemmar	*i-ṭemmar-an (~ i-ṭemmira)*	‘liar’

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:

M:SG:EL	**M:PL:EL**	
a-fus	*i-fass-en*	‘hand’
a-d̲em	*i-d̲amm-en*	‘blood’
a-sif	*i-saff-en*	‘river’
a-ɣil	*i-ɣall-en*	‘mountains’
a-faf	*i-faff-en* (~ *i-feff-en*)	‘nipple’

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

M:SG:EL	**M:PL:EL**	
a-nas	*i-nasen*	‘sparkle’
i-naɣ	*i-naɣen*	‘palate’
a-t̲ar	*i-t̲ar-en*	‘bird’ (sp.)

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

M:SG:EL	**M:PL:EL**	
a-ẓekka	*i-ẓukk-an*[32]	‘tomb’
a-muxxed̲	*i-muxd̲-en*[33]	‘wild cat’
a-ẓaṛ	*i-ẓuṛ-an*	‘root, muscle’

[31] The **u** is possibly labialisation of the **kk** and **k̲**. This cannot be established because of the position of the **u** (cf. II.4. phonology for discussion of the problem).

[32] The **u** might be labialisation of the consonant **kk**, i.e. /i-ẓekk^{w}-an/.

[33] The **u** might be labialisation of the consonant **xx**, i.e. /a-mexx^{w}ed̲/, /i-mex^{w}d̲-en/.

a-sammer	*i-sammir-en* (~ *i-summar*)	‘sunny hill’
a-ḇušaḵer	*i-ḇušaḵir-en*	‘kind of worm’

F:SG:EL	**F:PL:EL**	
ta-ɣrimez-t	*ti-ɣermiz-an*	‘small head louse’

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:

M:SG:EL	**M:PL:EL**	
a-ṭeṛṛaš	*i-ṭeṛṛiša*	‘jar’
a-ṣennaž	*i-ṣenniža*	‘basket’
a-ṭewwiš	*i-ṭewwiša*	‘rain-pipe’
a-ɛukkaz	*i-ɛukkiza*	‘walking stick’
a-ṯebban	*i-ṯebbina*	‘trousers’
a-ṛappaṣ	*i-ṛappiṣa*	‘hat’
a-ḥettaš	*i-ḥettiša*	‘slash’
a-ḡellu (~ a-wellu)	*i-ḡelliwa (~i-welliwa)*	‘plough’
a-rekkal	*i-rekkila*	‘dog’
a-qeṛṛaṣ	*i-qeṛṛiṣa*	‘leaf of cactus plant’
a-newwal	*i-newwila*	‘hut’
a-mmar	*i-mmira*	‘big beard’

F:SG:EL	**F:PL:EL**	
ta-muggas-t	*ti-muggiza*	‘stick (type)’
ta-rekkal-t	*ti-rekkila*	‘bitch’
ta-ḵemmar-t	*ti-ḵemmira*	‘face’
ta-ḵewwaṛ-t	*ti-ḵewwiṛa*	‘roll’
ta-ṛappaṣ-t	*ti-ṛappiṣa*	‘hat’
ta-žellab-t	*ti-želliḇa*	‘djellaba’

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:

final a = a

F:SG:EL	**F:PL:EL**	
ta-zizwa	*ti-zizwa*	‘bee’

prefinal i > a

M:SG:EL	**M:PL:EL**	
a-ɛebbiz	*i-ɛebbaz*	‘calf’
a-šeṛwiṭ	*i-šeṛwaṭ (~i-šeṛwiṭ-en)*	‘piece of string’
a-gṯiṭ	*i-gṯaṭ*	‘bird’
a-gelzim	*i-gelzam*	‘pick-axe’

final i > a

M:SG:EL	**M:PL:EL**	
a-seḵni	*i-seḵna*	‘big needle’

pre-final u > a

M:SG:EL	**M:PL:EL**	
a-qemmum	*i-qemmam (~ i-qemmum-en)*	‘mouth’
a-ferkuṭ	*i-ferkaṭ*	‘piglet’
a-ɛenquš	*i-ɛenqaš*	‘head (angry)’
a-meẓẓuḡ	*i-meẓẓaḡ (~i-mezg-an)*	‘ear’
a-myuz	*i-myaz*	‘nit’
a-keppuṭ	*i-keppaṭ* (~ *le-kpapeṭ*)	‘coat’

final u > a

M:SG:EL	**M:PL:EL**

a-qenqbu	*i-qenqba*	‘beak’

Ø > a

pre-final Ø > a

M:SG:EL	**M:PL:EL**	
a-seɣnes	*i-seɣnas*	‘big needle’

One noun has two forms in free variation:

M:SG:EL	**M:PL:EL**	
a-keskes	*i-keskas ~ i-kesksa*	‘couscous colander’

One noun does not change, except for the prefix.

a-ɛuqqaḏ	*i-ɛuqqaḏ*	‘knot’

Type 2

a…a > u…a

M:SG:EL	**M:PL:EL**	
a-maras	*i-muras*	‘valley, stream’
a-maḡal	*i-muḡal*	‘plants for goats’
a-maḵar	*i-muḵar*	‘thieve’

a…u > u…a

M:SG:EL	**M:PL:EL**	
a-saṯur	*i-suṯar*	‘beam’
a-safu	*i-sufa*	‘torch’
a-mdakkul	*i-mdukkal*	‘friend’
a-malu	*i-mula*	‘shady place’

a…Ø > u…a

M:SG:EL	**M:PL:EL**	
a-xaḇeš	*i-xuḇaš*	‘jug’
a-ḥayeḵ	*i-ḥuyaḵ*	‘woolen cloth’
a-sammer	*i-summar (~ i-sammir-en)*	‘sunny side of a hill’

F:SG:EL	**F:PL:EL**	
ta-xaḏem-t	*ti-xuḏam*	‘ring’

ta-šašeḵ-t	*ti-šušaḵ*	‘hat’

F:SG:EL	**F:PL:EL**	
ta-saru-ṯ	*ti-sura*	‘key’
ta-ḡayzu-ṯ	*ti-ḡuyaz (~ti-ḡayzu+ṯ-an)*	‘calf’

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 > c^{w}…a

M:SG:EL	**M:PL:EL**	
a-ḡlul	*i-ḡ^{w}lal*	‘sea horn’
a-ɣyul	*i-ɣ^{w}yal*	‘donkey’
a-qšuš	*i-q^{w}šaš*	‘snail shell’
a-zɣul	*i-z^{w}ɣal*	‘ladle’

Ø…i > c^{w}…a

F:SG:EL	**F:PL:EL**	
ta-qḇil-t	*ti-q^{w}ḇal*	‘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 **ḥ** 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-ḥečču̇n	*i-ḥuččȧn*	‘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-ɣezdiz	*i-ɣezdas*	‘rib’

F:SG:EL	**F:PL:EL**	
ta-ɣezdis-t	*ti-ɣezdis-an*	‘rib’

M:SG:EL	**M:PL:EL**	
a-keskes ~ *a-keskas*	*i-kesksa* ~ *i-keskas*	‘couscous colander’

F:SG:EL	**F:PL:EL**	
ta-keskas-t	*ti-kskis-an*	‘couscous colander’

M:SG:EL	**M:PL:EL**	
a-maḡal	*i-muḡal (~i-maḡal-en)*	‘plants for goats’

F:SG:EL	**F:PL:EL**	
ta-maḡal-t	*ti-maḡal-an*	‘plants for goats’

1.6. Irregular plural formations

final Ø > a

F:SG:EL	**F:PL:EL**	
ta-ggur-t	*ti-ggura (~ti-ḡura*)	‘door’
ta-ḥebb-et	*ti-ḥebba*	‘granule, pimple’

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**.

M:SG:EL	**M:PL:EL**	
a-yḏa	*i-ṭ-an*	‘dog’
a-zeɣbiw	*i-zeɣbun-en* (*~i-zeɣbiw-en*)	‘hair’

The following noun has an irregular apophonic plural:

M:SG:EL	**M:PL:EL**	
a-qellawes	*i-qelliwas*	‘water jug’

There are a number of feminine nouns which have irregular base forms in combination with the feminine plural suffix -**an**.

F:SG:EL	**F:PL:EL**	
ta-sa	*ti-se<u>k</u><u>t</u>-an*	‘cow’

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

F:SG:EL	**F:PL:EL**	
ta-selluf-t	*ti-selfa*	‘tick’

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

F:SG:EL	**F:PL:EL**	
ta-keskas-t	*ti-keskis-an*	‘couscous colander’
ta-sammer-t	*ti-sammir-an*	‘small sunny hill’
ta-siddel-t	*ti-siddil-an*	‘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.

F:SG:EL	**M:PL:EL**	
ta-ḡiḡ-et	*i-ḡiḡ-en*	‘tree’
ta-ɣyul-t	*i-ɣ^{w}yal*	‘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’ + **a<u>k</u>al** ‘earth’, the second compound is a combination of **aɣižd** ‘billy goat’ and **amyan** ‘small billy goat’.

M:SG:EL	**M:PL:EL**	
yemmawa<u>k</u>al	*i-mmawa<u>k</u>al-en*	‘type of worm’
*a-ɣižd**a**myan*	*i-ɣežd**e**nimyan-en*	‘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) *uleṯma-s i-ḡḡ=at g l-kuša*
sister-3S 3MS-do:P=3FS:DO in ART-fire.place
'He put his sister in the fireplace.'

(2) *i-ḵšem fx-essen l-weḥš*
3MS-enter:P on-3PL ART-animal
'Animals came in on them.'

(3) *ɣr-i kuṛ-a muqqṛ-eṯ*
at-1S ball-F big-FS
'I have a big ball.'

(4) *te-qql-et weḥš*
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)[34]. Some examples are:

F:SG

l-ɣeḇṛ-a	'dust'
le-ksiḇ-a	'livestock'
ṣ-ṣemṭ-a	'leather belt'
l-kuṛ-a	'ball'
l-kelm-a	'word'

M:SG

l-kaf	'cave'
d-dḵeṛ	'male'
l-menqeṛ	'chisel, sting'
l-mus	'retractable knife'
l-ğim	'pocket'

There exist a couple of feminine nouns that do not take the feminine suffix **-a** but have feminine agreement[35], for example:

F:SG

l-baṭil	'boat'
l-lḥem	'meat'
l-kif	'cannabis'
ṭ-ṭunuḇir	'car'

There are five feminine nouns which have a suffix **-eṯ** instead of **-a**. In many Berber languages this suffix is much more frequent in borrowed nouns (cf. Kossmann, 2013: 210)[36].

[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, **nneqqaḇeṯ** ‘woodpecker’ is only used by old people. Young people use **nneqqaḇa**.

F:SG

l-lefɛ-eṯ	‘snake’
l-xaṛb-eṯ	‘ruin’
n-neqqaḇ-eṯ (~ *n-neqqaḇa*)	‘woodpecker’
l-ɣaṛṣ-eṯ	‘vegetable garden’
ṛ-ṛumay-eṯ	‘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, singularia 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**, **-aṯ**, **-waṯ** 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 **-waṯ**.

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 **mṛa-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: **lemṛa dyal muḥammaḏ** ‘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.

SG		**Dual**	
l-ɛam	'one year'	*l-ɛam-ayen*	'two years'
š-šheṛ	'one month'	*š-šehṛ-ayen*	'two months'
n-nhaṛ	'one day'	*l-yum-ayen*	'two days'
le-qṣem	'ten minutes'	*le-qṣem-ayen*	'ten minutes'
t-tutluṯ	'twenty minutes'	*t-tuluṯ-ayen*	'fourty minutes'
le-mya	'hundred'	*le-myat-ayen*	'two hundred'
l-alef	'thousand'	*l-alf-ayen*	'two thousand'

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-ǧaw	'weather'
l-ḥṣaḏ	'harvest'
ṛ-ṛawẓ	'rice'
l-ɣeṛṣ	'plant'
l-bašaṛ	'people'
le-gg^{w}az	'food'
ṛ-ṛṣaṣ	'bullets'
ṭ-ṭḥin	'flour'
z-ziṯ	'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-mnaḏer	‘spectacles’
n-nḍaḍer	‘glasses’
d-draḇel	‘clothes’
le-kṛafez	‘celery’
l-lɛaɛeḇ	‘slobber’
l-ḥayawan	‘animals’
l-ğḏam	‘lepra’
le-mṯaɛ	‘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**
-aṯ
-s ~ **-is**
-waṯ

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 **-aṯ** 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 -**waṯ** is suffixed to a limited set of kinship nouns.

-in[37] ~ **-a**

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

M:SG	**F:SG**	**PL**	
s-seḥḥar	*s-seḥḥar-a*	*s-seḥḥar-in*	‘wizard’
l-xewwaf	*l-xewwaf-a*	*l-xewwaf-in*	‘coward’

[37] The suffix -**in** is used as well with a number of other nominal categories, such as the adjectives, participles and diminutives.

l-keddaḇ	*l-keddaḇ-a*	*l-keddaḇ-in*	‘liar’
l-ɣeḍḍaṛ	*l-ɣeḍḍaṛ-a*	*l-ɣeḍḍaṛ-in*	‘betrayer’

A small number of nouns that have an **m**- prefix also take the masculine external plural **-in**.

M:SG	**F:SG**	**PL**	
l-mežmuɛ	*l-mežmuɛ-a*	*l-mežmuɛ-in*	‘crowd’
l-mɛaṛeḏ	*l-mɛaṛḏ-a*	*l-mɛaṛḏ-in*	‘invitee’
l-mɛellem	*l-mɛellm-a*	*l-mɛellm-in*	‘master’
l-meyyeṯ	*l-meyyṯ-a*	*l-meyyṯ-in*	‘deceased’
l-muɛallim	*l-muɛallim-a*	*l-muɛallim-in*	‘teacher’

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**.

M:SG	**F:SG**	**PL**	
š-šfeṛ	-	*ššefṛ-in* (~ *lešfaṛ*)	‘eyelid’
l-ummi	*l-ummiyy-a*	*l-ummiyy-in*	‘ignorant’
l-walid	*l-walid-a*	*l-walid-in*	‘parent’
l-puṛẓwaẓi	*l-puṛẓwaẓiyy-a*	*l-puṛẓwaẓiyy-in*	‘rich person’ (<Fr.)
l-puḇri	*l-puḇriyy-a*	*l-puḇriyy-in*	‘poor person’ (<Sp.)
š-šṭayṛi	*š-šṭayṛiyy-a*	*š-šṭayṛiyy-in*	‘stingy person’

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.

M:SG	**F:SG**	**PL**	
l-muddaɛi	*l-muddaɛy-a*	*l-mudaɛy-in*	‘plaintiff’
z-zani	*z-zaniyy-a*	*z-zan-in*	‘adultery committer’

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

M:SG	**F:SG**	**PL**	
l-fellaḥ	*l-fellaḥ-a*	*l-fellaḥ-a*	‘farmer’
š-šeffaṛ	*š-šeffaṛ-a*	*š-šeffaṛ-a*	‘thief’
š-šekkam	*š-šekkam-a*	*š-šekkam-a*	‘traitor’

l-xeyyaṭ	*l-xeyyaṭ-a*	*l-xeyyaṭ-a*	‘tailor’

An example of plural agreement is:

(5) *šw a degg-an l-fellaḥ-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-ɣeššaš	*l-ɣeššaš-a*	*l-ɣeššaš-in* ~ *l-ɣeššaš-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 -a̲t̲

67% of the external plurals in our corpus take the plural marker **-a̲t̲**. 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**		
ṛ-ṛwiḍ-a	*ṛ-ṛwiḍ-a̲t̲*	‘tire, wheel’	(< Sp.)
n-nsiḇ-a	*n-nsiḇ-a̲t̲*	‘mother-in-law of a man’	
s-sḇiɣ-a	*s-sḇiɣ-a̲t̲*	‘paint’	
l-batri	*l-batriyy-a̲t̲*	‘battery’	(<Fr.)
l-prikanti	*l-prikantiyy-a̲t̲*	‘nurse’	(<Sp.)
š-šeɛṛ-a	*š-šeɛṛ-a̲t̲*	‘fishing line’	
l-kamyuna	*l-kamyun-a̲t̲* (~*l-kamyun-is*)	‘big truck’	(< Sp.)
l-kridi	*l-kridiyy-a̲t̲*	‘debt’	(< Fr.)
l-buṛǧ-a	*l-buṛǧ-a̲t̲*	‘fortress’	
l-laṛḍ-a	*l-laṛḍ-a̲t̲*	‘school of fish at night’	(< Sp.)
s-sint-a	*s-sint-a̲t̲*	‘cassette’	(< Sp.)

There are two feminine nouns with a prefix **m**- that take the external plural -**at̲**.

l-mdab̲z-a	*l-mdab̲z-at̲*	‘fight’
l-mdafn-a	*l-mdafn-at̲*	‘fight’

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

M:SG	**PL**		
l-lt̲am	*l-lt̲am-at̲*	‘veil’	
s-sḍ̲aɛ	*s-sḍ̲aɛ-at̲*	‘sound, noise’	
s-sb̲ab̲	*s-sb̲ab̲-at̲*	‘amulet’	
t-tran	*t-tran-at̲*	‘train’	(< Fr.)
s-sb̲iṭaṛ	*s-sb̲iṭaṛ-at̲*	‘hospital’	(< Sp.)
l-ɛilwan	*l-ɛilwan-at̲*	‘address’	
l-intixab̲	*l-intixab̲-at̲*	‘election’	
l-mešklit̲	*l-mešklit̲-at̲*	‘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-ɛaḍ̲u	*l-ɛaḍ̲uww-at̲*	(~ *l-ɛuḍ̲y-an*)	‘enemy’	
l-meṛ̣raxu	*l-meṛ̣raxuw-at̲*		‘shark’	(< Sp.)
l-ganču	*l-gančuww-at̲*	(~ *l-ganču-s*)	‘kind of rake’	(< Sp.)
s-stilu	*s-stiluw-at̲*	(~ *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-ismuwat̲*	‘name’

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

SG	**PL**		
t-ṭ̲rayenbu	*t-ṭ̲rayenbu-t̲*	‘spintop’	(< Sp.)

-s ~ -is

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.[38] 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.

M:SG	**PL**		
l-kuntru	*l-kuntru-s*	'crossroads'	
l-byixu	*l-byixu-s*	'old man'	
r-ruḇyu	*r-ruḇyu-s*	'blond'	
s-suḇri	*s-suḇri-s*	'envelope'	
l-funḍu	*l-funḍu-s*	'bottom'	
l-kurču	*l-kurču-s*	'mattress'	
l-pirmi	*l-pirmi-s*	'driver's licence'	(< Fr.)
l-grifu	*l-grifu-s*	'tap'	
l-kwaḏru	*l-kwaḏru-s*	'doorframe'	
d-difidi	*d-difidi-s*	'DVD'	
l-laḇaḇu	*l-laḇaḇu-s*	'sink'	
n-nigru	*n-nigru-s*	'brown dolphin'	
t-tuṛneyyu	*t-tuṛneyyu-s*	'screw'	
l-ğuṛni	*l-ğuṛni-s*	'wage for one day'	(< Fr.)
r-rigalu	*r-rigalu-s*	'present'	
ṣ-ṣalaḇa	*ṣ-ṣalaḇari-s (~ṣalaḇaṯ)*	'fyke'	

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

M:SG	**PL**	
l-luring	*l-luring-is*	'beacon'
l-muṛtal	*l-muṛtal-is*	'flip (in the water)'
s-stenyaḏuṛ	*s-stenyaḏuṛ-is*	'screwdriver'
ṛ-ṛaḏyun	*ṛ-ṛaḏyun-is*	'radio'

There is one noun which only occurs in the plural:

M:SG	**PL**	
--	*l-waṇṭ-is*	'gloves'

[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 **ɛwin-eš** '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

M:SG	**PL**		
l-ganču	*l-gančuww-aṯ*	‘rake’	(< Sp.)
l-gaṛaž	*l-gaṛaž-aṯ*	‘garage’	(< Fr.)

The internal plural

F:SG	**PL**		
l-falḍa	*l-flaḍi*	‘skirt’	(< Sp.)
l-plaṣa	*l-playeṣ*	‘seat’	(< Fr.)

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 cccic**, **cccuc**, **cCuc**, **cccc**, **cccac**, **cCac**, **ciccac**, **cccc-a**, **cccic-a**, **ccccc-a**, **cCac-a**, **cccuc-a**, **cCuc-a**, **cCic-a** (**c** stands for single consonant, **C** for a geminate consonant). Some examples are:

SG PL

d-dexxan	*d-dxaxen*	‘smoke’
l-perrim	*le-prarem*	‘drill’
l-qendil	*le-qnaḏel*	‘oil lamp’
z-zeɛbul	*z-zɛabel*	‘kind of bag’
s-sellum	*s-slalem*	‘ladder’
t-teɛlem	*t-tɛalem*	‘fox’
l-feṛṛan	*le-fṛaṛen*	‘oven’
ṣ-ṣebbaṭ	*ṣ-ṣbabeṭ*	‘shoe’
l-ɣeṛṛaf	*le-ɣṛaṛef*	‘cup’
d-demmal-a	*d-dmamel*	‘hump’
ẓ-ẓeṛmuṭ-a	*ẓ-ẓṛameṭ*	‘lizard’
l-bezzun-a	*l-bzazen*	‘female breast’

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: **mccc**, **mccac-a**, **mccac**, **mCac**, **muccac**, **mccac-a**, **mccuc**, **muccic**, **mcicc-a**.

M:SG	**PL**	
l-medfeɛ	*le-mdafeɛ*	‘canon’
l-menšeṛ	*le-mnašeṛ*	‘saw’
l-mehraz	*le-mharez*	‘mortar’
l-menqaṛ	*le-mnaqeṛ*	‘chisel, sting’
l-meṛfeɛ	*le-mṛafeɛ*	‘shelf’
l-mexxaṣ	*le-mxaxeṣ*	‘poking stick’
l-meqqaṣ	*le-mqaqeṣ*	‘scissors’
l-muqdaf	*le-mqadef*	‘paddle’

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

M:SG	**PL**		
l-ǧenn	*le-ǧnawen*	‘spirit’	
t-teksi	*t-tkases*	‘taxi’	(< Sp. / Fr.)

In one five-consonant noun, the final **n** is deleted in the plural.

M:SG	PL		
l-puklan	*le-pwakel*	‘excavator’	(<Sp.)

cwacc

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**.

SG	PL	
z-zamel	*z-zwamel*	‘homosexual’
s-saḇeɛ	*s-swaḇeɛ*	‘birth ceremony’
š-šiṭan	*š-šwaṭen*	‘satan’
n-nimiṛu	*n-nwameṛ*	‘number’
l-muṭuṛ	*le-mwaṭeṛ*	‘motorcycle, engine’
l-kaɣiṭ	*le-kwaɣeṭ*	‘papers’
l-baṭil	*le-bwaṭel*	‘boat’
l-maḵina	*le-mwaḵen*	‘machine’
l-ḥanuṯ	*le-ḥwaneṯ*	‘shop, store’
ṭ-ṭaḥun-a	*ṭ-ṭwaḥen*	‘electric mill’
čekkiṭ-a	*čwakeṭ*	‘coat’
ṭ-ṭayfuṛ	*ṭ-ṭwafeṛ*	‘table’
l-qayṭun	*le-qwaṭen*	‘small tent’

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

M:SG	PL	
l-maḥal	*le-mwaḥel*	‘room’
l-muṭaɛ	*le-mwaṭeɛ*	‘place’

The following noun of this type only has a plural:

SG	PL	
--	*le-xwašem*	‘gills’

ccayc

The singular patterns corresponding to this plural pattern are **ccic**, **ccic-a**, **cicc-a**, **ccuc-a**, **ccac-a**, **cC-a**. For example:

SG	PL	
le-bzim	*le-bzayem*	‘buckle’
s-srir	*s-srayer*	‘hand-made bed’
ṣ-ṣṛiṛ	*ṣ-ṣṛayeṛ*	‘secret’
le-bhim-a	*le-bhayem*	‘female mule’
le-qmiǧ-a	*le-qmayež*	‘shirt’
l-xiḏm-a	*le-xḏayem*	‘work’
ṛ-ṛḏum-a	*ṛ-ṛḏayem*	‘bottle’
l-plaṣ-a	*le-playeṣ*	‘seat’
š-šeff-a	*š-šfayef*	‘lip’

There is one bi-consonantal **caca** noun which inserts a **w** and a **y** in the plural.

F:SG	PL	
l-ḥaž-a	*le-ḥwayež*	‘thing’

ccvc / ccvcv schemes

There are several plural schemes that have the structure **ccvc**[39]. 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:

SG	PL		
n-nsiḇ	*n-nsaḇ*	‘father-in-law (of a man)’	
s-suq	*le-swaq*	‘market’	
l-ɛušš	*le-ɛwaš*	‘nest’	
l-muss	*le-mwas*	‘retractable knife’	
l-buṭ-a	*le-bwaṭ*	‘butagas cylinder’	(< Fr./Sp.)
l-ḥukk	*le-ḥkaḵ*	‘ankle, wrist’	
l-ǧim	*le-žyam*	‘pocket’	

[39] 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.

l-qeḥb-a	*le-qḥaḇ*	‘prostitute’
s-sekk-a	*s-skak*	‘coin’
l-ǧumb	*le-žnaḇ*	‘side’
l-buṛk-a	*le-bṛaḵ*	‘duck, pond’
n-naq-a	*n-nyaq*	‘female camel’

ccuc

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

SG	**PL**	
l-hemm	*le-hmum*	‘anxiety’
ṛ-ṛas	*ṛ-ṛyus*	‘cape’
l-biṯ	*le-byuṯ*	‘room’
ẓ-ẓeṛb	*ẓ-ẓṛuḇ*	‘fence’
ḍ-ḍayf	*ḍ-ḍyuf*	‘guest’
n-nežm-a	*n-nžum*	‘star’
l-ɛeṭṭ-a	*le-ɛṭuṭ*	‘bite’
l-gayz-a	*le-gyuz*	‘stick, wood, pole’
l-qird	*le-qruḏ*	‘monkey’
l-mḏin-a	*le-mḏun*	‘town’
l-lefɛ-eṯ	*l-lfuɛ*	‘snake’
š-šaheḏ	*š-šhuḏ* (~ *š-šuhuḏ*[40])	‘witness’

ccc

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

F:SG	**PL**	
l-xaṛḇ-eṯ	*le-xṛeḇ*	‘ruin’
l-ɣaṛṣ-eṯ	*le-ɣṛeṣ* (~ *le-ɣṛuṣ*)	‘vegetable garden’
ṛ-ṛeẓẓ-a	*ṛ-ṛẓeẓ*	‘turban’
l-qett-a	*le-qtet*	‘bunch of cane’
ṣ-ṣaḇ-a	*ṣ-ṣyeḇ*	‘harvest’
l-miss-a	*le-mses*	‘table’
l-fuṭ-a	*le-fweṭ*	‘towel’

[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**.

SG	**PL**	
l-kebd-a	*le-kḇada*	‘liver’
l-ǧebli	*le-žbala*	‘man from the Jbala’
l-ɛezri	*le-ɛzara*	‘adolescent’

ccaci

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 **ṛ-ṛiḥ-eyya** > **ṛ-ṛwaḥi**. In the case of **ḍ-ḍaw** > **ḍ-ḍwawi** the vowel **w** is inserted, as in the case of **l-ɣaḇeyy-a** > **le-ɣwaḇi**. Except for the first two examples below, all nouns have the feminine singular suffix **-a**.

SG	**PL**	
l-lil	*l-lyali*	‘night’
ḍ-ḍaw	*ḍ-ḍwawi*	‘light’
ṛ-ṛiḥ-eyya	*ṛ-ṛwaḥi*	‘traditional women’s shoe’
t-terb-eyya	*t-trabi*	‘baby’
ṭ-ṭeɣṭ-eyya	*ṭ-ṭɣaṭi*	‘lid’
l-ɣaḇ-eyya	*le-ɣwaḇi*	‘seagull’
l-belɣ-a	*le-blaɣi*	‘traditional shoe’
l-qehw-a	*le-qhawi*	‘coffee’
l-falḍ-a	*le-flaḍi*	‘skirt’

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**.

SG	**PL**	
ḍ-ḍell	*ḍ-ḍlula*	‘shadow’
d-dk̲eṛ	*d-dk̲uṛa*	‘male’
ṭ-ṭeṛf	*ṭ-ṭṛufa*	‘end, side, edge, piece’
le-ktaḇ	*le-ktuḇa*	‘book’
s-sayf	*s-syufa*	‘sword’
z-zif	*z-zyufa*	‘handkerchief’
ṛ-ṛḇiɛ	*ṛ-ṛḇuɛa*	‘grass’

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:

SG	**PL**		
l-kaṛ	*l-kiṛ-an*	‘intercity bus’	
l-kaf	*l-kif-an*	‘cave’	
l-baz	*l-biz-an*	‘hawk’	
z-zaž	*z-zič-an*	‘glass’	
l-qaɛ	*l-qiɛ-an*	‘bottom’	
ṭ-ṭaṣ-a	*ṭ-ṭiṣ-an*	‘cup’	(< Sp.)
l-leṭṭ-a	*l-liṭ-an*	‘bottle’	

cucc-an

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

M:SG	**PL**	
š-šɛaṛ	*š-šuɛṛ-an*	‘hair’
d-dheḇ	*d-duhb-an*	‘gold’
t-tris	*t-turs-an*	‘kind of fishnet’

cucy-an

In this type, final **u** or **i** is changed to the semivowel **y** before the suffix, as shown in the following examples:

M:SG	**PL**	
l-ɛaḍu	*l-ɛuḍy-an*	‘enemies’
ṛ-ṛaɛi	*ṛ-ṛuɛy-an*	‘herdsman’
s-saɛi	*s-suɛy-an*	‘beggar’

cicc-an

There is one noun of the type **cacc** which has this plural.

M:SG	**PL**	
l-ḥažeḇ	*l-ḥižḇ-an*	‘eyebrow’

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**	
ṛ-ṛḥa	*le-rḥi*	‘stone mill’

cuCac

M:SG	**PL**	
t-tažiṛ	*t-tuǧaṛ*	‘rich man’
l-kari	*l-kurray*	‘renter’

cucac

M:SG	**PL**	
ṛ-ṛayeṣ	*ṛ-ṛuyaṣ*	‘chieftain’

cuCa

M:SG	**PL**	
ṭ-ṭḇiḇ	*ṭ-ṭubba*	‘doctor’

cucca

M:SG	**PL**	
ṭ-ṭaleḇ	*ṭ-ṭulḇa*	‘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 **-a<u>t</u>** is added and **u** is inserted in the base.

M:SG	**PL**	
s-sqef	*s-squf-aṯ*	‘roof’
s-sḇeḥ	*s-sḇuḥ-aṯ*	‘morning’

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

M:SG	**PL**	
l-gaṛṛu	*le-graṛu-s* ~ *l-gaṛṛu-s*	‘cigarette’
l-baṛku	*le-bṛaku-s*	‘big ship’
ṣ-ṣalṭu	*ṣ-ṣlaṭu-s*	‘dive’

ccacc

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-merṭ** and **l-wext**.

M:SG	**PL**	
l-lawn	*l-ʔalwan*	'colour'
d-din	*l-ʔadyan*	'religion'[41]
l-film	*l-ʔaflam*	'film'
ṛ-ṛaqem	*l-ʔaṛqam*	'number'
l-wext	*l-ʔawqat*	'time'
l-merṭ	*l-ʔamṛaḏ*	'sickness'

cucaca

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

M:SG	**PL**	
š-šaɛir	*š-šuɛaṛa*	'poet'
l-ɛalem	*l-ɛulama*	'Islamic scholar'

cacaca

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

M:SG	**PL**	
l-wazir	*l-waẓaṛa*	'minister'
ṭ-ṭaleḇ	*ṭ-ṭalaḇa*	'pupil in islamic education'

caca?ic

The singular pattern is **cacica**.

[41] cf. **din** - **dyun** 'debt'.

M:SG	PL	
ḍ-ḍaṛiḇa	*ḍ-ḍaṛaʔiḇ (~ ḍ-ḍariḇaṯ)*	‘tax’
l-ǧarima	*l-ǧaraʔim*	‘crime’

cucuc ~ cucac

The singular noun patterns corresponding to the plural are: **cC**, **cacc**, **caC**.

M:SG	PL	
l-ḥedd	*l-ḥudud*	‘border’
l-ḥeqq	*l-ḥuquq*	‘right’
l-ḥaṛb	*l-ḥuṛuḇ*	‘war’
l-ḥağ	*l-ḥuǧağ*	‘hadji, pilgrim’

cacacic

The noun patterns **ciccac**, **cccaca** correspond to this plural.

M:SG	PL	
z-zinzal	*z-zanazil*	‘earthquake’
l-meḥkama	*l-maḥakim*	‘court’

ʔaccica

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

M:SG	PL	
t-taman	*l-ʔatmina*	‘price’

cuCac

M:SG	PL	
l-qaḍi	*l-quḍḍat*	‘judge’

2.3.7. Summary

In the following table all singular schemes are grouped together next to the corresponding plural schemes.

Four-consonant nouns	Corresponding singular patterns
ccacc	ceCec, ceCic ceccic, ceccuc, ceCuc, ceccec, ceccac, ceCac, ciccac, ceccca, ceccica, ceccecca, cCaca, ceccuca, cCuca, cCica

m- derived nouns	mccc, mccaca, mccac, mCac, muccac, mccaca, mccuc, muccic, mcicca
cwacec	cacec, cicac, caccuc, cicicu, cucuc, cacic, cacica, cacuc, cacuca, ceCica, cacac, cacaca, cucac
m- derived nouns	macac, mucac, macaca
ccayec	ccic, ccica, cicca, ccuca, ccaca, ceCa, cc, caca
CCVC / CCVCV schemes	
ccac	ccic, cuc, cuC, cuca, caca, cic, cecc, cecca, ceCa, cucc, cucca
ccuc	ceC, cec, cac, cic, cecc, cecca, ceCa, cicc, ccica/et, cacec
ccec	cecca, ceCa, caca, ciCa, cuca
ccaca	cecca, cecci
ccaci	cic, cac, cecca, cacca
ccuca	ceC, ccec, cecc, ccac, cacc, cic, ccic
Suffix type	
cic-an	cac, caca, ceCa
cucc-an	caci, ccac, ccec, ccic, cacu
cucy-an	cacu, caci
cicc-an	cacec
Exceptional types	
cci, cuCac, cucac, cuCa,	
cucca, cucca, cuca, cuCac	
ceccac ~ cuccac	
Borrowings from Standard Arabic	
ʔaccac	cacc, cic, cicc, cecc
cucaca	cacic, cacec
cacaca	cacic, cacec
cacacic	cacica
cucuc ~ cucac	ceC, cacc, caC
cacacic	ciccac, ceccaca
caccica	cacac

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-ɛeddis-t** 'belly' is neutral regarding size, whereas **a-ɛeddis** '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:

M:SG		**M:SG:DIM**	
le-ɛmel	‘fishnet’	*le-ɛmeyyel*	‘small fishnet’
l-meqqaṣ	scissors	*le-mqiqeṣ*	‘small scissors’

F:SG		**F:SG:DIM**	
l-uṭa	‘field’	*l-wiṭa*	‘small field’

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:

M:SG		**M:SG:DIM**	
a-wraw	‘two fistfuls’	*ta-wraw-t*	‘two small fistfuls’
a-sif	‘river’	*ta-sif-t*	‘small river’
a-messiw	‘old basket’	*ta-messiw-t*	‘small old basket’
a-safu	‘torch’	*ta-safu-ṯ*	‘small torch’

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:

M:SG		**M:SG:DIM**	
a-ḇeddiḵ	‘rooster’	*a-ḇdideḵ*	‘small rooster’
a-ɣižd	‘billy-goat’	*a-ɣžeyyež*	‘small billy-goat’
ta-myan-t	‘she-kid’	*ta-mweyyen-t*	‘small she-kid’

ta-ɣaṭ-t	‘goat’	*ta-ɣṭiw-et*	‘small goat’
ta-mɣaṛ-t	‘woman’	*ta-mɣeyyeṛ-t*	‘small, nice woman’

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:

M:SG	**M:SG:DIM**		**F:SG**	**F:SG:DIM**	
a-frux	*a-freyyex*	‘boy’	*ta-frux-t*	*ta-freyyex-t*	‘girl’
a-rekkal	*a-rkikel*	‘dog’	*ta-rekkal-t*	*ta-rkikel-t*	‘bitch’
a-ɛebbiz	*a-ɛbibez*	‘bull’	*ta-ɛebbiz-t*	*ta-ɛbibez-t*	‘cow’
a-ḥeẓẓut	*a-ḥẓiẓet*	‘naked one’	*ta-ḥeẓẓut*	*ta-ḥẓiẓet*	‘naked one’
a-ɣyul	*a-ɣweyyel*	‘donkey’	*ta-ɣyul-t*	*ta-ɣweyyel-t*	‘she-ass’

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:

M:SG		**F:SG**	
a-ferkuṭ	‘farrow’	*ta-ferkuṭ-t*	‘piglet’
a-meslem	‘muslim’	*ta-meslem-t*	‘muslima’
a-yaw	‘grandson	*ta-yaw-t*	‘granddaughter’
a-ḇeṛṛey	‘ram’	*ta-ḇeṛṛeḵ-t*	‘sheep’

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:

M:SG		**M:SG:DIM**	
a-fus	‘hand’	*a-fweyyes*	‘small hand’
a-ṭar	‘leg’	*ta-ṭṭar-t*	‘small leg’

Some nouns which are inherently masculine or feminine do not allow the external diminutive. They can have an internal diminutive, for example:

M:SG		**M:SG:DIM**	
a-gežd̲ir	‘lizard’ (sp.)	*a-gžider*	‘small lizard’ (sp.)
a-keppuṭ	‘coat’	*a-kpipeṭ*	‘small coat’
a-mḡer	‘sickle’	*a-mḡeyyer*	‘small sickle’
a-fus	‘hand’	*a-fweyyes*	‘small hand’
a-ḡṭiṭ	‘bird’	*a-ḡṭeyyeṭ*	‘small bird’

F:SG		**F:SG:DIM**	
ta-fellun-t	‘frying pan’	*ta-flilen-t*	‘small frying pan’
ta-wleḵ-t	‘gunny sack’	*ta-wleyyeḵ-t*	‘small gunny sack’
ta-xaḏem-t	‘ring’	*ta-xwiḏem-t*	‘small ring’
ta-b̲ṣat-t	‘mat’	*ta-b̲ṣeyyet-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		**F:SG**	**F:SG:DIM**	
a-ḡussar	‘hill’	*ta-ḡussar-t*	*ta-ḡʷsiser-t*	‘small hill’
a-sammer	‘sunny hillside’	*ta-sammer-t*	*ta-smimer-t*	‘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-zreyyef-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-xšeb̲**, **ta-xšeb̲-t** and **ta-xšeyyeb̲-t** which refer to traps of different sizes used for different kinds of animals. There are not many nouns which show this lexicalisation.

M:SG		**F:SG**		**F:SG:DIM**	
a-zref	‘road’	*ta-zref-t*	‘path’	*ta-zreyyef-t*	‘small path’
a-xšeḇ	‘boar trap’	*ta-xšeḇ-t*	‘bird trap’	*ta-xšeyyeḇ-t*	‘mouse trap’

An interesting case is the noun **a-salles** ‘darkness’. Here the diminutives refer to a less strong type of darkness.

M:SG		**F:SG**	**F:SG:DIM**	
a-salles	‘darkness’	*ta-salles-t* ‘slight darkness’	*ta-sliwes-t*	‘twilight’

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.

M:SG	**M:SG:DIM**	**F:SG**	**F:SG:DIM**	
a-maleḥ	*a-mwileḥ*	*ta-maleḥ-t*	*ta-mwileḥ-t*	‘fish’
a-newwal	*a-nwiwel*	*ta-newwal-t*	*ta-nwiwel-t*	‘hut’
a-qemmum	*a-qmiqem*	*ta-qemmum-t*	*ta-qmiqem-t*	‘mouth’
a-qṛaḇ	*a-qṛeyyeḇ*	*ta-qṛaḇ-t*	*ta-qṛeyyeḇ-t*	‘bag’
a-saṯur	*a-swiṯer*	*ta-saṯur-t*	*ta-swiṯer-t*	‘pole’
a-sɣun	*a-sɣ^{w}eyyen*	*ta-sɣun-t*	*ta-sɣ^{w}eyyen-t*	‘rope’
a-šaquṛ	*a-šwiqeṛ*	*ta-šaquṛ-t*	*ta-šwiqeṛ-t*	‘axe’
a-ṛappas	*a-ṛpipeṣ*	*ta-ṛappaṣ-t*	*ta-ṛpipes-t*	‘hat’

In the following cases the nouns have the masculine internal diminutive and either the feminine external or internal diminutive, for example:

M:SG	M:SG:DIM	F:SG	F:SG:DIM	
a-ftuṯ	*a-ftiweṯ*	-	*ta-ftiweṯ*	‘piece of bread’
a-ḡelzim	*a-ḡlizem*	*ta-ḡelzim-t*	-	‘pick-axe’
a-fṛaṭ	*a-fṛeyyeṭ*	*ta-faṛiṭ-t*	-	‘water pool’
a-nšel	*a-nšeyyel*	*ta-nšel-t*	-	‘storage floor’

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.

ccicc / 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 **cuccac**, **cccc**, **ciccac**, **cccic**, **cuccic**, **cccuc**, **ccucc**, **cccac**, **cCcac-a**, **ccccu**.

l-ɛunṣaṛ	*le-ɛniṣeṛ*	‘water source’
l-menšeṛ	*le-mnišeṛ*	‘saw’
l-qiṛṭaṣ	*le-qṛiṭeṣ*	‘bullet’
l-qezdir	*le-qzider*	‘tin can’
a-ḡelzim	*a-ḡlizem*	‘pick-axe’
l-meskin	*le-msiḵen*	‘poor man’
l-muṛhiṭ	*le-mṛiheṭ*	‘homosexual man’
a-ṣnuḇeṛ	*a-ṣniḇeṛ*	‘pine tree’
a-fernaq	*a-frineq*	‘bulging on a stick’
l-mežmaṛ	*le-mžimeṛ*	‘stove’

ta-mengaž-t	*ta-mnigež-t*	‘earring’
a-keskes ~ a-keskas	*a-ksikes*	‘couscous colander’

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**, **cCvcc**, **ccc-a**. Examples:

a-ɛebbiz	*a-ɛbibez*	‘calf’
a-b̲eɛɛiš	*a-b̲ɛiɛeš*	‘lamb’
a-k̲emmar	*a-k̲mimer*	‘face’
a-muggaz	*a-mgigez*	‘stick to pin animals to’
a-kepput̠	*a-kpipet̠*	‘coat’
a-t̲ebban	*a-t̲biben*	‘trousers’
l-meqqaṣ	*le-mqiqeṣ*	‘scissors’
ta-gussar-t	*ta-g^{w}siser-t*	‘small hill’
ta-ḥeẓẓut̠-t	*ta-ḥẓiẓet̠-t*	‘naked woman’
ta-sammer-t	*ta-smimer-t*	‘sunny hill’
a-ṛẓeẓẓan	*a-ṛẓiẓen*	‘wasp’
a-qenqbu	*a-qniqeb̲*	‘beak, point of a knife’
l-keddab̲-a	*l-kd̲id̲b̲-a*	‘liar’
l-bezzun-a	*l-bzizn-a*	‘woman’s breast’
d-demmal-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-qliles-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.).

l-qeḥb-a	*le-qḥiḥb-a*	‘prostitute’
a-fulus	*a-fliles*[42]	‘rooster’

The following word is exceptional in that it has a reduplication of the first consonant in third position instead of a geminate split.

ta-qemmum-t	*ta-qmiqem-t*	‘small mouth’

3.2.2. Triliteral bases

ccyyc / 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-sḇeyyeɛ** ‘small lion’, **s-sḇiɛ-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**.

l-ferg	*le-freyyeg*	‘swarm’
ḍ-ḍḵeṛ	*ḍ-ḍḵeyyeṛ*	‘male’
ta-ḵʷser-t	*ta-ḵʷseyyer-t*	‘piece of bread’
a-ɣʷlal	*a-ɣʷleyyel*	‘pot’
le-bzim	*le-bzeyyem*	‘buckle’
a-frux	*a-freyyex*	‘small chicken’
ṭ-ṭuɛm	*ṭ-ṭɛeyyem*	‘bait’
l-qird	*le-qreyyeḏ*	‘monkey’
a-ɣeṣṣ	*a-ɣṣeyyeṣ*	‘bone’
n-neṣṣ	*n-nṣeyyeṣ*	‘half’
s-seḇɛ-a	*s-sḇiɛ-a*	‘lioness’
š-šuṛb-a	*š-šṛib-a*	‘soup’
l-ɛeṭṭ-a	*le-ɛṭiṭ-a*	‘bite’
le-plaṣ-a	*le-pliṣ-a*	‘seat’

[42] Nouns which have this singular base structure have different diminutive types, compare **a-saṯur** > **a-swiṯer** ‘rafter’, **a-šaquṛ** > **a-šwiqeṛ** ‘axe’, **a-maṭuṭ** > **a-mṭiweṭ** ‘useless person’.

[43] Marçais (1977:146) notes that the **cciyyec-a** type is ‘*facultatif dans les parlers citadins et ruraux d’Algérie et du Maroc, des diminutifs masculins de type* ***c₁c₂iyyec₃,***’ one of his examples occurs in our corpus too, namely **qerda** dim. **qrida**. 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.

l-malṭ-a	*le-mliṭ-a*	‘blanket’
l-qahw-a	*le-qhiw-a*	‘coffee’
l-ḥelw-a	*le-ḥliw-a*	‘candy’

The base extension **eyy** is not part of the root to which the diminutive pattern is applied.

s-seḇn-eyy-a	*s-sḇin-eyy-a*	‘headband’

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

ḍ-ḍell	*ḍ-ḍlil-a*	‘shadow’

ccicv

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.

l-kursi	*le-krisi*	‘chair’
l-kanki	*le-kniki*	‘gas lamp’
l-baṛku	*le-bṛiku*	‘ship’
l-ɣaṛbi	*le-ɣṛiḇi*	‘wind from the west’
l-ferdi	*le-fridi*	‘gun’
a-mušš	*a-mšišu*	‘cat’
a-mexṛaw	*a-mxiṛu*	‘rabbit young’
ta-mezla-ṯ	*ta-mzilu-ṯ*	‘goat that bears in the first year’

cciwc / cciwca

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] 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.

l-ḥessas	*le-ḥsiwes*	‘submissive homosexual’
ṣ-ṣennaṛ-a	*ṣ-ṣniwṛ-a*	‘fish hook’
ta-salles-t	*ta-sliwes-t*	‘darkness’
ta-maṭuṭ-t	*ta-mṭiweṭ-t*	‘dirty person’
a-mellul	*a-mliwel*	‘white one’
ta-qšuš-t	*ta-qšiweš-t*	‘shell’
a-ftuṯ	*a-ftiweṯ*	‘small piece of bread’
š-šeɛṛ-a	*š-šɛiwṛ-a*	‘fishing line’

There is one feminine noun which has a base extension +**k̲**.

ta-ḡnaw-t	*ta-ḡniw + ek̲-t*	‘pumpkin’

cwicc

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: **cvcvc** and **cvycvc**.

l-kaɣiṭ	*l-kwiɣeṭ*	‘paper’
a-maleḥ	*a-mwileḥ*	‘fish’
l-qaleḇ	*le-qwileḇ*	‘mould’
a-saṯur	*a-swiṯer*	‘rafter’
l-muṭuṛ	*le-mwiṭeṛ*	‘engine’
l-muṭaɛ	*le-mwiṭeɛ*	‘place’
ta-šaquṛ-t	*ta-šwiqeṛ-t*	‘small axe’
ta-maras-t	*ta-mwires-t*	‘valley’
ṭ-ṭayfur	*ṭ-ṭwifeṛ*	‘table’
a-k̲ayḍaṛ	*a-k̲wiḍaṛ*	‘horse’
ta-zaytun-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-bwireš*	‘flying ant’

cwyyc / cwic-a

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**, **ccuc**, **cacc**, **ccac**, **cacc-a**, **caccu**.

a-ɛeyyal	*a-ɛweyyel*	'boy'
ta-ɛeyyal-t	*ta-ɛweyyel-t*	'girl'
a-ɣyul	*a-ɣweyyel*	'donkey'
l-ḥawṭ	*a-ḥweyyeṭ*	'vegetable garden'
l-ḥayṭ	*a-ḥweyyeṭ*	'wall'
a-ṣyaṭ	*a-ṣweyyeṭ*	'border in a meadow'
ta-myan-t	*ta-mweyyen-t*	'baby goat'
ṛ-ṛwaḥ	*ṛ-ṛweyyeḥ*	'wind'
ta-gayzu-ṯ	*ta-gweyyez-t*	'kind of cow'
l-gayz-a	*le-gwiz-a*	'stick'

The following noun forms an exception because the addition of **wi** is combined with reduplication of the first base consonant[45]. This could be due to its adjectival origins.

a-ḇeyyuṭ	*a-ḇwiḇeṭ*	'white one'

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.

a-ẓaṛ	*a-ẓweyyeṛ*	'root'
ṛ-ṛaṣ	*ṛ-ṛweyyeṣ*	'cape'
l-ğim	*le-ğweyyem*	'pocket'
l-mus	*le-mweyyes*	'knife'
s-suq	*s-swiqa*	'market on an alternative day'[46]
ṭ-ṭaṣ-a	*ṭ-ṭwiṣ-a*	'bowl'

[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**'.

ṭ-ṭaqq-a	*ṭ-ṭwiq-a*	‘small window’[47]
ta-saɛɛa-t	*ta-swiɛ-et*	‘moment, period’

This one noun is a variant of the above type which has an **-eyy** base extension.

r-riḥeyy-a	*r-rwiḥeyy-a*	‘traditional shoe’

3.2.3. Exceptions

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

ḍ-ḍaw	*ḍ-ḍwiwi*	‘light’
tu-zzal-t	*tu-zizel-t*	‘knives’
l-uṭa	*l-wiṭa*	‘plain’

3.2.4. Schemes with suffixes

-š ∼ -ž suffix

Two Berber class nouns combine suffixation of **-š** with a pattern insertion based on the type **ccyyc**[48]. In the second example there is distant voice assimilation and loss of the final base consonant.

a-qḇay	*a-qḇeyyeš*	‘billy goat’
a-ɣižd	*a-ɣžeyyež*	‘male kid goat’

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 **ccyyc** which indicates that it is seen as a three-consonantal base. This noun has no masculine form. The **t** is a base consonant.

ta-rbat	*ta-rbeyyet*	‘girl’

[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.

ta-ɣaṭ-t	*ta-ɣṭiw-et*	‘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:

M:SG:EL	**M:SG:EL**	**F:SG:EL**	**F:PL:EL**	
a-keḥlaw	*a-kḥiḥel*	*ta-keḥlaw-t*	*ta-kḥiḥel-t*	‘black one’
a-ḥemṛaw	*a-ḥmimeṛ*	*ta-ḥemṛaw-t*	*ta-ḥmimeṛ-t*	‘red one’
a-zerqaw	*a-zrireq*	*ta-zerqaw-t*	*ta-zrireq-t*	‘blue one’
a-xed̠raw	*a-xd̠id̠er*	*ta-xed̠raw-t*	*ta-xd̠id̠er-t*	‘green one’
a-ṣefṛaw	*a-ṣfifeṛ*	*ta-ṣefṛaw-t*	*ta-ṣfifeṛ-t*	‘yellow one’
a-zergaw	*a-zrireg*	*ta-zergaw-t*	*ta-zrireg-t*	‘grey one’
a-ẓeɛṛaw	*a-ẓɛiɛeṛ*	*ta-ẓeɛṛaw-t*	*ta-ẓɛiɛṛ-t*	‘blond one’

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.

M:SG:EL	**M:SG:EL**	**F:SG:EL**	**F:PL:EL**	
a-mellul	*a-mliwel*	*ta-mellul-t*	*ta-mliwel-t*	‘white one’
a-beyyuṭ	*a-b̲wib̲eṭ*	*ta-beyyuṭ-t*	*ta-b̲wib̲eṭ-t*	‘white one’

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 **-at̲** or **-in**. The suffix **-at̲** is used on both masculine and feminine nouns while **-in** is used on a couple of masculine nouns. Some examples are:

ṭ-ṭb̲iṣel	*ṭ-ṭb̲iṣl-at̲*	'little plate'
ṭ-ṭwifeṛ	*ṭ-ṭwifṛ-at̲*	'little table'
d-dšeyyeṛ	*d-dšeyyṛ-at̲*	'little village'
ṭ-ṭwiṣ-a	*ṭ-ṭwiṣ-at̲*	'little cup'
ṣ-ṣmiṭ-a	*ṣ-ṣmiṭ-at̲*	'little belt'
le-xṛib̲-a	*le-xṛib̲-at̲*	'little ruin'
le-qniṭṛ-a	*le-qniṭṛ-at̲*	'little bridge'

Nouns ending in a vowel **i** have a semi-vowel **yy** before the suffix, e.g:

le-krisi	*l-krisiyy-at̲*	'little chairs'

The middle vowel sequence **eyy** is reduced to **i** when **-at̲** is suffixed.

ṛ-ṛb̲eyyeɛ	*ṛ-ṛb̲iɛ-at̲*	'little/small grass'
d-dreyyeɛ	*d-driɛ-at̲*	'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-zweyyef	*z-zwif-in*	'little handkerchief'
ṭ-ṭṛeyyef	*ṭ-ṭṛif-in*	'little piece'
š-šfifeṛ	*š-šfifṛ-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**

~ **-t̲** or **ta**-….-**et** circumfix in the singular EL, **t**-….-**t** ~ -**t̲** in the singular EA, **ti**-….-**an** circumfix in the plural EL and **t**-….-**an** in the plural EA. Some feminine nouns have a base extension +**t̲** before **-an**. Feminine nouns reduce vowel **eyy** to **i** when a plural suffix is added.

3.3.2.1. Masculine plurals

The masculine plural takes the prefix **i**- and the suffix -**en**, for example:

M:SG:EL	**M:PL:EL**	
a-ɣṛiṛef	*i-ɣṛiṛf-en*	‘small earthernware plate’
a-ɣdiden	*i-ɣdidn-en*	‘small fig tree’ (type)
a-ɛweyyel	*i-ɛweyyl-en*	‘small boy’
a-xneyyeq	*i-xneyyq-en*	‘small corridor’
a-qzizen	*i-qzizn-en*	‘small dog puppy’

The following two masculine nouns form an exception because they take the -**an** plural suffix.

M:SG:EL	**M:PL:EL**	
a-ftiweṯ	*i-ftiwṯ-an*	‘small piece of bread’
a-mṭiweṭ	*i-mṭiwṭ-an*	‘small useless person’

Two Arabic-morphology nouns take the Berber plural suffix -**en**.

le-mweyyes	*le-mweyys-en*	‘small retractable knife’
le-qweyyeṣ	*le-qweyyṣ-en*	‘small arch’

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 **ti**- and suffix -**an**.

F:SG:EL	**F:PL:EL**	
ta-fšiqeṛ-t	*ti-fšiqṛ-an*	‘small bale’
ta-lfifeṭ-t	*ti-lfifṭ-an*	‘small blister’
ta-mnigež-t	*ti-mnigž-an*	‘small earring’

ta-qzizen-t	*ti-qzizn-an*	‘small female puppy’
ta-wfeyyel-t	*ti-wfeyyl-an*	‘small eggs’
ta-wqiqef-t	*ti-wqiqf-an*	‘small door jamb’
ta-ṛpiṗeṣ-t	*ti-ṛpiṗṣ-an*	‘small straw hat’
ta-flilen-t	*ti-fliln-an*	‘small clay frying pan’

Two diminutive nouns have a prefix **ta-** in the plural. The base has an extension +**t̲**. Both singular and plural prefixes distinguish state.

F:SG:EL	**F:SG:EA**	**F:PL:EL**	**F:PL:EA**	
ta-smimer-t	*te-smimer-t*	*ta-smimer* + *t̲-an*	*te-smimer* + *t̲-an*	‘small sunny land’
ta-ɣweyyel-t	*te-ɣweyyel-t*	*ta-ɣweyyel* + *t̲-an*	*te-ɣweyyel* + *t̲-an*	‘small filly’

A couple of other nouns also have a base extension +**t̲** in the plural. These nouns have the regular prefix **ti-**. Many of these nouns reduce vowel **eyy** in the singular to **i** in the plural.

F:SG:EL	**F:PL:EL**	
ta-ḥbib-et	*ti-ḥbib* + *t̲-an*	‘small granule, pimple’
ta-rbeyy-et	*ti-rbeyy* + *t̲-an*	‘little girl’
ta-freyyex-t	*ti-frix* + *t̲-an*	‘little chicken, girl’
ta-nqeyyel-t	*ti-nqil* + *t̲-an*	‘small plant stengel’
ta-wneyyef-t	*ti-wnif* + *t̲-an*	‘small bread’
ta-zreyyef-t	*ti-zrif* + *t̲-an*	‘small road’

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.

le-fḥel	*a-fḥeyyel*	‘bull’
r-rt̲il-a	*ta-rt̲eyyel-t*	‘spider’
l-feṛn	*a-fṛiṛen* (~ *l-fṛeyyen*)	‘traditional oven’
ṣ-ṣtel	*ta-ṣteyyel-t*	‘bucket’

There is one noun which has a Berber-morphology masculine form and a feminine Arabic-morphology diminutive.

a-mezbel	*le-mziḇl-a*	‘refuse-dump’

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.

F:SG:EL		**M:SG:EL**	
ta-fraw-t	‘leaf’	*a-fraw*	‘big leaf’
ta-mmar-t	‘beard’	*a-mmar*	‘big beard’
ta-mṣeṭ-t	‘thigh’	*a-mṣeṭ*	‘big thigh’
ta-ɛeddis-t	‘belly’	*a-ɛeddis*	‘big belly’
ta-ṛḥeḇ-t	‘land’	*a-ṛḥeḇ*	‘big land’
ta-wfal-t	‘egg’	*a-wfal*	‘big egg’
t-uzzal-t	‘knife’	*a-wzzal*	‘big knife’
ta-qebbiṭ-t	‘bundle’	*a-qebbiṭ*	‘big bundle’
ta-ɣ^{w}lal-t	‘pot’	*a-ɣ^{w}lal*	‘big pot’

ta-xxun-t	'ass'	*a-xxun*	'big ass'
ta-xšeḇ-t	'trap'	*a-xšeḇ*	'big trap'
ta-ɛebbuṭ-t	'navel'	*a-ɛebbuṭ*	'big navel'
ta-ḇekkiw-t	'worm'	*a-ḇekkiw*	'big worm'
ta-ḡnaw-t	'pumpkin'	*a-ḡnaw*	'big pumpkin'

There is one Berber-morphology noun which gets a base extension +**iw** in the masculine.

F:SG:EL		**M:SG:EL**	
ta-sarka	'traditional shoe'	*a-sark* + *iw*	'big traditional shoe'

There is one noun which has a suppletive augmentative counterpart:

F:SG:EL		**M:SG:EL**	
ti-ṭṭ	'eye'	*a-ḇerruq*	'big eye'

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-ḇeṛquq** and **a-qṣeḇ** 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-ḇezzun*	'big breast'
le-bṭaṭ-a	'potatoes'	*a-ḇaṭaṭ*	'big potato'
maṭiš-a	'tomatoes'	*a-maṭiš*	'big tomatoe'
t-teffaḥ	'apples'	*a-teffaḥ*	'big apples'
d-dellaḥ	'watermelons'	*a-dellaḥ*	'big watermelon'
l-bettix	'melons'	*a-ḇettix*	'big melon'
le-bṣel	'onions'	*a-ḇṣel*	'big onion'
le-qṣeḇ	'cane'	*a-qṣeḇ*	'big cane'
l-baḵur	'fig'	*a-ḇaḵur*	'big fig'
l-beṛquq	'prunes'	*a-ḇeṛquq*	'big prune'
l-qenbul-a	'bomb'	*a-qenbul*	'big bomb'
l-keṛṛus-a	'wagon'	*a-keṛṛus*	'big wagon'
le-hraw-a	'beating stick'	*a-hraw*	'big beating stick'

bušbel	‘mushroom’	*a-bušbel*	‘big mushroom’[49]
buqɛaṣ	‘unripe fig’	*a-ḇuqɛaṣ*	‘big unripe fig’[50]

Group 2

The augmentatives in this group combine the masculine affixes with one of the suffixes **-un**, **-iw** and (in one case) **-win**.

-un

		M:SG:EL	
š-škaṛ-a	‘bag’	*a-šekṛ-un*	‘big bag’
l-lefɛ-eṯ	‘snake’	*a-lefɛ-un*	‘big snake’
l-ɛaṯb-a	‘threshold’	*a-ɛeṯb-un*	‘big threshold’
š-šmeɛ	‘candles’	*a-šemɛ-un*	‘big candle’
le-bṣel	‘onions’	*a-ḇeṣl-un*	‘big onion’
l-left	‘sweet potato’	*a-left-un*	‘big sweet potato’
l-qefl-a	‘button’	*a-qefl-un*	‘big button (sea vest)’
l-qettal-a	‘cobra’	*a-qettal-un*	‘big cobra’
ṣ-ṣennaṛa	‘fish hook’	*a-ṣennaṛ-un*	‘big fish hook’

There is one noun which has two possible forms of which the second is irregular.

		M:SG:EL	
l-ḥafer	‘foot print’	*a-ḥefṛ-un* ~ *a-ḥawfar*	‘big foot print’

Some augmentatives have a suffix **-iw**. The few nouns which take this form all end in **a**.

-iw		**M:SG:EL**	
ṛ-ṛeml-a	‘thin sand’	*a-ṛeml-iw*	‘thick sand’
l-xanč-a	‘bag’	*a-xanč-iw*	‘big bag’
ṛ-ṛeẓẓ-a	‘turban’	*a-ṛeẓẓ-iw*	‘big turban’

-win

There is one noun which takes the suffix **-win**.

		M:SG:EL	
r-rḥ-a	‘mill’	*a-reḥ-win*	‘big mill’

[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**.

d-ders-a	‘wheat heap’	*a-derrus*	‘big wheat heap’
l-bḥar	‘sea’	*a-ḇeḥḥur*	‘big wave’
l-ɛeṭṭ-a	‘bite’	*a-ɛeṭṭuṭ*	‘big bite’
ṭ-ṭḇel	‘tambourine’	*a-ṭebbal*	‘big tambourine’
d-debz-a	‘slap’	*a-debbiz*	‘big slap’
l-gezb-a	‘horn’	*a-gezziḇ*	‘big horn’
š-šṭeḇ	‘heap of bush’	*a-šeṭṭiḇ*	‘big heap of bush’
l-gayz-a	‘beam’	*a-geyyuz*	‘big beam’
l-ḥayṭ	‘wall’	*a-ḥeyyuṭ*	‘big wall’
l-ɣayṭ-a	‘flute’	*a-ɣeyyuṭ*	‘big flute’
l-ǧeld	‘skin’	*a-želluḏ*	‘big skin’
l-xubz-a	‘one bread’	*a-xubbaz*	‘one big bread’

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 in the singular and Arabic morphology in the plural. There are some Berber-morphology deadjectival nouns which are derived from Arabic-morphology adjectives. Finally, adjectival (nisba-type) nouns, the Berber element **ay** for tribal affiliation and the elements **bu**-, **ṣ-ṣḥab** 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**, +**t̲**, +**it**, +**it̲**, +**k̲**, +**iw**. Especially fruit, vegetables, trees and plants oppose a collective and a unity noun. The nouns **manḍalina** ‘mandarine’, **xiča** ‘dried fig’ and **maṭiša** / **tumaṭiš** ‘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:

M:SG	**F:SG:EL**	**F:PL:EL**	
l-banan	*ta-b̲anan-t*	*ti-b̲anan-an*	‘banana’
l-baḳ̲ur	*ta-b̲aḳ̲ur-t*	*ti-b̲aḳ̲ur-an*	‘fig’
l-laymun	*ta-laymun-t*	*ti-laymun-an*	‘lemon’
manḍalin-a	*ta-manḍalin-t*	*ti-manḍalin-an*	‘mandarin’
l-beṛquq	*ta-b̲eṛquq-t*	*ti-b̲eṛquq-an*	‘prune’
d-dellaḥ	*ta-dellaḥ-t*	*ti-dellaḥ-an*	‘watermelon’
l-felfel	*ta-felfel-t*	*ti-felfl-an*	‘paprika’
l-firas	*ta-firas-t*	*ti-firas-an*	‘pear’
l-lečin	*ta-lečin-t*	*ti-lečin-an*	‘orange’
l-lingaṣ	*ta-lingaṣ-t*	*ti-lingaṣ-an*	‘pear’
t-teffaḥ	*ta-teffaḥ-t*	*ti-teffaḥ-an*	‘apple’
s-snub̲eṛ	*ta-snub̲eṛ-t*	*ti-snub̲ṛ-an*	‘stone pine’

l-xeṛṛuḇ	*ta-xeṛṛuḇ-t*	*ti-xeṛṛuḇ-an*	‘carob bean / tree’
le-xniš	*ta-xniš-t*	*ti-xniš-an*	‘plant’
l-bettix	*ta-ḇettix-t*	*ti-ḇettix-an*	‘melon’
ṭ-ṭmar	*ta-ṭmaṛ-t*	*ti-ṭmaṛ-an*	‘date’
ṣ-ṣefṣaf	*ta-ṣefṣaf-t*	*ti-ṣefṣaf-an*	‘tree’ (sp.)
nnwaṛ	*ta-newwaṛt*	*ti-newwaṛ-an*	‘plant’ (generic)
l-lažuṛ	*ta-lažuṛ-t*	*ti-lažuṛ-an*	‘brick’
le-fḥem	*ta-fḥem-t*	---	‘charcoal’
n-namus	*ta-namust*	*ti-namus-an*	‘mosquito’

The following Berber-morphology unity nouns take base extensions.

M:SG	**F:SG:EL**	**F:PL:EL**	
l-ǧuǧeṯ	*ta-žuž-et*	*ti-žuž + ṯ-an*	‘peanut’[51]
n-niš	*ta-niš-et*	*ti-niš + ṯ-an*	‘apricot’
l-luwqiṯ	*ta-lewqit-t*	*ti-lewqit-an*	‘match’
l-lawz	*ta-lawz + i-ṯ*	*ti-lawz + iṯ-an*	‘almond’
š-šmuṛṛ-a	*ta-šmuṛṛ + eḵ-t*	*ti-šmuṛṛ + ḵ-an*	‘barbary fig’
s-sfenǧ	*ta-sfenǧ + eḵ-t*	*ti-sfenǧ + ḵ-an*	‘kind of donut’

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.

M:SG	**F:SG:EL**	**F:PL:EL**	
maṭiša~ tumaṭiš	*ta-maṭišt~tumaṭiš-t*	*ti-maṭiš-an*	‘tomato’

The following collective-unity nouns have Arabic morphology all over. Some unity nouns have an attested plural form. The noun **š-šmeɛ** ‘candles’ adds an extension + **ay** in the plural.

M:SG	**F:SG**	**F:PL**	
ṭ-ṭuḇ	*ṭ-ṭuḇ-a*	*ṭ-ṭuḇ-aṯ*	‘dried clay’
l-lḥem	*l-leḥm-a*	-	‘meat’
l-ǧawhaṛ	*l-ǧawhaṛ-a*	-	‘jewel’

[51] See II.1.3. phonology for **ǧ** and **ž**.

ṣ-ṣaḇun	*ṣ-ṣaḇun-a*	-	‘soap’
š-šmeɛ	*š-šemɛ-a*	*š-šemɛ + ay-aṯ*	‘candle’
n-nxel	*n-nexl-a*	-	‘palm tree’

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-ḥšam	*i-ḥšišm-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-qiṛṭaṣ	*ta-qiṛṭaṣ-t*	*ti-qiṛṭaṣ-an*	*le-qṛaṭeṣ*	*le-qṛiṭeṣ*	*le-qṛiṭṣ-aṯ*	‘bullet’

The following Berber-morphology diminutive has a base extension + **ṯ**.

M:SG	**F:SG:EL**	**F:PL:EL**	**PL**	
l-luḥ	*ta-lwiḥ-et*	*ti-lwiḥ + ṯ-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-beɛbuš	*ta-beɛbuš-t*	*le-bɛabeš*	‘dung beetle’
a-heğal	*ta-heğal-t*	*le-hğağel*	‘widow(er)’
a-karḇaš	*ta-karḇaš-t*	*le-kraḇeš*	‘claw’

a-menǧuṛ	-	*le-mnažeṛ*	‘traditional chair’
a-meɣraḇi	*ta-meɣraḇi-ṯ*	*le-mɣaṛḇa*	‘Moroccan’
a-rifi	*ta-rifi-ṯ*	*r-rwafa*	‘Riffian’
a-meḥǧuṛ	*ta-meḥǧuṛ-t*	*le-mḥažeṛ*	‘orphan’
a-meṣmaṛ	-	*le-mṣumaṛ*	‘nail’
a-mqerreḏ	*ta-mqerreḏ-t*	*le-mqerrḏin*	‘weak, small person’
a-mxazni	-	*le-mxazniyya*	‘government agent’
a-mɛawen	*ta-mɛawen-t*	*le-mɛawnin*	‘help’
a-mḥaḏri	-	*le-mḥaḏra*	‘pupil’
a-qṛin	*ta-qṛin-t*	*le-qṛan*	‘peer’
a-xeddam	*ta-xeddam-t*	*l-xeddama*	‘worker’
a-ɛeyyal	*ta-ɛeyyal-t*	*le-ɛwawel*	‘boy / girl / children’
a-ḵayḍar	-	*le-ḵyaḍer*	‘horse’
a-fešqaṛ	*ta-fešqaṛ-t*	*le-fṣaqeṛ*	‘bale’

One noun has an Arabic-morphology feminine and plural. For another noun Arabic- and Berber-morphology variants are in free variation.

M:SG:EL	**F:SG**	**PL**	
a-g^{w}ren	*le-grana*	*le-grayen*	‘frog’
a-šeṛṛiṭ	*ta-šeṛṛiṭ~š-šeṛṭ-a*	*i-šeṛṛiṭ-en~š-šṛaṭ*	‘line, scar’

One noun has Berber-morphology singulars and a feminine plural, whereas the general plural is Arabic.The feminine plural has a base extension +**ṯ**.

M:SG:EL	**F:SG:EL**	**F:PL:EL**	**PL**	
a-žaṛ	*ta-žaṛ-t*	*ti-žaṛ+ṯ-an*	*l-ǧiṛan*	‘neighbour’

There are two nouns in our corpus for which the Berber- and Arabic-morphology plurals are in free variation.

M:SG:EL	**PL**	
a-keppuṭ	*i-keppaṭ~ le-kpapeṭ*	‘coat’
a-quṛtaš	*i-quṛtaš~ le-qṛateš*	‘plant’ (sp.)

There is one case of an Arabic singular noun which has a Berber-morphology plural.

M:SG	**PL**	
l-mehraz	*i-mehrazen*	‘insect’ (sp.)

Finally, the noun for ‘nose’ is an Arabic-morphology plural, whereas the word for ‘nostril’ is a Berber-morphology singular noun:

PL		**F:SG:EL**	**F:PL:EL**	
le-xnafer	‘nose’	*ta-xenfur-t*	*ti-xenfur-an*	‘nostril’

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 + **aw**, for example:

Adjective			**M:SG**	**F:SG**	
kḥel	‘black’	>	*a-keḥl* + *aw*	*ta-keḥl* + *aw-t*	‘black one’
ḥmeṛ	‘red’	>	*a-ḥemṛ* + *aw*	*ta-ḥemṛ* + *aw-t*	‘red one’
zreq	‘blue’	>	*a-zerq* + *aw*	*ta-zerq* + *aw-t*	‘blue one’
xḏer	‘green’	>	*a-xeḏr* + *aw*	*ta-xeḏr* + *aw-t*	‘green one’
ṣfeṛ	‘yellow’	>	*a-ṣefṛ* + *aw*	*ta-ṣefṛ* + *aw-t*	‘yellow one’
zreg	‘grey’	>	*a-zerg* + *aw*	*ta-zerg* + *aw-t*	‘grey one’
ẓɛeṛ	‘blond’	>	*a-ẓeɛṛ* + *aw*	*ta-ẓeɛṛ* + *aw-t*	‘blond one’

There are two color nouns, both referring to ‘white’, which do not take the base extension + **aw**. One of these nouns is derived from an Arabic-morphology adjective, the other from a Berber-morphology adjective:

Adjective			**M:SG**	**F:SG**	
byeṭ	‘white’	>	*a-beyyuṭ*	*ta-beyyuṭ-t*	‘white one’
mellul	‘white’	>	*a-mellul*	*ta-mellul-t*	‘white one’

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 **ḥen**.

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).

M:SG	**F:SG**	**PL**	
t-tiṭwan-i	*t-tiṭwan-eyy-a*	*t-tiṭwan-eyy-in*	‘person from Tetouan’
l-buzraṯ-i	*l-buzraṯ-eyy-a*	*l-buzraṯ-eyy-in*	‘person from Beni Bouzra’
l-menṣur-i	*l-menṣur-eyy-a*	*l-menṣur-eyy-in*	‘person from Beni Mensour’

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 buẓṛa	‘those of Bouzra’
ay n menṣur	‘those of Mensour’
ay n ẓyaṯ	‘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:

		M:SG	**F:SG**	
l-lihuḏ	‘Jews’	*l-lihuḏ-i*	*l-lihuḏ-eyy-a*	‘Jew’

The feminine form of the following noun refers both to the feminine and the plural.

M:SG		**F/PL**	
l-ǧaḍarm-i	‘male gendarme’	*ǧaḍarm-eyy-a*	‘female gendarme / gendarmes’

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	
t-tn-eyy-a	‘one year old goat (with two teeth)’

r-rbaɛ-eyy-a	‘two year old goat’
le-xmas-eyy-a	‘three year old goat’
s-sdas-eyy-a (~ *ž-žamɛ-a*)	‘four year old goat’

4.5. Pre-nominal elements bu-, sḥaḇ, 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 **ṣṣḥaḇ** ‘people’ is used, followed by the EL. The prefix **bu**- can be preserved when **ṣṣḥab** 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 **sḥaḇ** and **mul** are followed by nouns in the EL. Some examples are:

bu-

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’

sḥaḇ

sḥaḇ ti-ɛebbuṭ-an	‘the people with the bellies’

mul

mul l-ḥanuṯ	‘the owner (M.) of the shop’
mul ṭṭunuḇir	‘the owner of the car’
mul-a l-ḥanuṯ	‘the owner (F.) of the shop’
mwal-in ti-mmira	‘the people with the beards’
mwal-in bu-t-ɛebbuṭ-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 -**aṯ**. 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 **l**-. The nouns that have a plural either have a suppletive form or take a suffix -**waṯ** 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. **ɛemṯi nnes** 'his/her paternal aunt'. There are two kinship nouns that have a suppletive plural **ayeṯma** '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:

SG		**PL**	
ḵma	'brother'	*ayeṯma*	'brothers and sisters'
uleṯma	'sister'	*ayeṯma*	'brothers and sisters'
ɛemṯi	'paternal aunt'	*ɛemmṯi-waṯ*	'paternal aunts'
ɛemmi	'paternal uncle'	*ɛemmi-waṯ*	'paternal uncles'
xalti	'maternal aunt'	*xalti-waṯ*	'maternal aunts'
ḥḇiḇi	'maternal uncle'	*ḥḇiḇi-waṯ*	'maternal uncles'
žeddi	'grandfather'	*žeddi-waṯ*	'grandfathers'
ɛezzi	'older brother'	-	
nanna	'older sister'	-	
ḇaḇa	'father'	-	
yemma	'mother'	-	

Some non-affix nouns have a Berber-morphology plural, for example:

buqɛaṣ (~ *a-ḇuqɛaṣ*)	*i-ḇuqɛaṣ-en*	'unripe fig'
buriš	*i-buriš-en*	'ant with wings'
žaymuṯ	*i-žaymuṯ-en*	'gadfly'

The following two nouns only take a Berber-morphology plural suffix.

ṭrayllil	*ṭrayllil-en*	‘bat’
paɣeyyu	*paɣeyyu + w-en*	‘parrot’

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**.

budrihem	*budrihm-aṯ*	‘type of bird’
muḵa	*muḵ-aṯ*	‘owl’

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:

bušuḵ	‘iron fence’	
buḏen	‘kind of pasta’	
buḥḇel	‘life’	
buhrawa	‘bird’ (sp.)	
quṛṛayes	‘insect’ (sp.)	
qlallu	‘plant’ (sp.)	
kersanna	‘bitter vetch’	
qesbaṭṭa	‘plant’ (sp.)	
gamba	‘shrimp’	(< Sp.)
gana	‘interest’	(< Sp.)

One of these singularia tantum is a compound made up out of **serraq** ‘thief’ + **zziṯ** ‘oil’. It does not take an article.

serraqzziṯ	‘cockroach’

[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. **ḍṛab**, **ḍaṛb** 'the fact of hitting' > **ḍeṛb-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**

verb		**VN**	
ḥezzen	'grief'	*l-ḥuzen*	'the fact of grieving'
hewwel	'disturb'	*l-hawl*	'the fact of disturbing'
rɛeḇ	'scare'	*r-ruɛḇ*	'the fact of scaring'
qeyyes	'mesure'	*le-qyas*	'the fact of mesuring'
dleḡ	'rub'	*d-dliḡ*	'the fact of rubbing'
qṛeṭ	'break'	*le-qṛiṭ*	'the fact of breaking'
fṛeq	'separate'	*le-fṛaq*	'the fact of separating'

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'exercise d'un metier*' (Marçais 1977:86). For example:

fhem	'understand'	*le-fham-a*	'the fact of understanding'
fleḥ	'cultivate'	*le-flaḥ-a*	'the fact of cultivating'
xeyyeṭ	'sew'	*le-xyaṭ-a*	'the fact of sewing'

ccc(**-a**)

ḥteš	'collect bush'	*le-ḥteš*	'the fact of collecting bush'
rbeḥ	'earn'	*r-rbeḥ*	'the fact of earning'
ɛzel	'separate'	*l-ɛezl-a*	'the fact of separating'

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:

k̲šem	'enter'	*d-dxul*	'the fact of entering'

cvc (hollow)

ṣum ~ ṣam	'fast'	*ṣ-ṣum*	'the fact of fasting'
zzenz ~ znez	'sell'	*l-biɛ*	'the fact of selling'

ccv (defective)

žerri	'run'	*le-ǧri*	'the fact of running'
qqim	'stay'	*le-bqa*	'the fact of staying'
ssyas / ɣli	'boil'	*le-ɣli*	'the fact of boiling'
xṛa	'defecate'	*le-xṛa*	'the fact of defecating'
ṛṛḏ̲a	'exceptance'	*ṛ-ṛḏ̲a*	'the fact of excepting'
ddu	'go'	*le-mši*	'the fact of going'
ddu d	'come'	*le-mži*	'the fact of coming'

Berber-etymology verbs have suppletive verbal nouns of different types.

ṭṭeṣ	'sleep'	*n-nɛas*	'the fact of sleeping'
serwe̲ṭ	'thresh'	*d-dras*	'the fact of threshing'
werg	'dream'	*le-mnam*	'the fact of dreaming'
wwe̲ṭ	'hit'	*ḍ-ḍeṛb*	'the fact of hitting'
ffuɣ	'go out'	*l-xuṛž-a*	'the fact of going out'
ara (*kte̲b*)	'write'	*le-k̲tab-a*	'the fact of writing'
ɣṛes	'slaughter'	*d-dbiḥ-a*	'the fact of slaughtering'
ssendu	'churn'	*le-mxiṭ*	'the fact of churning'
nu	'be cook'	*ṭ-ṭyab*	'the fact of cooking'

One verb with Arabic etymology corresponds to a verbal noun of different Arabic origin.

ɛeyyeṛ	'play'	*l-leɛb*	'the fact of playing'

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 **-a** suffix to get a more concrete meaning. There are no examples of verbal nouns of stem III.

tvccic

Mostly **cCc** (stem 2) verbs correspond to these schemes.

derreɛ	‘embrace’	*t-tedriɛ*	‘the fact of embracing’
kemmeš	‘winkled’	*t-tekmiš*	‘the fact of winkling’
šekkem	‘squeal’	*t-tešk̲im*	‘the fact of squealing’
ḥelleq	‘fish’	*t-teḥliq*	‘the fact of fishing’
ṛeqqeɛ	‘repair clothes’	*t-teṛqiɛ*	‘the fact of repairing’
sqef	‘roof’	*t-teṣqif*	‘the fact of making a roof’
debbeɣ	‘weed’	*t-tedbiɣ*	‘the fact of weeding’
felleq	‘cut in half’	*t-tefliq*	‘the fact of cutting in half’
felleḥ	‘burst, dispose of’	*t-tefliḥ*	‘the fact of bursting’
heddeḏ	‘threat’	*t-tehdiḏ*	‘the fact of threatening’
hemmeḵ	‘hit’	*t-tehmiḵ*	‘the fact of hitting’
melleḥ	‘salt’	*t-temliḥ*	‘the fact of salting’
nedder	‘shock after crying’	*t-tendir*	‘the fact of shocking’
qeṣṣeṣ	‘cut’	*t-teqṣiṣ*	‘the fact of cutting
ḥeṛq	‘feel pain’	*t-teḥṛiq*	‘the fact of feeling pain’
sellem	‘permit’	*t-teslim*	‘the fact of permitting’
seǧeɛ	‘be brave’	*t-tesžiɛ*	‘the fact of being brave’
šebbeṛ	‘catch’	*t-tešbiṛ*	‘the fact of catching’
ɛerref	‘authenticate’	*t-teɛrif*	‘the fact of authenticating’
ɛeṛref	‘invite’	*t-teɛṛif*	‘the fact of inviting’
ṣeffeṛ	‘whistle’	*t-teṣfiṛ*	‘the fact of whistling’
ẓewweṛ	‘forge’	*t-teẓwiṛ*	‘the fact of forging’
tʔekkeḏ	‘guarantee’	*t-teʔkiḏ*	‘the fact of guaranteeing’

ccuc(a)

There is one verbal noun which has the same scheme but a different vowel.

qeṭṭeɛ	‘cut’	*t-teqṭuɛ*	‘the fact of cutting’

tvcc-eyy-a

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.

ṛebbi	‘raise’	*t-teṛbiyy-a*	‘the fact of raising’
lewwi	‘roll’	*t-telwiyy-a*	‘the fact of rolling’

tcccic(a)

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.

qeṛfez	'pinch'	*t-tqeṛfiz*	'the fact of pinching'
beɣez	'swap'	*t-tbeɣiz*	'the fact of swapping'
bežɣeṭ	'mumble'	*t-tbežɣiṭ*	'the fact of mumbling'
ḥesḥes	'whisper'	*t-tḥesḥis*	'the fact of whispering'

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.

ɛayen	'look'	*a-mɛayen*	'the fact of looking'
ḇzeḡ	'be wet'	*a-zzuḡ*	'the fact of being wet'
mḡer	'harvest'	*a-mḡer*	'the fact of harvesting'

Examples of their use are:

(1) *i-ttakk = as amɛayen*
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-ḵmel 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:

Arabic morphology

non-derived		**tt**- (**t**-) / **n**- **derived**	
fhem	‘understand’	*t-keyyef*	‘smoke’
fleḥ	‘cultivate’	*t-qeyya*	‘vomit’
sken	‘live’	*t-ḥerreḵ*	‘move’
kṛeh	‘hate’	*n-baɛ*	‘be sold’
kri	‘rent’	*ne-dfeɛ*	‘be pushed’

Berber morphology

ccc		**cCc** (stem II)		**cacc** (stem III)	
fṛeq	‘separate’	*xebbeɛ*	‘hide’	*sahel*	‘make easy’
qleḇ	‘flip’	*šebbeṛ*	‘hold’	*ḥawel*	‘try’
hleḵ	‘be sick’	*ɛeqqeḏ*	‘tie’	*ɛafer*	‘try’

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 detransivisers (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 embarrased, 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 adressed, 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)[53]. 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:

[53] cf. Galand (2010:85-86) for a discussion.

person – (**tt**) – aspectual lexical base - person

(1)	*te*	*tt*	*beddal*	*et*
	2S	I	change:I	2S
	‘You always change.’			

For **ss**- derived verbs the structure is:

(2)	*te*	*ss*	*lkam*	*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 -**awe<u>t</u>** or **-a<u>t</u>**. 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:

		nṭeḡ ‘fly’ (P)		**alu** ‘pick’ (I)	
1:SG	*…- ax /-aɣ/-x*	*neṭḡ-ax*	‘I flew’	*ttalu-x*	‘I pick’
2:SG	*t-… - et*	*t-neṭḡ-et*	‘you flew’	*he-ttalu-t*	‘you pick’
3:M:SG	*i-…*	*i-nṭeḡ*	‘he flew’	*i-ttalu*	‘he picks’
3:F:SG	*t- …*	*t-enṭeḡ*	‘she flew’[55]	*he-ttalu*	‘she picks’
1:PL	*n-…*	*n-enṭeḡ*	‘we flew’	*ne-ttalu*	‘we pick’

[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**-.

2:PL	*t-…-em*	*t-neṭḡ-em*	‘you flew’	*he-ttalu-m*	‘you pick’
3:PL	*…-en*	*neṭḡ-en*	‘they flew’	*ttalu-n*	‘they pick’

7.3. The Imperative and injunctive affixes

The Imperative singular has no affix. The plural is marked by means of the suffix -**aweṯ** or -**aṯ**. 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)nṭeḡ*	‘jump!’
2:PL	*…-aweṯ* ~ *aṯ*	*netḡ-aweṯ* ~ *netḡ-aṯ*	‘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	*aṛa*	‘give!’
2:PL	*aṛa-w*	‘give!’ (PL)

The form **aṛa** ‘give’ takes direct object pronouns and the deictic clitic.

(3) *aṛa=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*	*keğ̌i*	*a*	*saḥḇi*
	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 -**awe̲t̲** ~ -**a̲t̲**. The non-real marker **a** always precedes the injunctive verb.

1:PL *n-…-awe̲t̲*

(5) *a* *n-k̲erz-awe̲t̲*
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**…**ši**. The same construction is used to negate non-realised events[56]. In the examples both translations are given.

(6) *ma* *ya* *k̲erz-et* *ši*
NEG AD plough:A-2:S NEG
'Do not plough! / You will not plough. (S)'

(7) *ma* *ya* *k̲erz-em* *ši*
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**[57]. In Berber literature this form is the traditionally know 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).

[56] In Arabic the negative imperative is formed by negating the Imperfect, **ma deḥre̲t̲ ši** 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-….-n	*i-ttiṯu-n*	‘go’	(I)
	y-uk̲r-en	‘steal’	(P)

There is one verb which appears only in its relative form in the following question:

(8) *ma* *k̲ = y-uɣu-n?*
what 2S:DO = 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. **vcc** as opposed to **ccc** roots), and is not related to the semantics of the verb, for example:

	1.‘pick’	**2.‘plough’**	**3.‘cry’**
Aorist	*alu*	*k̲rez*	*ttru*
Perfective	*ulu*	*k̲rez*	*ttru*
Imperfective	*ttalu*	*kkrez*	*ttru*

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 varities of Senhaja de Sraïr, geographically closest to Ghomara, do not have negative (Perfective or Imperfective) stems (Lafkioui, 2007: 175, 176). The absence of a negative stem is found in certain dialects of Tashelḥiyt 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 **ll** '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**[60]. Younger speakers have no person-based changes. The full Aorist paradigm of this verb is:

	'be' (A)
1:SG	*ll-ax* ~ *lli-x*
2:SG	*te-ll-et* ~ *te-lli-t*
3:M:SG	*i-ll*
3:F:SG	*te-ll*
1:PL	*ne-ll*
2:PL	*te-ll-em* ~ *te-lli-m*
3:PL	*ll-en* ~ *lli-n*

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.

	Aorist	**Perfective**	
ccc	*ḵmeṭ*	*ḵmeṭ*	'burn'
cC	*ɛeṭṭ*	*ɛeṭṭ*	'bite'
cCc[61]	*beddel*	*beddel*	'swap, dress'
cCi[62]	*denni*	*denni*	'blow the fire'
cccc	*qefqef*	*qefqef*	'shiver'
cacc	*ɛayen*	*ɛayen*	'look for, search'
Cc	*ṭṭeṣ*	*ṭṭeṣ*	'sleep'

[60] It is interesting to note that in the fixed expression **aṛa-ḵ illa** 'that might be' the third person masculine form verb ends in an **a**.

[61] **cCc** (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).

[62] 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 **ɛṛež** 'limp' is used, in Ghomara Berber **ɛeṛṛež** 'limp' is used. Other examples which have underived forms in Arabic, but have geminated forms in Berber are Arabic **qṭeṛ** Berber **qeṭṭeṛ** 'drip' and Arabic **nder**, Berber **nedder** 'shock after crying'. Examples of de-nominalised forms are **zeḥḥem** 'narrow' from **zzḥam** 'narrowness' and **deḥḥes** 'crowd' from **ddḥas** 'crowdedness'. De-adjectival forms are quite numerous, e.g. **ɛewwež** 'bend' (< **ɛwež** 'be bent'), **ḥewwel** 'make crooked' (< **ḥwel** 'be crooked'), **wesseɛ** 'widen'(< **waseɛ** 'be wide'), **ṛeṭṭeḇ** 'soften, smoothen'(< **ṛṭeḇ** 'soft, smooth'), **ṭewwel** 'lenghten' (< **ṭwil** 'be tall'), **qeṣṣeṛ** '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**, **caci**, **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.

Cc

Aorist		**Perfective**	
kkur	*/kkʷer/*	*kker*	'stand up'[63]
qqul	*/qqʷel/*	*qqel*	'return'
gguz	*/ggʷez/*	*ggez*	'descend'
kkus	*/kkʷes/*	*kkes*	'remove'
qqun	*/qqʷen/*	*qqen*	'tie, close'
ffuɣ	*/ffeɣʷ/*	*ffeɣ*	'go out'
ẓẓuḡ (~ *ẓẓeḡ*)	*/ẓẓeḡʷ/*	*ẓẓeḡ*	'milk'

[63] For this verb labialisation is optional in the imperative plural but not in the singular:

ukkr-aweṯ ~ *ekkr-aweṯ*	'stand up'	IMP:PL
kkur ~ **kker*	'stand up'	IMP:S

ccc

Aorist		**Perfective**	
lkum	*/lkʷem/*	*lkem*	‘reach’

cc

Aorist		**Perfective**	
suɣ	*/seɣʷ/*	*seɣ*	‘buy’

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 (/nɣʷ/)** ‘kill’[64]. Type 2, adds the **a** in the Perfective only when the verb has an inflectional suffix. The verbs **nes** ‘be extinguished’, **ḵes** ‘herd’, **ẓeṛ** ‘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: **meḏ** ‘finish’, **ẓeḏ** ‘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.

	Type 1		**Type 2**	
	nuɣ ‘kill’		**fk** ‘give’	
1:SG	*nɣa-x*	‘I have killed ’	*fka-x*	‘I gave’
2:SG	*te-nɣa-t*	‘You have killed’	*te-fka-t*	‘You gave’
3:M:SG	*i-nɣa*	‘He has killed’	*i-fk*	‘He gave’
3:F:SG	*te-nɣa*	‘She has killed’	*te-fk*	‘She gave’
1:PL	*ne-nɣa*	‘We have killed’	*ne-fk*	‘We gave’
2:PL	*te-nɣa-m*	‘You have killed’	*te-fka-m*	‘You gave’
3:PL	*nɣa-n*	‘They have killed’	*fka-n*	‘They gave’

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).

	meḏ ‘be finished, be extinguished’		**ẓeḏ** ‘grind’	
1:SG	*mḏ-ax*	‘I am finished’	*ẓḏ-ax*	‘I ground’
2:SG	*te-mḏ-et*	‘You are finished’	*te-ẓḏ-et*	‘You ground’
3:M:SG	*i-meḏ*	‘He is finished’	*i-ẓeḏ*	‘He ground’
3:F:SG	*t-meḏ*	‘She is finished’	*t-ẓeḏ*	‘She ground’
1:PL	*n-meḏ*	‘We are finished’	*n-ẓeḏ*	‘We ground’
2:PL	*te-mḏ-em*	‘You are finished’	*te-ẓḏ-em*	‘You ground’
3:PL	*mḏ-en*	‘They are finished’	*ẓḏ-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 aformentioned 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 **žž** ‘leave it!’ and the plural imperative **ǧ-awet̲** ‘leave (PL) it!’ (cf. II.1.3. phonology).

	su ‘drink’		**nu** ‘be ripe/cooked’	
1:SG	*swa-x*	‘I drank’	*nwa-x*	‘I am cooked’[66]
2:SG	*te-swa-t*	‘You drank’	*te-nwa-t*	‘You are cooked’
3:M:SG	*i-su*	‘He drank’	*i-nwa*	‘He is cooked’
3:F:SG	*t-su*	‘She drank’	*te-nwa*	‘She is cooked’
1:PL	*n-su*	‘We drank’	*ne-nwa*	‘We are cooked’
2:PL	*te-swa-m*	‘You drank’	*te-nwa-m*	‘You are cooked’
3:PL	*swa-n*	‘They drank’	*nwa-n*	‘They are cooked’

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.

	rri ‘return’	
1:SG	*rrya-x* ~ *rri-x* ~ *rra-x*	‘I returned’
2:SG	*te-rrya-t* ~ *te-rri-t* ~ *te-rra-t*	‘You returned’
3:M:SG	*i-rrya* ~ *i-rri* ~ *i-rra*	‘He returned’
3:F:SG	*te-rrya* ~ *terri* ~ *terra*	‘She returned’
1:PL	*ne-rrya* ~ *ne-rri* ~ *ne-rra*	‘We returned’
2:PL	*te-rrya-m* ~ *te-rri-m* ~ *te-rra-m*	‘You returned’
3:PL	*rrya-n* ~ *rri-n* ~ *rra-n*	‘They returned’

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).

Aorist	**Perfective**	
a̲kel ~ *a̲kul (/a̲k^{w}el/)*	*u̲kel*	‘step on’

[66] This can be used metaphorically to signify that someone is too hot.

aḵer ~ aḵur (/aḵʷer/)	*uḵer*	‘steal’
alu	*ulu*	‘pick’

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 **ḡ** can be labialised **ḡu** (/**ḡ**ʷ/).

Aorist	**Perfective**	
aḡem d ~ aḡum d (*/aḡʷem d/*) ~ *daḡem ~ daḡum* (*/daḡʷem/*)	*uḡem d ~ daḡem*	‘draw water’

The following verbs show free variation between **a** ~ **u** in initial position in the Aorist.

Aorist	**Perfective**	
af ~ uf	*uf*	‘find’
as d ~ us d	*us d*	‘land, be family of’
ara ~ ura	*ura*	‘write’
aru ~ uru	*uru*	‘give birth’
ani ~ uni	*uni*	‘ride’
aggez ~ uggez	*uggez*	‘recognise’
aḡel ~ uḡel ~ aḡul (*/aḡʷel/*)	*uḡel*	‘hang up food for animals’

One verb in our corpus shows free variation between initial **Ø** and **u** in the Perfective.

Aorist	**Perfective**	
ameẓ ~ umeẓ	*meẓ ~ umeẓ*	‘catch, take, grab’

There is one verb beginning with an **a** which does not change in the Perfective.

Aorist	**Perfective**	
ažuf	*ažuf*	‘stink’

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** ~ **u**. There is one exceptional case which has **a** ~ **u** > **a**. Many of the verbs which have a vowel alternation are integrated Arabic hollow (**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**.

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:

	fiq 'wake up'		
	Aorist	**Perfective**	
1:SG	*fiq-ax*	*faq-ax*	'I woke up'
2:SG	*t-fiq-et*	*t-faq-et*	'You woke up'
3:M:SG	*i-fiq*	*i-faq*	'He woke up'
3:F:SG	*t-fiq*	*t-faq*	'She woke up'
1:PL	*n-fiq*	*n-faq*	'We woke up'
2:PL	*t-fiq-em*	*t-faq-em*	'You woke up'
3:PL	*fiq-en*	*faq-en*	'They woke up'

Other verbs of this type are:

Aorist	**Perfective**	
riḇ	*raḇ*	'destroy'
ɛiš	*ɛaš*	'live'
žif	*žaf*	'choke'
miḥ	*maḥ*	'empty water'
sis	*sas*	'boil'

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.

Aorist	**Perfective**	
siwel	*sawel*	'speak or talk'
sisen	*sisen* ~ *sasen*	'dip bread into gravy'

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.

Aorist	**Perfective**	
zwir	*zwir* ~ *zwar*	'go first'

All other verbs of this type do not have vowel change, for example:

Aorist	**Perfective**	
wsir	*wsir*	'be/become old'

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.

	Aorist	**Perfective**	
1:SG	*ɛum-ax*	*ɛam-ax* ~ *ɛum-ax*	'I swam'
2:SG	*t-ɛum-et*	*t-ɛam-et* ~ *t-ɛum-et*	'You swam'
3:M:SG	*i-ɛum*	*i-ɛam* ~ *i-ɛum*	'He swam'
3:F:SG	*t-ɛum*	*t-ɛam* ~ *t-ɛum*	'She swam'
1:PL	*n-ɛum*	*n-ɛam* ~ *n-ɛum*	'We swam'
2:PL	*t-ɛum-em*	*t-ɛam-em* ~ *t-ɛum-em*	'You swam'
3:PL	*ɛum-en*	*ɛam-en* ~ *ɛum-en*	'They swam'

Other verbs of this type are:

Aorist	**Perfective**	
ṣum	*ṣam ~ ṣum*	‘fast’
ẓuṛ	*ẓaṛ ~ ẓuṛ*	‘visit a marabout’
bus	*bas ~ bus*	‘kiss’
šuš	*šaš ~ šuš*	‘search’

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.

Aorist	**Perfective**	
ṣuṭ	*ṣaṭ*	‘blow’

The following verbs of different types change **u** in the Aorist to **a** or **a** ~ **u** in the Perfective.

Aorist	**Perfective**	
lluẓ	*llaẓ ~ lluẓ*	‘be hungry’

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.

Aorist	**Perfective**	
ẓẓall ~ ẓẓull	*ẓẓall*	‘pray’
ggall ~ ggull	*ggall*	‘swear’

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.

Aorist	**Perfective**	
mmuṯ	*mmuṯ*	‘die’
qquṛ	*qquṛ*	‘dry up’[67]

[67] This form does not have labialisation (see II.4. on labialisation).

One verb in our corpus has **u** ~ **Ø** in the Aorist and in the Perfective.

Aorist	**Perfective**	
šumm ~ *šemm*	*šumm* ~ *šemm*	‘smell’

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:

	ṣḥu ‘get better, heal’		
	Aorist	**Perfective**	
1:SG	*ṣḥu-x*	*ṣḥa-x*	‘I have become better’
2:SG	*te-ṣḥu-t*	*te-ṣḥa-t*	‘You have become better’
3:M:SG	*i-ṣḥu*	*i-ṣḥa*	‘He has become better’
3:F:SG	*te-ṣḥu*	*te-ṣḥa*	‘She has become better’
1:PL	*ne-ṣḥu*	*ne-ṣḥa*	‘We have become better’
2:PL	*te-ṣḥu-m*	*te-ṣḥa-m*	‘You have become better’
3:PL	*ṣḥu-n*	*ṣḥa-n*	‘They have become better’

ccu verbs

This verb structure has final vowel **u** in the Aorist that changes to **a** in the Perfective.

Aorist	**Perfective**	
rku	*rka*	‘rot’
bnu ~ *b̲nu*	*b̲na*	‘build’
ṣḥu	*ṣḥa*	‘be strong, cure’
ḥmu	*ḥma*	‘be hot’
rnu	*rna*	‘add’
b̲ṭu	*b̲ṭa*	‘share’
b̲du	*b̲da*	‘begin’

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**	
ẓẓu	*ẓẓa*	‘plant’
ddu	*dda*	‘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**	
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:

	ɛelli ‘ascend, go up’		
	Aorist	**Perfective**	
1:SG	*ɛelli-x*	*ɛella-x*	‘I went up’
2:SG	*t-ɛelli-t*	*t-ɛella-t*	‘You went up’
3:M:SG	*i-ɛelli*	*i-ɛella*	‘He went up’
3:F:SG	*t-ɛelli*	*t-ɛella*	‘She went up’
1:PL	*n-ɛelli*	*n-ɛella*	‘We went up’
2:PL	*t-ɛelli-m*	*t-ɛella-m*	‘You went up’
3:PL	*ɛelli-n*	*ɛella-n*	‘They went up’

Other verbs of this type are:

Aorist	**Perfective**	
ḥewwi	*ḥewwa*	‘have sex’
ɛelli	*ɛella*	‘rise’
žerri	*žerra*	‘run’
feḍḍi	*feḍḍa*	‘finish’
meḍ̲ḍ̲i	*meḍ̲ḍ̲a*	‘sharpen’
ḥeffi	*ḥeffa*	‘make blunt’
neqqi	*neqqa*	‘clean’
ḥenni	*ḥenna*	‘rub in with henna’

The following verb of the type **cCi** has vowel change **i** > **i** ~ **a**. The Perfective has two forms which are in free variation.

Aorist	**Perfective**	
tekki	*tekki* ~ *tekka*	‘press on’

A number of verbs which have underlying **ey** > **i** in final position, do not have vowel change, for instance:

Aorist	**Perfective**	
denni	*denni*	‘blow the fire’
lewwi	*lewwi*	‘roll’

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.

Aorist	**Perfective**	
qli	*qla*	‘fry’
ʒri	*ʒra*	‘pound’
d̲ri	*d̲ri* ~ *d̲ra*	‘pass’

Other **cci** verbs do not participate in these vowel changes, e.g.

Aorist	**Perfective**	
mṭi	*mṭi*	‘lunch’
ngi	*ngi*	‘push’
ɣli	*ɣli*	‘set, descend’

The following verb of the type **cci** has vowel change **i** > **i** ~ **a**. The Perfective forms show free variation of these two forms.

xwi	*xwi* ~ *xwa*	‘empty’

caci verbs

A number of verbs which have structure **caci** change the final **i** to **a** in the Perfective.

Aorist	**Perfective**	
laqi	*laqa*	‘let, make meet’
wali	*wala*	‘hit’
ẓ̣ali	*ẓ̣ala*	‘separate’
ḥaḏ̣i	*ḥaḏ̣a*	‘touch’

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.

Aorist	**Perfective**	
uḵ̣i ~ aḵ̣i	*uḵ̣a ~ uḵ̣i*	‘cross the river’

One verb, ending in a vowel, adds vowel **i** to the Aorist to form the Perfective. Underlying **w** becomes **u** in final position.

Aorist	**Perfective**	
ṭ̣ṭ̣u	*ṭ̣ṭ̣wi*	‘fold’

One verb has the vowel change **i** in the Aorist to **a** in the Perfective.

Aorist	**Perfective**	
seqṣ̣i	*seqṣ̣a*	‘ask’

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:

	Perfective ‘give deserved punishment’	
1:SG	*uḡm-ax as*	‘I gave him/her the deserved punishment’
2:SG	*t-uḡm-et as*	‘You gave him/her the deserved punishment’
3:M:SG	*y-uḡem as*	‘He gave him/her the deserved punishment’
3:F:SG	*t-uḡem as*	‘She gave him/her the deserved punishment’
1:PL	*n-uḡem as*	‘We gave him/her the deserved punishment’
2:PL	*t-uḡm-em as*	‘You gave him/her the deserved punishment’
3:PL	*uḡm-en as*	‘They gave him/her the deserved punishment’

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) *aḥu* *ga-s*
give.deserved.punishement:IMP in-3S
'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.

Aorist	**Perfective**	
ssen	*ssen*	'know
ffer	*ffer*	'owe'[68]

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:

Aorist	**Imperfective**	
zwir	*zuggir*	'precede'
k̲nes	*kknes*	'argue'
fred̲	*ffred̲*	'graze'
rfes	*reffes*	'knead'
d̲ri	*ddray*	'pass'[69]

[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:

tazzeḡ	'dry'	*ttaẓẓeḏ*[69]	'pee'
tṣuṭ	'blow'	*ttɛum*	'swim'

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.

tteḥtiž	'want'	*teṭṭeṣ*	'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'	*ttṛeẓ*	'break'

The geminate consonant in the verb types **Cc**, **Cvc** and some irregular types degeminates when the **tt** ~ **t** is prefixed, for example:

Aorist	**Imperfective**	
qquṛ	*ttɣaṛ*	'dry'
qqim	*ttɣim* ~ *ttɣima*	'sit'
ggull	*tgalla*	'swear'
kkar	*ttḵar*	'be full'

(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 **ṯ** > **tt** correspondence. One possible candidate with **ṯ** > **dd** correspondence would be Aorist **iddu** > Imperfective **ittiṯu** - **ittuṯu**. 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** ~ **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**, **ṛ**). 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 **k̲meṭ** > **kemmeṭ** 'burn' as opposed to **k̲nes** > **kknes** 'argue'.[70]

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:

Aorist	**Imperfective**	
ccc	**Ccc**	
dleḡ	*ddleḡ*	'rub'
xneq	*xxneq*	'smother' (person)
k̲nes	*kknes*	'fight'
k̲rez	*kkrez*	'plough'
fred̲	*ffred̲*	'graze'

The **ccv** verbs which have initial consonant gemination and another irregular change are:

Aorist	**Imperfective**	
qla	*qqli*	'bake'
dri	*ddray*	'pass'

A majority of verbs of this type also add **u** or **a** before the final consonant.

[70] For theoretical explanations of similar facts in Tashelḥiyt see Dell & Elmedlaoui (2002) and Lahrouchi (2010).

Aorist	**Imperfective**	
ccc	**Ccuc**	
qleḇ	*qqluḇ*	‘roll’
sleṯ	*ssluṯ*	‘remove’
fṛeq	*ffṛuq*	‘separate’
ɣleq	*ɣɣluq*	‘cover’
slex	*sslux*	‘skin’
žreḥ	*ǧruḥ*	‘injure’
qṣem	*qqṣum*	‘share, divide’

ccc	**Ccac**	
sker	*sskar*	‘do’
šɛel	*ššɛal*	‘turn on (oven)’

Some verbs of this type have two possible Imperfective forms, one with and one without vowel insertion, which are in free variation:

Aorist	**Imperfective**	
ccc	**Ccc** ~ **Ccuc**	
sḇeɣ	*ssbeɣ* ~ *ssbuɣ*	‘dye, paint’
ṭleq	*ṭṭleq* ~ *ṭṭluq*	‘straighten’
qṛeṭ	*qqṛeṭ* ~ *qqṛuṭ*	‘break’
sref	*ssref* ~ *ssruf*	‘comb’
ḥseḇ	*ḥḥseḇ* ~ *ḥḥsuḇ*	‘count’
ḥfeṛ	*ḥeffeṛ* ~ *ḥḥfuṛ*	‘dig’

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:

Aorist	**Imperfective**	
ɣems	*qqems* ~ *ɣemmes* ~ *ɣems*	‘cover’

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.

Aorist	**Imperfective**	
cc	**Cac**	
ẓeḏ	*ẓẓaḏ*	‘grind’
suɣ (*/seɣʷ/*)	*ssaɣ*	‘buy’

7.6.1.2. Verbs with gemination of the second consonant

ccc verbs

Aorist	**Imperfective**	
ccc	**cCc**	
xleq	*xelleq*	‘be born’
mṭel	*meṭṭel*	‘bury’
hleḵ	*helleḵ*	‘be sick, ill’
rfes	*reffes*	‘knead’
mger	*megger*	‘harvest’
fṛeɛ	*feṛṛeɛ*	‘damage, hit’
lseq	*lesseq*	‘stick’
mleḵ	*melleḵ*	‘marry’
ršeq	*rešše**q***	‘split’
lḥes	*leḥḥes*	‘lick’
rwel	*ruggel* (*/reggʷel/*)	‘flee’
ḵmel	*kemmel*	‘finish’
lkem ~ *lkum* (*/lkʷem/*)	*lekkem*	‘arrive’
nǧeṛ	*neǧeṛ*	‘make furniture’
sketˍ ~ *skuˍt* (*/skʷeˍt/*)	*sekketˍ*	‘be quiet’

In some cases when **ḵ** is the first consonant of the verb in the Aorist and the Perfective, in the Imperfective a non-geminated stop **k** is found, for example:

Aorist	**Imperfective**	
ḵmeṭ	*kemmeṭ*	‘burn’
ḵšem	*kečem*	‘enter’
ḵmel	*kemmel*	‘finish’

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.

Aorist	**Imperfective**	
ccu	**cCu**	
rku	*rekku*	‘rot’
b̲nu	*b̲ennu*	‘build’
sḥu	*seḥḥu*	‘be strong, cure’
ḥmu	*ḥemmu*	‘hot’
rnu	*rennu*	‘add’

Most **cci** verbs geminate the second consonant.

Aorist	**Imperfective**	
cci	**cCi**	
ɣli	*ɣelli*	‘set, descend’
zri	*zerri*	‘pound’
xwi	*xewwi*	‘empty’
mṭi	*meṭṭi*	‘lunch’[72]
ngi	*neggi*	‘push’

cc 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**.

Aorist		**Imperfective**	
cc		**cC(a)**	
neɣ ~ nuɣ	*(/neɣ^{w}/)*	*neqqa*	‘kill’
k̲es		*k̲ess ~ k̲essa* (*~ttk̲es*)	‘herd’
ruɣ	*(/reɣ^{w}/)*	*reqq* (*~ttraɣ*)	‘light’

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.

Aorist	**Imperfective**	
acc ~ ucc	**ttacc**	
aḡel ~ uḡel ~ aḡul (*/aḡʷel/*)	*ttaḡel*	‘hang up plants for goats’
aḵel ~ aḵul (*/aḵʷel/*)	*ttaḵel*	‘step on’
aḵer ~ aḵur (*/aḵʷer/*)	*ttaḵer*	‘steal’
ameẓ ~ umeẓ	*ttameẓ*	‘take, grab, trap’
aḡer ~ uḡer	*ttaḡer*	‘put bread in the oven’
ameṛ ~ umeṛ	*ttameṛ*	‘send’
azel ~ uzel	*ttazel*	‘run’
aɣel ~ uɣel	*ttaɣel*	‘be stuck’

Aorist	**Imperfective**	
ac ~ uc	**ttac**	
af ~ uf	*ttaf*	‘find’

Aorist	**Imperfective**	
aca ~ ucu	**ttaca**	
ara ~ ura	*ttara*	‘write’

Aorist	**Imperfective**	
acu ~ ucu	**ttacu**	
alu	*ttalu*	‘pick’
aru ~ uru	*ttaru*	‘give birth’

Aorist	**Imperfective**	
aci ~ uci	**ttaci**	
ani ~ uni	*ttani*	‘ride’
aḵi ~ wḵi	*ttaḵi*	‘cross the river’

Aorist	**Imperfective**	
acuc	**tacuc**	
ažuf	*ttažuf*	‘stink’

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.

Aorist	**Imperfective**	
āgem d ~ āgum d, dāgem ~ dāgum	*ttāgam d ~ ddāgam*	‘draw water’

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.

Aorist	**Imperfective**	
cCc	**tcCac**	
ḵerreḵ	*tḵerraḵ*	‘lie’
lebbeq	*tlebbaq*	‘become fat’
žewwef	*tžewwaf*	‘stink’
neẓẓeẓ	*tneẓẓaẓ*	‘be overripe’
seyyel	*tseyyal*	‘flow’
ṛemmeš	*tṛemmaš*	‘blink’
xebbeṭ	*txebbaṭ*	‘trot’
neqqez	*tneqqaz*	‘jump’

šeṭṭeḥ	*tšeṭṭaḥ*	‘make dance’
neddeh	*tneddah*	‘guide animals’
šebbeṭ	*tšebbaṭ*	‘climb’
weğeḏ	*tweğaḏ*	‘make ready’
seğeɛ	*tseğaɛ*	‘encourage’

There are a number of **cCc** verbs that prefix **t**- and do not insert **a**.

Aorist	**Imperfective**	
cCc	**tcCc**	
nessem	*tnessem*	‘smell’
ɛeššeṛ	*tɛeššeṛ*	‘beget’
ɛeṛṛež	*tɛeṛṛež*	‘limp’
qeššeṛ	*tqeššeṛ*	‘peel’
serrem	*tserrem*	‘comb’

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**.

Aorist	**Imperfective**	
wesseɛ	*tesseɛ* ~ *twesseɛ*	‘broaden’

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:

Aorist	**Imperfective**	
cvc	**ttcvc**	
riḇ	*ttriḇ*	‘destroy’
fiq	*ttfiq*	‘wake up’
ɛiš	*ttɛiš*	‘live’
žif	*tžif*	‘choke’
miḥ	*ttmiḥ*	‘empty water’
ṣuṭ	*tṣuṭ*	‘blow’
ẓuṛ	*tẓuṛ*	‘visit a saint’
ɛum	*ttɛum*	‘swim’

ṣum	*ttṣum*	‘fast’
bus	*tbus*	‘kiss’

There is one verb of this type that has an obligatory deictic clitic **d** / **id**.

Aorist	**Imperfective**	
faw d	*ttfaw d*	‘be in the morning’

Two verbs of this type form their Imperfectives in an irregular way:

Aorist	**Imperfective**	
sis	*ssyas*	‘boil’
ẓum	*ttaẓum*	‘fast’

cvcc verbs

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:

Aorist	**Imperfective**	
cvcc	**tcvcc**	
sisen	*tsisen*	‘dip bread into gravy’
sahel	*tsahel*	‘make easy’

The following verbs copy the first vowel to the position before the final consonant. The vowel is either **a** or **u**.

Aorist	**Imperfective**	
cvcc	**tcacvc**	
ɛayen	*tɛayan*	‘look for, search’
gaded	*tgadad*	‘flatten’
ɛaṛeṭ	*tɛaṛaṭ*	‘memorise’
ḥawel	*tḥawal*	‘try’
susem	*tsusum*	‘listen’
ṣuṣef	*tṣuṣuf*	‘spit’

There is one verb which has an irregular infixation of two **a**'s:

Aorist	**Imperfective**	
cicc	**tcacac**	
siwel	*tsawal*	'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.

Aorist	**Imperfective**	
caci	**tcacay**	
laqi	*tlaqay*	'let, make meet'
wali	*twalay*	'hit'
ẓali	*tẓalay*	'separate'

cCi	**tcCay**	
ḥewwi	*tḥewway*	'have sex'
ɛelli	*tɛellay*	'go up'
žerri	*tžerray*	'run'
feḍḍi	*tfeḍḍay*	'finish'
meḏḏi	*tmeḏḏay*	'sharpen'
lewwi	*tlewway*	'spin, roll'
ɣeṭṭi	*tɣeṭṭay*	'cover'
tekki	*tekkay*	'press'

In one verb, **i** becomes **a** in the Imperfective.

Aorist	**Imperfective**	
caci	**tcaca**	
ḥaḏi	*tḥaḏa*	'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).

Aorist		**Imperfective**	
Cc		**tCc**	
ṭṭeṣ		*teṭṭeṣ*	‘sleep’
ẓẓeḡ ~ *ẓẓeḡ*	(*/ẓẓeḡʷ/*)	*teẓẓeḡ*	‘milk’
ddez		*teddez*	‘pound’
dder		*tedder*	‘live, be alive’
kkur	(*/kkʷer/*)	*tekker*	‘stand up’
qqul	(*/qqʷel/*)	*teqqel*	‘return’
gguz	(*/ggʷez/*)	*teggez*	‘descend’
kkus	(*/kkʷes/*)	*tekkes*	‘remove’
qqun	(*/qqʷen/*)	*teqqen*	‘tie, close’
ffuɣ	(*/ffeɣʷ/*)	*teffeɣ*	‘go out’

cC verbs

cC verbs prefix **t** and add **a** after the final consonant.

Aorist	**Imperfective**	
cC	**tcCa**	
ɛeṭṭ	*tɛeṭṭa*	‘bite’
kebb	*tkebba*	‘pour’
hezz	*thezza*	‘shake, move’
ṛešš	*tṛešša*	‘splash’
medd	*tmedda*	‘lie down’
ḍeṣṣ	*ḍḍeṣṣa*	‘laugh’
ṣeff	*tṣeffa*	‘empty, dispose’

In one **cC** verb the final consonant is degeminated in the Imperfective.

Aorist	**Imperfective**	
sell	*tesla*	‘listen’

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.

Aorist	**Imperfective**	
cc	**ttcc**	
res	*ttres*	‘to be put’

ṛeẓ	*ttṛeẓ*	‘break’
meḏ	*ttmeḏ*	‘extinguish’
ḵes	*ttḵes* (∼ *iḵess* ∼ *iḵessa*)	‘herd’
ruɣ	*ttreɣ* (∼ *reqq*)	‘light’

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.

Aorist	**Imperfective**	
mɣi d	*ttemɣi d*	‘grow (plants)’
ɣmuṛ	*tteɣmuṛ*	‘grow (generic)’
kkar	*ttḵar*	‘be full’
ḥruru	*tteḥruru*	‘crawl’
ttu	*tettu*	‘forget’
ẓẓu ∼ *ẓẓa*	*teẓẓa*	‘plant’

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.

Aorist	**Imperfective**	
caccc	**tcaccc**	
ɣaylef	*tɣaylef*	‘become angry’
qawqeš	*tqawqeš*	‘tickle’

Aorist	**Imperfective**	
caccc	**tcaccac**	
dawses	*tdawsas*	‘squeal’

Aorist	**Imperfective**	
cccc	**tcccac**	
ṭeṛṭeṛ	*tteṛṭaṛ*	‘fart hard’
zegzeg	*tzegzag*	‘mate’
qefqef	*tqefqaf*	‘shiver’
ɛerkel	*tɛerkal*	‘limp’
selsel	*tselsal*	‘bake grain’
serweṯ	*tserwaṯ*	‘thresh’

penčer	*tpenčar*	‘stab’

Aorist	**Imperfective**	
cccc	**tcccc**	
zeɛzeɛ	*tzeɛzeɛ*	‘tremble’
dergel	*ddergel*	‘roll’
qeṛqeṛ	*tqeṛqeṛ*	‘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**, **b̲**, **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 consonant[73]. There are two verbs of the **ccc** type which do not geminate the second consonant but instead add a final vowel **a**[74].

Aorist	**Imperfective**	
ccc	**t(t)aCc**	
bzeḡ	*tazzeḡ*	‘swell, be wet’
ftel	*tattel*	‘spin, roll’
fsex	*tassex*	‘untie’
fteḥ	*tatteḥ*	‘open’
b̲ẓeḏ	*taẓẓeḏ*	‘urinate’
bdeḏ	*ttaddeḏ*	‘stand up, remain, stop’
b̲ṭeṛ	*taṭṭeṛ*	‘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 Tašelḥiyt Berber as well (cf. Kossmann, 1999: 120-125 for a historical explanation). The difference with Tašelḥiyt is that in Ghomara there is a **tt** ~ **t** prefix.

[74] The verbs **mseḥ**, **fteḥ** and **b̲ṭeṛ** 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**	
b̲ṭu	*taṭṭu*	‘share’
b̲du	*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** degeminates to **k̲** after the prefix **tt**.

Aorist	**Imperfective**	
mt̲en	*ttamt̲en*	‘ferment’
ǧ ~ wǧ	*ttaǧ*	‘keep’
kku	*ttk̲aw*	‘dry up’
ǧun	*tžawan*	‘be full’
ẓẓwit̲	*ẓẓayat̲*	‘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).

Aorist	**Imperfective**	
ll	*ttill*	‘be’
ḥtaž	*tteḥtiž*	‘want, love’

There is one irregular Imperfective in the corpus to which **y** is added.

Aorist	**Imperfective**	
falṭa	*tfalṭay*	‘make a mistake’

7.6.4.1.3. Irregular consonants

There is one verb that adds a **d** in the Imperfective.

Aorist	**Imperfective**	
ḡḡ	*deḡḡ*	‘do, make’

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.

Aorist	**Imperfective**	
dheṛ	*ttiṯuṛ* ~ *ttuṯuṛ*	‘appear’
ddu	*ttuṯu*	‘walk’
rri	*rraz*	‘return, plant’
mmuṯ	*tmettaṯ*	‘die’
qquṛ	*ttɣaṛ*	‘dry’
lluẓ	*tlaẓ*	‘be hungry’
ggull	*tgalla*	‘swear’
bbukk	*tb̄akka*	‘explode’
mel	*mmal*	‘show’
wweṯ	*kkaṯ* ~ *tkaṯ*	‘strike, hit, shoot’
su	*sess*	‘drink’

7.6.5. Suppletion

The following verbs have suppletive Imperfectives.

Aorist	**Imperfective**	
šš	*tett*	‘eat’
bb	*ttawi*	‘bring’

There is one verb which does not change its form in the Imperfective.

Aorist	**Imperfective**	
ttru	*ttru*	‘cry’

The following verb forms the Imperfective by prefixing **tt** and optionally adding **a**. Note that **qq** is degeminated after the **tt** prefix.

Aorist	**Imperfective**	
qqim	*ttɣim* ~ *ttɣima*	‘sit’

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**^{w} geminated counterpart.

Aorist	**Imperfective**		
nu	*nugg*	(*/negg^{w}/*)	‘be cooked’

7.7. The ss causative derivation

The causative is derived from a non-derived verb by means of the prefix **ss** ~ **s**[75]. 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**

[75] In Berber linguistics this derivation is often referred to as the *dérivation à sifflante* (prefix **s**- / **ss**- / **zz**-) as opposed to the *dérivation à nasale* (prefix **m-**/**n**-) and *dérivation à dentale* (**tt**- passive, cf. Galand, 2002 [1987]: 323 - 329 and Chaker 1995: 1).

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 onomatopeic in origin, which has the causative prefix.

Aorist	**Perfective**	
ss-kuḥ	*ss-kuḥ*[76]	‘cough’

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**-:

Aorist	
šš-eḵšem (~ *ss-eḵšem*)	‘make enter’
š-wešk	‘cause to get lost’
zz-enz ~ *z-nez*	‘sell’

Pharyngealisation spreads to the **ss** ~ **s** prefix (cf. II.1.11. phonology).

Aorist		
ss-eḥṣel	*[ṣṣ-eḥṣel]*	‘drop’
ss-eɣmuṛ	*[ṣṣ-eɣmuṛ]*	‘make grow’

In the following **cc** and **cecc** verbs the causative prefix is not geminated:

Aorist	
s-nes	‘extinguish’
s-res	‘put down’
š-wešk	‘make disappear’

[76] The onomatopeia does not exist in the language. It does exist as a verb in local Arabic, **kaḥ** ~ **ikuḥ** ‘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:

non-derived Aorist				**Aorist**
ffuɣ (*/ffeɣ^{w}/*)	'go out'	>	*ss-ufuɣ /ss-ufeɣ^{w}/*	'make go out, expel'
gguz (*/ffeɣ^{w}/*)	'descend'	>	*ss-aguz /ss-ag^{w}ez/*	'lower'

Other geminate-initial verbs degeminate the initial consonant after **ss** (without insertion of a plain vowel), for example:

non-derived Aorist				**Aorist**
ttru	'cry'	>	*ss-etru*	'make cry'
kku	'dry'	>	*ss-ku*	'make dry'

7.7.2. Perfective formation

A number of causative verbs formally distinguish the Aorist and the Perfective[77]. 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.

	ss-nu 'cook'		
	Aorist	**Perfective**	
1:SG	*ss-nu-x ~ ss-enwa-x*	*ss-enwa-x*	'I cooked'
2:SG	*te-ss-nu-t ~ te-ss-enwa-t*	*te-ss-enwa-t*	'You cooked'
3:M:SG	*i-ss-nu*	*i-ss-nu*	'He cooked'
3:F:SG	*t-ess-nu*	*t-ess-nu*	'She cooked'

[77] In other Berber dialects such as Aït Seghrouchen (Bentolila, 1981: 375), **ss-** derived verbs have no formal distinction between Aorist and Perfective. In Tašelḥiyt such verbs do make a distinction which exists in underived verbs as well (cf. Aspinion, 1953: 263).

1:PL	*n-ess-nu*	*n-ess-nu*	‘We cooked’
2:PL	*te-ss-num* ~ *te-ss-enwa-m*	*te-ss-enwa-m*	‘You (P) cooked’
3:PL	*ss-nu-n* ~ *ss-enwa-n*	*ss-enwa-n*	‘They cooked’

ss-nes[78] ‘extinguish, put out’

	Aorist	**Perfective**	
1:SG	*ssens-ax*	*sse-nsa-x*	‘I put out’
2:SG	*te-sse-ns-et*	*t-sse-nsa-t* ~ *t-sse-ns-et*	‘You put out’
3:M:SG	*i-s-nes* ~ *i-ss-ens*	*i-s-nes* ~ *i-ss-ens*	‘He put out’
3:F:SG	*te-s-nes* ~ *te-ss-ens*	*te-s-nes* ~ *t-ss-ens*	‘She put out’
1:PL	*ne-s-nes* ~ *ne-ss-ens*	*ne-s-nes* ~ *ne-ss-ens*	‘We put out’
2:PL	*t-s-ens-em*	*t-se-nsa-m* ~ *t-s-ens-em*	‘You put out’
3:PL	*ss-ens-en*	*ss-ensa-n* ~ *ss-ens-en*	‘They 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 **ss-umem** ~ **ss-umum** ‘suck’ do not have a non-derived counterpart. The voicing of the prefix of **zz-uɣur** is unexplained.

	Aorist	**Perfective**	
1:SG	*ssuṭṣ-ax*	*ssaṭṣ-ax*	‘I made sleep’
2:SG	*te-ssuṭṣ-et*	*te-ssaṭṣ-et*	‘You made sleep’
3:M:SG	*i-ssuṭuṣ*	*i-ssaṭeṣ*	‘He made sleep’
3:F:SG	*te-ssuṭuṣ*	*te-ssaṭeṣ*	‘She made sleep’
1:PL	*ne-ssuṭuṣ*	*ne-ssaṭeṣ*	‘We made sleep’
2:PL	*te-ssuṭṣ-em*	*te-ssaṭṣ-em*	‘You made sleep’
3:PL	*ssuṭṣ-en*	*ssaṭṣ-en*	‘They made sleep’

initial position			
non-derived	**Aorist**	**Perfective**	
ṭṭeṣ	*ss-uṭuṣ*	*ss-aṭeṣ*	‘make sleep’

[78] The prefix can be simple or geminated.

ṭṭeṭṭ	*ss-uṭuṭ*	*ss-aṭeṭ*	‘suckle’
---	*ss-umem ~ ss-umum*	*ss-amem*	‘suck’

In the two following verbs the **u** before the final consonant is probably the result of labialisation.

ffuɣ	*ss-ufuɣ*	/ss-ufeɣ^{w}/	*ss-afeɣ*	‘make go out, expel’
---	*zz-uɣur*	/zz-uɣ^{w}er/	*zz-aɣer*	‘drag’

There are two verbs with the same vowel change **u** > **a** ~ **u**. Neither of these verbs has a non-derived counterpart. Furthermore, both verbs have a **t**- prefix in the Imperfective.

non-derived	**Aorist**	**Perfective**	
---	*ṣuṣef*	*ṣaṣef*	‘spit’
---	*susem*	*sasem ~ susem*	‘hear’

Medial position

non-derived	**Aorist**	**Perfective**	
ɛum	*ss-ɛum*	*ss-ɛam*	‘let, make swim’

	Aorist	**Perfective**	
bbukk	*ss-b̲ukk*	*ss-b̲akk*	‘explode’

Final position

non-derived	**Aorist**	**Perfective**	
ḥmu	*ss-eḥmu*	*ss-eḥma*	‘heat’
---	*ss-endu*	*ss-enda*	‘churn’

The Perfective of the verb **ttru** ‘cry’ has two forms which are in free variation, one with and one without a vowel change.

non-derived	**Aorist**	**Perfective**	
ttru	*ss-etru*	*ss-etra~ss-etru*	‘make cry’

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.

non-derived	**Aorist**	**Perfective**	
---	*ss-ireḏ*	*ss-areḏ*	‘bathe’
---	*ss-ifef*	*ss-afef*	‘sieve’

There is one other verb which shows this pattern. This verb does not have an underived counterpart either.

non-derived	**Aorist**	**Perfective**	
---	*ss-fi*	*ss-fa*	‘fester, overflow’

Medial position

non-derived	**Aorist**	**Perfective**	
fiq	*ss-fiq*	*ss-faq*	‘wake up’

Final position

non-derived	**Aorist**	**Perfective**	
ani ~ uni	*ss-ani*	*ss-ana*	‘mount’

non-derived	**Aorist**	**Perfective**	
mɣi	*ss-emɣi* (*d*)	*ss-emɣa* (*d*)	‘let grow’ (plants)
ɣli	*ss-eɣli*	*ss-eɣli*	‘swallow’
ɛelli	*ss-eɛli ~ ss-elɛi*	*ss-eɛla ~ ss-elɛa*	‘lift, make ascend’

The verb **ss-eḏri** ‘make pass’ has free variation **i** ~ **a** in the Perfective:

non-derived	**Aorist**	**Perfective**	
ḏri	*ss-eḏri*	*ss-edri ~ ss-edra*	‘make pass’

There is one verb which has **u** in the Aorist and **a** ~ **u** in the Perfective.

non-derived	**Aorist**	**Perfective**	
ggall	*s-gull*	*s-gall* ~ *s-gull*[79]	'make swear'

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** (/reɣ^{w}/ ~ /reɣ/) 'be lit':

non-derived	**Aorist**	**Perfective**	
ruɣ ~ *reɣ*	*ss-ruɣ* ~ *ss-reɣ*	*ss-reɣ*	'light'

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.

non-derived	**Aorist**	**Perfective**	
gguz (/gg^{w}ez)	*ss-aguz* (*/ss-ag^{w}ez/*)	*ss-agez*	'let, make descend'

The following three-consonantal verbs optionally or obligatorily have labialised **k** or **ḡ** 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).

non-derived	**Aorist**	**Perfective**	
lkum (/lk^{w}em)	*ss-elkem* ~ *ss-elkum (ss-elk^{w}em)*	*ss-elkem*	'take, bring'
kkur (/kk^{w}er/)	*ss-enkur (ss-enk^{w}er)*	*ss-enker*	'wake up, get up'
ḇzuḡ (/ḇzeḡ^{w})	*ss-eḇzeḡ*	*ss-eḇzeḡ*	'make wet'

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:

non-derived	**Aorist**	**Perfective**	
qquṛ	*ss-qaṛ* ~ *ss-ɣaṛ* ~ *ss-ɣuṛ*	*ss-qaṛ* ~ *ss-ɣaṛ* ~ *ss-ɣuṛ*	'make dry'
faw	*ss-faw* (*d)*	*ss-faw* (*d)*	'make become'

[79] An often used alternative is **cCc** verb **ḥellef** 'make swear'.

kku	*ss-ku*	*ss-ku*	‘make dry’
qqim	*ss-ɣim ~ ss-qim*	*ss-ɣim ~ ss-qim*	‘make sit’
res	*s-res*	*s-res*	‘put’
meḏ	*ss-meḏ*	*ss-meḏ*	‘empty, extinguish’
---	*zzenz ~ znez*	*zzenz ~ znez*	‘sell’
ɣmuṛ	*ss-eɣmuṛ*	*ss-eɣmuṛ*	‘make grow’

The Aorist and the Perfective of **ccc** verbs which do not have a labialised consonant are the same.

non-derived	**Aorist**	**Perfective**	
ḵmeṭ	*ss-eḵmeṭ*	*ss-eḵmeṭ*	‘burn’
ḵšem	*šš-eḵšem*	*šš-eḵšem*	‘make enter, let in’
mleḵ	*ss-emleḵ*	*ss-emleḵ*	‘let, make marry’
ḇdeḏ	*ss-ebdeḏ*	*ss-eḇdeḏ*	‘let, make stand up’
nṭeṛ	*ss-enṭeṛ*	*ss-enṭeṛ*	‘let, make fly’
ḥṣel	*ss-eḥṣel*	*ss-eḥṣel*	‘drop’
nṭeḡ	*ss-enṭeḡ*	*ss-enṭeḡ*	‘let, make fly’
hleḵ	*ss-ehleḵ*	*ss-ehleḵ*	‘make sick’

One verb has three free variants in the Perfective:

non-deriv.	**Aorist**	**Perfective**	
wešk	*š-wešk*	*šš-ušk ~ š-wešk*	‘let, make loose,
		~ šš-ašk	let, make dissappear’

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.

non-derived	**Aorist**	**Imperfective**	
ḵmeṭ	*ss-eḵmeṭ*	*ss-eḵmaṭ*	'burn'
ḇzeḡ ~ḇzuḡ	*ss-eḇzeḡ*	*ss-eḇzaḡ*	'make wet'
mleḵ	*ss-emleḵ*	*ss-emlaḵ*	'let, make marry'
bdeḏ	*ss-ebdeḏ*	*ss-eḇdaḏ*	'let, make stand up'
---	*ss-entef*	*ss-entaf*	'wound'
nṭeṛ	*ss-enṭeṛ*	*ss-enṭaṛ*	'let, make fly'
nṭeḡ	*ss-enṭeḡ*	*ss-enṭaḡ*	'let, make fly'
hleḵ	*ss-ehleḵ*	*ss-ehlaḵ*	'make sick'

The following two **ccc** verbs loose their labialisation of **k** in the Imperfective:

non-derived	**Aorist**	**Imperfective**	
lkem ~	*ss-elkem ~*	*ss-elkam*	'make arrive'
lkum (/lkʷem/)	*ss-elkum (/ss-elkʷem/)*		
kkur (/kkʷer/)	*ss-enkur*	*ss-enkar*	'awake'
	(/ss-enkʷer/)		

There is one **cc** verb which inserts **a**:

non-derived	**Aorist**	**Imperfective**	
meḏ	*ss-meḏ*	*ss-maḏ*	'extinguish'

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]:

non-derived	**Aorist**	**Imperfective**	
ḵšem	*šš-eḵšem*	*t-š-eḵšam*	'make enter'
ḥṣel	*ss-eḥṣel*	*ss-eḥṣal ~ t-s-eḥṣal*	'drop'

[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.

non-derived	**Aorist**	**Imperfective**	
bbukk	*ss-ḇukk*	*ss-ḇakka*	‘make explode’

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.).

non-derived	**Aorist**	**Imperfective**	
kku	*ss-ku*	*ss-kaw*	‘dry’
nu	*ss-nu*	*ss-naw*	‘cook’
ni	*ss-ani*	*ss-anay*	‘let, make mount’
---	*ss-fi*	*ss-fay*	‘fester, overflow’
ḥmu	*ss-eḥmu*	*ss-eḥmaw*	‘make hot’
---	*ss-endu*	*ss-endaw*	‘churn’
ttru	*ss-etru*	*ss-etraw*	‘make cry’[81]
ɣli	*ss-eɣli*	*ss-eɣlay*	‘swallow’
ɛelli	*ss-eɛli* ~ *ss-elɛa*	*ss-eɛlay*	‘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**.

non-derived	**Aorist**	**Imperfective**	
mɣi	*ss-emɣa (d)*	*ss-emɣay (d)*	‘grow’

In the following verb, the labialisation found in the Aorist is absent in the Imperfective:

non-derived	**Aorist**	**Imperfective**	
gguz (ggʷez)	*ss-aguz (/ss-agʷez/)*	*ss-agaz*	‘let, make descend’

7.7.3.2. Insertion of u

The following verbs insert **u** before the final consonant in the Imperfective.

non-derived	**Aorist**	**Imperfective**	
nes	*s-nes*	*ss-nus*	‘extinguish’

[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**.

res		*s-res*	*ss-rus*	‘put’
---	*zz-enz ~ z-nez*		*zz-nuz*	‘sell’

non-derived	**Aorist**[82]	**Imperfective**	
ṭṭeṣ	*ss-uṭeṣ*	*ss-uṭuṣ*	‘make sleep’
ṭṭeṭ	*ss-uṭeṭ*	*ss-uṭuṭ*	‘suckle’

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.):

non-derived	**Aorist**	**Imperfective**	
reɣ ~ ruɣ (/reɣ^{w})	*ss-reɣ ~ ss-ruɣ (/ss-reɣ ~ ss-rəɣ^{w})*	*ss-ruɣ (/ss-ruɣ/)*	‘light’[83]
ffuɣ (/ffeɣ^{w}/)	*ss-ufuɣ (/ss-ufeɣ^{w}/)*	*ss-ufuɣ (/ss-ufuɣ/)*	‘make go out, expel’

There is one verb in which **u** is added after the base. It does not have a non-derived base.

non-derived	**Aorist**	**Imperfective**	
---	*ss-kuḥ*	*ss-kuḥu*	‘cough’

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.

non-derived	**Aorist**	**Imperfective**	
---	*ss-ireḍ*	*ss-iriḍ*	‘bathe’
---	*ss-ifef*	*ss-ifif*	‘sieve’

7.7.3.4. No change

Some verbs have an Imperfective that is identical to the Aorist.

[82] **u** appears in some positions before the final consonant.

[83] 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’.

non-derived	**Aorist**	**Imperfective**	
ɛum	*ss-ɛum*	*ss-ɛum*	‘let, make swim’
qquṛ	*ss-qaṛ ~ ss-ɣaṛ ~ ss-ɣuṛ*	*ss-qaṛ ~ ss-ɣaṛ ~ ss-ɣuṛ*	‘make dry’
faw (d)	*ss-faw (d)*	*ss-faw (d)*	‘make become’
ɣmuṛ	*sse-ɣmuṛ*	*sse-ɣmuṛ*	‘make grow’
fiq	*ss-fiq*	*ss-fiq*	‘wake up’
qqim	*ss-qim*	*ss-qim*	‘make sit’
wešk	*š-wešk*	*š-wešk*	‘make disappear’
ggull	*s-gall*	*s-gall*	‘make swear’

There are two verbs which do not have a non-derived counterpart and prefix a **t**- in the Imperfective.

non-derived	**Aorist**	**Imperfective**	
---	*ṣuṣef*	*tṣuṣuf*	‘spit’
---	*susem*	*tsusum*	‘hear’

8. The Arabic-morphology verb

In this section we present Arabic verbs that retain the original Arabic morphology in Ghomara Berber[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** ~ **ɣa**) 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[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):

PNG.ASP -	deriv. -	stem (ASP) -	PNG.ASP
i-	**t**-	**b̲aɛ** -	**u**
3MPL:IMPF	PASS	sell	3MPL:IMPF
‘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.

Perfect		‘hunt/fish’[86]	‘sweat’	‘learn/read’
1:SG	*-t ~ -t̲*	*ṣṣaḏ-it̲*	*ɛṛeq-t*	*qṛi-t̲*
2:SG	*-t ~ -t̲ / -ti ~ -t̲i*	*ṣṣaḏ-it̲ /-it̲i*	*ɛṛeq-t / -ti*	*qṛi-t̲ / -t̲i*
3:M:SG	-	*ṣṣaḏ*	*ɛṛeq*	*qṛa*
3:F:SG	*-t̲*	*ṣṣaḏ-et̲*	*ɛeṛq-et̲*	*qṛa-t̲*
1:PL	*-na*	*ṣṣaḏ-na / -ina*	*ɛṛeq-na*	*qṛi-na*
2:PL	*-tum ~ -t̲um / -tu*	*ṣṣaḏ-tum / -it̲um*	*ɛṛeq-tu(m)*	*qṛi-t̲u(m)*
3:PL	*-u*	*ṣṣaḏ-u*	*ɛeṛq-u*	*qṛa-w*

[84] 118 Verbs (approximately 19%) on a total of 639 verbs in our database retain Arabic morphology.

[85] Here we apply the same definition of the lexical stem as in the part on Berber verbs (cf. III.7.1.).

[86] The insertion of the **i** before a first or second person suffix is optional.

Imperfect		‘hunt/fish’	‘sweat’	‘learn/read’
1:SG	*n-*	*(ka-)ne-ṣṣaḏ*	*(ka-)ne-ɛṛeq*	*(ka-)ne-qṛa*
2:SG	*d-*	*(ka-)de-ṣṣaḏ*	*(ka-)de-ɛṛeq*	*(ka-)de-qṛa*
3:M:SG	*y-*	*(ka-)ye-ṣṣaḏ*	*(ka-)ye-ɛṛeq*	*(ka-)ye-qṛa*
3:F:SG	*d-*	*(ka-)de-ṣṣaḏ*	*(ka-)de-ɛṛeq*	*(ka-)de-qṛa*
1:PL	*n - u*	*(ka-)ne-ṣṣaḏ-u*	*(ka-)n-ɛeṛq-u*	*(ka-)ne-qṛa-w*
2:PL	*d – u*	*(ka-)de-ṣṣaḏ-u*	*(ka-)d-ɛeṛq-u*	*(ka-)de-qṛa-w*
3:PL	*y - u*	*(ka-)ye-ṣṣaḏ-u*	*(ka-)y-ɛeṛq-u*	*(ka-)ye-qṛa-w*

The form -**t** immediately follows a vowel while -**ṯ** 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[87]; the suffix is either -**t** (~ -**ṯ**) or -**ti** (~ -**ṯi**). The second person plural is either -**tu** (~ **ṯu**) or -**tum** (-**ṯum**)[88]. 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

SG	**PL**	
ṣṣaḏ	*ṣṣaḏ-u*	‘hunt, fish’
qṛa	*qṛa-w*	‘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** / -**ṯum** is unique to the Jbala region. For the dialect of Anjra the form **tˢum** 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**[89]. An example of such a verb is:

	Perfect		**Imperfect**	
1:SG	*fekk-it̲*	'I rescued'	*n-fukk*	'I rescue'
2:SG	*fekk-it̲(i)*	'You rescued'	*d-fukk*	'You rescue'
3:M:SG	*fekk*	'He rescued'	*i-fukk*	'He rescues'
3:F:SG	*fekk-et̲*	'She rescued'	*d-fukk*	'She rescues'
1:PL	*fekk-(i)na*	'We rescued'	*n-fukk-u*	'We rescue'
2:PL	*fekk-(i)tu(m)*	'You rescued'	*d-fukk-u*	'You rescue'
3:PL	*fekk-u*	'They rescued'	*y-fukk-u*	'They rescue'

Some verbs of this type are:

Perfect	**Imperfect**
cC ~ cuC	**cC ~ cuC**

[89] Moscoso writes that this type of verb can get **a**, **i** or **u** in the Imperfective (2000:68).

ɣešš ~ ɣušš	*ɣušš*	‘deceive’
šekk ~ šukk	*šekk ~ šukk*	‘doubt’
fekk	*fukk*	‘rescue’

Perfect	**Imperfect**	
cC	**ciC**	
ɛess	*ɛiss*	‘guard’
ḥebb	*ḥibb*	‘love’

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 **ɣam - iɣum** ‘bottle up (anger/sorrow)’.

	Perfect		**Imperfect**	
1:SG	*ɣum-t*	‘I bottled up’	*(ka-)n-ɣum*	‘I bottle up’
2:SG	*ɣum-t(i)*	‘You bottled up’	*(ka-)d-ɣum*	‘You bottle up’
3:M:SG	*ɣam*	‘He bottled up’	*(ka-)y-ɣum*	‘He bottles up’
3:F:SG	*ɣam-eṯ*	‘She bottled up’	*(ka-)d-ɣum*	‘She bottles up’
1:PL	*ɣum-na*	‘We bottled up’	*(ka-)n-ɣum-u*	‘We bottle up’
2:PL	*ɣum-tum*	‘You bottled up’	*(ka-)d-ɣum-u*	‘You bottle up’
3:PL	*ɣam-u*	‘They bottled up’	*(ka-)y-ɣum-u*	‘They bottle up’

Perfect	**Imperfect**	
cac	**cac**	
sal	*sal*	‘owe’
ban	*ban*	‘appear, seem’

Perfect	**Imperfect**	
cac	**cic**	
ḥas	*ḥis*	‘feel’
sar	*sir*	‘continue’
ɛaq	*ɛiq*	‘become aware of’
qaṛ	*qiṛ*	‘admit’

Perfect	**Imperfect**	
cac	**cuc**	
sag	*sug*	‘drive’[90]
bas	*bus*	‘kiss’
lam	*lum*	‘blame’
dam	*dum*	‘last’

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 **qṛa** – **yeqṛa** ‘read, learn’:

	Perfect		**Imperfect**	
1:SG	*qṛi-ṯ*	‘I read/learned’	*(ka-)ne-qṛa*	‘I read/learn’
2:SG	*qṛi-ṯ/qṛi-ṯi*	‘You read/learned’	*(ka-)de-qṛa*	‘You read/learn’
3:M:SG	*qṛa*	‘He read/learned’	*(ka-)ye-qṛa*	‘He reads/learns’
3:F:SG	*qṛa-ṯ*	‘She read/learned’	*(ka-)de-qṛa*	‘She reads/learns’
1:PL	*qṛi-na*	‘We read/learned’	*(ka-)ne-qṛa-w*	‘We read/learn’
2:PL	*qṛi-ṯu*	‘You read/learned’	*(ka-)de-qṛa-w*	‘You read/learn’
3:PL	*qṛa-w*	‘They read/learned’	*(ka-)ye-qṛa-w*	‘They read/learn’

Other verbs of this type are:

Perfect	**Imperfect**	
cca	**cca**	
ḥfa	*ḥfa*	‘be blunt’
tfa	*tfa*	‘yawn’
ɛya	*ɛya*	‘tired’
xṛa	*xṛa*	‘defecate’
rğa	*rğa*	‘hope’
qṛa	*qṛa*	‘study, read’

Perfect	**Imperfect**	
cca	**cci**	
xwa	*xwi*	‘hollow out’

[90] One informant conjugated only the Perfective of this verb using Berber conjugation. Others consistently used Arabic morphology.

kma	*kmi*	‘smoke’
kra	*kri*	‘hire’
bɣa	*bɣi*	‘love’
ḥka	*ḥki*	‘tell’
zna	*zni*	‘comit adultery’

ccc

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:

Perfect	**Imperfect**	
ccc	**ccc**	
bṛeq	*bṛeq*	‘shine’
fṭen	*fṭen*	‘become aware of’
ndem	*ndem*	‘regret’
ɣleḏ	*ɣleḏ*	‘wrong’
šxeṛ	*šxeṛ*	‘snore’
ɛgez	*ɛgez*	‘lazy’
sker	*sker*	‘get drunk’
ɛṭeš	*ɛṭeš*	‘be thirsty’
qḍeṛ	*qḍeṛ*	‘be able’
wzen	*wzen*	‘weigh’

cacc

The following verb has a glottal stop in initial position[91].

Perfect	**Imperfect**	
ʔameṛ	*ʔameṛ*	‘command or order’

There is one verb in our corpus which has the form **caCec**, **ʔammen**. It is in free variation with **t-ʔammen** ‘trust’.

Perfect	**Imperfect**	
ʔammen	*ʔammen*	‘believe, trust’

[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.

Perfect	**Imperfect**	
dumanḍa	*dumanḍi*	'command or order'

cCv

There is one **cCv** verb in our corpus which has Arabic-morphology.

Perfect	**Imperfect**	
mella	*melli*	'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

t-šedd	'be tie, be closed'

t-cac

t-ḇaɛ (~ *n-baɛ*)	'be sold'
t-maḥ	'be emptied of water'
t-ḇan	'appear'
t-ṭal	'be guessed'

t-cca

t-exwa	'be hollowed out'
t-ešra	'be bought'
tt-eqla	'be fried'
tt-eqṛa	'be studied, be read'

t-ccc

tt-efleḥ	‘be cultivated’
tt-efṛeɛ	‘be damaged, be hit painfully’
tt-eɣleḇ	‘be defeated’
tt-eḥṛeṯ	‘be ploughed’

t-ccac

tt-exṭaṛ	‘be chosen’

t-cCc (stem V)

There are two verbs from standard Arabic in this group which have a glottal stop in stem-initial position.

t-ḥeṛṛeḳ	‘move’
t-keyyef	‘smoke’
t-ɛeṭṭel	‘be late’
t-ɛellem	‘learn’
t-heddeḏ	‘threaten’
t-seyyeḇ	‘be thrown’
t-žeyyeṛ	‘whitewash’
t-ɛewwež	‘be bent’
t-ṛewweḥ	‘be lifted, be returned’
t-xeffef	‘be light’
t-ʔekkeḏ	‘be guaranteed’
t-ʔammen (~ ʔammen)	‘trust’

t-cCa (stem V)

t-menna	‘hope’
t-ɣedda	‘have lunch’

t-cacc (stem VI)

t-taxeṛ	‘be last’
t-dafen	‘fight (each other)’
t-daḇez	‘fight (each other)’
tt-haweḏ	‘talk (to each other)’
t-sameḥ	‘forgive (each other)’

t-caca

t-laqa	‘join, meet’
t-ẓala	‘be separated’

t-caC

t-gadd	‘be flat, flatten’
tt-fakk	‘be rescued’

There are a number of quadriliteral verbs with **t**- passive derivation.

t-berɣez	‘be swapped’
t-ektašef	‘guess’
t-penčer	‘be stabbed’
t-qefqef	‘shiver’
t-selsel	‘be baked (grain)’
t-ṣeṛwel	‘be clothed with trousers’
t-xerčef	‘speak unclearly’
t-zeɛzeɛ	‘tremble’
t-ɣaylef	‘become angry’
t-ɣeṛbel	‘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-ṣalṭa	‘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-eqṛeṭ	‘break’
n-tellef	‘be lost, be dissapeared’
n-exṭeḇ	‘be asked to marry’
n-ɛezzel	‘be filtered, be separated’
n-eɛžen	‘be kneaded’
n-eɣḍeṛ	‘be betrayed’

n-eḍfeṛ	‘be tied (hair)’
n-eḍṛeḇ	‘be hit’
n-bheṭ	‘be astonished’
n-efḏeḥ (~ *tt-efḏeḥ*)	‘be caught
n-eɛqel (~ *t-eɛqel*)	‘be recognised’
n-ekteḇ (~ *tt-ekteḇ*)	‘be written’
n-baɛ (~ *t-ḇaɛ*)	‘be sold’
n-šaq (~ *t-šaq*)	‘be split’

8.3.3. Other derivations

The three schemes presented here have an infix **t**-, a prefix **s**t- or a vowel **a** inserted.

ctcc ~ ctacc (stem VIII)

A small number of verbs have a **t** infix after the stem-initial consonant.

rtɛeḇ	‘be scared’
ntaṣeṛ	‘win over’
ktašef	‘guess’
ɛtaṛef	‘admit, recognise’
štaweṛ	‘consult’

The verb **ṣṣaḏ** ‘hunt’ has initial **st** has become **ṣṣ** through assimilation[92]. The Perfect of this verb gets an optional **i** inserted between the stem and the suffix.

ṣṣaḏ	‘hunt’

ccac (similar to stem XI)

The following verbs all have an **a** before the final vowel.

šṭaṛ	‘ruminate’
shal	‘become, be easy’
ɛšaṛ	‘be pregnant’
ɣṛaq	‘drown’
zḥam	‘bad’
ḥtaž	‘need’
ḥmaṛ	‘tan, redden’

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.

steɛžeḇ	‘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[93]. 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 **-et̲** in free variation with the feminine singular / plural suffix **-et̲**. The following scheme provides an overview of the forms.

		'big'	'small'	'insipid'
M:SG	-	*meqquṛ (meqq^{w}eṛ)*	*meẓẓi*	*messus*
F:SG	*-t̲ ~ -et̲*	*muqqṛ-et̲*	*meẓẓi-t̲*	*messus-et̲*
PL	*-t̲ ~ -e t̲*	*muqqṛ-et̲*	*meẓẓi-t̲*	*messus-et̲*

The plural suffix of adjective **mellul** 'white' is either **-et̲** or **-in**.

[93] In the dialect of Ayt Bšir (Senhaja de Sraïr) the perfective of certain stative verbs (e.g. **meqqur** '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	*-eṯ*	*mellul-eṯ*
PL	*-eṯ ∼ -in*	*mellul-eṯ/-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:

		Type 1	**Type 2**
		‘tall’	‘yellow’
M:SG	-	*ṭwil*	*ṣfeṛ*
F:SG	*-a*	*ṭwil-a*	*ṣefṛ-a*
PL	*-in*	*ṭwil-in*	*ṣufaṛ*

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) *iḇeṛṛiyen a y-meẓẓi-n ma ga-sen ši n lḥemm bezzaf*
sheep REL RF-small-RF NEG in-3PL NEG of meat a.lot
‘Small sheep do not have a lot of flesh.’

(2) *lektaḇ n umḥaḏ̱ri 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 meẓẓi i meqquṛ*
3MS-come:P DC small and big
The small and the big have come.

(4) *i-dda d l-meẓẓi i l-meqquṛ*
3MS-come:P DC ART-small and ART-big
The small and the big have come.

(5) *le-kḥel i le-ḥmeṛ safṛ-en dar ya tmazirt bɛiḏ-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) *deɣya h-tɛellay g ya tḡiḡet muqqṛ-eṯ*
quickly 3FS-go.up:I in one:F tree:EA big-FS
'She quickly climbs a big tree.'

(7) *i-kkrez s žuž n iɛebbaz muqqṛ-eṯ*
3MS-plough:I with two of oxen big-PL
'He ploughs with two big oxen.'

(8) *ttawi-n=d yah lgayza, ya usɣaṛ ɣliṭ*
take-3PL=DC one:F stick one:M stick:EA thick:MS
'They bring a stick, a thick stick.'

(9) *tamɣaṛt=ahen ṭwil-a hay te-sskar tawnaft*
woman:EL=S:ANP tall-FS she:PRES 3FS-do:I bread:EL
'That tall woman is making bread.'

(10) *i-tkewwaṛ* *ši* *n* *isekkawen* *ṭwil-in*
3MS-make.round:I some of horns tall:PL
'He makes some long horns.'

Examples (11) and (12) show the use of the adjective as a predicate.

(11) *taɛeyyalt* *muqqṛ-eṯ* *i* *wɛeyyal* *baqi* *meẓẓi*
girl:EL big-FS and boy:EA still small:MS
'The girl is big and the boy is still small.'

(12) *lbuffa=yahen* *n* *ṛṛwiḍa* *ṛqiq-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) *nekki* *meqquṛ*
I big:MS
'I am big' (male speaker)

(14) *nekki* *muqqṛ-eṯ*
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

	meqquṛ ‘big’	**meẓẓi** ‘small’
i-STEM-*in* ~ *i*-STEM-*en*	*i-muqqṛ-in/-en*	*i-meẓẓi-n*
	messus ‘insipid’	**mellul** ‘white’
	i-messus-in/-en	*i-mellul-in/-en*

Arabic Relative

	ṭwil ‘tall’	**ṣfeṛ** ‘yellow’
i-STEM-*in* / *i*-PL.STEM	*i-ṭwil-in*	*i-ṣefṛ-in* ~ *i-ṣufaṛ*

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) *uleṯma-s = ahen a y-muqqṛ-en*
sister-3S = S:ANP REL RF-big-RF
‘His older sister.’

(16) *iḇeṛṛiyen a y-meẓẓi-n ma ga-sen ši 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) *lektaḇ n umḥaḏri a y-ṭwil-in*
book of student REL RF-tall-RF
‘The book of the tall student.’

(18) *iṣɣaṛen = ihen a y-xeḏṛ-in ma mezyan-in ši*
sticks = PL:ANP REL RF-green-RF NEG good-PL NEG
‘Those thick green sticks are not good.’

(19) *iṣɣaṛen = ihen a y-xuḏeṛ ma mezyan-in ši*
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) *asɣaṛ = ahen* *a* *y-xeḏṛ-in* *ma* *mezyan* *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 **-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

ccic / ccic-a / ccic-in

This is a common adjective scheme in Moroccan Arabic dialects. Plural formation by means of **-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)[95].

M:SG	**F:SG**	**PL**	
bxil	*bxil-a*	*bxil-in*	'stingy'
bɛiḏ	*bɛiḏ-a*	*ḇɛiḏ-in*	'far'
qlil	*qlil-a*	*qlil-in*	'few'
qṛiḇ	*qṛiḇ-a*	*qṛiḇ-in*	'near'
qṣir	*qṣir-a*	*qṣir-in*	'short'
tqil	*tqil-a*	*tqil-in*	'heavy'
xfif	*xfif-a*	*xfif-in*	'light'
xšin	*xšin-a*	*xšin-in*	'thick'
ždiḏ	*ždiḏ-a*	*ždiḏ-in*	'new'
ɣliṭ	*ɣliṭ-a*	*ɣliṭ-in*	'fat'
ḍɛif	*ḍɛif-a*	*ḍɛif-in*	'weak'
ḥnin	*ḥnin-a*	*ḥnin-in*	'benevolent, mild'

[95] In the dialect Caubet studied this type is different. She writes : '*Tous les adjectifs en ccic ont un pluriel en ccac*; *la plupart du temps, ils ont un deuxième pluriel mixte (schème ccac + suffixe -in: ccacin)'* (Caubet, 1993:114).

ṛqiq	*ṛqiq-a*	*ṛqiq-in*	‘thin’
ṛxis	*ṛxis-a*	*ṛxis-in*	‘cheap’
ṭwil	*ṭwil-a*	*ṭwil-in*	‘long’

ccc / **ccc-a** / **cucc**

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-ẓṛa-t* *argaz=ahen* *azergaw*?
2S-see:P-2S man=S:ANP grey:EL
‘Have you seen that grey man?’

(22) *lḥayt=an* *aḥemṛaw* *i* *lḥayt=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**	
byeṭ	*beyṭ-a*	*buyeṭ*	‘white’
kḥel	*keḥl-a*	*kuḥel*	‘black’
xḏeṛ	*xeḏṛ-a*	*xuḏeṛ*	‘raw, green’
zreq	*zerq-a*	*zureq*	‘blue’
ḥmeṛ	*ḥemṛ-a*	*ḥumeṛ*	‘red’
ḥṛeš	*ḥeṛš-a*	*ḥuṛeš*	‘rough’
ṣmeḵ	*ṣemḵ-a*	*ṣumeḵ*	‘deaf’
ṣfeṛ	*ṣefṛ-a*	*ṣufeṛ*	‘yellow’
ṛṭeḇ	*ṛeṭḇ-a*	*ṛuṭeḇ*	‘soft’

ccc / **ccc-a** / **cicc**

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).

M:SG	F:SG	PL	
ɛwež	*ɛewž-a*	*ɛiwež*	‘crooked’
ḥwel	*ḥewl-a*	*ḥiwel*	‘crooked’
ɛweṛ	*ɛewṛ-a*	*ɛiweṛ*	‘blind’

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.

M:SG	F:SG	PL	
ḥlu	*ḥluw-a*	*ḥluw-in*	‘sweet’

cci / cciyy-a / cciyy-in

When a suffix is added to the stem a glide **yy** is inserted between the stem and the suffix.

M:SG	F:SG	PL	
nqi	*nqiyy-a*	*nqiyy-in*	‘clean’
qwi	*qwiyy-a*	*qwiyy-in*	‘strong’

cC / cC-a / cC-in

M:SG	F:SG	PL	
merr	*merr-a*	*merr-in*	‘bitter’

cacic / cacic-a / cacic-in

M:SG	F:SG	PL	
xaṭiṛ	*xaṭiṛ-a*	*xaṭiṛ-in*	‘dangerous’

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.

M:SG	F:SG	PL	
qerqašun-i	*qerqašuni-ya*	*qerqašuniy-in*	‘multi-colored’
zelliɣi	*zelliɣiy-a*	*zelliɣiy-in*	‘bald’

ḥeẓẓuti	*ḥeẓẓutiy-a*	*ḥeẓẓutiyy-in*	‘naked’
ḍuɣri	*ḍuɣriyy-a*	*ḍuɣriyy-in*	‘simple, honest’
ǧuhdi	*ǧuhdiyy-a*	*ǧuhdiyy-in*	‘strong’
ḥqiqi	*ḥqiqiyy-a*	*ḥqiqiyy-in*	‘real’

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 **-t̲**.

M:SG	**F:SG**	**M:PL**	**F:PL**	
ḍubb-u	*ḍubb-a*	*ḍubb-us*	*ḍubb-at̲*	‘fat’
gurḏ-u	*gurḏ-a*	*gurḏ-us*	*gurḏ-at̲*	‘fat’
ruḇy-u	*ruḇy-a*	*ruḇy-us*	*ruḇy-at̲*	‘blond’

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 **leɛwawel mqiqṛ-eṯ** ‘young boys’ refers to children between the age of about 12 to 15 years. There is one exception. The diminutive of the adjective **meẓẓi** ‘small’ is **mzizu** ‘very small’ (the diminutive form loses pharyngealisation).

$c_1c_2ic_2c_3$

This is a regular diminutive adjective scheme in Moroccan dialects (Marçais, 1977:148). These adjectives have one of the base schemes **ccc**, **cacc**, **ccic**. The second base consonant is reduplicated in this type of diminutive.

base	**M:SG**	**F:SG**	**PL**	
kḥel	*kḥiḥel*	*kḥiḥl-a*	*kḥiḥl-in*	‘somewhat black’
qaṣeḥ	*qṣiṣeḥ*	*qṣiṣḥ-a*	*qṣiṣḥ-in*	‘somewhat hard’
qṣir	*qṣiṣeṛ*	*qṣiṣṛ-a*	*qṣiṣṛ-in*	‘somewhat short’
waseɛ	*wsiseɛ*	*wsisɛ-a*	*wsisɛ-in*	‘somewhat wide’
xḏeṛ	*xḏiḏeṛ*	*xḏiḏṛ-a*	*xḏiḏṛ-in*	‘somewhat green’
zṛeq	*zṛiṛeq*	*zṛiṛq-a*	*zṛiṛq-in*	‘somewhat blue’
ɣaṛeq	*ɣṛiṛeq*	*ɣṛiṛq-a*	*ɣṛiṛq-in*	‘somewhat deep’
ɣliṭ	*ɣlileṭ*	*ɣlilṭ-a*	*ɣlilṭ-in*	‘somewhat fat’

ḍɛif	*ḍɛiɛef*	*ḍɛiɛf-a*	*ḍɛiɛf-in*	‘somewhat thin’
ḥmeṛ	*ḥmimeṛ*	*ḥmimṛ-a*	*ḥmimṛ-in*	‘somewhat red’
ṣfeṛ	*ṣfifeṛ*	*ṣfifṛ-a*	*ṣfifṛ-in*	‘somewhat yellow’
ṭwil	*ṭwiwel*	*ṭwiwl-a*	*ṭwiwl-in*	‘somewhat long’

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.

base	**M:SG**	**F/PL**	
meqquṛ	*mqiqeṛ*	*mqiqṛ-eṯ*	‘somewhat big’
meẓẓi	*mzizu*	*mzizu-ṯ*	‘very small’

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.

base	**M:SG**	**F:SG**	**PL**	
mellul	*mliwel*	*mliwl-a*	*mliwl-in*	‘somewhat white’[96]
messus	*msiwes*	*msiws-a*	*msiws-in*	‘somewhat insipid’
ṛqiq	*ṛqiweq*	*ṛqiwq-a*	*ṛqiwq-in*	‘somewhat thin’
qlil	*qliwel*	*qliwl-a*	*qliwl-in*	‘somewhat few’

$c_1$wic$_1$c$_3$

There is one adjective which has this scheme.

base	**M:SG**	**F:SG**	**PL**	
byeṭ	*bwiḇeṭ*	*bwiḇṭ-a*	*bwiḇṭ-in*	‘somewhat white’

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:

[96] This adjective has + **ṯ** in the feminine singular and **-in** in the plural which might point to a certain degree of integration in the Arabic morphological system.

M:SG	**F:SG**	**PL**	
wa-yeṭ ~ wa-yṭiṭin	*ta-yeṭ ~ ta-yeṭiṭin*	*wi-yeṭ ~ wi-ṭiṭin*	‘other’

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-yeṭ*
time MS-other
‘Another time’

(24) *ayeṯma-s* *wi-yeṭ* *ma* *lla* *kayn-in*
siblings-3S MPL-other NEG be exist-PL
‘His other brothers and sisters where not there.’

(25) *ttafa-n* *ta-yeṭ*
find:I-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[97]. 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; **Ø** 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.

	M:SG	F:SG	PL

[97] As mentioned before we use 'participle' to mean the Arabic participle.

dfeɛ	*medfuɛ*	*medfuɛ-a*	*medfuɛ-in*	‘push’
dleḡ	*medluḡ*	*medluḡ-a*	*medluḡ-in*	‘rub’
fhem	*mefhum*	*mefhum-a*	*mefhum-in*	‘understand’
fekk	*mefkuḵ*	*mefkuḵ-a*	*mefkuḵ-in*	‘rescue’
freq	*mefruq*	*mefruq-a*	*mefruq-in*	‘separate’
ḥfeṭ	*meḥfuṭ*	*meḥfuṭ-a*	*meḥfuṭ-in*	‘memorise’
ḥkem	*meḥkum*	*meḥkum-a*	*meḥkum-in*	‘adjudicate’
ṛešš	*meṛšuš*	*meṛšuš-a*	*meṛšuš-in*	‘splash’
wzen	*muzun*	*mezun-a*	*muzun-in*	‘weigh
wžeḏ	*mužuḏ*	*mežuḏ-a*	*mužuḏ-in*	‘be ready’

The following verbs of Berber origin have a suppletive relation to Arabic passive participles:

qqen	*mešduḏ*	*mešduḏ-a*	*mešduḏ-in*	‘closed’
šš	*mukul*	*mukul-a*	*mukul-in*	‘eat’
ẓẓeḡ	*meḥluḇ*	*meḥluḇ-a*	*meḥluḇ-in*	‘milk’

In addition to the regular **mccuc** pattern, Ghomara Berber has the following participles with the pattern **mccac**:

	M:SG	**F:SG**	**PL**	
šekk - išukk	*meškak*	*meškak-a*	*meškak-in*	‘doubt’
miḥ	*memyaḥ*	*memyaḥ-a*	*memyaḥ-in*	‘empty water’
xṭaṛ	*mexṭaṛ*	*mexṭaṛ-a*	*mexṭaṛ-in*	‘choose’[98]

cf. the following suppletive passive participles:

ḵnes	*mešṛaṛ*	*mešṛaṛ-a*	*mešṛaṛ-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.

[98] 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 reïnterpreted as a stem I verb. Vicente (2000:95) remarks about this type of verb: *‘el infijo -ṭ- 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.

	M:SG	F:SG	PL	
b̲na	*meb̲ni*	*meb̲ni-yya*	*meb̲ni-yyin*	‘build’
qla	*meqli*	*meqli-yya*	*meqli-yyin*	‘bake’
xwa - ixwi	*mexwi*	*mexwi-yya*	*mexwi-yyin*	‘hollow out’

cf. the following suppletive passive participles:

ttu	*mensi*	*mensi-yya*	*mensi-yyin*	‘forget’
suɣ	*mešri*	*mešri-yya*	*mešri-yyin*	‘buy’
snes	*metfi*	*metfi-yya*	*metfi-yyin*	‘extinguish’

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**)

	M:SG	F:SG	PL	
beddel	*mbeddel*	*mbeddl-a*	*mbeddl-in*	‘put on, trade’
berreḏ	*mberreḏ*	*mberrḏ-a*	*mberrḏ-in*	‘make cold’
debbeɣ	*mdebbeɣ*	*mdebbɣ-a*	*mdebbɣ-in*	‘weed’
ḍehheṛ	*mḍehheṛ*	*mḍehhṛ-a*	*mḍehhṛ-in*	‘show, make appear’
felleq	*mfelleq*	*mfellq-a*	*mfellq-in*	‘cut up in two pieces’
melleḥ	*mmelleḥ*	*mmellḥ-a*	*mmellḥ-in*	‘salty’
heddeḏ	*mheddeḏ*	*mheddḏ-a*	*mheddḏ-in*	‘threat’
ḥeddeḏ	*mḥeddeḏ*	*mḥeddḏ-a*	*mḥeddḏ-in*	‘press’
beyyeṭ	*mbeyyeṭ*	*mbeyyṭ-a*	*mbeyyṭ-in*	‘whitewash’
beyyen	*mbeyyen*	*mbeyyn-a*	*mbeyyn-in*	‘show’
wesseɛ	*mwesseɛ*	*mwessɛ-a*	*mwessɛ-in*	‘widen’

There is one passive participle in our corpus which does not have a corresponding verb:

	M:SG	F:SG	PL	
-	*mdexxem*	*mdexxm-a*	*mdexxm-in*	‘excellent’

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**.

	M:SG	F:SG	PL	
ibekka	*mbekki*	*mbekky-a*	*mbekk-in*	‘make cry’[99]
feḍḍa	*mfeḍḍi*	*mfeḍḍy-a*	*mfeḍḍ-in*	‘finish’
lewwi	*mlewwi*	*mlewwy-a*	*mleww-in*	‘spin, roll’
meḍ̲ḍ̲i	*mmeḍ̲ḍ̲i*	*mmeḍ̲ḍ̲y-a*	*mmeḍ̲ḍ̲-in*	‘sharpen’
neqqi	*mneqqi*	*mneqqy-a*	*mneqq-in*	‘clean’
qeṛṛi	*mqeṛṛi*	*mqeṛṛy-a*	*mqeṛṛ-in*	‘teach’

mcacc (stem III)[100]

	M:SG	F:SG	PL	
sameḥ	*msameḥ*	*msamḥ-a*	*msamḥ-in*	‘forgive’
ḥaṛeb̲	*mḥaṛeb̲*	*mḥaṛb̲-a*	*mḥaṛb̲-in*	‘wage war’
gadd	*mgaded*	*mgadd-a*	*mgadd-in*	‘flat, flatten’
ɛafer	*mɛafer*	*mɛafr-a*	*mɛafr-in*	‘try’
ɛaqeb̲	*mɛaqeb̲*	*mɛaqb̲-a*	*mɛaqb̲-in*	‘punish’
ɛaweḍ̲	*mɛaweḍ̲*	*mɛawḍ̲-a*	*mɛawḍ̲-in*	‘tell’
ɛaṛeḍ̲	*mɛaṛeḍ̲*	*mɛaṛḍ̲-a*	*mɛaṛḍ̲-in*[101]	‘invite’

There is one Berber-morphology verb with Berber etymology that can form a passive participle:

	M:SG	F:SG	PL	
ag̲em d ~ dag̲em	*mdag̲em*	*mdag̲em-a*	*mdag̲em-in*	‘draw water’

mcaci (defective)

	M:SG	F:SG	PL	
ẓali	*mẓali*	*mẓaly-a*	*mẓal-in*	‘separate’
ḥaḍ̲i	*mḥaḍ̲i*	*mḥaḍ̲y-a*	*mḥaḍ̲-in*	‘touch’

mcawc (hollow)

	M:SG	F:SG	PL	
sawem	*msawem*	*msawem-a*	*msawem-in*	‘bargain over’
ɛaweḍ̲	*mɛaweḍ̲*	*mɛaweḍ̲-a*	*mɛaweḍ̲-in*	‘repeat’

[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 **meɛṛuḍ̲** exists as well.

mtcCc (stem V)

Passive participles of this type are very rare. Only the following examples occur in our corpus:

	M:SG	**F:SG**	**PL**	
tweqqef	*metweqqef*	*metweqqf-a*	*metweqqf-in*	‘stop’
tḍeššem	*metḍeššem*	*metḍeššm-a*	*metḍeššm-in*	‘be ashamed’

mtcacc (stem VI)

The passive participles of stem VI attested in our corpus are given below.

	M:SG	**F:SG**	**PL**	
ttafeq	*mettafeq*	*mettafq-a*	*mettafq-in*	‘agree’
tɛaqeḇ	*metɛaqeḇ*	*metɛaqḇ-a*	*metɛaqḇ-in*	‘be punished’
tsameḥ	*metsameḥ*	*metsamḥ-a*	*metsamḥ-in*	‘forgive each other’
tsara	*metsari*	*metsary-a*	*metsar-in*	‘take a walk’
tlaqa	*metlaqi*	*metlaqy-a*	*metlaq-in*	‘meet (each other)’
tqadd	*metqadd*	*metqadd-a*	*metqadd-in*	‘become equal’
tfakk	*metfakk*	*metfakk-a*	*metfakk-in*	‘escape, to get rid of’

mctcc ~ mctacc (stem VIII)

There are only sound forms of these passive participles in our corpus.

	M:SG	**F:SG**	**PL**	
ktašef	*mektašef*	*mektašf-a*	*mektašf-in*	‘guess’
ɛṭaṛef	*meɛṭaṛef*	*meɛṭaṛf-a*	*meɛṭaṛf-in*	‘admit’
štaweṛ	*meštaweṛ*	*meštaweṛ-a*	*meštaweṛ-in*	‘advise’
ḥtaṛem	*meḥtaṛem*	*meḥtaṛm-a*	*meḥtaṛem-in*	‘respect’
rtɛeḇ	*mertɛeḇ*	*mertɛeḇ-a*	*mertɛeḇ-in*	‘be scared’
ḥtaž	*meḥtaž*	*meḥtaž-a*	*meḥtaž-in*	‘need’

mstccc (stem X)

	M:SG	**F:SG**	**PL**	
steɛžeḇ	*mesteɛžeḇ*	*mesteɛžḇ-a*	*mesteɛžḇ-in*	‘astonished’
stanes	*mestanes*	*mestanes-a*	*mestanes-in*	‘accustome’

10.1.3. Quadriliteral verbs

mcccc

Participles derived from quadriliteral verbs are well-represented. They always have a passive interpretation. For example:

	M:SG	F:SG	PL	
beḷbeḷ	*mbeḷbeḷ*	*mbeḷbḷ-a*	*mbeḷbḷ-in*	‘mate’
beryez	*mberyez*	*mberyz-a*	*mberyz-in*	‘swap’
derdeḇ	*mderdeḇ*	*mderdb-a*	*mderdb-in*	‘arouse’
penčer	*mpenčer*	*mpenčer-a*	*mpenčer-in*	‘stab’
qefqef	*mqefqef*	*mqefqf-a*	*mqefqf-in*	‘shiver’
qendel	*mqendel*	*mqendl-a*	*mqendl-in*	‘brighten’
qeṛfez	*mqeṛfez*	*mqeṛfz-a*	*mqeṛfz-in*	‘pinch’
qeṛweṭ	*mqeṛweṭ*	*mqeṛwṭ-a*	*mqeṛwṭ-in*	‘stutter or stammer’
selsel	*mselsel*	*mselsel-a*	*mselsl-in*	‘to bake grain’
sentef	*msentef*	*msentf-a*	*msentf-in*	‘wound’
xerčef	*mxerčef*	*mxerčf-a*	*mxerčf-in*	‘speak unclearly’
zegzeg	*mzegzeg*	*mzegzg-a*	*mzegzg-in*	‘mate’
ɛerkel	*mɛerkel*	*mɛerkl-a*	*mɛerkl-in*	‘limp’
ɣaylef	*mɣaylef*	*mɣaylf-a*	*mɣaylf-in*	‘become angry’
ssifef	*mɣerbel*	*mɣerbl-a*	*mɣerbl-in*	‘sieve’

The following participles have irregular schemes. The passive participle **maẓuẓi** does not have a feminine or plural form.

	M:SG	F:SG	PL	
ǧheḏ	*meǧheḏ*	*mǧehḏ-a*	*mǧehḏ-in*	‘loud’
-	*muxliṣ*	*muxliṣ-a*	*muxliṣ-in*	‘faithful’
ziwen	*mziwen*	*mziwn-a*	*mziwn-in*	‘beautiful’
neẓẓeẓ	*maẓuẓi*	-	-	‘be late for ploughing’
-	*mezgawger*	*mezgawger-a*	*mezgawgr-in*	‘squatted’
-	*mmerr*	*mmerr-a*	*mmerr-in*	‘bitter’

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

	M:SG	**F:SG**	**PL**	
bred	*bareḏ*	*barḏ-a*	*barḏ-in*	‘become cold’
ḵmel	*kamel*	*kaml-a*	*kaml-in*	‘complete’
kṛeh	*kaṛeh*	*kaṛh-a*	*kaṛh-in*	‘hate’
mles	*males*	*mals-a*	*mals-in*	‘smooth’
mleḥ	*maleḥ*	*malḥ-a*	*malḥ-in*	‘salty’
ban	*bayen*	*bayn-a*	*bayn-in*	‘appear, seem’
fiq	*fayeq*	*fayq-a*	*fayq-in*	‘wake up’
ɛiš	*ɛayeš*	*ɛayš-a*	*ɛayš-in*	‘live’
ḥas	*ḥayes*	*ḥays-a*	*ḥays-in*	‘feel’
ṣum ~ ẓum	*ṣayem*	*ṣaym-a*	*ṣaym-in*	‘fast’
wseɛ	*waseɛ*	*wasɛ-a*	*wasɛ-in*	‘wide’

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 **ḵun** is used in counterfactuals, cf. IV.4.2.4.).

-	*kayen*	*kayn-a*	*kayn-in*	‘exist’

Suppletive participles

	M:SG	**F:SG**	**PL**	
qqim	*gales*	*gals-a*	*gals-in*	‘sit’
šš	*wakel*	*wakl-a*	*wakl-in*	‘eat’
ṭṭeṣ	*naɛes*	*naɛs-a*	*naɛs-in*	‘sleep’
ḇdeḏ	*waqef*	*waqf-a*	*waqf-in*	‘stand up, remain’

caci (defective verbs)

The final **i** can be assimilated or become a glide **y** when followed by the plural marker **-in**.

	M:SG	**F:SG**	**PL**	
kra - ikri	*kari*	*kary-a*	*kar(y)-in*	‘hire’
mḍi	*maḍi*	*maḍy-a*	*maḍ(y)-in*	‘pointed’
qṛa - iqṛa	*qaṛi*	*qaṛy-a*	*qaṛ(y)-in*	‘study, read’

Suppletive participles

	M:SG	**F:SG**	**PL**	
ttu	*nasi*	*nasy-a*	*nasy-in*	‘forget’
ddu	*maši*	*mašš-a*	*maš(y)-in*	‘go’
ddu d	*maži*	*mağ-a*	*mažy-in*[102]	‘come’

ccc-an

	M:SG	**F:SG**	**PL**	
ḥzen	*ḥeznan*	*ḥeznan-a*	*ḥeznan-in*	‘be sad’
ɣḍeḇ	*ɣeḍḇan*	*ɣeḍḇan-a*	*ɣeḍḇan-in*	‘be angry’
zɛef	*zeɛfan*	*zeɛfan-a*	*zeɛfan-in*	‘be reluctant’
sker	*sekran*	*sekran-a*	*sekran-in*	‘be drunk’
fṛeḥ	*feṛḥan*	*feṛḥan-a*	*feṛḥan-in*	‘be happy’
ɛgez	*ɛegzan*	*ɛegzan-a*	*ɛegzan-in*	‘be lazy’

There is one adjective of this type which has an optional **u** after the first consonant.

	M:SG	**F:SG**	**PL**	
---	*ɛuryan* ~ *ɛeryan*	*ɛuryan-a* ~ *ɛeryan-a*	*ɛuryan-in* ~ *ɛeryan-in*	‘naked’

cCac

There is one active participles of this type in our corpus.

	M:SG	**F:SG**	**PL**	
xdem	*xeddam*	*xeddam-a*	*xeddam-in*	‘work’

[102] This form has a free variant **mağ-in**.

There is one active participle that combines gemination and the -**an** suffix.

	M:SG	**F:SG**	**PL**	
ɛya	*ɛeyyan*	*ɛeyyan-a*	*ɛeyyan-in*	‘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 ~ nekkineṯ*
2:M:SG	*kežž*[103] *~ keği ~ keğin ~ keğineṯ*
2:F:SG	*kemm ~ kemmi ~ kemmin ~ kemmineṯ*
3:M:SG	*netta*
3:F:SG	*nettaṯa*
1:PL	*nuḵna*
2:PL	*kunna*
3:PL	*nihma*[104]

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 **ğ** can become **žž** (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 **h** 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. [105] 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.

	Post-verbal 1	**Post-verbal 2**	**Pre-verbal**
1:SG	*ay*	*ay*	*y ~ ṯ (yṯ)*[106]
2:M:SG	*aḵ*	*aḵ*	*ḵ*
2:F:SG	*am*	*am*	*m*
3:M:SG	*aṯ / ah*	*t*	*y ~ ṯ*
3:F:SG	*at / ah*	*t ~ tet ~ teṯ*	*t*
1:PL	*anax*	*anax*	*ɣen*
2:PL	*awen*	*awen*	*wen*
3:PL	*ahen*	*ten*	*n*

[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 Iɛṛaḇen. 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 **ṯ**, like in Iɛṛaḇen, whereas the first person has form **yṯ**. **š a yṯ iẓẓwiṯ** thus only means ‘He will miss me’. The speakers in Iɛṛaḇen 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 **šebbeṛ** '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).

	'He grabbed (X)'	**'They grabbed (X)'**
1:SG	*i-šebbṛ = ay*	*šebbṛ-an = ay*[107]
2:M:SG	*i-šebbṛ = ak̲*	*šebbṛ-an = ak̲*
2:F:SG	*i-šebbṛ = am*	*šebbṛ-an = am*
3:M:SG	*i-šebbṛ = at̲*	*šebbṛ-en = t*
3:F:SG	*i-šebbṛ = at*	*šebbṛ-en = tet ~ teṭ̲*
1:PL	*i-šebbṛ = anax*	*šebbṛ-an = anax*
2:PL	*i-šebbṛ = awen*	*šebbṛ-an = awen*
3:PL	*i-šebbṛ = ahen*	*šebbṛ-en = ten*

The use of the pronouns is illustrated by the following examples. In example (1) first the third person masculine type 2 pronoun is used following a verbal suffix while type 1 is used following the verb which does not take a suffix.

(1) *te-nn = as:* *'a* *xay,* *nekki* *ḡḡa-x = t*
3FS-say:P = 3S:IO VOC brother I do:P-1S = 3MS:DO
'She said to him: 'o brother, I put it in the frying pan,
g *lmeqla,* *netta* *i-nṭeṛ,* *i-leqṭ = at̲* *afeṛṛuž.*'[108]
in frying.pan he 3MS-fly:P 3MS-pick:P = 3MS:DO rooster:EL
it flew, and the rooster took it.'

The third person feminine singular pronoun of the second type has the forms **t / tet ~ teṭ̲**. The forms **tet** and **teṭ̲** 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 ~ teṭ̲** 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] The difference between conjugational suffix -**en** and -**an** is due to schwa retention (cf. II.2.3. phonology).

[108] The neighbouring dialect of Amṭiqan has the spirantised form of the third person masculine direct object pronoun **ṯ** following a verbal suffix, cf. **ufax ṯ idda** ' I found (him) that he had gone' (El Hannouche 2010: 114).

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* *tseyyaḇ-en = teṯ*
and piece.of.bread throw:I-3PL = 3FS:DO
'and the chunk of bread, they throw it away'

(4) *maši* *iḏ* *izref i* *netta* *i-tett* *tayʷlalt = ahen.*
go:AP:MS with road and he 3MS-eat:I bissara:EL = S:ANP
i-tqeṭṭaṛ = 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) *ṭṭf-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) *qleḇ* *x* *ṭṭhaṛ* *nn-eḵ* *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* *uɛebbiz = 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 **aṯ** / **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-šebbeṛ* *ya* *tsekkurt,* *saɛa* *i-bb = ah = d*
3MS-catch:P one:F partridge:EA then 3MS-take:P = 3FS:DO = DC
dar *uxyam*
to house:EA
'He caught a partridge, then he brought it home.'

(11) *bb = ah = id!*
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 **ṯ**. The two pronouns are different, however, when preceding a third person plural verb. In this position the first person pronoun is **ṯ** 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:

	1:M:SG	**3:M:SG**
1:SG	-	*y*
2:SG	*y*	*y*
3:M:SG	*ṯ*	*ṯ*
3:F:SG	*y*	*y*
1:PL	-	*y*
2:PL	*y*	*y*
3:PL	*ṯ*	*y*

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:

1:SG	*š a y ẓẓwiṯax*	‘I will miss him’
2:SG	*š a y teẓẓwiṯet*	‘You will miss him/ me’
3:M:SG	*š a ṯ iẓẓwiṯ*	‘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*[109]	‘They will miss me’

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 wfax*	‘I will find him’
2:SG	*š a y tufet*	‘You will find him/ me’
3:M:SG	*š a ṯ yuf*	‘He will find him/ me’[110]
3:F:SG	*š a y tuf*	‘She will find him/ me’
1:PL	*š a y nuf*	‘We will find him’
2:PL	*š a y tufem*	‘You (PL) will find him/ me’
3:PL	*š a y ufen*	‘They will find him’
3:PL	*š a ṯ ufen*	‘They will find me’[111]

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-ttuṯu a y=n-ẓeḏ g rrḥa, rrḥa n ufus,*
1PL-go:I AD 3MS:DO=1PL-grind:A in mill, mill of hand:EA
hamḵa, ne-ẓẓaḏ=aṯ…..
like.this 1PL-grind:I=3MS:DO
‘We go and grind it in the mill, a hand mill, like this, we grind it…’

[109] 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 Amṭiqan the pronoun **yṯ** would be used here.

[110] In the variant of Amṭiqan ‘He will find me.’ is **š a yṯ yuf** (elicitation in Bou Ahmed).

[111] In the variant of Amṭiqan ‘They will find me.’ is **š a yṯ ufen** (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 **t̲** is used preceding third person masculine singular verbs.

(13) *wella a weḵl-en ga-s iɣežden a y=b̲eššṭ-en*
or AD step:A-3PL in-3:MS billy.goats AD 3MS:DO=hurt:A-3PL
wella a t̲=ye-wweṭ̲ aɣižd 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 **šš** 'eat' is used. In example (14a) the third person pronoun is used whereas in (14b) the first person pronoun is used.

(14a) *lmuhim, aḇeṛṛey tẓeyyer s iḇẓaḏen nn-es.*
anyway sheep:EL PASS:tight:PF:3MS with urine of-3:M
š i-ɛiq-u iḏ̲-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: 'mḵi ne-dda ḥetta tferreq-na, š*
3MS-said:P=3S:IO if 1PL-go:P until PASS:separate-1PL:PF FUT
i-ɛiss-u=li ag̲ḏ̲i ulla nnmer ulla kḏ̲a,
3PL:IMPF-guard-3PL:IMPF=1PL:IO jackal:EL or leopard or something
š a t̲=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) *nhaṛ=aḏ̲ š a ɣen=i-neɣ b̲aḇa 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* *lɣula=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 **ṯ** before the participle. The referent can only be inferred from the context.

(17) *šk* *a* *ṯ* *i-ẓẓwiṯ-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.

	post-verbal	**pre-verbal**
1:SG	*ay*	*y* ~ *ṯ*[112]
2:M:SG	*aḵ*	*ḵ*
2:F:SG	*am*	*m*
3:SG	*as*	*s*
1:PL	*anax*	*ɣen*
2:PL	*awen*	*wen*
3:PL	*asen*	*sen*

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 **ṯ** is used before third person masculine singular and third person plural verbs, e.g.:

2:M:SG	*š a y tɛawḏet taxʷṛaft*	'You will tell me a story'
3:M:SG	*š a ṯ iɛaweḏ taxʷṛaft*	'He will tell me a story'
3:F:SG	*š a y tɛaweḏ taxʷṛaft*	'She will tell me a story'
2:PL	*š a y tɛaḏwem taxʷṛaft*	'You will tell me a story'
3:PL	*š a ṯ ɛawḏen taxʷṛaft*	'They will tell me a story'

[112] Just like the direct object pronoun the variant **yṯ** is used in Amṭiqan (cf. El Hannouche, 2010: 116, 118). Speakers from Amṭiqan 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) *š a y=d=i-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) *š a t=d=i-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.

		***fsir* 'behind'**		***g* 'in'**	
1:SG	*-i ~ y*	*fsir-i*	'behind me'	*ga-y*	'in me'
2:M:SG	*-k*	*fsir-ek*	'behind you (M)'	*ga-k*	'in you'
2:F:SG	*-m*	*fsir-em*	'behind you (F)'	*ga-m*	'in you'
3:SG	*-s*	*fsir-es*	'behind him/her'	*ga-s*	'in him/her'
1:PL	*-nax*	*fsir-nax*	'behind us'	*ga-nax*	'in us'
2:PL	*-un ~ -wen*	*fsir-un*	'behind you (PL)'	*ga-wen*	'in you'
3:PL	*-sen*	*fsir-sen*	'behind them'	*ga-sen*	'in them'

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 **kma** 'brother', **uletma** 'sister' and **ayetma** '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, Lafkioui, 2007:133).

suffix (cf. III.13.2.8. for the genitive preposition).

		‘brother’	
1:SG	*-Ø*	*ḵma-Ø*	‘my brother’
2:M:SG	*-ḵ*	*ḵma-ḵ*	‘your (M) brother’
2:F:SG	*-m*	*ḵma-m*	‘your (F) brother’
3:SG	*-s*	*ḵma-s*	‘his brother’
1:PL	-	*ḵma nn-ax*	‘our brother’
2:PL	-	*ḵma nn-un*	‘your (PL) brother’
3:PL	-	*ḵma nn-sen*	‘their brother’

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

	post-consonantal	**post-vocalic**
1:SG	*-i / -ni* (verbal suffix)	*-y / -ni* (verbal suffix)
2:SG	*-eḵ*	*-ḵ*
3:M:SG	*-u*	*-h*
3:F:SG	*-a*	*-ha*
1:PL	*-na*	*-na*
2:PL	*-ḵum*	*-ḵum*
3:PL	*-em*	*-hem ~ -hum*

The following paradigms show direct object pronominal suffixes attached to a third person singular and a third person plural form of the verb **ɛṭeq** ‘help’. The glide **ww** 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).

	ɛṭeq ‘he helped’	**ɛeṭqu** ‘they helped’
1:SG	*ɛṭeq-ni*	*ɛeṭqu-ni*
2:SG	*ɛeṭq-eḵ*	*ɛeṭquww-eḵ*
3:M:SG	*ɛeṭq-u*	*ɛeṭquww-eh*
3:F:SG	*ɛeṭq-a*	*ɛeṭqu-ha*
1:PL	*ɛṭeq-na*	*ɛeṭqu-na*
2:PL	*ɛṭeq-ḵum*	*ɛeṭqu-ḵum*
3:PL	*ɛeṭq-em*	*ɛeṭqu-hem* ~ *-hum*

In the following text excerpts the use of the pronouns is illustrated. The borrowed Arabic DO pronoun accompanies the borrowed verb:

(20) *aḡḏi* *ɛṭeq-ni* *zeg* *nnmer*
jackal help:PF-1S from leopard
‘The jackal helped me (get rid of) from the leopard.’

(21) *nettaṯa* *ma* *ka-t-fehm-u* *ši* *ɛaweḏ*
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).

	l- ‘to’
1:SG	*l-i*
2:SG	*l-eḵ*
3:M:SG	*l-u*
3:F:SG	*l-a*
1:PL	*l-na*
2:PL	*l-ḵum*
3:PL	*l-em*

The following two examples show the use of the indirect object pronoun with borrowed verbs.

(23) *ka-ḥsab̲=l-a* *š* *a* *t* *i-šš.*
IMPP-suppose:3MS=to-3FS FUT AD 3FS:DO 3MS-eat:A
'She thought that he would eat her.'

(24) *š* *i-ɛiss-u-l-i* *aḡd̲i* *ula* *nnmer…*
FUT 3PL:IMPF-guard-3PL:IMPF-to-1S jackal:EL or leopard
'The leopard or the jackal will watch out for me…'

mula' (SG), '**mwali**' (PL) 'owner/lord' optionally take the third person pronouns. No other borrowed nouns take a suffix. Instead, the Berber preposition **n** 'of' is used to express possession (cf. III.13.2.8.).

(25) *mwali-ha* *dda-n* *fḥal-em*
owners-3FS go:P-3PL way-3PL
'Her owners went their way.'

(26) *amk̲* *a* *ye-ḥtaž* *mula-h*
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 **bi**- and **bweḥd**- 'alone' used with collective numerals (see III.12.3.). Other elements are **ɛemmeṛ**- ~ **ɛummeṛ**- 'never', **fḥal**- 'way' shown in examples (27) and (28) and **byedd**- 'self' in (29) and (30) (See below for reciprocal pronoun **baɛṭiyat̲**- / **baɛṭ**- ~ **baɛḍ̲**- and the reflexive pronoun **miss-** ~ **nefs-**.).

(27) *ɛemmṛ-ek̲* *ma* *he-šš-at* *aylal*?
never-2S NEG 2S-eat:P-2S snails
'Have you never eaten snails?'

(28) *i-qqel* *fḥal-u*
3MS-return:P way-3MS
'He went back'

(29) *šeṭṭḥ-ax=t̲* *byedd-i*
make.dance:P-1S=3MS:DO self-1S

‘I made him dance myself.’

(30) *wella* *a* *k̲ = 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 **ɣemmen**, made up of a combination of the simple preposition **n** ‘of’ and **ɣer** ‘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 **baɛṭiya̲t̲** / **baɛṭ** ‘each other’ and the reflexive element **miss**- ~ **nefs**- ‘self’ are borrowed from Arabic. They take Arabic suffixes. The form **baɛḏ̲**- is found as well, though it is less frequent than the others. It can only be used in the plural. The reciprocal forms are:

baɛṭiya̲t̲- / **baɛṭ**- ~ **baɛḏ̲-**

1:PL	*b̲aɛṭiya̲t̲-na ~ baɛṭ-na*	‘each other’
2:PL	*baɛṭiya̲t̲-k̲um ~ baɛṭ-k̲um*	‘each other’
3:PL	*baɛṭiya̲t̲-em ~ baɛṭ-em*	‘each other’

For example:

(33) *ne-dda* *i* *baɛṭiya̲t̲-na*
1PL-go:P with each.other-1PL

‘We went with each other.’

(34) *te-wṯ-em* *baɛṭ-ḵum*
2PL-hit:P-2PL each.other-2PL
‘You hit each other.’

(35) *wṯa-n* *baɛṭiyaṯ-em*
hit:P-3PL each.other-3PL
‘They hit each other.’

An example of the reflexive pronoun is:

(36) *i-deḡḡ* *miss-u* *ssḇeɛ*
3MS-do:I self-3MS 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:

	proximal	**distal**	**anaphoric**
SG.	*a-ḏ ~ a-ḏin ~ a-ḏineṯ*	*a-n ~ a-ni ~ a-niṯ*	*a-hen*
PL.	*i-ḏ ~ i-ḏi ~ i-ḏineṯ*	*i-n ~ i-ni ~ i-nineṯ*	*i-hen ~ i-hin*

The agreement in number of the post-nominal clitics is shown in the following examples.

Masculine Singular		**Feminine Singular**	
argaz a-ḏ	‘this man’	*tameṭṭuṯ a-ḏ*	‘this woman’
argaz a-n	‘that man’	*tameṭṭuṯ a-n*	‘that woman’
argaz a-hen	‘that man’	*tameṭṭuṯ a-hen*	‘that woman’
Masucline Plural		**Feminine Plural**	
irgazen i-ḏ	‘these men’	*tiɛeyyalan i-ḏ*	‘these girls’

[116] Deictic clitics in Senhadja, Zenaga, Ghadames also agree in number (see Lafkioui, 2007: 206 for demonstrative pronouns, Kossmann, 2013: 56-57 for Ghadames, Taine-Cheikh, 2008: 55 sub ce).

irgazen i-n	‘those men’	*tiɛeyyalan i-n*	‘those girls’
irgazen i-hen	‘those men’	*tiɛeyyalan i-hen*	‘those girls’

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:

	proximal	**distal/relative**
M:SG	*u-ha* ~ *u-haḏ* ~ *u-haḏin* ~ *u-haḏineṯ*	*w-an* ~ *w-ani* ~ *w-aniṯ*
F:SG	*t-ha* ~ *t-haḏ* ~ *t-haḏin* ~ *t-haḏineṯ*	*t-an* ~ *t-ani* ~ *t-aniṯ*
PL	*u-hi* ~ *u-hiḏ* ~ *u-hiḏin* ~ *u-hiḏineṯ*	*w-in* ~ *w-ini* ~ *w-iniṯ*

	anaphoric	**pronominal head**
M:SG	*u-hen* ~ *u-henni* ~ *u-henniṯ*	*w-a*
F:SG	*t-hin* ~ *t-hinni* ~ *t-hinniṯ*[117]	*t-a*
PL	*u-hin* ~ *u-hinni* ~ *u-hinniṯ*	*w-i*

A number of examples of demonstrative pronouns as they are used in texts are:

(37) *u-ha* *ɛemmi* *nn-em* *afeṛṛuž*
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**.

PL-ANP:PL NEG know:P-3PL nothing
'They do not know anything!'

It is possible to combine post-nominal deictics and demonstrative pronouns to add emphasis, as shown in the following examples:

(40) *amaleḥ = a-ḏ u-ha*
fish:EL = S:PRX MS-PRX
'This fish!'

(41) *tameṭṭuṯ = a-n t-an*
woman = S-DIST FS-DIST
'That woman!'

(42) *lxeddama = i-n w-ini*
workers = PL-DIST PL-DIST:PL
'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) *t-a ye-nwa-n i netta*
FS-PRH RF-be.cooked:P-RF for he
'The one (F) that is ripe is for him'

(43b) *t-an a lla g lbir*
FS-PRH REL be:P in well
'The one that is in the well.'

(44a) *w-a nn-es s ššɛaṛ i w-a ynu s isennanen*
MS-PRH of-3S with hair and MS-PRH my with thorns
'His have hair and mine have thorns.'

(44b) *škun w-an a y-ṯerraḥ-en?*
who MS-PRH REL RF-call:I-RF

‘Who is that who is calling?’

(45a) *ɣa* *w-i* *d=i-ttiṯu-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* *ɣa* *leɛwawel,* *ɣa* *ššmayeṯ*
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-haḏineṯ*

EA *w-ay-ha ~ w-ay-haḏ ~ w-ay-haḏi ~ w-ay-haḏineṯ*

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* *ṭleḇ-t-eḵ*
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.’

(48) *ay-haḏ* *a* *ḵ = i-fk*
EL:INDEF-PRX:S REL 2MS:IO = 3MS-give:P
'This is all that he gave to you'

(49) *i-rri* *ay-hen* *mudḥiḵa*
3MS-return:P EL:INDEF-S:ANP laughter-FS
'He made it into laughter.'

(50) *ssfi* *n* *w-ihen*
behind of INDEF:EA-S:ANP
'After that.'

(51) *u* *x* *uy* *a* *lla-x* *ḥaḏṛ-ax…*
and on INDEF:EA REL be:P-1S be.present:P-1S
'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** / **ya̲t** ~ **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) *žuž* *n* *tse**k̲t̲**an*
two of EA:cows
'Two cows.'

(2) *žuž* *n* *leḥyif*
two of rocks
'Two rocks.'

12.1. Cardinal numbers

The numeral 'one' distinguishes two different forms, Arabic **waḥit** is used on its own while Berber **yan** ~ **ya** / **ya̲t** ~ **yah** is used to modify a noun. When asked 'could you count from one to ten' the people use **waḥit**, **žuž** ~ **zuž**, **tla̲ta** etc. When asked 'how much do you have?' the answer could be **yan** / **ya̲t** '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 **mya̲ta̲yen** and '2,000' which is **alfayen**) 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 restircted 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 **u** ~ **w** (cf. IV.4.1. coordination). Below we present the two sets of cardinal numbers.

	Set 1	**Set 2**
1	*waḥit, yan ~ yaṯ*	-
2	*žuž / zuž, tnayen*	-
3	*tlaṯa*	*telt*
4	*areb(b)ɛa*	*arbeɛ*
5	*xemsa*	*xems*
6	*setta*	*sett*
7	*sebɛa*	*sebɛ*
8	*tmenya*	*tmen*
9	*tesɛuṯ*	*tseɛ*
10	*ɛašra*	*ɛšeṛ*
11	*ḥḏaš*	*ḥḏašer*
12	*ṭnaš*	*ṭnašer*
13	*tleṭṭaš*	*tleṭṭašer*
14	*ṛbeɛṭaš*	*ṛbeɛṭašer*
15	*xemmesṭaš*	*xemmesṭašer*
16	*seṭṭaš*	*seṭṭašer*
17	*sḇeɛṭaš*	*sḇeɛṭašer*
18	*tmenṭaš*	*tmenṭašer*
19	*tseɛṭaš*	*tseɛṭašer*
20	*ɛišrin*	
21	*waḥit u ɛišrin*	
22	*tnayen u ɛišrin*	
etc.		
30	*tlaṯin*	
40	*arebɛin*	
50	*xemsin*	
60	*settin*	
70	*sebɛin*	
80	*tmanin*	
90	*tesɛin*	
100	*mya*	*myaṯ*

101	*mya w waḥit*
etc.	
200	*myaṯayn*
300	*teltemya*
400	*aṛbɛemya*
500	*xemsemya*
600	*settemya*
700	*sebɛemya*
800	*temnemya*
900	*tesɛemya*
999	*tesɛemya*
1100	*ḥḏašermya*
1000	*alef*
2000	*alfayen*
3000	*teltalaf*
11000	*ḥḏašeralef*
million	*menyul*
	žuž n mnayel
	etc.
bilion	*menyaṛ*
	žuž n mnayeṛ
	etc.

The following remarks have to be taken into account with regards to the numeral system:

12.1.1. The numeral ‘one’

‘One’ is the only cardinal numeral that has gender distinction. When used independently the forms are **yan** for masculine and **yaṯ** for feminine. In its function as a modifier of the noun there are several possibilities. Before a masculine Berber noun the forms **yan** ~ **ya** are in free variation as examples (3) and (4) show. Before a feminine Berber noun the forms **ya** ~ **yah** are in free variation as in examples (5) and (6). Arabic-morphology nouns (and other numerals) can only be preceded by the forms **yan** for masculine and **yah** for feminine as exemplified in (7) and (8). The use of **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* *wsɣun*
one rope:EA
'one rope'

(5) *ya* *temḏa*
one pond:EA
'a lake'

(6) *yah* *temḏa*
one pond:EA
'a lake'

(7) *yan* *ḍ-ḍwiwen*
one ART-light:DIMIN
'a small light'

(8) *yah* *s-sennaṛ-a*
one ART-hook-FS
'a hook'

(9) **ya* *ssennaṛa*
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’, **ɛamayen** for ‘two years’, but **snin** from three to ten years. From ten upwards it is either **ɛam** or **sna**.

‘day’		**‘month’**	
nhaṛ	‘one day’	*šhaṛ*	‘one month’
yum-ayn	‘two days’	*šehṛ-ayn*	‘two months’
telt eyyam	‘three days’	*telt šhuṛ*	‘three months’
ṛeḇɛ eyyam	‘four days’	*ṛḇeɛ šhuṛ*	‘four months’
xems eyyam	‘five days’	*xems šhuṛ*	‘five months’
sett eyyam	‘six days’	*sett šhuṛ*	‘six months’
seḇɛ eyyam	‘seven days’	*sḇeɛ šhuṛ*	‘seven months’
tmen eyyam	‘eight days’	*tmen šhuṛ*	‘eight months’
tesɛ eyyam	‘nine days’	*tseɛ šhuṛ*	‘nine months’
ɛešṛ eyyam	‘ten days’	*ɛšeṛ šhuṛ*	‘ten months’
ḥḏašer yum	‘eleven days’	*ḥḏašer shaṛ*	‘eleven months’
tmanin yum	‘eighty days’	*tmanin šhaṛ*	‘eighty months’

‘year’	
ɛam	‘one year’
ɛam-ayn	‘two years’
telt snin	‘three years’
ṛḇeɛ snin	‘four years’
xems snin	‘five years’
sett snin	‘six years’
seḇɛ snin	‘seven years’
tmen snin	‘eight years’
tseɛ snin	‘nine years’
ɛešṛ snin	‘ten years’
hḏašer ɛam ~ sna	‘eleven years’
tmanin ɛam ~ sna	‘eighty years’

12.1.3. Money units

The most frequently used money units in the Jbala are **ryal**, **fṛank** and **derhem**. One **ryal** is half a dirham and a **fṛank** is 1/100 of a dirham. The old term **peṣṣiṭa** 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’
ɛešṛa ryal ~ ɛešṛa n rryal	‘ten ryal’
ḥḏaš ryal ~ ḥḏaš n rryal	‘eleven ryal’
alef ryal ~ alef n rryal	‘thousand ryal’

fṛank

fṛank	‘one frank’
žuž fṛank ~ žuž n lefṛank	‘two frank’
ɛešṛa fṛank ~ ɛešṛa n lefṛank	‘ten frank’
ɛišrin fṛank ~ ɛišrin n lefṛank	‘twenty frank’
alef fṛank ~ alef n lefṛank	‘thousand frank’

derhem

Note that for the numerals 11 till 19 set 2 cardinal numbers are used.

derhem	‘one dirham’
žuž derhem ~ žuž n ddrahem	‘two dirham’
ɛešṛa derhem ~ ɛešṛa n ddrahem	‘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 peṣṣiṭa	‘one peseta’
žu pṣaṣet ~ žuž n lepṣaṣet	‘two peseta’
tlaṯin peṣṣiṭa ~ tlaṯin n lepṣaṣeṭ	‘three peseta’
menyul peṣṣiṭa ~ menyul n lpeṣṣiṭa ~ menyul n lepṣaṣeṭ	‘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 / zzuž	‘at two o’clock’
g ttlaṯa	‘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:

M:SG	**F:SG**	**PL**	
luli	*luli-ya*	*luliyy-in*	first
tani	*tany-a*	*tan-in*	second
taleṯ	*talṯ-a*	*talṯ-in*	third
ṛaḇeɛ	*ṛaḇɛ-a*	*ṛaḇɛ-in*	fourth
xames	*xams-a*	*xams-in*	fifth
sades (~*saḍes*)	*sads-a* (~*saḍs-a*)	*sads-in* (~*saḍes*)	sixth
saḇeɛ	*saḇɛ-a*	*saḇɛ-in*	seventh
tamen	*tamn-a*	*tamn-in*	eighth
taseɛ	*tasɛ-a*	*tasɛ-in*	ninth
ɛašer	*ɛašr-a*	---	tenth
laxri	*laxri-yya*	*laxri-yyin*	last

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 žuž bi-na*	

2. *b weḥd-ḵum* *b aṛbɛa bi-ḵum*
3. *b weḥd-em* *b tlaṯa bi-hem*

13. Prepositions

Prepositions in Ghomara Berber can be divided in two groups: simple prepositions and prepositional complexes. The simple prepositions can be further subdivided in 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 **qb̲el** '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***,* **aḡʷemmaṭ** have nominal characteristics. Two of these consistently mark state on the prefix when preceded by a preposition. The three elements **ṭṭerf***,* **aḡʷemmaṭ***,* **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 in 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 **iḏ-**), 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.

Prenominal	**Pronominal**	**State**	**Function**
i ~ *iḏ*	*iḏ-*	EA	comitative
s	*iḏ-*	EA	instrumental
dar ~ *da*	*dar-*	EA	allative
day ~ *dayer*	*dayer-*	EA	allative 'chez'

zeg	*zga-*	EA	ablative
g	*ga-*	EA	locative
x ~ fex ~ f	*xef- ~ fex-*	EA	locative
n	*nn-* (1SG : *inu*)	EA	genitive
ɣer ~ ɣ	*ɣer-*	EA	possessive / loc.
zdu	*zdaw-*	EA	locative
sennig	*sennig-*	EA	locative

It is possible to combine prepositions to a limited extent. The element **z**, probably a shortened form of **zeg**, can precede **ɣer** 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 **men** (~ **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** ~ **iḍ** can be substituted by the indirect object pronoun (cf. III.11.2.2. for the full IO paradigm).

	State	**Function**
i ~ iḍ	EA	dative
am	EA	similative
ḥettar	EA	'until'
qḇel	EL	'before'
bla	EA / EL	'without'

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', **aḡʷemmaṭ** 'opposite', which mark state, or an Arabic borrowed nominal element, **ṭṭerf** 'beside'. The latter must have a preceding preposition which is often **i** 'with'. The element **af** has a variant **afel** which is used adverbially. When **aḡʷemmaṭ** 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 **nešt** occur only as part of complex prepositions.

	EA	
gum n	---	'in front of, beside'
ammas n	*wammas*	'in the middle of'
af n / afel	*waf / wafel*	'on top (of)'
agʷemmaṭ i / n-	*ugʷemmaṭ*	'on the opposite side of'
ṭṭerf n	---	'beside'
nešt n	---	'as big as'

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.

Prenominal	**Pronominal**	
fsi n ~ sfi n	*fsir- ~ sfir-*	'behind'

13.1.4. Arabic prepositions

Three prepositions of Arabic origin keep their original morphology; **qḇalṯ-** and **bɣaṛt-** meaning 'opposite' and **lil-** ~ **dil-** in **šḥal lil-** ~ **šḥal dil-** (Other borrowed Arabic prepositions, **ɛla**, **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) *ssḇeɛ maš a šš ašnikef iḏ uḡḏi*
lion FUT AD [3MS]-eat:A hedgehog:EL and jackal:EA
'The lion is going to eat the hedgehog and the jackal.'

(3) *i-dda = d iḏ-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 **iḏ**[120]. Compare the following sentences, (4) is an example of the prenominal form while (5) is the pronominal form.

(4) *i-ddez iḇawen s usɣaṛ*
3MS-crush:P beans with stick:EA
'He crushed the beans with a stick.'

(5) *i-ddez iḏ-es iḇawen*
3MS-crush:P with-3:MS beans
'He crushed the beans with it.'

13.2.3. Allative preposition dar ~ 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 (**l - ɣeṛ** for Figuig, Kossmann, 1997: 224-225, **ɣeṛ** for Aït Seghrouchen, Bentolila, 1981: 215 **dar** in Tashelḥiyt cf. van den Boogert 1997:235). Ghomara Berber uses a separate preposition **daɣ ~ daɣer** for 'chez'. Examples of **dar** are:

(6) *dda-n dar urrar*
go:P-3PL to threshing.floor:EA
'They went to the threshing floor.'

(7) *nettaṯa h-teffeɣ dar-es ssluqiyya = 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 **siss-i**. In Iɛṛaḇen a speaker told me that the preposition **siss** is used in Beni Menṣur. Furthermore in Colin's text (1929) the preposition **s** is used in an ablative sense in the phrase **iḏ ušnekkaf iffeɣ s teryalt** '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’, **ammas n** ‘in the middle of’, **āgwemmaṭ n** ‘opposite’, for example:

(8) *yaḷḷah* *qerrḇ = at* *dar* *gum* *n* *te-sla-ṯ*
come.on move:IMP = 3FS:DO to front of bride:EA
‘Come on, move her in front of the bride.’

dar can precede nouns with a locative meaning, as well as nouns with temporal meaning, for example:

(9) *š* *a* *y* *n-ežž* *dar* *ṣṣḇeḥ*
FUT AD 3MS:DO 1PL-leave:A to morning
‘We’ll leave it till the morning.’

The form of the preposition **da** is in free variation with **dar** as the following examples show.

(10a) *i-ttuṯu* *ɛaweḏ* *da* *waššin*
3MS-go:IMP again to stable:EA
‘He goes to the stable.’

(10b) *i-dda* *dar* *waɣeḏ* *a* *ṭṭeṣ*
3MS-go:P to ash:EA AD [3MS]-sleep:A
‘He went to sleep in the ash.’

(11a) *da* *lemḏina*
to city
‘to the city’

(11b) *t-ɛelli-t* *dar* *lemḏina*
2S-go up:A-2S to city
‘You go to the city.’

13.2.4. Preposition daɣ ~ daɣer ‘chez’

The preposition **daɣ ~ daɣer** 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 **l** ‘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 **daɣer** is a combination of the allative preposition **dar** and the possessive preposition **ɣer**.

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) *saɛa te-dda daɣ urgaz 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 **daɣ** ~ **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 daɣ lqayeḏ*
3MS-go:P to Kaid
'He went to the Kaid's place.'

(14b) *i-dda da lqayeḏ*
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) *yaṯ te-qqim g uxyam i žuž rewl-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-syaṛ-en*

[122] Speaking animals in tales are treated as humans.

1PL-do:I in-3S sticks
'We put sticks in it.'

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) *i-ffeɣ* *zeg* *uxyam*
3MS-go.out:P from house:EA
'He got out of his house.'

(18) *sessa-n* *zga-s* *tisukran*
drink:I-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 prenominal 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[123].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* *ḡḡ-aɣ* *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-ḏ*
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) *rrɣ-an* *as* *lǧeld* *f* *taṭṭiwan* *nn-es*
return:P-3PL 3S:IO skin on eyes of-3:M
'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* *qeṭṭr-en* *fx-essen*
FUT AD drip:A-3PL on-3PL
'They will drip on them.'

(23) *leḥšam=i-hen* *ḵerrḵ-en xf-es*
children=PL-ANP lie:P-3PL on-3S
'Those children lied to him.'

(24) *i-ḇeṛṛeḥ* *xf-es*
3MS-call:P on-3S
'He called him.'

(25) *i-tḍeṣṣa* *x* *te-mɣaṛ-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**.

1:SG	*inu*
2:M:SG	*nn-eḵ*
2:F:SG	*nn-em*
3:SG	*nn-es*
1:PL	*n-nax*
2:PL	*nn-un*
3:PL	*nn-sen*

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 ɣer ~ ɣ / ɣer- ‘at’

This preposition has two forms; when suffixed it has the form **ɣer-**, when prenominal the form has free variation between **ɣer** and **ɣ**. It is used in possessive and locative constructions as shown in the examples below.

(28) *ɣer-sen leḥšam g uxyam s warsin*
at-3PL children in house:EA with hunger:EA
‘They have hungry children in the house.’

(29) *i-mmuṯ g martin, ɣ uleṯma-s*
3MS-die:P in Martil at sister-3S
‘He died in Martil, at his sister’s (place)’

(30) *ɣer muḥemmeḏ leflus nn-eḵ*

at Mohammed money of-2MS
'Mohammed has your money.'

The preposition can be preceded by an element **z** (probably from **zeg**, maybe from **s**) which yields **zɣe(r)** meaning 'from someone/somewhere', for example:

(31) *i-dda d zɣe žeddi 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*
I 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) *aḡṭiṭ* *i-neṭṭeḡ* *sennig* *uxyam*
bird:EL 3MS-fly:I above house:EA
'The bird is flying over the house.'

(35) *walakin* *ma* *ya* *te-ḡḡ-et* *ši* *sennig* *lɛafya*
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 **qḇel** '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 **iḏ-** 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* *tmeṭṭuṯ*
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 = aṯ* *i* *ya* *t-meṭṭu-ṯ*
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).

FS-PRH RF-be.cooked:P-RF to he
'The ripe one for him.'

(40) *i-nn = as* *iḏ* *nnmer*
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 = aṯ* *i* *ya* *tmeṭṭuṯ*
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) *mawši* *am* *keǧi*
NEG like you
'Not like you.'

(44) *am* *tɛebbist,* *am* *tgayzuṯ*
like calf:EA like calf:EA
'A *taɛebbist* (calf) is the same as a *tagayzuṯ* (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* *lexṭuḇer*

[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 ḥettar 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 ḥetta dar uxyam i-qqel=d*
3MS-go:P until to house:EA 3MS-return:P=DC
'He went until the house and came back.'

(48) **i-dda ḥetta 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 leḥšam nn-es, ɣa he-dda bla waman.*
3FS-go:P until children of-3MS only 3FS-go:P without water:EA
'She went to her children, though she went without water.'

(50) *i-dda bla uɛeyyal nn-es*
3MS-go:P without child:EA of-3S
'He went without his child.'

(51) *i-dda bla aɛeyyal nn-es*
3MS-go:P without child:EL of-3S
'He went without his child.'

13.3.5. Preposition qb̲el '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) *qb̲el leɛša*
before dinner

‘before dinner’

(53) *qḇel 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 prenominal 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-bdeḍ 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 wdideḡ*
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) *yaḷḷah qeṛṛḇ = at dar gum n te-sla-ṯ*
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).

(57) *t-ɛellq = at* *g* *af* *n* *dduxxan*
3FS-hang:P = 3FS:DO in above of smoke
'She hung it above the smoke.'

(58) *dar* *waf* *n* *mni* *menṣuṛ*
to above of Beni Mensour
'To the top of Beni Mensour.'

(59) *i* *wa-yeṭ* *i-bb* *ifrawen* *zeg* *wa-fel*
and MS-other 3MS-take:P leaves from top:EA
'And the other took leaves from the top'

(60) *haw* *afel*
PR:3MS top:EL
'He is in the top.'

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* *wammas* *n* *ṭṭšaṛ*
in middle:EA of village
'In the middle of the village.'

(62) *g* *wammas* *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* *wammas*
PR:3MS in middle:EA
'He is in the middle.'

(65) *haw* *ammas* *n* *lemḏina*
PR:3MS middle:EL of city
'He is in the middle of town.'

13.4.4. Prepositional complex aḡʷemmaṭ (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 **aḡʷemmaṭ**. **aḡʷemmaṭ** 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 prenominal form has **i** (example 69):

(66) *i-dda* *dar* *uḡʷemmaṭ*
3MS-go:P to other.side:EA
'He went to the other side.'

(67) *i* *nihma* *twala-n = teṯ* *aḡʷemmaṭ,* *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-dda* *dar* *uḡʷemmaṭ* *nn-es*
3MS-go:P to other.side:EA of-3S
'He went to the other side of it.'

(69) *i-dda* *dar* *uḡʷemmaṭ* *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** ~ **iḏ**, **dar** and **zeg**. In the following examples the prenominal and the pronominal forms are used.

(70) *i* *ṭṭeṛf n* *uxyam*
with side of house:EA
'On the side of the room.'

(71) *i* *ṭṭerf* *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 ḵma-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 / fsir- ‘behind’

This element combines features of the prepositional complexes and simple prepositions[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=ahen*
PR:3MS behind of house:EA=S:ANP
‘He is behind that house.’

(75) *netta maši fsir-es i-tbeɣbaɣ*
he go:AP:MS behind-3S 3MS-bleat:I
‘He was walking behind him bleating.’

(76) *sfi n yaɣil=a-ḏ*
behind of mountain:EA=S-PRX
‘Behind this mountain.’

(77) *fsi n lmaḵla*
behind of meal
‘After the meal.’

[126] In the Colin (1929: 54) texts the form **zdfir-es** is found.

13.5. Arabic prepositions

There are two Arabic prepositions, **qḇalṯ** ‘opposite’ and **bɣart** ‘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:

	qḇalṯ ‘opposite’	**bɣaṛt** ‘opposite’	**lil** ~ **dil**
1:SG	*qḇalṯ-i*	*bɣaṛt-i*	*lil-i* ~ *dil-i*
2:SG	*qḇalṯ-eḵ*	*bɣaṛt-eḵ*	*lil-eḵ* ~ *dil-eḵ*
3:M:SG	*qḇalṯ-u*	*bɣaṛt-u*	*lil-u* ~ *dil-u*
3:F:SG	*qḇalṯ-a*	*bɣaṛt-a*	*lil-a* ~ *dil-a*
1:PL	*qḇalṯ-na*	*bɣaṛt-na*	*lil-na* ~ *dil-na*
2:PL	*qḇalṯ-ḵum*	*bɣaṛt-ḵum*	*lil-ḵum* ~ *dil-ḵum*
3:PL	*qḇalṯ-em*	*bɣaṛt-em*	*lil-em* ~ *dil-em*

A noun following one of these prepositions takes the EL, e.g.

(78) *qḇalṯ* *axyam*
opposite house:EL
‘opposite the house’

(79) *bɣaṛt* *amaras*
opposite riverbed:EL
‘opposite the riverbed’

(80) *šḥal* *lil-eḵ* *ma* *he-ẓṛ-at=t?*
how.many for-2S NEG 2S-see:P-2S=3MS:DO
‘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 adverbial 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

nhaṛ / nhaṛ aḏ / nhaṛ ahen	‘day’ (also: ‘today’, ‘that day’)
amilla ~ amella (*wa-*)	‘now’
amla ɛiḏ (*wa-*)	‘just now’
deɣdaḵ ~ deɣdayaḵ	‘earlier today’
assa (*wa-*)	‘nowadays’
aẓgaṣneṭ - aẓg^{w}asneṭ (*u-*)	‘last year’
asleṭ (*u-*)	‘two years ago’
asleṭ n usleṭ	‘three years ago’
alaẓen (*wa-*)	‘tomorrow’
nafaẓen ~ lafaẓen	‘the day after tomorrow’
anawiṭin ~ aliwiṭin (*wa-*) ~ *liwiṭin ~ niwiṭin*	‘in three days’
nafaẓnaẓ	‘in three days’
aṭḡam (*wa-*)	‘yesterday’
aṣelaṭḡam (*u-*)	‘the day before yesterday’
asnuṣelaṭgam (*u-*)	‘three days ago’
llumayen iḏ	‘the past few days’
daʔimen	‘always’
ɛaḏ ~ ɛiḏ	‘still, yet’
saɛa	‘then, later’
mbeɛd	‘after’
zegya	‘from the time that’
bihabiha	‘directly’
meṛṛa	‘time, occassion’
meṛṛa meṛṛa	‘sometimes’
meqḇeyya	‘almost’
xeṭṛa	‘time, occassion’

Manner Adverbs

hamk̲a ~ hamk̲ad̲ ~ hamk̲an ~ hamk̲ad̲in ~ hamk̲ad̲inet̲	‘in this way, like this’
deɣya	‘quickly’
bellati	‘slowly’
mezyan	‘good’
nišan	‘straight on, right’

Locative Adverbs

dha ~ dhad̲ ~ dhad̲in ~ dhad̲inet̲	‘here’
das ~ dan	‘there’
zdas	‘from there’
ssiha ~ ssihad̲ ~ ssihad̲in ~ ssihad̲inet̲	‘from here, through here’
ssyan ~ ssyas	‘from there, through there’
darha ~ dariha ~ darihad̲ ~ darihad̲in ~ darihad̲inet̲	‘to here’
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’
hab̲eṭ	‘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’, **hab̲eṭ** ‘down’ to form locative adverbials.

dar ṭaleɛ	‘upwards’
dar hab̲eṭ	‘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 **šḥal** is an interrogative as well. **kamel / kamla / kamlin** is derived from an adjective.

xṛebbi	‘quite a lot, quite a while’
bezzaf	‘a lot, many’
meṛṛa	‘all’
kamel - kamla - kamlin	‘all’
šweyya	‘a little’
šwiwweš	‘very little’
ši ḥaža	‘a bit’
šḥal	‘a lot’
k̲teṛ ~ xteṛ	‘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’
beɛda	‘already’
aqa ~ qa	‘wait a moment’
fḥal fḥal	‘the same’
xyaṛ	‘better’
ḥsen	‘better’
bellati	‘wait’
ɛla qedd- (+ 3 person Arabic suffix)	‘bad’
belḥeqq	‘in fact’
amexṭa	‘probably’
waqila	‘probably’
aḇenṣaḇ	‘it is unlikely that’
ilaxiri-hi / -ha / - him	‘etcetera’
yak̲	‘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:

(Indefinite + *n*) - (Quantifier / Composite prep. + *n*) - Core - (Poss) - (Indefinite/Deictic) - (Adjective) - (*n* + NP) (*kamel / kamla / kamlin*) - relative clause

The core can be modified by additional elements. Independent pronouns can only be modified by the adverb MS **kamel**, FS **kamla**, PL **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**) **ḵra**, **ši ~ š** and **yan ~ ya / yaṯ ~ 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**) **ḵra** 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**) **ḵra** is only used for plurals. The numeral **yan ~ ya / yaṯ ~ yah** 'one'

is used for specific, individuated enitities, 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) *k̲ra n leḥšam*
some of children
'some children'

(2) *ši n leflus aḡ lla-n lwext=ahen g ṭanǧa*
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) *nettaṯa ɣr-es ya n lxeddam iḏ̲-es das*
she at-3S one:M of worker with-3S there
'She has a servant with her there.'

(5) *ya n k̲ma nn-ax tweḍḍeṛ ṭṭarix=ahen g tanǧa*
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 yaɣeḏ̲*
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) *mk̲i ṭleb-t xf-es lḥaža inši ma i-tweqqaf=ak̲ ši*
if ask.for-2S:PF on-3S thing some NEG 3S-stop:I=2MS:DO NEG
'If you ask him something, he will not refuse.'

(8) *mk̲i te-ll tameɣṛa ynši ilaxiri n lɛaʔila 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 nnhaṛ iši te-qql=as=d s ṣṣulṭan*
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 iḏawen*
many of beans
'many beans'

(11) *ažemmuɛ 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 appromixate 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) *leḥyif=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).

(15) *leḥyif muqqṛ-eṯ*
stones big-PL
'big rocks'

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 elicitiation it is therefore best to assume that there is free variation in the contexts given below.

(16) *ma ssaɣ-en lḥaža te-sḥa*
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) *tɛayan-en l-beṛṛani*[127]*, a, beṛṛani. beṛṛani kamel*
look:I-3PL ART-foreigner, yes, foreigner foreigner all
'They look for foreigners, yes, foreigners.
aḡ lla-n tšebbaṛ-en=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 **meɛmel** does not take an article, but the following noun **lqehwa** 'café' does. For example:

(18) *ama g l-ḥanuṯ, wella g meɛmel 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.'

[127] This is a collective noun.

In the following example of a non-verbal predicate, the article in the noun **ḥimaya** ‘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* *iḏ-i* *ḥimaya*
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 **ll** ‘to be’.

(20) *u* *te-lli-t* *ma* *ga-ḵ* *ɣuš*
and 2S-be:A-2S NEG in-2MS falsehood
‘And you are not false.’

Example (21) shows a noun **ɛezri** ‘young adult’ which is on a very high level of generality as well.

(21) *aḵ* *te-lla-t* *ilaxirih* *ɛezri* *wella* *w* *aḵ* *te-lla-t* *meẓẓi*
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 listerener does not know which specific garden he/she is referring to.

(22) *ɣr-i* *ɣaṛṣeṯ* *mezyan-a,* *ɣr-i* *ɣaṛṣeṯ* *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-ɣliṭ-a=ahen*
3FS=say:P=1S:IO=3FS:DO ART-fat-FS=S:ANP

‘The fat one told me.’

(24) *fka-n = ay = t* *le-qṣiṛ-in = ihen*
give:P-3PL = 1S:IO = 3FS:DO ART-short-PL = PL:ANP
‘The short ones gave it to me.’

(25) **ẓṛ-ax* *tamɣaṛt = ahen* *l-eɣliṭ-a*
see:P-1S woman:EL = S:ANP 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* *n* *ɛaziz*
room:EL of Aziz
‘Aziz’s house’

(27) *lqaɛ* *n* *lbir*
bottom of 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) *tažellaḇt* *n* *isɣaṛen*
djellaba:EL of 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) *lfuṛma* *n* *urgaz*
figure of man:EA
‘the figure of a man’

(30) *lqaḏiya n txʷraft*
case of story:EA
'the case of the story'

(31) *g tmunniṯt n iɛṛaḇen*
in ass:EA of Iraben
'in godforsaken Iraben' (lit. 'in the ass of Iraben')

When pronominalised, a lexically restricted set of nouns has adnominal suffixes rather than a construction with **n** in the singular: **ḵma** 'brother', **uleṯma** 'sister' and **ayeṯma** 'brothers and sisters'. When such a noun is modified by a non-pronominal genitival expression, there is double possessive marking, for example:

(32) *uleṯma-s n uɛeyyal=aḏ*
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 firɛawn*
mother of-3S of Pharaoh
'Pharaoh's mother.'

Finally, the adjectival element **kamel** - **kamla** - **kamlin** '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) *irgaẓen n iɛraḇen kaml-in*
men of Iraben all-PL
'All the men of Iraben'

A relative clause can modify the head noun (cf. IV.5. for relative clauses).

(35) *i uɛebbiẓ 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) *i-dda = d* *meẓẓi* *i* *meqquṛ*
3S-go:P = DC big:MS and small:MS
'The big one and the little one have come.'

(37) *idda = d* *l-meẓẓi* *i* *l-meqquṛ*
3S-go:P = DC ART-big:MS and ART-small:MS
'The big one and the little one have come.'

(38) *le-kẖel* *i* *le-ḥmeṛ* *safṛ-en* *da* *ya* *tmazirt* *bɛiḏ-a*
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) *kẖel* *i* *ḥmeṛ* *safṛ-en* *da* *ya* *tmazirt* *bɛiḏ-a*
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* *ṭwil* *n* *urgaz?*
one:M tall:MS of man:EA
'a tall man'

(41) *i-dda = d* *ya* *uẖenṭwil* *n* *urgaz*
3S-go:P = DC one:M tall.man:EA of man:EA
'This taal 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) **tiɛeyyalan* *tikeẖlawan*

girls:EL black:EL
'black girls'

1.2.1. Comparatives and superlatives

Adjectives can be used in comparatives and superlatives. Different from mainstream Moroccan Arabic, there are no special morphogical 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-qḏim-in** in example (46). In this particular sentence the other forms do not take an article.

Comparative:

(43) *axyam = ahen qḏim nešt n temzgiḏa = yahen*
house:EL = S:ANP old:MS like of mosque:EA = S:ANP
'That house is as old as that mosque.'

(44) *lbaṛku = an meqquṛ nešt n yaɣil*
ship = S:DIST big:MS as of mountain:EA
'That ship is as big as a mountain.'

(45) *nihma zhim-in kteṛ zg-asen*
they bad-PL more from-3PL
'They are uglier than them.'

Superlative:

(46) *u-hin a lla qḏim-in dhaḏin. tafrawt qḏim-a dha x*
those REL be:P old-PL here. Tafrawt old-FS here on M-
'They are the oldest here. *Tafrawt* is older here than
u-hiḏ a ḵ = nna-x kaml-in. tafrawt, lɛaʔila n lgawṭ,
PL:PRX REL 2MS:IO = tell:P-1S all-PL Tafrawt, family of lgawṭ,
all the others I have mentioned to you. *Tafrawt*, the family of *lgawṭ*,
nihma le-qḏim-in x u-hiḏ a ḵ = 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) *lebḥar=aḏ ɣareq*
see=S:PRX deep:MS
'This sea is deep/the deepest.'

(48) *nihma ẓhim-in zg-asen kaml-in*
they bad-PL from-3PL all-PL
'They are the ugliest (of them all).'

(49) *fk=ay=d w-a y-ṛqiq-in*
give:IMP=1S:IO=DC MS-PRH 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 **kamel** ~ **kamla** ~ **kamlin** 'all' and by a relative clause. Both follow the pronoun.

(50) *nihma kaml-in*
they 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 **kamlin**, for example:

(51) *u-haḏ a ye-swa-n aman=ihen*
M-S:PRX REL RF-drink:P-RF water=PL:ANP
'The one who drank the water.'

(52) *u-hiḏ kaml-in*
M-PL:PRX all-PL
'All of these.'

(53) *u-hi muqqṛ-eṯ ma mezyan-in ši*

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) *dda-n=d tlaṯa inši muqqṛ-eṯ*
go:P-3PL=DC three some big-PL
'Three big ones came.'

The numeral 'one' can refer to 'somebody', for example:

(55) *i-dda=d yan zeg uɛerqub*
3MS-go=DC one:M from aɛerqub:EA
'One man came from Aarhob (village)'

(56) *i-ḏra ssiha yan a y-ṭwil-in i yan a y-qṣiṛ-in*
3MS-pass:P from.here one:M REL RF-tall-RF and one:M REL RF-short-RF
'A tall one and a shot one went past here.'

1.4.1. The distributive

Numerals, nouns and adjectives can be repeated to give a distributive reading.

(57) *dda-n=d yan yan*
go:3PL=DC one:M one:M
'They came one by one.'

(58) *qeṭṭɛ=aṯ meẓẓi-ṯ meẓẓi-ṯ*
cut:IMP=3MS:DO small-PL small-PL
'Cut it in small pieces.'

(59) *ne-dda amaras amaras*
1PL-go:P riverbed:EL riverbed:EL
'We went all the way past the riverbed.'

(60) *i-ɛella taɣilt taɣilt*
3MS-go.up:P mountain:EL mountain:EL
'He went all the way over the mountains.'

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 **ɛend-** 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. Lafkioui, 2011: 35). There is no intonational pause between the noun phrases. The subject precedes the predicate. For example:

(1) *lxeddama = ihen* *rrwafa*
workers = PL:ANP riffians
'Those workers are riffians.'

(2) *i-nn = as:* *aḇaw* *aḇaw* *waha*
3MS-say:P = 3S:IO bean:EL bean:EL only
'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) *ṭṭḇiḇ* *maši* *aḇeḥri*
doctor not fisherman:EL
'It is the doctor, not the fisherman.'

Other examples are:

(4) *ssxun!*
hot
'It is very hot.'

(5) *nhaṛ = aḏ* *aywer!*
day = S:PRX moon:EL
'The moon is very bright today.'

(6) *lehwa!*
rain
'It is raining.'

(7) *tkeṛfis!*
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) *nettaṯa ṭwil-a*
she tall-FS
'She is tall.'

(9) *ḍḍerḇa nn-eḵ* *ɛḏim-a*
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:

(10) *axyam = ahen* *g* *umaras*
house:EL = S:ANP in riverbed:EA
'The house is in the riverbed.'

(11) *ga-s* *axyam = ahen*
in-3S house:EL = S:ANP
'The house is in it.'

(12) *aqrab* *nn-eḵ* *gum* *n* *teggurt*
bag:EL of-2MS front of door:EA
'Your bag is in front of the door.'

In prepositional predicates with **ɣer** 'at' the predicate precedes the subject, for example:

(13) *ɣr-es ya* *n* *ḍḍḵer*
at-3S one:M of male
'He has a boy'

(14) *ɣer* *muḥemmeḏ leflus* *nn-eḵ*
at Mohammed money of-2MS
'Mohammed has your money.'

(15) *nettaṯa* *ɣr-es* *g* *ya* *teɛšušt* *leḥšam = 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* *ɛaziz*
house:EL = S:ANP of Aziz
'That house is Aziz's.'

(17) *t-haḏ* *nn-es*
F-S:PRX of-3S
'This one (F) is his.'

(18) *nn-es*
of-3S
'It is his/hers.'

Prepositional phrases with the instrumental preposition **s** can also function as predicates, for example:

(19) *w-in* *inu* *s* *ššɛar* *i* *w-in* *n* *ušnikef* *s* *isennanen*
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 **xef** ~ **fex** 'on' **zeg** 'from' can function as predicates as well.

(20) *fx-em* *lʔamen*
on-you:FS safety
'You are safe.'

(21) *taxʷṛaft=aḏ* *x* *uḡḏi* *iḏ* *ušnikef*
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 **zeg** 'from' is the following idiomatic expression.

(22) *zga-s* *kušši*
from-3S everything
'He provides everything.'

The comitative predicate is formed by using the comitative predicate **i** ~ **iḏ**, for example:

(23) *netta* *iḏ-i*
he with-1S
'He is with me'

(24) *amla* *keǧi* *šwiya* *iḏ-i* *ḥimaya*
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* *lfṛank = ahen*
old.coin like franc = S:ANP
‘The *ṣulḍi* (old type of coin) is like that *franc*.’

(26) *netta* *nešt* *n* *uɛebbiz*
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 = aḏ* *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) *u-hiḏ* *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* *yaḡer*
there one:M of meadow:EL
‘There is one field.’

(31) *das* *yah* *lbelɛa* *n* *taliwan*
there one:F many of sources
‘There are many sources.’

2.5. The existential predicate

For existential predicates the borrowed Arabic element **kayen/kayna/kaynin** 'there is/exists' is used[128]. 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 he subject). Some examples are:

(32) *kayen tasarka n lǧeld n wiffeṭ, kayen tasarka n lbuffa 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 lmeṭmura*
EXST-FS one:F grain.storage
'There exists one grain storage.'

(34) *kayen nnžum ttuṯu-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 ɣa** 'there is only'. This is probably a short variant of **kayen**, for example:

(35) *i netta i-sekr=as s umḡer ma ka ɣa 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

[128] In Moroccan Arabic it functions as a locative as well as an existenial (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 žeḥḥa?’ iqqr̲=as: ‘haw g lbir.’*
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 beṛṛa.’*
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) *imežwaɛen, ham baqi imežwaɛen*
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 ɛend- ‘look out’

The presentative **ha** is used to present something (cf. Lafkioui, 2011:46).

(41) *ha t-haḏ a siḏi*
PRES F-S:PRX o sir
‘Here is this one, sir.’

ɛend- ‘look out’ is borrowed from Arabic and always takes the Arabic series of prepositional pronouns (cf. III.11.5. on borrowed pronouns).

(42) *ɛend-eḵ*
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 iɛraḇen*
they NEG Arabs
'They are not Arabs. (i.e. from the village of Iɛraben)'

(44) *nihma ma lla-n ši iɛraḇen*
they NEG be:P-3PL NEG Arabs
'They are not Arabs. (i.e. from the village of Iɛraben)'

(45) *t-haḏ 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).

(46) *tamɣart = an* *maši* *ɣliṭ-a*
woman:EL = S:DST NEG fat-FS
'That woman is not fat.'

(47) *netta* *maši* *meqquṛ*
he NEG big:MS
'He is not big.'

(48) *ma* *waseɛ* *ši*
NEG wide:MS NEG
'It is not wide.'

(49) *ma* *meqquṛ* *ši*
NEG big:MS NEG
'It is not big.'

(50) *ma* *y-ell* *meqquṛ* *ši*
NEG 3MS-be:P big:MS NEG
'It is not big.'

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 similative predicates.

(51) *ma* *ɣr-es* *ši* *n* *tẓenniṭt*
NEG at-3S NEG of tail:EA
'He does not have a tail.'

(52) *ma* *ga-m* *ši* *n* *lğuhḍ*
NEG in-2FS NEG of strength
'He does not have any strength.'

(53) *ma* *ga-s* *ši* *taḍunt*
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 lefṛank=ahen*
old.coin NEG like franc=S:ANP
‘A *ṣuḷḍi* (an old type of coin) is not like that franc (money).’

(59) *netta maši nešt n uɛeyyal=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 lkaɣeṭ*

NEG of paper
'not (made) of paper'

(63) *netta maši iḏ-i*
he NEG with-1S
'He is not with me.'

(64) *netta ma iḏ-i ši*
he NEG with-1S NEG
'He is not with me.'

(65) *netta ma yell ḳma-s ši*
he NEG with brother-3S NEG
'He is not with his brother.'

2.8.4. The adverbial predicate

The locative adverbial predicate can be negated by means of the continuous and the discontinuous negative marker, for example:

(66) *nuḳna maši ssiha*
we NEG from.here
'We are not from here.'

(67) *nuḳna ma ssiha ši*
we NEG from.here NEG
'We are not from here.'

(68) *nuḳna 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 ši ssaɛa*
NEG EXST NEG clock
'There is no clock.'

(71) *ma he-ll kayn-a ši ssaɛa*
NEG 3F-be:P EXT-FS NEG clock
'There is no clock.'

(72) *maši kayen ssaɛa*
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[129]. 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).

3MS-go.down:P
'He went down.'

(2) *ɛṭeš-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-ffeɣ*
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-ḥmeq* *ɣa* *x* *tɣaṭen*
jackal:EL IMPP-3MS:IMPF-go.crazy only on goats:EA
'Well, the jackal is just crazy for goats.'

(6) *ka-ye-ḥmeq* *aḡḏi* *ɣa* *x* *tɣaṭen*
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* *ašnikef* *iy* *uḡḏi*
3MS-go:P hedgehog:EL and jackal:EA
'The hedgehog and the jackal went'

(8) *dda-n* *ašnikef* *iy* *uḡḏi*
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* *tteffaḥ* *i* *lbanan* *das*
IMPP-3MS:IMPF-be.sold apple and banana there
'Apples and banana's are sold there.'

(10) *ka-ye-nbaɛ-u* *tteffaḥ* *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) *aḡḏi* *i* *ušnikef* *ṣafṛ-en*
jackal:EL and hedgehog:EA travel:P-3PL
'The jackal and the hedgehog travelled'

(12) *tteffaḥ* *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-nṭeṛ*
he 3MS-fly:P
'He flew away.'

(14) *i-nṭeṛ* *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 lmeḍraṣa 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) *aḡḏi iḏ ušnikef mažy-in*
jackal:EL and hedgehog:EA come:AP-PL
‘The jackal and the hedgehog are coming.’

(18) *mažy-in aḡḏi i ušnikef*
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 aḡḏi i ušnikef*
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, accompagnied by an indirect object pronoun.

(20) *xeṣṣ = aḵ ilaxirihi myaṯayn n rryal*
need:P = 2MS:IO etc two.hundred of rial
‘You need moreover two hundred rial.’

(21) *i nihma xeṣṣ = asen a t = nɣu-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) *i* *netta* *i-txeṣṣ=as* *netta*
and he 3MS-need:I=3S:IO he
'And he needs him.'

Another impersonal verb with Arabic morphology is the verb **taṛ - 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) *taṛ-eṯ=l-u* *aḡḏi*
fly-3FS:PF=IO-3MS jackal:EL
'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) *ṭṭf-en* *aḡḏi*
grab:P-3PL jackal:EL
'They caught the jackal.'

(25) *ṭṭf-en=t*
grab:P-3PL=3MS:DO
'They caught him.'

(26) *tlaqi-ṯ* *ḥmeḏ*
meet-1S:PF Ahmed
'I met Ahmed.'

(27) *tlaqiṯ=u*
meet-1S:PF=3MS:DO
'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) *aɣyul* *umṛ-en = t* *ššurkan*
donkey:EL send:P-3PL = 3MS:DO peasants
'The peasants sent the donkey.'

(29) *tameṭṭuṯ = 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* *lmaḵla*
3MS-eat:P food
'He ate food.'

(31) *i-šš*
3MS-eat:P
'He ate.'

3.1.2. Obliques

Indirect objects, prepositonal 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** ~ **iḏ** '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 = aṯ* *i* *ya* *tmeṭṭuṯ*
3MS-give:P = 3MS:DO to one:F woman:EA
'He gave it to a woman.'

(33) *i-fk = as = t* *i* *ya* *tmeṭṭuṯ*
3MS-give:P = 3S:IO = 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.:

(34) *ḥmeḏ* *i-fk = as* *leflus* *i* *urgaz = ahen*
Ahmed 3MS-give:P = 3S:IO money to man:EA = S:ANP
'Ahmed gave that man money.'

(35) *ḥmeḏ* *i-fk = as* *i* *urgaz = ahen* *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) *ḥmeḏ* *i-fk* *i* *urgaz = ahen* *leflus*
Ahmed 3MS-give:P = 3S:IO to man:EA = S:ANP money
'Ahmed gave that man money.'

(37) *ḥmeḏ* *i-fk* *leflus* *i* *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 = aḵ = 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-ṛeẓ afus i ḥmeḏ
3MS-break:P hand:EL to Ahmed
'Ahmed broke his hand.'

(40) i-ṛẓ = as afus i ḥmeḏ
3MS-break:P = 3S:IO hand:EL to Ahmed
'Ahmed broke his hand.'

Example (41) is a example of a transitive phrase, where **ṭṭunubir** 'car' is the direct object.

(41) i-ṛẓ = as ṭṭunubir i urgaz = 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) ttεεṭa-w = l-u leflus i ilyas
be.given-3PL:PF = to-3MS money to Elias
'The money was given to Elias.'

(43) ttεεṭa-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 εwaž-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:

(45) *ɛṛeq* *afus* *i* *ḥmeḏ*
sweat[3MS:PF] hand:EL to Ahmed
'Ahmed's hand sweated.'

(46) *ɛṛeq=l-u* *afus* *i* *ḥmeḏ*
sweat[3MS:PF]=to-3MS hand:EL to Ahmed
'Ahmed's hand sweated.'

(47) *ɛṛeq=l-u* *afus* *nn-es* *i* *ḥmeḏ*
sweat[3MS:PF]=to-3MS hand:EL of-3S to Ahmed
'Ahmed's hand sweated.'

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) *a* *sellem* *x* *yemma*
AD [3FS]-greet:A on mother
'She will greet my mother.'

(49) *tḵerraḵ-en* *x* *medden*
lie:I-3PL on people
'They lie to people.'

In most cases the prepositional phrase is an oblique argument, e.g.

(50) *š* *a* *qeṭṭṛ-en* *fx-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)', **qqul** 'to become, to return', **ǧ** ~ **uǧ** 'to let, to leave', **ḇdu** 'begin', **ṭaḥ** 'to start and continue', **qqim** 'to sit, to remain' **ẓṛ** '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* *tɣewwaṯ-en* *kaml-in*
stay:P-3PL scream:I-3PL all-PL
'All of them kept on screaming.'

(52) *qqim-en,* *tɣewwaṯ-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-qql=aṯ*
3MS-become:P=3MS
'*He became it.'

(53c) *i-qqel* *i-ttiṯu*
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-rry = aṯ* *argaz*
3MS-return:P = 3MS:DO man:EL
'He made him a man.'

(54b) *i-rry = aṯ* *hamḵa*
3MS-return:P = 3MS:DO like.this
'He made him like this.'

Secondary predicates can be verbal as well as non-verbal . Some examples are:

(55) *i-ttaf = aṯ* *mžebbeḏ*
3MS-find:I = 3MS:DO stretch:PP:MS
'He finds him lying flat.'

(56) *i-ẓṛ = aṯ* *i-ttiṯu*
3MS-see:P = 3MS:DO 3MS-go:I
'He saw him walking.'

(57) *i-ttaf = at* *ɣa* *zzayn*
3MS-find:I = 3FS:DO only beauty
'He finds that she is a beauty.'

(58) *i-ffeɣ* *mkellex*
3MS-go.out:P be.backward:PP:MS
'He turned out to be backward.'

(59) *i-qqel* *i-ṣḥa*
3MS-become:P 3MS-heal:P
'He became better.'

(60) *ḇda-n* *rri-n* *iḇawen*
begin:P-3PL sow:P-3PL beans
'They started to sow beans.'

(61) *he-ḇda* *te-ẓẓeḡ* *tarekkalt*
3FS-begin:P 3FS-milk:P dog:EL

‘She began milking the dog.’

(62) *b̲da-n* *daxl-in* *ssyan* *i* *ssyan* *i* *ssyan*
begin:P-3PL enter:AP-PL from.here and from.here and from.here
‘They started to enter from here and there.’

(63) *b̲da-n* *a* *k̲erz-en*
begin:P-3PL AD plough-3PL
‘They began ploughing’

(64) *dda-n* *dar* *urrar,* *ṭaḥ-u* *teddz-en*
go:P-3PL to threshing.floor:EA begin-3PL:PF pound:I-3PL
‘They went to the threshing floor and started pounding.’

(65) *ɛaweḏ* *ɛaw* *ṭaḥ-u* *ka-y-stɛeml-u* *ɛaweḏ*
again again begin-3PL:PF IMPP-3PL:IMPF-use-3PL:IMPF again
‘Then they started using…’

(66) *ṭaḥ* *maši,* *i-ttaf* *ya* *tmeɣṛa*
begin[:3MS:PF] go:AP:MS 3MS-find:I one:F wedding:EA
‘He went and encountered a wedding.’

(67) *ṭaḥ* *i-nn=as:* *‘a* *weddi,* *a* *b̲aḇa,* *nda* *daɣe* *ttuɛban’*
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) *saɛa* *ṭaḥ-u* *ifulusen* *tberraḥ-en,* *iṭan* *settn-en*
then begin-3PL:PF roosters yell:I-3PL dogs bark:I-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-ḥemmu,* *qqima-n* *ḥemmu-n*
3MS-stay:P 3MS-heat.up:I stay:P-3PL heat.up:I-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 hept 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* *lɛafya* *mešɛul-a*
3MS-find:P fire light:PP-FS
‘He found that the fire was lit.’

(72) *tameṭṭuṯ* *nn-es,* *t-taf = aṯ* *mžebbeḏ*
woman:EL of-3S 3FS-find:I = 3MS:DO stretch:PP:MS
‘His wife found him lying.’

(73) *i* *lɣula = yahen* *te-ffeɣ* *beṛṛa,* *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-ɣres* *haḏiḵ = 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-ɛaql = at* *billa* *tameṭṭuṯ = ahen*
3MS-recognise:P = 3FS COMP woman:EL = S:ANP
‘He recognised her to be that woman.’

(76) *i-ɛaql = at* *tameṭṭuṯ = ahen*
3MS-recognise:P = 3FS woman:EL = S:ANP
‘He recognised her to be that woman.’

(77) *t-han* *ɛaq-eṯ* *illa* *ɣr-es* *lmeṣkeṛ*
F-S:ANP be.aware-3FS:PF COMP at-3S intoxicant
'She became aware that he had intoxicant.'

(78) *i* *nettaṯa* *nya* *d* *ɛaq-eṯ* *is-sen* *rewl-en*
and she when AREL be.aware-3FS:PF with-3PL flee:P-3PL
'When she became aware of them, they fled.'

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* *sekr-en* *ṭṭɛam*
ahmed 3MS-know:P COMP AD make:A-3PL couscous
'Ahmed knows that they will make couscous.'

(80) *ḥmeḏ* *i-ssen* *a* *sekker* *ṭṭɛam*
ahmed 3MS-know:P AD [3MS-]make:A couscous
'Ahmed knows how to make couscous.'

3.2. Verbal valency and derivation

There exist intranstive, 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 **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).

[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:

Perfective			Perfective	
i-nes	'it is extinguished'	>	*i-s-nes*	'he extinguised'
i-ffuɣ	'he went out'	>	*i-ss-afeɣ*	'he let/made him go out'
i-kku	'it dried'	>	*i-ss-ku*	'he dried'

The only instance of a different use of the **ss** ~ **s** prefix is in **ss-kuḥ** '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).

Non-derived			**Causative**	
Arabic-morphology			Berber-morphology	
wžeḏ	'be ready'	>	*weǧeḏ*	'make ready'
ṛɛeš	'shiver'	>	*ṛeɛɛeš*	'cause to shiver'
zɛem	'dare'	>	*zeɛɛem*	'make dare'

[132] In addition to its function as a causativiser, 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.

Berber-morphology			Berber-morphology	
fṛeḥ	'be happy'	>	*feṛṛeḥ*	'make happy'
šṭeḥ	'dance'	>	*šeṭṭeḥ*	'make dance'
ḍher	'appear'	>	*ḍehher*	'show, make appear'
fṛeq	'separate'	>	*feṛṛeq*	'make separate'
lseq	'stick'	>	*lesseq*	'make stick, glue'
ɛqel	'recognise'	>	*ɛeqqel*	'remind'

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]:

Berber-morphology			Berber-morphology	
ḍeṣṣ	'to laugh'	>	*ṭeḥḥeḵ*	'make laugh'
ssen	'know'	>	*ɛerref*	'make acquaintance'
rwel	'flee'	>	*heṛṛeḇ*	'make flee'
wsir	'be old'	>	*šeṛṛef*	'make old'
ḵṣuṭ	'be afraid'	>	*xewwef*	'scare'

Rarely, one finds Arabic stem III verbs which have a causative meaning, for example:

Arabic-morphology			Berber-morphology	
shel	'be easy'	>	*sahel* (~ *sehhel*)	'to make easy'
tlaqa[134]	'to meet'	>	*laqi*	'to make meet'

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:

Berber-morphology			Berber-morphology	
ḇdeḏ	'stop, stand'	>	*ss-eḇdeḏ* ~ *weqqef*	'get up'

[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.

qqim	'sit'	>	*s-qim ~ gelles*	'let/make sit'
ḏri	'pass'	>	*ss-eḏri ~ gewwez*	'let/make pass'
ɛam ~ ɛum	'swim'	>	*s-ɛum ~ ɛewwem*	'let/make swim'
tru	'to cry'	>	*s-etru ~ bekka*	'let/make cry'

A very limited number of transitive verbs have a causative, which is always of the **cCc** 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:

Berber-morphology			Berber- morphology	
šš	'eat'	>	*wekkel*	'feed'
su	'drink'	>	*šeṛṛeḇ*	'make/let drink'

Arabic- morphology			Berber- morphology	
qra	'study'	>	*qerra*	'teach'
fhem	'understand'	>	*fehhem*	'explain'

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) *aɛeyyal nn-es i-šš ayrum*
boy:EL of-3S 3MS-eat:P bread:EL
'His child ate bread.'

(82) *fariḏ i-wekkl=as ayrum i uɛeyyal nn-es*
Farid 3MS-feed:P=3S:IO bread to child:EL of-3S
'Farid fed bread to his child.'

(83) *fariḏ i-wekkel aɛeyyal 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 **k̲rez** '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 **tteḥṛet̲** 'to be ploughed' in (85).

(84) *i-k̲rez* *aḡer* *nn-es*
3MS-plough:P meadow:EL of-3S
'He ploughed his field.'

(85) *aḡer* *nn-es* *tte-ḥṛet̲* *azgaẓnet̤*
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=at̲* *g* *lmeqla=yahen*
1PL-take:I=DC barley, 1PL-put:I=3MS:DO in frying.pan=S:ANP
ne-qqely=at̲, *iwa, netta* *ka-y-tt-eqla*
1PL-fry:I=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) *ɛlaḥeqq* *ka-t-t-ḥekk,* *ka-t-t-ḥekk,* *ššuk̲a=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-baɛ* *zziṯ,* *ma* *aḡ*
NEG PST 3MS-be:P IMPP-3MS:IMPF-PASS-sell oil, NEG PST
i-ll *ka-y-en-baɛ* *zzaytun* *ma* *aḡ* *i-ll*
3MS-be:P IMPP-3MS:IMPF-PASS-sell olives, NEG PST 3MS-be:P

ka-y-en-baɛ *imalḥen* *das*
IMPP-3MS:IMPF-PASS-sell fish there
'Oil was not sold, olives were not sold, fish were not sold there.'

The following examples show an Arabic-morphology verb which corresponds to the root of the derived passive.

(89) *kra* *axyam*
rent[:3MS:PF] house:EL
'He rented a house.'

(90) *tt-ekra* *axyam = ahen*
PASS-rent[:3MS:PF] 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 **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 **ss**- ~ **s**- prefix. All labile verbs have Berber morphology; many are Arabic stem II verbs as in example (93) and (94).

(91) *lkas* *i-ṛeẓ*
glass 3MS-break:P
'The glass is broken.'

(92) *argaz = ahen* *i-ṛeẓ* *lkas*
man:EL = S:ANP 3MS-break:P glass
'That man broke the glass.'

(93) *i-ɛeqqeḏ*
3MS-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).

(94) *i-ɛeqqeḏ = aṯ*
3MS-tie:P = 3MS:DO
'he tied him/it'

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[136]. 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 **ḇṭa** '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).

(95) *talqimt* *te-ḇṭa*
bread:EL 3FS-divide:P
'The bread is divided'

(96) *i-ḇṭa* *talqimt*
3MS-divide:P bread:EL
'He divided the bread'

Instead of the intranstive the younger speaker uses the Arabic passive participle:

(97) *talqimt* *meqṣum-a*
bread:EL divide:PP-FS
'The bread is divided'

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 Tashelḥiyt, see Galand, 2010: 294). An example of such a verb is **ḵrez** 'to plough'. Example (98) can only have a transitive reading.

(98) *i-ḵrez* *aḡer* *nn-es*
3MS-plough:P meadow:EL of-3S

[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).

‘He ploughed his meadow.’

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, a, d a** and **ar a**). 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).

nya ~ yya ‘when’

(99) *nya* *t=ne-ẓẓaḍ*
when 3FS:DO=1PL-grind:I

[137] In elicitation sessions other speakers confirmed that these phrases are grammatical and accepted.

[138] In other Berber languages these elements can be attracted (cf. for example Kossmann, 1997: 271-272 for Figuig Berber and Dell & Elmedlaoui, 1989 for Tashelḥiyt).

‘When we grind it.’

(100) *nya* *y = zerri-n*
when 3MS:DO = pound:I-3PL
‘When they pound it.’

The following construction without attraction is possible as well.

(101) *nya* *ne-ẓẓaḍ = aṯ*
when 1PL-grind:I = 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-kkaṯ* *ga-s, ḥetta ṯ = i-neɣ*
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-kkaṯ* *ga-s,* *ḥetta* *ye-nɣ = 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-en* *argaz* *a* *n = ye-wwṯ-en.*
capture:P-3PL man:EL REL 3PL:DO = RF-hit:P-RF
‘They caught the man who hit them.’

(105) *taɣaṭt* *a* *s = i-qqeṛ* *leɛqel* *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-ttiṯu-n* *dar* *žžbala* *ma* *ɣer-sen* *ši* *leflus*
Europeans REL DC = RF-go:I-RF to 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 qṛiṛeɛ = 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 tfaṛiṭ*
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-ttuṯu a y = n-ẓeḏ 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 feṛmaṣya*
peseta, CRT AD 3FS:DO = 2S-find:A-2S in pharmacy
‘The peseta, you will find it in the pharmacy.’

(112) *mḵi 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 shows 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* *uɣižd* *š* *a* *ne-ǧ=aṯ* *dar* *ḍḍaw*
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-ǧ=as* *ḥetta* *smana* *h-teffeɣ*
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:

Verb	IO	DO	Deictic
i-ml	*am*	*ten*	*d*
3MS-show:P	2FS:IO	3PL:DO	DC

'He showed them to you.'

In the following example the combination of indirect object and direct object clitics in postverbal position is shown:

(115) *taɛeyyalt=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 post-verbal 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 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 uɣižd=ahen, š a*
he 3MS-go:P to billy.goat:EA=S:ANP, FUT AD
s=t=i-šš=at
3S:IO=PDO=3MS-eat:A=3FS:DO
'He went to the billy goat, he will eat it (to her detriment).'

(118) *i-tteḥtiž a s=t=i-šš=ahen aḡḏi*
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=šša-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.[140] 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 **ɣmuṛ** 'to grow' in examples (123) and (124).

(120) *aḡḏi i-ffeɣ=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 **ḏ**. 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:* *'allahwkḇaṛ'*
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-ɣmuṛ=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-dagem*
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-agem*
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) *nihma* *ražɛ-in=d*
they AP:return-PL=DC
'They are coming back (hither).'

(129) *nekki* *aḡ* *lla-x* *g* *taza* *i* *nihma* *talɛ-in = d* *daɣr-i*
I PST be:P-1S in Taza and they go.up:AP-PL = DC to-1S
'I was in Taza and they were coming (up) towards me.'

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) *amk̲* *a* *d = i-da = d* *k̲ma-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) *amk̲* *a* *d = i-da* *k̲ma-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-ffuɣ = d* *g* *bellil*
FUT AD DC = 3MS-go.out:A = DC in night
'He will come out in the evening.'

(132) *saɛa,* *ɣa* *wi* *d = i-ttit̲u-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.

(133) *i-bb = ay = t*
3MS = 1S:IO = 3MS:DO
'He took it (M) from me.'

(134) *amaleḥ = ahen,* *i-bb = ay = d = id*
fish:EL = S:ANP 3MS-take:P = 1S:IO = DC:3MS:DO = DC
'He brought that fish to me.'

2. The third person feminine singular pronoun (type 2) is **t** ~ **tet** ~ **te̲t** (cf. III.11.2.1. on pronouns). The form with the deictic clitic is always **ded** (never **ted**). Therefore it is impossible to decide whether it is the result of the **t** + **d** or **tet** ~ **te̲t** + **d**. (135a) presents forms without the deictic clitic and (135b) is an example with **ded**.

(135a) *i-bb = ay = tet* ~ *ibb = ay = te̲t*
3MS-take:P = 1S:IO = 3FS:DO ~ 3MS-take:P = 1S:IO = 3FS:DO
'He took it (F) from me.'

(135b) *i-bb = ay = ded*
3MS-take:P = 1S:IO = DC:3FS:DO
'He brought it (F) to me (in my direction).'

3. When combined with the deictic clitic, the third person plural pronoun **ten** has two possible forms. In the first place, there is an long distance assimilated variant **den**, which is combined with the deictic clitic (i.e. **den = d**). It is possible to leave out the final clitic, leading to a form **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. **d = ten** > **den**. However, as the deictic clitic never precedes the pronoun in other cases and when the allomorph **ahen** is used, it is preferable to regard the pronoun as an allomorph of **ten** which has fused with the deictic clitic. In (136a) the form **ten** is shown. (136b) shows the use of the form **den** and (136c) shows the use of the same pronoun followed by the deictic clitic **d**. (136d) shows that the allomorph of the third person plural pronoun **ahen** does not assimilate to the deictic clitic.

(136a) *i-ml = ay = ten*
3MS-show:P = 1S:IO = 3PL:DO
'He showed them to me.'

(136b) *i-bb = ay = den*
3MS-take:P = 1S:IO = DC:3PL:DO

‘He showed them to me (in my direction).’

(136c) *i-bb = ay = den = d*
3MS-take:P = 1S:IO = DC:3PL:DO = DC
‘He showed them to me (in my direction).’

(136d) *i-bb = ahen = d*
3MS-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.

	Pronoun	**Pronoun + Deictic Clitic**
M	*t*	*did*
F	*t ~ tet ~ te̲t*	*ded*
PL	*ten*	*den ~ dend*

The deictic particle always follows the indirect object pronoun in postverbal position:

(137) *y-umṛ = a̲k = d* *amaleḥ*
3MS-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) *š* *a* *n = d = i-bb*
FUT AD 3PL:DO = DC = 3MS-take:A
‘He will bring them.’

(139) *š* *a* *k̲ = d = i-bb*
FUT AD 2MS:IO = DC = 3MS-take:A
‘He will bring (something) for you.’

(140) *š* *a* *sen = d = i-bb = ahen = d*
FUT AD 3PL:IO = DC:PDO = 3MS-take:A = 3PL:DO = DC
'He will take them to them (hither)'

(141) *a* *ddu-x* *a* *k = d = rri-x = ded*
AD go:A-1S AD 2MS:IO = DC:PDO = return-1S-DC:3FS:DO
'I will go and bring her back 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 ~ weḏqul ~ wetqul** 'nothing' and **ḥedd ~ ḥetta yan / ḥetta yaṯ** '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 **ɛemmeṛ-** '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-ṛeqq* *ši* *ga-sen* *lɛafya*
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* *aɛeyyal = 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**, **weḏqul** 'nothing', **ḥedd** 'nobody' and **ḥetta 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* *weḏqul*
NEG see:I-1S nothing
'I cannot see anything.'

(149) *ma* *ya* *n-šeḵšem* *ḥedd*
NEG AD 1PL-make.enter:A nobody
'We are not going take anybody inside.'

(150) *nuḵna,* *ḇaḇa* *i-nn=anax* *ma* *ɣer-nax* *ḥetta* *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* *wṯ-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 **wetqul** '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* *ɣa* *siwel,* *ma* *ya* *ḵṣut-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-aɣ* *wetqul*
NEG AD 2FS:DO=do:A-1S nothing
'I will not do anything to you.'

(155) *lla,* *ma* *ra* *ḡḡ-aɣ* *weḏqul*
no NEG AD do:A-1S nothing
'No, I'm not going to do anything.'

The verb **ll** 'to be' is negated in the same way as other verbs [**ma** verb **ši**], except when it forms a past marker together with **aḡ** ~ **aḵ** (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* *ssḇeɛ*
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 IMPP-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 IMPP-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) *axyam 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 Lafkioui 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) *mḵi ma i-ssenkr=anax lefqi, šku š a ɣen=i-ssenkur?*
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 zeɛma-ḵ i-ḥtaž a fsex šškaṛa baš ma ya*
he kind.of-2MS 3MS-want:P AD [3MS-]open:A bag so.that NEG AD
te-fleṯ taɣaṭt
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 qaṛi 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) *aḵ i-ll dhaḏin, ma ssn-ax šk a t=i-leqqṭ-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 ḥtaž a t=te-wweṯ s leḥzam*
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-sagūm 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) *žeḥḥa i-ttɛiš netta i yemma nn-es, netta ma i-melleḵ,*
Jeha 3MS-live:I he and mother of-3S he NEG 3MS-marry:I
yemma nn-es ma h-melleḵ
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 haḏiḵ=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 ṛeẓ ma ya haḏiḵ*
NEG AD [3MS-]break:A NEG AD thingy
'It will not break and it will not do anyhting.'

(170) *i-qqr=as: 'ma tesla-x=aḵ, ma tesla-x=aḵ.'*
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 **maɛet** (< **ma ɛṛeft**) 'I do not know.' borrowed from Arabic the postverbal element never appears. Some examples are:

(171) *i-dda ṣṣulṭan maɛet ana aḵ 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) *maɛet* *amḵ* *a* *ḡḡa-n* *leḥšam = ihen*
don't.know how REL do:P-3PL children = PL:ANP
'I do not know how the children did it.'

The element **ɛemmeṛ-** ~ **ɛummeṛ-** '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* *ɛemmṛ-a* *de-nqteɛ,* *ššelḥa* *ɛemmr-a* *ma* *d-enqteɛ*
Berber NEG never-3FS 3FS:IMPF-stop Berber never-3FS NEG 3FS:IMPF-stop
'Berber will never die, Berber will never die.'

(174) *ɛemmṛ-eḵ* *ma* *he-šša-t* *aɣlal*
never-2S NEG 2S-eat:P-2S snail:EL
'Have you never eaten snails?'

(175) *ma* *ya* *af-et* *ši* *beṣṣiṭa* *ɛummṛ-eḵ* *t-uf-et = teṯ*
NEG AD [2S]find:A-2S NEG peseta never-2S 2S-find:P-2S = 3FS:DO
'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-wweṯ* *ši* *ḵma-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-wweṯ* *ḵma-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* *ḇaḇa maši š* *a* *ṯ = i-bb,*
3FS-say:P = 3S:IO M-S:ANP VOC father NEG FUT AD 1S:DO = 3MS-take:A
š *a* *ṯ = i-nuɣ* *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.'

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:PRXF-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* *ṭṭhar,* *la* *g* *tɛeddist*
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).

Coordinative conjunctions	Can be followed by a topic	Main clause precedence	Attraction
Conjunctive coordinator *NP / PP* **i** ~ **id̲** / *Verb* **u** ‘and’	+	-	-
Disjunctive coordinator **wella** ~ **awella** ~ **aw** ‘or’	+	-	-
Adversative coordinator **walakin** ‘but’	+	-	-
Causal coordinator **liyanna**, **ɛlaḥeqq** **ɛlaqib̲al**, **ɛlaxaṭeṛ** ‘because’	+	-	-

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).

Causal coordinator **semmen** ~ **semm a** 'so that'	+	-	optional
Causal coordinator **laba** ~ **bašma** 'so that not'	+	-	-[143]
fḥalli 'as if'	+	-	-

4.1.1. Conjunctive coordinators

The conjunctive coordinators **i** ~ **iḏ** and **u** 'and' are allomorphs. The borrowed conjunction **u** links verbs while non-borrowed **i** ~ **iḏ** only coordinates (pro)nouns and prepositional phrases. The coordinator **i** ~ **iḏ** 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** ~ **iḏ** as a preposition). The form **iḏ** only appears before vowels, never before consonants, where **i** is used. While **i** ~ **iḏ** is more often used by older people, younger speakers tend to generalise the use of **i** in all contexts.

4.1.1.1. Nominal / Prepositional coordinator i ~ iḏ

Noun phrases and prepositional phrases coordinated by **i** or **i** ~ **iḏ** immediately follow the coordinator. Example (1) shows coordination of a noun phrase. A following Berber-morphology noun gets the EA.

(1) *legrana i ukfer melḵ-en*
toad and turtle:EA marry:P-3PL
'The toad and the turtle married.'

Example (2) shows the use of **iḏ** before a noun with an initial vowel and **i** before a noun with an initial consonant.

(2) *tettan=t ɣa lebhayem iḏ iɣʷyal i tɣaṭen*
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=teṯ g feṛmaṣya i g ṣṣaka*
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.

(4) *tsawal-en s lɛarbiyya i s šše*l*ḥa*
talk:I-3PL with Arabic and with Berber
'They speak Arabic and Berber.'

i ~ id cannot coordinate predicates, e.g.

(5) **i-dda i(d) i-qqim*
3MS-go:P and 3MS-sit:P
'He went and he sat down.'

i ~ id is used for a topicalised nominal or prepositional element (cf. IV.7.1.1.5. for topicalisation), for example:

(6) *aɛeyyal n ṣṣulṭan i-dda ka-y-ɛiss fx-es, i netta*
child:EL of Sultan 3MS-go:P IMPP-3MS:IMPF-guard on-3S and he
i-ttaf = at ɛaweḍ
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**.

(7) *ssiriḍ-en = t g waḵal u tmeṛṛaḥ-en = t g tafuḵt*
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**.

(8) *ne-ttawi = d isɣaṛen dar uḥemmal = ahen u aywel ɣer-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-ɛellm = ahen* *u* *n-šeḵšm = ahen* *u* *zedq-u* *g* *wilḇa*
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** ~ **iḏ** is only reluctantly accepted in this context), for example:

(10) *xeṣṣ = ay* *imalḥen* *muqqr-eṯ* *u* *bezzaf*
need:P = 1S:IO fish big-PL and many
'I want big and many fish.'

(11) *netta* *ṭwil* *u* *ɣliṭ*
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 kḏa** 'and so forth', **u ṣafi** 'that's all', **u ḥleq** 'whatever', **xyaṛ u xyaṛ** 'even better', **bi xir u ɛla xir** 'very good', **lil u nhaṛ** 'day and night'. It is used to link numerals as well (cf. III.12. on numerals). An example is:

(12) *i-mmuṯ* *u* *ḥleq*
3MS-die:P and what
'If he died, so what?'

4.1.2. Disjunctive coordination

There are two conjunctions for disjunctive coordination, **wella** ~ **awella** and **aw**, both meaning 'or'. They are borrowed from Arabic. Both conjunctions coordinate all types of phrases and clauses. A number of examples with **wella** will be presented first. In the following examples **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-zzenz = at* *s* *tkemmišt* *n* *lḥebb* *wella* *s* *lxuḇza*
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) *ssemlaḵ-en = ten* *i* *lemselmin* *wella* *i* *nnṣaṛa* *ssemlaḵen = ten?*
marry:I-3PL = 3PL:DO to muslims or to Christians marry:I-3PL = 3PL:DO
'Do they marry them to muslims or do they marry them to Christians?'

(16) *ma ssaɣ-en ši lḥaža te-sḥa wella lḥaža mezyana*
NEG buy:I-3PL NEG thing 3FS-good:P or thing good
'They do not buy a strong thing or a good thing…'

(17) *ḥtaž-et muqqṛ-eṯ wella meẓẓi-ṯ?*
[2S]want:P-2S big-PL or small-PL
'Do you want a big one or a small one?'

(18) *ḥtaž-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 ḍḍḇaɛ š a ṯ=i-šš awella aḡḏi*
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) *aɣeṛṛaf n iḇawen aw aɣeṛṛaf n taẓart, 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) *lʔamana=yaḏ, xebbɛ=ay=tet, walakin ma ya*
safeguard=S:PRX hide:IMP=1S:IO=3FS:DO but NEG AD
te-ḡḡ-et ši sennig lɛafya
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* *tamɣaṛt* *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, ɛlaḥeqq, ɛlaqiḇal, ɛlaxaṭeṛ ‘because’

The coordinative conjunction **liyanna** ‘because’ indicates a causal relation between two phrases. **ɛlaḥeqq**, **ɛlaqiḇal**, **ɛlaxaṭeṛ** 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) *tkeffṛ-eṯ* *fx-es,* *liyanna* *taḵna*
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-tɣima* *tmen* *eyyam* *n* *lehwa* *fx-ennex* *i-ḥeṣṣel*
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-ttak-at = as* *ilaxirihi* *te-rri = d* *xf-eḵ*
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 **ɛlaḥeqq** is illustrated from a text excerpt.

(27) *i-tšebbaṛ = ahen* *ṛṛemḏan* *g uḏrar.* *ɛlaḥeqq* *qḇel* *zeg* *u-haḏin*
3MS-grab:I = 3PL Ramadan in mountain:EA because before from M-PRX:S
aḡ *lla-n* *tɛemmaṛ-en* *ʔakṭareyya* *tɛemmaṛ-en* *g* *uḏrar*
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) *n-sekr=as* *ši* *ḥaja* *n* *lemlaḥ* *semmen* *taẓemmiṯ=ahen*
1PL-do:P=3S:IO some thing of salt so.that fried.wheat:EL=S:ANP
h-till *ḥelwa*
3FS-be:I sweet:FS
‘We put a bit of salt in it, so that the baked wheat becomes sweet.

(29) *wṯ=ay* *s* *leḥzam* *semm* *a* *teqql-ax* *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) *ẓeyyeṛ* *x* *šškaṛa=yahen* *laba* *taɣaṭt=ahen* *a* *ḵ=te-fleṯ*
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) *netta* *zeɛma-ḵ* *i-ḥtaž* *a* *fsex* *šškaṛa* *bašma*
he kind.of-2MS 3MS-want:P AD [3MS]open:A bag so.that.not
ya *tefleṯ* *taɣaṭt*
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) *asɣun* *tlewway-en=t* *i* *ḍḍmaɣ* *n* *tsa* *bašma*
rope:EL wrap:I-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* *tažellaḇt = ahen* *n* *iṣɣaṛen* *fḥalli* *t-ɛeddel* *lfuṛma*
3MS-do:P = 3S:IO djellaba:EL = S:ANP of sticks as.if 3FS-make:P form
n *urgaz* *tameṭṭuṯ = 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.

Subordinative conjunctions	Can be followed by a topic	Main clause precedence	Attraction[144]	Arab.Rel. Marker
amḵ a 'when'	-	+	+	+
nya ~ yya 'when'	-	+	+	+

[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**.

mḵi ‘if’	+	+	-	-
ka ‘if’	-	+	-	-
qeḇla ‘before’	-	+	optional	+
ḥetta ‘until’	-	+	optional	+
zegya ‘since’	-	+	+	+
waxxa ‘even though’	+	+	optional	+
baš ‘so that’	-	+	-[145]	-
bla ma ‘without’ **qbel ~ qeḇla ma** ‘before’ **ana ma** ‘where ever’	-	+	-	-

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 **ammeḵ** ‘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 baɛtiyaṯ-em akfer ye-wṯ=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-tiṯu dar teggurt te-qqṛ=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.

(36) *amḵ a argaz=ahen i-ggez dar uxyam
when REL man:EL=S:ANP 3MS-go.down to house:EA
'When the man decsended to the house.'

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 ḥmeḏ, š a d=uqql-aɣ 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 wežḏ-eṯ 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'[146]. 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-mleḵ fx-es, qellɛ-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 taɣilt ɛaweḏ
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.

[146] 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 meqḇeyy-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-ẓeṛ hamḵa mmerrṯ-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-teffeɣ 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-teffeɣ 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 nettaṯa nya d ɛaq-eṯ is-sen rewl-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:

(46) *mḵi argaz=ahen i-dda, mezyan*
if man=S:PRX 3MS-go:P good
'If that man has gone, that's fine.'

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-sseḇzg-et=t i-qelleɛ*
if 2S-make.wet:P-2S=3MS:DO 3MS-leave:P
'If you make him wet, he is gone.'

(48) *mḵi tferreq-na nekki ḍḍaɛ-ax*
if split.up-1PL:PF I be.lost:P-1S
'If we split up, I will be lost.'

The (**š**) **a** + Aorist and the Imperfective can also follow **mḵi**, for example:

(49) *mḵi š a y=te-nɣ-em, ǧ-aweṯ 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-ttiṯu-m dar uxyam, bb=aweṯ iḏ-un aman*
if 2PL-go:I-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 **ɣa** 'just'.

(51) *ɣa mḵi dda-x a žeṛṛḇ-aɣ a n-ɛayen amḵ a ye-ll*
only if go:P-1S AD try:A-1S AD 1PL-see:A how REL 3MS-be:P
zzayn=ahen
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 **ll** 'be' can be used. In the following example the verb does not agree with the following plural noun.

(52) *mḵi ll imalḥen inši waɛr-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 **ll**, for example:

(53) *myaṯayn n rryal, mḵi ssarḏin wella ššral wella taɣzalt*
two.hundred of rial, if sardine or jack.mackerel or bogue.fish:EL
'Two hunderd 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) *mḵi netta ilaxirih i-tett lɛeṭṭa=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** + **ll** is used following **ka**. In the apodosis **ka** is facultative. In the apodosis, if there is a verbal predicate, the borrowed element **ḵun ~ iḵun** 'then' can be used. If the apodosis is a non-verbal predicate, **ll** 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 iḏ 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 iḏ 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.'

(57) *ka* *i-šebbṛ=aḵ* *argaz=ahen,* *ka* *iqeṭṭɛ=aḵ* *s* *tuzzalt=aḏ*
CF 3MS-catch:P=2MS:DO man:EL=S:PRX CF cut:P=2MS:DO with knife=S:PRX
'If the man had caught you, he would have sliced you with this knife.'

In the next examples the use of **aḡ ~ aḵ + ll**, in the apodosis (58) and in the protasis (59) is shown.

(58) *ka* *qqim-aɣ* *mtebbeɛ* *lxiḏma* *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* *aḵ* *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
mseyyeḇ *g* *teẓga*
throw:PP:MS in forest:EA
in the forest.'

In example (60) **ka** is only used in the protasis. In the apododis there is no further marking.

(60) *ma* *nekki* *ka* *dda-x* *amella* *refs-ax=t,* *šeɛl-aɣ=am,*
as.for I CF go:P-1S now:EL knead:P-1S=3MS:DO lite.oven:P-1S=2FS:IO
ḡḡ-aɣ=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. qeḇl a 'before'

The conjunction **qbel a** indicates that the event in the subordinate clause follows the event in the main clause. This conjunction consists of the preposition **qḇel** 'before' followed by the element **a** (cf. IV.5.). The subordinate clause can follow the main clause.

(61) *qeḇl* *a* *i-dda* *argaz=ahen,* *i-dda* *w-ayeṭ*
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:

(62) *qeḇl a ṯ = ye-wweṯ, i-dda = d daɣr-i*
before REL 3MS:DO = 3MS-hit:P 3MS-go:P = DC to-1S
'Before he hit him, he came to me.'

(63) *qeḇl a ye-wweṯ = aṯ, idda = d daɣr-i*
before REL 3MS-hit:P = 3MS:DO 3MS-go:P = DC to-1S
'Before he hit him, he came to me.'

An example of the Arabic relative marker with an Arabic-morphology verb is:

(64) *qeḇl a d stɛeml-u ṭṭunuḇiraṯ aḡ lla-n*
before REL AREL use-3PL:PF cars PST be-3PL
ka-y-stɛeml-u ɣa 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.13.3.3. 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-kkaṯ ga-s ḥetta ṯ = i-neɣ*
3MS-stay:P 3MS-hit:I in-3S until 3MS:DO = 3MS:kill:P
'He kept on beating him until he killed him.'

(66) *ɛaweḏ ka-y-ṭiḥ fx-es 'puk', ḥetta ye-nɣ = 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 = d dariha ḥetta d xwa-w sswasa*
NEG go:P-3PL = DC to.here untill 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:

(68) *zegya* *d=dda-x* *nekkin* *meɛdum*
since CD=go:P-1S I sick:PP:MS
'Since I have arrived, I have been ill.'

(69) *te-ḇda* *ka-t-ḍɛef* *zegya* *h-su* *lbaṣteyya=ahen*
3FS-start:P IMPP-3FS:IMPF-loose.weight since 3FS-drink:P pill=S:ANP
'She started to loose weight since she drank that pill.'

An example of the Arabic relative marker with an Arabic-morphology verb is:

(70) *zegya* *d* *xṭaṛɛ-u* *ṭṭunuḇiraṯ* *mezyan*
since AREL invent-3PL:PF cars good
'Since they invented cars it has been good.'

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* *ḥmeḏ* *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-ẓṛ=aṯ* *aṭḡam,* *ma* *i-nn=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* *ṯ=i-ẓeṛ* *aṭḡam,* *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* *ṣṣaḏ-tum* *nnhaṛ=aḏ* *ma* *he-bba-m=d* *weḏqul*
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 = aḵ* *ššwešk* *leḥšam* *nn-eḵ* *baš* *a*
I tell:P-1S = 2MS:IO make.dissappear:IMP children of-2MS so.that AD
ḡḡ-aɣ *leɛša*
do:A-1S supper
'I said to him, make your children dissappear so that I can make supper.'

(76) **ššwešk* *leḥšam* *nn-eḵ* *baš* *leɛša* *a* *ḡḡ-aɣ*
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 **qeḇl a** 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 **qeḇla**, **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) *qeḇl* *a* *ma* *ye-qquṛ* *lebṣel,* *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-qqṛ = as:* *'a* *weddi*
where MA find:P-3PL source 3MS-say:I = 3S:IO o boy
nekki *ḵemṭ-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) *i* *ɣzizel=ahen,* *i-ɛaql=at* *billa* *tameṭṭuṯ=ahen*
and ɣzizel=S:ANP 3MS-recognise:P=3FS:DO COMP woman:EL=S:ANP
'And that *ɣzizel*, he recognised that she was that woman.'

(81) *ku* *nnhaṛ* *i-ẓẓaṛ=at* *das,* *billa* *i-thaḏiḵ*
every day 3MS-see:I=3FS:DO there COMP 3MS-do.thingy:I
'He sees him here doing thingy.'

(82) *t-han* *ɛaq-eṯ* *illa* *ɣr-es* *lmeṣkeṛ*
F-S:ANP be.aware-3FS:PF COMP at-3S anaesthetics
'That one was aware that she had anaesthetics.'

The particle **bihen** can optionally follow **illa**, for example:

(83) *š* *i-ɛiq-u* *is-sen* *illa* *bihen* *ham* *das*
FUT 3PL:IMPF-be.aware-3PL:IMPF with-3PL COMP COMP PR:3MS there
'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 **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 **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 **d** in all types of relative clauses, which follows the Berber relativiser **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.

Verbal clitics of Berber-morphology verbs stand in preverbal position in a relative clause. They follow the relativiser. Like in non-relative clauses, prepositional phrases do not appear in preverbal position. Clitics of Arabic-morphology verbs do not change position.

Any aspectual stem of Berber or Arabic-morphology verbs can appear in the relative clause. The allomorph **ar** of the non-real marker appears before both Arabic and Berber-morphology verbs in the relative clause. As the non-real **a** cannot co-occur with an Arabic-morphology verb, its allomorph **ar** cannot co-occur with the Arabic relativiser **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**-…**-in** (see III.9.1.). The following example shows a subject relative clause and the relative form of the verb:

(1) *lekwaṣet=ihen a y-tḍewwar-en hamḵa*
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=ahen a ḵ=ye-wṯ-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-ṣerreḏ dar-i irgazen a ar a yṯ=nɣʷ-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-umṛ=as tamɣaṛt 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.).

(5) *argaz a y-ṭwil-in*
man:EL REL RF-tall-RF
'The tall man.'

(6) *iḇeṛṛiyen a y-muqqṛ-in ga-sen taḏunt bezzaf*
sheep REL RF-big-RF in-3PL fat a.lot
'Big sheep contain a lot of fat.'

(7) *wa y-muqqṛ-en*
PRH:MS RF-big-RF
'The big one.'

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 **ll** '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) *tamɣaṛt a y-nawy-in a ddu, ma he-dda ši*
woman:EL REL RF-plan:AP-RF AD [3FS]go:A NEG 3FS-go:P NEG
'The woman who was planning to go did not go.'

(9) *mnaḏem a y-mestans-in i tafuḵt ma ya*
person REL RF-be.used:PP-RF with sun NEG AD
hleḵ ši deɣɣa
[3MS]be.sick:A NEG quickly
'A person who is used to the sun will not get sick quickly.'

(10) *g ṭṭšeṛ=aḏ ga-s ya uɛeyyal a lla msemmi ilyas*
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) *tamɣaṛt a lla naɛs-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) *argaz = ahen* *a* *d* *ḥṣel* *s* *leḥšiš* *i-mmuṯ*
man:EL = S:PRX REL AREL catch[:3MS:PF] with hashish 3MS-die:P
'The man who got caught with hemp died.'

(13) *argaz = ahen* *a* *ḥṣel* *s* *leḥšiš* *i-mmuṯ*
man:EL = S:PRX REL catch[:3MS:PF] with hashish 3MS-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) *w-a* *d* *ḥreg* *lwext = ahen* *haw* *g* *mirikan*
MS-PRH AREL migrate.illegally time = S:PRX PR:3MS 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) *sswasa* *a* *d* *xwa-w* *ṭṭarix = ahen* *u-hen,*
Sousis REL AREL leave-3PL:PF period = S:ANP M-S:ANP
ḍebbṛ-en *x* *ḍḍmaɣ* *nn-sen*
manage:P-3PL 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) *sswasa* *a* *xwa-w* *g* *lwext = ahen,* *ḍebbṛ-en*
Sousis REL leave-3PL:PF in period = S:PRX manage:P-3PL
x *ḍḍmaɣ* *nn-sen*
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-sekṛ-u* *das,*
men REL IMPP-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-sekṛu* *das,*
men REL AREL IMPP-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-ṛebb = at*
PRES F-S:RL REL DC = 3FS-go:P = DC little:DIM-PL 3MS-raise:P = 3FS:DO
ṣṣulṭan, *i-mleḵ* *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) *šškaṛa* *a* *y-uḵer* *aɛeyyal = aḏ*
bag REL 3MS-steal:P boy:EL = S:PRX
'The bag that this boy stole.'

(21) *ayerni=ahen* *a* *i-tett* *alef*
arum.italicum=S:PRX REL 3MS-eat:I boar:EL
'The *arum italicum* that the boar eats.'

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) *iḇawen* *a* *d* *fleḥ-t* *azgazneṭ* *mezyan-in*
beans REL AREL cultivate-1S:PF last.year good-PL
'The beans I sowed last year are good.'

(23) *iḇawen* *a* *fleḥ-t* *azgazneṭ* *mezyan-in*
beans REL cultivate-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) *iḇawen* *a* *d* *ka-ne-fleḥ* *kul* *ɛam* *mezyan-in*
beans REL AREL IMPP-1S:IMPF-cultivate every year good-PL
'The beans that I sow every year are good.'

(25) *iḇawen* *a* *d* *ka-n-felḥ=em* *kul* *ɛam* *mezyan-in*
beans REL AREL IMPP-1S:IMPF-cultivate=3PL:DO every year good-PL
'The beans that I sow (them) every year are good.'

(26) *lgaṛṛu* *a* *d* *tkeyyef-t* *nekki* *mezyan*
cigarette REL AREL smoke-1S:PF I good:MS
'The cigarette that I smoked was good.'

(27) *lgaṛṛu* *a* *d* *tkeyyeft=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 **ll** '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) *taḇayṣart 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) *taḇayṣart 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) *taḇayṣart 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 fḥal-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 fḥal-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 ṭleb-t=l-u imalḥen,*
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 ṭleb-t=l-em imalḥen,*
men=PL:ANP REL AREL ask.for-1S:PF=IO-3PL fish

ma *bba-n = den = d* *ši*
NEG take:P-3PL = 3PL:DO = DC NEG
'The men from who I ordered fish did not bring them.'

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 **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).

(35) *te-mmuṯ = as* *taɛeyyalt = ahen* *i* *tmeṭṭuṯ = ahen*
3FS-die:P = 3S:IO girl:EL = S:PRX to woman:EA = S:PRX
'That girl died to that woman's detriment.

(36) *tameṭṭuṯ = ahen* *a* *s = ye-mmuṯ-en* *taɛeyyalt = ahen*
women:EL = S:PRX REL 3S:IO = RF-die:P-RF girl = S:PRX
he-ttru *bezzaf*
3FS-cry:I much
'The woman whose girl has died cries a lot.'

(37) *timɣaṛan* *a* *sen = ye-mmuṯ-en* *tasa = yahen*
women:EL REL 3PL:IO = RF-die:P-RF cow = S:PRX
ttru-n *bezzaf*
cry:I-3PL much
'The women of whom the cow has died, cry a lot.'

(38) *ššaraḳa = ahen* *a* *d* *ɛiss-u = l-a* *medden = ihen*
company = S:PRX REL AREL guard-3PL:PF = IO-3FS people = PL:ANP
ma *he-qqim* *ši*
NEG 3FS-stay:P NEG
'The factory for which those people guarded, does not exist anymore.'

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 contruction 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) *i-ttiṯu* *ḵma-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) *aɛeyyal=ahen* *a* *i-ttiṯu-n* *ḵma-s* *da* *lxariž*
boy=S:ANP REL RF-go:I-RF brother-3S to abroad
'That boy whose brother lives abroad.'

(41) *aɛeyyal=ahen* *a* *s=i-ttiṯu-n* *ḵma-s* *da* *lxariž*
boy=S:ANP REL 3S:IO=RF-go:I-RF brother-3S to abroad
'That boy whose brother lives abroad.'

(42) *irgazen=ihen* *a* *sen=i-ttiṯu-n* *ḵma* *nn-sen* *da* *lxariž*
men=PL:ANP REL 3PL:IO=RF-go:I-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 **a** links the head to the relative clause, the preposition retains its position and has a resumptive pronoun (cf. III.13. for prepositions).

(43) *sers-aɣ* *lberraḏ* *x* *ṣṣiniya*
put:P-1S teapot on tray
'I put the teapot on the tray.'

(44) *ṣṣiniya* *a* *sers-ax* *fx-es* *lberraḏ*
tray REL put:P-1S on-3S teapot
'The tray on which I put the teapot.'

(45) *i-ttara* *s* *sstilu*
3MS-write:I with pen
'He writes with a pen.'

(46) *sstilu* *a* *ye-ttara* *id̲-es*
pen REL 3MS-write:I with-3S
'The pen he writes with.'

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 **ll** '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 **ll** '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) *sak̲en* *g* *uxyam=ahen*
live:AP:MS in house:EA=S:ANP
'I live in that house.'

(51) *axyam* *a* *lla-x* *ga-s* *sak̲en*
house:EL REL be:P-1S in-3S live:AS:MS
'The house that I live in.'

(52) *axyam* *a* *lla-x* *sak̲en* *ga-s*
house:EL REL be:P-1S live:AS:MS in-3S
'The house that I live in.'

(53) *axyam* *a* *lla-x* *ka-ne-sken* *ga-s*
house:EL REL be:P-1S IMPP-1S:IMPF-live in-3S
'The house that I live in.'

(54) *axyam* *a* *lla-x* *ga-s* *ka-ne-sken*
house:EL REL be:P-1S in-3S IMPP-1S:IMPF-live
'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* *fḥal-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=ak̲=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* *ṭleb-t*
give:IMP=1S:IO INDEF REL ask.for-1S:PF
'Give me what I demanded from you.'

(58) *ay* *a* *ṭleb̲-ti-ha* *mužud̲-a*
INDEF REL ask.for-2S:PF=3FS present-FS
'Whatever you demanded, it is here.'

(59) *ay* *a* *d* *ṭleb̲-ti-ha,* *mužud̲-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 idomatic expression.

(60) *i-sker* *ay* *nn-es*
3MS-do:P INDEF of-3S
'He got some property of his own.'

5.7. Demonstrative pronouns and the relativiser a

Demonstrative pronouns can be the head of a relative clause. Note that the singular pronouns end in **a** (**wa**, **ta**). As there is assimilation in this type of context, it is impossible to decide whether the relativiser **a** is present or not on the basis of these forms. However, the absence of **a** after the plural pronoun **wi** suggests that the relativiser is not used in this construction. Example (64) shows an example that causes attraction after the plural pronoun.

(61) *w-a* *y-muqqṛ-in*
M-PRH:S RF-big-RF
'The big one'

(62) *w-a* *ye-dda-n* *baqi* *ma* *i-qqel=d* *ši*
M-PRH:S RF-go.P-RF still NEG 3MS-return:P=DC NEG
'The one who left has still not returned.'

(63) *w-i* *y-muqqṛ-in*
M-PRH:PL RF-big-RF
'The big one'

(64) *wi* *d=i-ttiṯu-n=d* *a* *su*
M-PRH:PL DC=RF-go:I-RF=DC AD [3MS-]drink
'The ones who comes to drink.'

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 **a**. The examples are:

(65) *ṭṭuɛm* *w-a* *s=fk-ax,* *haw* *baqi* *ɣr-es*
bait M-PRH:S 3S:IO=give:P-1S PR:3MS still at-3S
'The bait I gave him , he still has it.'

(66) *lluḇya* *t-a* *ye-bb,* *i-šš=at* *aṭḡam*
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) *lebwaṭel* *wi* *i-ffɣ-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) *ɣr-i* *a* *sskar-ax*
at-1S REL do:I-1S
'I have something to do.'

(69) *ɣr-i* *a* *ss-ax*
at-1S REL drink:I-1S
'I have something to drink.'

The relativiser **a** can be used after the extistential **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-RF jug:EL of wheat EXST REL RF-take:I-RF
ila?axirihi *aɣʷleyyel,* *kayen* *a* *y-ttawi-n* *taḵint,* *kayen*
etc clay.pot:DIM:EL EXST REL RF-take:I-RF clay.bowel:EL EXST
a *y-ttawi-n* *šškaṛa*
REL RF-take:I-RF 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* *iḏ-es,* *kayen* *w-a*
even.though NEG AD [2S]speak:A-2S with-3S EXST M-PRH:S
y-tsawal-en *iḏ-es*
RF-speak:I-RF 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** / **ɣa** / **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* *leɣḏa=yahen* *a* *ar* *a* *bb* *iḏ* *išurkan*
3MS-eat:P=3S:IO lunch=S:ANP REL FUT AD [3MS]take:A with farmers
‘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* *a* *ar* *i-ṣṣaḏ-u* *alaẓen,* *š* *a*
fishermen REL FUT 3PL:IMPF-fish-3PL:IMPF tomorrow FUT AD
d=bb-en *bezzaf*
DC=take:A-3PL much
‘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* *lmuɛellim=ahen* *a* *lla* *ma* *i-wṯ=aḵ* *ši*
3MS-go:P teacher=S:PRX REL be:P NEG 3MS-hit:P=2MS:DO NEG
‘The teacher that did not hit you left.’

(75) **idda=d* *lmuɛellim=ahen* *a* *ma* *ḵ=i-wṯ-en* *ši*
3MS-go:P=DC teacher=S:PRX REL NEG 2MS:DO=RF-hit:P-RF NEG
‘The teacher that did not hit you came.’

(76) *dda-n* *lmuɛellimin=ihen* *a* *lla* *ma* *wṯ-an=aḵ* *ši*
go:P-3PL teacher=S:PRX REL be:P NEG hit:P-3PL=2MS:DO NEG
'The teachers that did not hit you left.'

(77) *te-dda* *lmuɛellima=ahen* *a* *lla* *ma* *te-wṯ=aḵ* *ši*
3FS-go:P teacher=S:PRX REL be:P NEG 3FS-hit:P=2MS:DO NEG
'The teacher (F.) that did not hit you left.'

Adjectives do not take a relative form in negative relative clauses, for example:

(78) *leğmula* *a* *lla* *ma* *ɛiwaṛ* *ši* *fferḏ-en*
camels Rel be:P NEG blind:PL NEG eat:I-3PL
'The camels that are not blind eat.'

(79) *bba-n=d* *ɣa* *iḇeṛṛeyyen* *a* *lla* *ma* *muqqṛ-eṯ* *ši*
take:P-3PL=DC only sheep REL be:P NEG big-PL NEG
'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):

(80) *ẓṛ-aɣ* *argaz=ahen* *a* *lla* *ma* *ḥṣel* *ši* *leḥšiš*
see:P-1S man:EL=S:ANP REL be NEG fall[:3MS:PF] NEG hashish
'I saw the man who was not caught with hemp.'

(81) *w-a* *lla* *ma* *ḥṛeg* *ši* *g* *lwext=ahen,*
MS-PRH be NEG emigrate.illegally[:3MS:PF] NEG in time=S:ANP
i-qqim *dha*
3MS-stay:P here
'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

(82) *te-qqim* *yah* *šškaṛa* *a* *lla* *ma* *y-uḵr=at* *ši* *amaḵar=ahen*
3FS-stay:P one:F bag REL be:R NEG 3MS-steal:P=3FS NEG thief:EL=S:ANP
'Just one bag was left that was not stolen by that thief.'

As in affirmative relative clauses, Arabic-morphology verbs have an optional resumptive pronoun in direct object position. Compare the following examples:

(83) *iḫawen=ihen* *a* *lla* *ma* *fleḥ-t=em* *ši* *aẓgaẓnet,*
beans=PL:ANP REL be NEG cultivate-1S:PF=3PL:DO NEG last.year
ham *baq-in* *dha*
PR:3PL still-PL here
'The beans that I did not sow last year are still here.'

(84) *iḫawen* *a* *lla* *ma* *ka-ne-fleḥ* *ši* *kul*
beans=PL:ANP REL be NEG IMPP-1S:IMPF-cultivate=3PL:DO NEG every
ɛam *tɣim-en* *dha*
year stay:I-3PL here
'The beans I do not sow every year stay here.'

Indirect Object

(85) *argaz=ahen* *a* *lla* *ma* *nn-aɣ=as* *ši* *lkelma=yahen*
man=S:ANP REL be NEG say:P-1S=3S:IO NEG word=S:ANP
i-dda *fḥal-u*
3MS-go:P way-3MS
'The guy to whom I did not say anything has gone.'

Benefactive/Malefactive

(86) *tameṭṭuṯ=ahen* *a* *lla* *ma* *he-mmuṯ=as* *ši* *taɛeyyalt=ahen,*
woman:EL=S:ANP REL be NEG 3FS-die:P=3S:IO NEG girl:EL=S:ANP
hay *das*
PR:3FS there
'The woman whose daughter did not die is still there.'

For the genitive there are two possibilities. The pronoun **as** is optional in (87). Contrary to expectation there is (optional) attraction of the pronoun to preverbal position when the

lexical subject **ḵma-s** is in postverbal position. This is the only negative relative construction where attraction occurs.

(87) *ẓṛ-aɣ aɛeyyal=ahen a lla ḵma-s ma i-ttuṯu=(as)*
see:P-1S boy:EL=S:ANP REL be brother-3S NEG 3MS-go:I=(3S:IO)
ši da lxariž
NEG to abroad
'I saw the boy whose brother does not go abroad.'

(88) *ẓṛ-ax aɛeyyal=ahen a lla ma (s)=i-ttuṯu ḵma-s*
see:P-1S boy:EL=S:ANP REL be NEG (3S:IO)=3MS-go:I brother-3S
ši da lxariž
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 ṭleb-t=eḵ 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 leḥšam a lla ma naɛs-in ši*
call:IMP=DC on children REL be:P NEG sleep:AP-PL NEG
'Call the children who are not asleep.'

(91) *mnaḏem a lla ma mestanes ši i tafuḵt š a*
person REL be NEG used.to:PP:MS NEG with sun FUT AD
hleḵ deɣya
[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 k̲ = ml-aɣ ya urgaz i-ttiṯu = d daʔimen da lqehwa*
FUT AD 2S:IO = show:A-1S one:M man:EA 3MS-go:I = DC always to café
'I will show you a man who always comes to the café'

(93) *š a k̲ = ml-aɣ ya urgaz a d = i-ttiṯu-n daʔimen da lqehwa*
FUT AD 2S:IO = show:A-1S one:M man:EA REL DC = RF-go:I-RF always to café
'I will show you a man who always comes to the café'

(94) *u baqi d a k̲ = laqi-x i ya n xeyyna i-ttiṯu = d a qqim das*
and still FUT AD 2MS:IO = make.meet:A-1S to one:M of guy 3MS-go:I = 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 urgaz ma ɣr-es ši n leḥšam*
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) *ɣer-sen ya n lefqi mšaṛeṭ ɣer-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) *ɣr-eḵ* *leflus?* [↗]
at-2S money
'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) *i-dda* *ḥasan?*
3MS-go:P Hasan
'Did Hasan go?'

(3) *ḥasan* *i-dda?*
Hasan 3MS-go:P
'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) *iwa,* *ka* *he-zzenz-at=teṯ?*
and Q 2S-sell:P-2S=3FS:DO
'And, did you sell it?'

Another yes-no question particle, interchangeable with **ka** but less commonly used, is the particle **waš**.

(5) *waš* *i-fk = as = tet?*
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) *ka* *t-ha* *ka* *t-ha*?
Q F-PRX:S Q F-PRX:S
'This one or that one?'

(7) *waš* *t-ha* *wella* *t-ha?*
Q F-PRX:S or F-PRX:S
'This one or that one?'

(8) *ka* *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:

(9) *šk**a*** *d* *xtarɛ-u* *tisarkiwan*?
who AREL invent-3PL:PF shoes:EL
'Who invented shoes?'

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-seɣ?*
fish 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.

Independent	**Before rel. clause**	**Pronoun**	**Meaning**
šenni ~ šennu ~ šnu	*šu ~ ma*	*šn-* + pr.	'what'
šku(n) (+ pronoun*) ~*	*škun ~ šk*	*škun-* + pr.	'who'
šḥal	*šḥal*	-	'how much/many'
leyyaš ~ leyya	*leyyaš ~ leyya*	-	'why'
ammek̲	*amk̲*	-	'how'
faywex ~ fax	*faywex ~ fax*	-	'when'
ana	*ana*	-	'where'
smana	*smana*	-	'where from'
layn	*layn*	-	'whither'
kifaš ~ kif ~ ki	*kifaš*	-	'how'

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**.[149] The independent form is **šenni** ~ **šennu** ~ **šnu.** Finally there is

[149] The interrogative never occurs without the relativiser **a**, so the form **šu** never occurs on its own it is always **šw a**.

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 εaweḏ?*
what REL FUT AD [2S-]take:A-2S again
'What are you going to take now?'

(12) *šw a ḡḡa-n leḥšam = 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 **wqeε**. 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 wqeε = 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:P-RF
'What happened to him?'

Example (15) shows an interrogative of a non-verbal construction in

(15) *šw a lla ɣer-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.

(16) *ma* *a* *k̲=y-uɣu-n* *he-txemmam-et* *dha?*
what REL 2MS:DO=RF-catch:P-RF 2S-think:I-2S here
'Why are you pondering here?' (lit. 'what is the matter with you (that) you are pondering here?')

(17) *iwa,* *ma* *a* *ra* *a* *ne-sker,* *a* *ɛibadeḷḷah?*
well what REL FUT AD 1PL-do:A o people
'So, what shall we do, o people?'

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 **ll** is not used.

(18) *šenni?*
what
'What?'

(19) *šenni* *lkaṛ?*
what bus
'What is a bus?'

(20) *šnu* *baqi* *l-ek̲?*
what left to-2MS
'What is left (for you)?

The following example shows the interrogative followed by a suffix pronoun.

(21) *šn=ahum* *iḡiḡen=id̲?*
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-tqerqab̲-en* *das?*
who REL RF-knock:I-RF there

‘Who is knocking there?’

(23) *škun a y-tqerqaḇ-en dha g laṭṭa=yaḏ?*
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 **ll** ‘to be’, for example:

(24) *šk a lla gales gum nn-eḵ?*
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) *ɛemmi nn-em ašnikef u-haḏineṯ, 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* *k̲=i-xeṣṣ-en?*
how.much REL 2MS:IO=RF-need:P-RF
‘How much do you need?’

(31) *šḥal* *a* *h-ttqima* *mmeṛḥ-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* *ɣr-ek̲* *n* *lḥilat̲?*
how.many at-2MS of tricks
‘How many tricks do you have?’

šḥal occurs independently in final position as well, e.g.

(33) *amella* *leqnišṭa* *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-ttru-t* *a* *taɛeyyalt?*
why REL 2S-cry:I-2S o girl:EL
‘Why are you crying girl?’

(35) *leyya* *h-zzenz-at=tet̲?*
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. ammeḵ / amḵ 'how'

In the relative clause construction, the form of the interrogative is **amḵ**. The independent form is **ammeḵ** as shown in example (40).

(38) *amḵ* *a* *he-ll-at?*
how REL 2S-be:P-2S
'How are you?'

(39) *amḵ* *a* *h-kečm-et?*
how REL 2S-enter:I-2S
'How do you enter?'

(40) *ammeḵ*?
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) *aserreɣyul,* *fax* *a* *y-tnewwaṛ?*
plant:EL when REL 3MS-bloom:I
'the *aserreɣyul* plant, when does it bloom?'

The following examples show the independent usage of the interrogative.

(42) *fax* *š* *a* *ṭṭs-et* *a* *ḥenna* *ɣula?*
when FUT AD [2S-]sleep:A-2S o lady ogress

‘When are you going to sleep, lady ogress?’

(43) *faywex leɛša*?
when dinner
‘When is dinner?’

The next example illustrates the alternative form **faywex**.

(44) *faywex š a d=t-uqql-et?*
when FUT AD DC=2S-return:A-2S
‘When will you return?’

6.2.7. ana ‘where’

The independent form of the interrogative **ana** ends in **a**, which makes it impossible to decide whether it is followed by the relative marker **a** or not. As it has all the characteristics of an interrogative with a relative clause (type one) it is assumed the **a** is there. An example of the interrogative is:

(45) *ana a i-xeddem*?
where REL 3MS-work:I
‘Where does he work?’

(46) *ana a y=t-seyyeḇ lmareyya*
where REL 1S:IO=3FS-throw:P tide
‘Where the tide has thrown me.’

The interrogative **ana** can be used as an adverb when pointing out something or someone. It must be preceded by **ha**. For example:

(47) *i leḥšam naɛs-in ha yana*
and children asleep:AP-PL PRES where
‘And the children are sleeping over there.’

6.2.8. smana 'whence'[150]

As with **ana**, it is assumed that the **a** follows the interrogative as the construction shows all necessary conditions.

(48) *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) *layen a n=ye-bb?*
whither REL 3PL:DO=3MS-take:P
'Where did he take them?'

(50) *layen ye-dda?*
whither 3MS-go:P
'Where has he gone?'

When the non-real (**š**) **a** + Aorist is used, only the construction without a relative clause can be used. For example:

(51) *layn š 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 **ha** preceding the pronoun in (52). In the second place it can follow the preposition **ḥetta** in (53).

(52) *ɛaweḏ ttiṯu-n am ssiha ha layn*
again go:I-3PL like from.here PRES whither
'Then they go like from here to there.'

[150] This interrogative can be analysed as instrumental preposition **s** + **mana**. The final element looks like **ana** 'where' and has similar forms in other Berber variants. As the form **mana** does not exist independently in Ghomara, there is no reason to separate them on the synchronic level.

(53) *i-qelleɛ* *am* *ssiha* *ḥetta* *layn*
3MS-leave:P like from.here until whither
'He went like from here to there.'

6.2.10. The use of kifaš ~ kif ~ ki 'how come'

The borrowed Arabic interrogative **kifaš ~ kif ~ ki** has the meaning 'how, how come'. Example (54) and (55) from a text shows the use of **kifaš**.

(54) *i-nn=as:* *'kifaš* *t-haḏin?'*
3MS-say:P=3MS:IO how F-PRX:S
'What is the matter with this one?'

(55) *kifaš* *a* *ye-dda* *dar* *uxyam?*
how REL 3MS-go:P to house:EA
'How did he go home?'

The form **kif** can be doubled for emphasis, for example:

(56) *taslaṯ* *nn-un* *xeṣṣ* *a* *sellem* *x* *yemma.* *kif* *kif?*
bride:EL of-2PL have.to AD [3FS-]greet:A on mother what what
'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* *muɛellim?*
what with.what REL 3MS-become:P teacher
'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 indefinitie pronouns is used. In (59) the **g lwext** 'in the time' is used.

(58) *i-sskar* *ay* *a* *qqṛ-en* *medden*
3MS-do:I INDEF REL say:I-3PL people
'He does what people tell him.'

(59) *lekm-aɣ g lwext a ye-lkem 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 ɣr-es layn i-ttiṯu*
NEG at-3S whither 3MS-go:I
'He does not have anywhere to go.'

(62) *kul waḥeḏ smana d=i-ttiṯu*
every one whence DC=3MS-go:I
'Each one from whence he comes.'

(63) *i-sskar=as kifaš a s=i-sskar ḵma-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 **ɣemmen** 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 **aḡʷemmaṭ 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

Prep. + *men*	**Interrogative**	**Meaning**
i + men	*imen*	‘to whom, with whom’
n + men	*nemmen*	‘whose, of what’
g + men	*gemmen*	‘in what, in which, in whom’
s + men	*semmen*	‘with what’
x + men	*xemmen*	‘for what, for what reason, about whom’
dayer + men	*dayermen*	‘to whom’
dar + men	*darmen*	‘for what, for whom’
zeg + men	*zgemmen*	‘for which reason’
ɣar + men	*ɣemmen*	‘where (at whom)’
zdu + men	*zdumen*	‘under what/whom’
sennig + men	*sennigmen*	‘above what/whom’
qbel + men	*qbelmen*	‘before what/whom’

Composite Prepositions + men

Prep. + *men*	**Interrogative**	**Meaning**
gum + n	*gum nemmen*	‘in front of, beside of whom/what’
ammas + n	*g wammas nemmen*	‘in the middle of whom/what’
af + n	*g waf nemmen*	‘on top of whom/what’
nešt + n	*(ne)št nemmen*	‘as big as whom/what’
fsi + n ~ sfi + n	*fsi nemmen*	‘after whom/what’
ṭṭerf n	*ṭṭerf nemmen*	‘beside whom/what’

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.)?

(66) *ɣe-mn = ahum*?
at-whom = PL
'At whose place are they?'

(67) *g waf ne-mn = ahum?*
in top:EA of-what = PL
'On top of what are they?'

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 ẓge-mmen a d xwa-w ssiha?*
Sousi's from.what REL AREL leave-3PL:PF from.here
'For which reason have the Sousi's moved from here?'

(69) *u se-mmen aḵ te-lla-t t-ẓumm-et keğin?*
and with-what PST 2S-be:P-2S 2S-fast:P-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-men lmaḵla = yaḏ?*
for-whom food = S:PRX
'For whom is this food?'

(71) *i-men ar a ddu-t?*
with-whom FUT AD [2S-]go:A-2S?
'With whom are you going?'

(72) *ne-mmen keğin aɛeyyal?*
of-who you:M boy:EL
'Whose child are you?' (lit. 'of whom are you a child')

(73) *ne-mn = ahu* *lektaḇ = aḏ*
of-who = MS book = S:PRX
'Whose is this book?'

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* *ḥaža* *zeg* *leflaḥa = yahen* *se-mmen* *a*
decrease:IMP some thing from crops = S:ANP with-what REL
h-teffɣ-et *fḥal-eḵ*
2S-go.out:I-2S way-2MS
'Decrease some of those crops so you can go out.'

(76) *kull* *waḥiḏ* *ge-mmen* *š* *a* *ḍebbeṛ*
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?'

(78) *t-aytum* *a* *ye-dda-n*?
F-which.one:S REL RF-go:P-RF
'Which one (F.) has gone?'

(79) *saɛa* *te-dda* *dar* *yan* *haḏiḵ* *n* *iḡḏan.* *i-nn=as:* *'w-aytun?'*
then 3FS-go:P to one:M thing of jackals 3MS-say:P=3S:IO M-which.one:S
'Then she went to a thing of jackals. He said: Which one?
i-nn=as: *'ha* *haw!'*
3MS-say:P=3S:IO PRES PR:3MS
He said: 'There he is.'

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* *haḏiḵ* *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) *ḷḷah ḷḷah,* *nya* *y=te-dda* *tamɣaṛt* *šmen* *ḥḇiḇa*
God God, when 1S:IO-3FS-go:P woman:EL what.kind love
ṯ=ye-qqim-an *i* *nekkineṯ*
1S:IO=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* *amek̲* *ma* *k̲=i-nn* *leɛqel* *nn-ek̲*
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-qqr̲=as:* *'a* *weddi* *nekki* *k̲emṭ-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) *b̲ab̲a* *nn-ek̲* *layn* *ma* *ye-dda,* *š* *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) *š* *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.'

7. Information structure

In this chapter the syntax of pragmatically marked structures will be adressed, 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. Mettouchi 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) *aɣižd = 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.'

(2) *nihma(,)* *ẓ̣ra-n=tet* *hamḵa*
they see:P-3PL=3FS:DO like.this
'They, they saw her like this.'

The same type of subject topicalisation is found with sentences with an Arabic-morphology verb, e.g.

(3) *taɛeyyalt=ahen(,)* *te-b̲da* *ka-t-ḍɛaf*
girl:EL=S:ANP 3FS-begin:P IMPP-3FS:IMPF-become.thin
'That girl, she began to loose weight.'

(4) *netta(,)* *ka-y-tlaqa* *yah* *tmeɣra* *maǧ-a.*
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) *netta(,)* *waqef* *argaz=ahen* *g* *teggurt*
he stand:AP:MS man:EL=S:ANP in door:EA
'He, that man is standing at the door.'

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) *aɣyul(,)* *umṛ-en=t* *ššurkan*
donkey:EL send:P-3PL=3MS peasants
'The donkey, the peasants have sent it.'

(7) *taɣaṭt* *nn-em(,)* *i-bb=am=teṯ* *aḡḏi*
goat:EL of-2FS 3MS-take:P=2FS:IO=3FS:DO jackal
'Your goat, the jackal has taken it.'

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* *aɛeyyal = ahen* *n* *ṣṣulṭan*
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-tɛemmaṛ* *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* *nuḵna(,)* *aḡ* *i-ll* *ka-y-tḇaɛ* *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-tɛemmaṛ* *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** ~ **iḍ** '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-ɣelli-m* *ya* *taɣilt.* *i* *nettaha(,)* *t-ɣellay*
you:PL 2PL-climb:I-2PL one:F mountain and she 3FS-climb:I
aṛbɛa *n* *taɣilan*
four of mountains
'You, you climb one hill. As for her, she climbs four hills.'

(13) *ašnikef(,)* *š* *a* *qqim* *a* *slex,* *š* *a*
hedgehog:EL FUT AD [3MS-]stay:A AD [3MS-]skin:A FUT AD
qqim, *ilaxirihi* *a* *slex,* *i-qeddeḏ,* *i-weğeḏ,*
[3MS-]sit:A etc AD [3MS-]skin:A 3MS-salt:A 3MS-prepare:A
i *uḡḏi(,)* *i-dda* *a* *daḡum*
and jackal:EA 3MS-go:P AD [3MS-]fetch.water:A
'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.

(14) *ya* *tferkiwt(,)* *i-kkerz=at* *s* *lḥebb,* *i* *t-ayeṭ(,)*
one:F garden:EA 3MS-cultivate:I=3FS with wheat and F-other:S
i-kkerz *ga-s* *žuž* *aw* *tlaṯa* *n* *lexṭuṭ* *n* *iḇawen*
3MS-cultivate:I in-3S two or three of furrows of beans
'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.

(15) *i* *nnhaṛ* *iši(,)* *te-qql=as=d* *s* *ṣṣulṭan*
and day some 3FS-return:P=3S:IO=DC with sultan
'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* *ḥmun,* *amušš* *i* *uḇeṛṛey*
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* *lɛišṛa,* *amušš* *i* *wḇeṛṛey*
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 = aṯ,* *aḡer = ahen*
he 3MS-plough:I = 3MS:DO field:EL = S:ANP
'He ploughs it, the field.'

Indirect Object

(19) *fk-an = as = teṯ,* *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-tɛemmar* *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-tɛemmar* *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* *lɛarbbiyya,* *žžnanniš*
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) *muɛellim* *nekkin*
teacher I
'I am a teacher.'

The Adjectival Predicate

(24) *ṭwil-a* *nettaṯa*
tall-FS she
'Tall is she.'

The Prepositional Predicate

(25) *g* *umaras* *axyam*[151]
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'

[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) *inu* *aɣyul = ahen*
my donkey:EL = S:ANP
'It is mine, that donkey.'

(28) *iḏ-i* *netta*
with-1S he
'He is with me.'

(29) *x* *uḡḏi* *iḏ* *ušnikef,* *tawxṛaft = aḏ*
on jackal:EA and hedgehog:EL story:EL = S:PRX
'It is about the jackal and the hedgehog, this story.'

(30) *nešt* *n* *uɛebbiz* *netta*
as.big.as of bull:EA he
'He is a big as a bull.'

The Adverbial Predicate

(31) *ssiha* *nuḵna*
from.here we
'We are from here.'

In example (32) which is a locative the present relevance marker **ham** is obligatory.

(32) *iḵenniwen* *ham* *das*
twins PR:3PL there
'The twins are there.'

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$_i$) and a relative clause whose relativised NP is coreferential with NP$_i$*' (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-umeṛ* *ḥmeḏ* *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) *ḥmeḏ* *a* *y-umṛ-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-umeṛ* *ḥmed* *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-umeṛ* *ḥmed* *leflus*
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-umeṛ* *ḥmed* *leflus*
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) *aṭḡam* *a* *y-umeṛ* *ḥmeḍ* *leflus* *i* *urgaz=ahen*
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 **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 **i-ḡa-n** can be used as well. The verb **ḡ** '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 **g** 'to be', Aspinion, 1953: 128, cf. chapter IV.9. for **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 i-ḡa-n: subject focus of nouns and adjectives

The element **i-ḡa-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 **i-ḡa-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:

(38) *keğ̆i a t̲=i-ḡa-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 t̲=i-ḡa-n argaz*
I REL 3MS:DO=RF-do:P-RF man:EL
'It is me who is a (real) man.'

(40) *kunna a n=i-ḡa-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-haḏ a t=i-ḡa-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) *lmeɣreb̲ mayši u-hen a t̲=i-ḡa-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-ḡa-n ṭwil-in*
you:PL REL 3PL:DO=RC-be:P-RC tall-PL
'You are the ones who are tall.'

(44) *nettaṯa a t=i-ḡa-n ṭwil-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 ll 'to be'

In all clefts based on non-verbal sentences with predicate focus the verb **ll** 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 **lla** is used (cf. IV.9. for **ll** 'to be'). Different from the construction with **i-ḡa-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*
man = S:ANP REL RC-be:P-RC Riffian
'It is that man who is a Riffian.'

(46) *rrifi a ye-ll, (argaz = ahen)*
Riffian REL 3MS-be:P man:EL = S:ANP
'He is a Riffian, (that man.)'

Adjectival predicates

(47) *argaz = ahen a ye-lla-n ṭwil*
man:EL = S:ANP REL RF_be:P-RF tall:MS
'It is that man who is tall.'

(48) *ṭwil-in a lla-n, (irgazen = ihen)*
tall-PL REL be:P-PL (men = PL:ANP)
'He is tall, that man.'

Prepositional predicates

(49) *axyam = ahen a lla g umaras*
house:EL = S:ANP REL be:P in riverbed:EA
'It is that house which is in the riverbed.'

(50) *ya wɛeyyal a lla ɣr-es*
one:M boy:EA REL be:P at-3S
'It is one child which he has.'

(51) *t-ha ay-haḍ a lla ga-s*
F-PRX:S INDEF-PRX REL be:P in-3S
'This is all there is.' (lit. 'this one is that what is in it')

(52) *axyam = ahen a ye-lla-n n ɛaziz*
house:EL-S:ANP REL RF-be-RF of Aziz

‘That is the house which is Aziz’s.’

(53) *netta a ye-lla-n iḏ-i*
he REL RF-be:P-RF with-1S
‘It is he who is with me.’

(54) *iḏ-i a ye-ll, (netta)*
with-1S REL 3MS-be:P (he)
‘He is with me.’

(55) *am netta a ye-ll ḥmeḏ*
like he REL 3MS-be:P Ahmed
‘Ahmed is like him.’

(56) *x uḡḏi iḏ ušnikef a he-ll tawxṛaft=aḏ*
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) *taɛeyyalt a ye-lla-n meḍṛuḇ-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.[152] 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* *aɛebbiz* *nn-es,* *i-siwel* *i* *leḥšam* *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-leqqeṭ* *aḇaw=ahen,* *i-ḡḡ=aṯ* *g* *lǧim* *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* *afeṛṛuž=ahen,* *i-lewᵂ=as* *aḏan* *nn-es* *iy*
3MS-eat:P rooster:EL=S:ANP 3MS-wrap:P=3S:IO intestines of-3S to
isekkawen *n* *uɣižd,* *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 usualy 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 **iffuɣ** 'he went away' (the Perfective is **iffeɣ**).

(4) *i-leww = as = ten* *i* *wqḇay* *a* *y-muqqṛ-in,*
3MS-wind:P = 3S:IO = 3PL:DO to billy.goat:EA REL RF-big-RF
i-ddu = d *g* *ṣṣḇaḥ.* *i-ffuɣ* *fḥal-u,* *g*
3MS-go:A = DC in morning 3MS-go.out:A way-3MS in
ṣṣḇeḥ *i-qqel = d.*
morning 3MS-return:P = DC
'He wound them around the biggest billy-goat and came back in the morning. He went out, in the morning he came back.'

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.

(5) *i-šebbṛ = aḵ* *aḇaw = ahen,* *i-ḡḡ = aṯ* *g* *lğim*
3MS-grab:P = 2MS:IO bean:EL = S:ANP 3MS-do:P = 3MS:DO in pocket
nn-es, *i-dda,* *aḡḏi.*
of-3S 3MS-go:P jackal:EL
'He took the bean, put it in his pocket and left, the jackal.'

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.

(6) *i-ḵšem* *i-weṭṭeṛ* *ilaxrihi,* *g* *lɣaṛ* *g* *uḥfaṛ.* *i-ḇdu*
3MS-enter:P 3MS-stretch:P etc in cave in hole:EA 3MS-begin:A
i-qqṛ = as: *ffuɣ = d* *a ɛemmi* *aḡḏi.*
3MS-say:I = 3S:IO come.out:IMP = DC VOC uncle jackal:EL
'He entered and stretched, in the cave, the hole. He began saying: Come out, jackal.'

(7) *i-kečem* *hamkaḏin,* *i-qqul* *a* *d = i-ffuɣ*
3MS-enter:I like.this 3MS-return:A AD DC = 3MS-go.out:A
'He goes in like this, and comes back.'

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-qqn = as = ten* *i* *uɛebbiz = ahen,* *g* *isekkawen,* *i-ddu* *fḥal-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) *te-qqn = aṯ,* *i-ddu* *fḥal-u* *fsi* *n* *ššɣul* *nn-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) *tawi-n = d* *zerriɛa* *zeg* *ssuq,* *ɛaweḏ* *bb-en = d* *ɛaweḏ,* *ɛaweḏ* *ḡḡ-en*
take:I-3PL = DC seeds from market again take:A = DC again, again make:A-3PL
ɛaweḏ *tagursa,* *ḡḡ-en* *ɛaweḏ* *aḥettaš,* *ww-en* *ɛaweḏ* *awellu.*
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) *ttfahm-u,* *i-ddu* *ḇaḇa* *nn-sen* *a* *xdem*
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) *šeṭṭeḇ* *axyam* *t-ɛelli-t* *dar* *tuḡnaṯ*
wipe:IMP house:EL 2S-go.up:A-2S to *tuḡnaṯ*
'Wipe the house and go up to *tuḡnaṯ* (part of the village).'

The initial verb can also be (**š**/**d**/**ar**) **a** + Aorist. In the following example the use of the non-real markers **š a** is shown.

(13) *u-hen* *alef* *š* *a* *su* *i-ddu* *fḥal-u,* *ya* *ɛayša*

M-S:ANP boar:EL FUT AD [3MS-]drink:A 3MS-go:A way-3MS o Aisha
'That is a boar, it will drink and leave, o Aisha, my daughter.'

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.[153] Notice that the final verb is an Arabic-morphology verb in the Imperfect. Example (15), (16), (17) and (18) are examples from elicition where the Aorist follows an initial (Berber and Arabic-morphology) Perfect(ive) and an Imperfective.

(14) *ma ya ṭṭṣ-aɣ ḥetta ya settn-en iṭan g tɛeddist inu,*
NEG AD sleep:A-1S until AD bark:A-3PL dogs in belly:EA of:1S
berrḥ-en ifulusen g tɛeddist inu, ɣewwṯ-en medden g tɛeddist
call:A-3PL chickens in belly:EA of:1S scream:A-3PL people in belly:EA
inu, i-nehq-u iɣʷyal g tɛeddist 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) *i-ḵšem dar uxyam, i-ḥmu i tɣeṛɣaṛt,*
3MS-enter:P to house:EA 3MS-warm.up:A to hearth:EA
i-siwel i leḥšam nn-es, i-ffuɣ 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) *ṣṣaḏ-u imalḥen, siwl-en i baɛṭ-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 aɛebbiz 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 leqseḇ. taqseḇt hamḵa,*
cover.roof:I-3PL=3MS:DO with reed. reed:EL like.this
i ta-yeṭ hamḵa, i ta-yeṭ hamḵa, i

[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-yeṭ	*hamḵa, i*	*ta-yeṭ*	*hamḵa,*	*i*	*ta-yeṭ*			
F-S:other	like.this and	F-S:other	like.this	and	F-S:other			
hamḵa, i	*ta-yeṭ*	*hamḵa,*	*ḡḡ-en*	*fx-es aḵal.*				
like.this and	F-S:other	like.this	do:A-3PL	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, 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 **ḥetta** and **amḵ a** as in examples (19) and (20). It is not obligatory in these cases.

(19)

netta	*i-tteɣmur*	*ḥetta*	*i-qqul*	*meqquṛ*
he	3MS-grow:I	until	3MS-become:A	big:MS

'He grew until he became big.'

(20)

amḵ	*a*	*ṯ = i-nuɣ,*	*saɛa*	*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, probablity and wish are given in the next examples:

possibility

(23) *wella a d=i-bb lmaqla 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=nɣ-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 šebbṛ-et aqḇay=aḏ, a y=ǧ-et*
o aunt, AD [2S-]grab-2S billy.goat=S:PRX AD 3MS:DO=[2S-]leave:A-2S
dha ɣr-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: mḵi t-ḵešm-et, š a perper,*
3FS-say:P=3S:IO if 2S-enter:P-2S FUT AD [3MS-]fly:A
š a ffeɣ fḥal-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-nn=as:* *a* *ddu=x* *a* *k̲=d=rri-x=ded* *a* *saḥb̲i.*
3MS-say:P=3S:IO AD go:A-1S AD 2MS:IO=DC=return:A-1S=DC:3FS:DO o friend
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-nn=as:* *ha* *nekk* *š* *a* *ddu-x* *a*
3MS-say:P=3S:IO PRES I FUT AD go:A-1S AD
k̲=d=bba-x=ded
2MS:IO=DC=take:A-1S=DC:3FS:DO
'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* *a* *gguz* *ilaxirihi* *g* *lbir,* *š* *a* *d=i-seɛli*
FUT AD [3MS-]go.down:A etc in well FUT AD DC=3MS-raise:A
ḍḍmaɣ *n* *lefqi*
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) *ssḇeɛ* *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* *ḵ = 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* *qeṭṭeɛ* *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. [155] 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) *ar* *a* *ddu-x* *bihabiha* *a* *šš-aɣ* *leḥšam* *nn-es*
FUT AD go:A-1S directly AD eat:A-1S children of-3S
'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) *leqnišṭa = yahen* *d* *a* *rfeɛ,* *d* *a* *rfeɛ,* *d*
box = S:ANP CRT AD [3MS-]lift:A CRT AD [3MS-]lift:A CRT
a *rfeɛ* *ɛišrin* *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 wil certainly carry twenty kilograms.'

(34) *iwa amella, keğ ma ar a ḡḡ-et, š a*
well now:EL, you:MS what FUT AD [2S-]do:A-2S FUT AD
ttru-t ɛaweḏ? a i-nn=as: nekki d a
[2S-]cry:A-2S again well 3MS-say:P=3S:IO I CRT AD
ttrux ḥetta ya ṛẓ-aɣ isekkawen 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 interpretated as a result, is on the same level as the adjective **xḍ̲er** 'be green' which is a state.

(35) *i* *lɛafya* *ne-ssruɣ=at* *s* *isɣaṛen,* *asɣaṛ* *n* *teẓ̲ḡa,*
and fire 1PL-lite:I=3FS:DO with sticks stick:EL of forest:EA
asɣaṛ *i-qqur,* *maši* *xḍ̲er*
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 **deɣya** is used the interpretation is that of 'becoming dry'. The interpretation is that of a resultant state.

(36) *asɣaṛ=ahen* *i-qqur* *deɣya*
stick:EL=S:ANP 3MS-dry:P quickly
'The stick has become dry quickly'

Another example of a resultative verb is **lluẓ̣** '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 **deɣya** '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) *lluẓ̣-ax*
be.hungry-1S
'I'm hungry.'

(38) *lluẓ̣-aɣ* *deɣya*
be.hungry-1S quickly

‘I’ve quickly become hungry.’

The corresponding adjective is a pure state. It cannot be accompanied by the adverb **deɣya** ‘quickly’, e.g.:

(39) **nekki* *ǧiɛan* *deɣya*
I hungry:MS quickly
‘I’m hungry quickly’

Another example is the contrast between the verb **hleḵ** ‘to be sick’ and the corresponding passive participle **meɛdum** ‘sick’. The verb allows for the adverb **deɣya** 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) *aɛeyyal* *nn-es* *i-hleḵ*
boy:EL of-3S 3MS-be.sick:P
‘His child is sick.’

(40b) *aɛeyyal* *nn-es* *i-hleḵ* *deɣya*
boy:EL of-3S 3MS-be.sick:P quickly
‘His child has become sick quickly.’

(41) **aɛeyyal* *nn-es* *meɛdum* *deɣya*
boy:EL of-3S be.sick:PP:MS quickly
‘His child is sick quickly.’

Futhermore 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) *nekki* *meɛdum* *amilla*
I be.sick:PP:MS now:EL
‘I’m sick now.’

(43) **nekki* *helḵ-aɣ* *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 **deɣya** 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 interpretated as a pure state. Compare examples (44) and (45).

(44) *i-ssen* *medden = ihen* *deɣya*
3MS-know:P people = PL:ANP quickly
'He knows those people quickly.'

(45) **netta* *ɛaref* *medden = ihen* *deɣya*
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* *iɣallen*
Iraben surround-3PL = 3FS:DO mountains
'Iraben is surrounded by mountains.' (lit. 'Iraben, mountains surround it')

(47) *iɛṛaḇen* *mḍewwṛ-a* *s* *iɣallen*
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-wṯ = aṯ,* *i-nɣ = at*
3MS-hit:P = 3MS:DO 3MS-kill:P = 3MS:DO
'He hit him, he (has) killed him…'

(49) *lkas* *i-ṛeẓ*
glass 3MS-break:P
'The glass is broken.'

(50) *argaz = ahen* *i-ṛeẓ* *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 habitualy 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-ttiṯu* *dar-i* *yan* *lğmel.*
3MS-say:P = 3S:IO 3MS-go:I to-1S one:M camel
'He said: 'A camel comes to me.'

(52) *ku* *nnhaṛ* *i-ttuṯu = d* *w-ayeṭ* *dar* *lbir = aḏ*
every day 3MS-go:I = DC M-other:S to well = S:PRX
'Every day the other one came to this well.'

(53) *žeḥḥa* *i-ttɛiš* *netta* *i* *yemma* *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) *asɣaṛ = ahen* *xḏer,* *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-qqṛ = asen :* *'a weddi* *nuḵna* *lbeḥriyya g* *lbaṛku* *flani.*
1PL-say:I = 3PL:IO VOC dear we fishermen in ship so-and-so
he-ttaka-t = as *lmeɛlumat ana* *he-lla-t* *xeddam.*
2S-give:I-2S = 3S:IO information where 2S-be:P-2S work:AP:MS
i-qqṛ = aḵ: *aṛa* *lkaḡiṭ.* *ttaka-t = as* *lkaḡiṭ,*
3MS-say:I = 2S:IO give:IMP paper [2S-]give:I-2S = 3S:IO paper
i-tɛayan *ga-s* *l̩l̩ah* *i-ɛawen.*
3MS-look:I in-3S God 3MS:IMPF-help

‘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) *saɛa* *i-berreḥ* *x* *ya* *urgaz,* *u-hen* *a* *s=i-qqeṛs-en.*
then 3MS-call:P on one:M man:EA M-S:ANP REL 3S:IO=RF-slaughter:I-RF
ka-t-semma *i-tmeḍḍay* *tuzzalt* *š* *a*
IMPP-3FS:IMPF-be.called 3MS-sharpen:I knife FUT AD
ṯ=i-ɣṛeṣ.
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) *netta* *i-twala* *lmayta inši.* *medden inši* *g* *lmaqaḇir,*
he 3MS-see:I corpse some people some in graveyard
g *lemqaber* *ttemṛ-en* *lmayta* *iši*
in graveyard bury:I-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 **ka**- 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-žž* *uleṯma-s a* *ddu* *ɣa* *hamḵa* *ši* *ḥaža,*
3MS-let:P sister-3S AD [3FS-]go:A only like.this some thing
lmasafa ynši hamḵa. *i* *netta* *i-tteggez* *x* *uqemmum*

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-šebbeṛ zga-s aqḇay = ahen, te-qqn = aṯ 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 aɣižd = ahen, i-šebbṛ
at night 3MS-return:I to-3MS 3MS-eat:I billy.goat = S:ANP 3MS-grab:P
aḏan = ahen i-tlewwa = as = ten ɛaweḏ
intenstines = S:PRX 3MS-wrap:I = 3S:IO = 3PL:DO again
i uɛebbiz a y-muqqṛ-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 lɣula = yahen te-ffeɣ beṛṛa, 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-aɣ g ṣṣḇaḥ ttaf-aɣ ɣa yaḏan nn-es*
o son, get.up:P-1S in morning find:I-1S only intestines:EL of-3S
mleww-in iḏ isekkawen n uɣižd
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.'

(62) *a mni, kkr-aɣ g ṣṣḇaḥ uf-aɣ ɣa yaḏan nn-es*
o son, get.up:P-1S in morning find:P-1S only intestines:EL of-3S
mleww-in i iṭaṛen 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.'

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:

(63) *ka-de-wqeɛ ilaxirihi lehrawa, i tmeṭṭuṯ 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 iḏ izref i netta i-tett taɣʷlalt=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 š a qleḇ hamḵaḏineṯ 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'.'

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:

(66) *wṯ=ay s leḥzam semm a teqql-ax 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.'

(67) *nqes ši ḥaža zeg leflaḥa=yahen semmen a*
reduce:IMP some thing from crops=S:ANP so.that REL
h-teffɣ-et fḥal-eḵ
2S-go.out:I-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 **ka-**[156] (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) *ma* *dda-n=d* *dariha ḥetta* *xwa-w* *sswasa*
NEG go:P-3PL=DC to.here until leave-3PL:PF Soussis
'They only came here after the Soussis left.'

(69) *ṣṣaḏ-na* *bezzaf* *n* *imalḥen aṭḡam*
fish-1PL:PF a.lot of fish yesterday:EL
'We caught a lot of fish yesterday.'

In example (70a) the Perfect resultative verb presents a state. The verb **wžeḏ** '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 **deɣya** 'quickly' only combines with the Perfect as shown in (70b) and not with the active participle (71b).

(70a) *ḵerz-en* *iḇawen,* *wežḏ-u* *iḇawen,* *wežḏ-u* *iḇawen,*
cultivate:P-3PL beans be.ready-3PL:PF beans be.ready-3PL:PF beans
ḡḡa-n *tixeṛṛuḇan.*
make-3PL fruits:EL

[156] Other preverbal particles such as **š**, **d**, **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) *wežḏ-u* *iḇzaḡen* *deɣya*
be.ready-3PL:PF beans quickly
‘The beans have been quickly cooked.’

(71a) *iḇzaḡen = ihen* *wažḏ-in*
beans = PL:ANP be.ready:AP-PL
‘The beans are cooked.’

(71b) **iḇzaḡen* *wažḏ-in* *deɣya*
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) **deɣya** can be combined with the Perfect while the active participle in example (73) does not allow this adverb.

(72) *nekki* *deɣya* *fhem-t* *lheḍṛa* *nn-es*
I quickly understand-1S:PF speech of-3S
‘I quickly understood his speech.’

(73) **nekki* *deɣya* *fahem* *lheḍṛa* *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**, **ɣa**, **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-tṣalla,* *ka-de-ɛḇeḏ* *lḷah,* *netta* *lla*
mother of-3S 3FS-pray:I 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 lḥebb, n-degg=aṯ g lmeqla=yahen,*
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=aṯ, iwa, netta ka-y-tt-eqla, 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) *leğmula=ihen, ma n=y-uɣu-n ka-y-ḍɛaf-u?*
camels=PL:ANP what 3PL:DO=RC-be.matter:P-RC IMPP-3PL:IMPF-lose.weight-3PL:IMPF
'Those camels, how come they are losing weight?'

In the following example the use of the progressive aspect is shown:

(77) *leḥšam=ihen msaḵen, qqim-en das msaḵen ttaḵṣaṭ-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 hamḵa. ka-y-ṛɛš-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-ssana=at x lebhima nn-es, i-šebbeṛ iḏ-es azref.*
3MS-put:P=3FS:DO on mule of-3S 3MS-grab:P with-3S road:EL
netta ka-y-tlaqa yah tmeɣṛa maǧ-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-lqeṭ* *tafulust* *inši* *n-zeḏq-u*
AD 3MS:DO=3FS-pick.up:A chicken:EL some 1PL:IMPF-end.up-1PL:IMPF
nekki *i* *keğin* *g* *ṯḥešuman*
I and you:MS in embarrasment
'A chicken will pick it up and we will end up being embarrased.'

(80) *d* *a* *ḵ=bb-en* *is-sen* *dar* *uxyam*
CRT AD 2MS:DO=take:A-3PL with-3PL to house:EA
w *i-ʔamn-u* *ga-ḵ*
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) *yaḷḷah* *ne-ṣṣaḏ-u* *a* *saḥbi*
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* *ši* *a* *qqim-et* *dhaḏi* *ḥetta*
NEG need:P=2MS:IO NEG AD [2S-]-stay:A-2S here until
y-fuṯ=l-eḵ, *ḥetta* *i-fuṯ* *lpaṣpuṛ* *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.

(83) *ma ya ṭṭṣ-aɣ ḥetta ya settn-en iṭan g tɛeddist inu,*
NEG AD sleep:A-1S until AD bark:A-3PL dogs in belly:EA of:1S
berrḥ-en ifulusen g tɛeddist inu, ɣewwṯ-en medden g tɛeddist
call:A-3PL chickens in belly:EA of:1S scream:A-3PL people in belly:EA
inu, i-nehq-u iɣʷyal g tɛeddist 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.'

8.2.4. The preverbs š, maš, ɣa, d, ar

The non-real element **a** does not occur before Arabic-morphology verbs[157]. As in the case of the Berber Aorist the preverbal marker **š** adds a nuance of certainty or desire to the non-real Imperfect. [158] 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 **ɣa** 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 iḏ-es, š a y=šš-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 bẓeḏ, š a qeṭṭr-en fx-essen.
FUT AD [3MS-]urinate: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) *mḵi ne-dda ḥetta tferreq-na, š i-ɛiss-u=l-i*
if 1PL-go:P until split-1PL:PF FUT 3PL:IMPF-guard-3PL:IMPF=IO-1S
aḡḏi 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-tɛašṛ-u*
FUT 1PL:IMPF-accompany-1PL:IMPF
'We are going to accompany each other.'

The Arabic koinè form **ɣa** 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, **ɣadi**, is considered unacceptable. In the following example the use of **ɣa** is illustrated.

(87) *saɛa, i-dda argaz = ahen maɛat ɣa y-ṣṣaḍ,*
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-ṣṣaḍ-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-ṣṣaḍ-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 partiple 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** + **ll** precedes the verb.

(91) *nuḵna* *aḡ* *ne-ll* *mašy-in* *daɣr-eḵ* *a* *ɣen=te-ḇṭu-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 **deɣya** 'quickly', for example:

(92) *nettaṯa* *mažž-a* *fsir-sen* *deɣya*
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* *ṭaleɛ*
tomorrow:EL I go.up:AP:MS
'Tomorrow I will go up.'

(94) *alaẓen* *nekki* *haṛeb* *zeg* *lmuṭeɛ = aḏ*
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 **deɣya** 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 **ḇdeḏ** '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* *argaz = ahen* *g* *teggurt*
he stand:AP:MS man:EL = S:ANP in door:EA
'That man was standing in the doorway'

(96) *zeg* *waṯgam* *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) **nuḵna* *ṣaym-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 waṯgam 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 waṯgam nuḵna ntɣima 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) *nuḵna* *n-ṣam* *telt* *eyyam*
we 1PL-fast:P three days
'We have fasted / been fasting three days.'

The active participle of verbs such as **qṛa** '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 **deɣya**, implying a state and not a process (**deɣya** does combine with the Perfective **qṛa**).

(99) *taḇṛat = aḍ,* *nekki* *qaṛi = ha*
letter:EL = S:PRX I read:AP:MS = 3FS:DO
'This letter, I have read it.'

(100) **netta* *qaṛi* *taḇṛat = ahen* *deɣya*
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) *qqima-n* *mašy-in,* *mašy-in,* *mašy-in* *dar* *ḍḍaw = ahen*
stay:P-3PL go:AP-PL go:AP-PL go:AP-PL to light = S:PRX
'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) *aḡ* *lla-n* *zznuz-en* *kawkaw,* *iḇawen,* *lḥummis* *mmelḥ-a,*
PST be:P-3PL sell:I-3PL peanuts beans chickpeas be.salted:PP-FS
iḇawen mmelḥ-in
beans be.salted:PP-PL
'They sold peanuts, beans, salted chick peas, salted beans.'

(103) *lla, netta mestanes iḏ iɣežden u kḏa*
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 = teṯ tamezgiḏa awzeqqur,*
call:I-3PL = 3FS:DO mosque:EL awzeqqur:EL
meḇniyy-a g ya n yaḡer mseddeq x tmezgiḏa.
build:PP-FS in one:M of field:EL give.to:PP:MS on mosque:EA
'They call it the mosque of the *awzeqqur*, it is built in a field that is given to the mosque.'

(105) *wa leḥḇiḇ inu, mḥeššm-a zga-ḵ*
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 tɛeddist. kušši mferreṭ, kušši ḍayeɛ
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.

Berber-morphology	**Meaning**
bare Aorist	consecutive event
particle + Aorist	non-real
Perfective	dynamic / resultative
Imperfective	habitual, iterative and progressive

Arabic-morphology	
Perfect	dynamic / resultative
ka- + Imperfect	habitual, iterative and progressive
(particle +) Imperfect	potential, future, whishes and injunctions
active participle stative	progressive (only some verbs), prospective,
passive participle	stative

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* *tmeṭṭuṯ* *ma* *ɣer-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) *tameṭṭuṯ* *aḵ* *te-ll* *h-tett* *iḇzaḡen*
woman:EL PST 3FS-be:P 3FS-eat:I beans
‘A woman used to eat beans.’

(3) *sspanyuḷ* *aḡ* *i-ll* *ɣr-es* *leflus* *nn-es*
Spaniards PST 3MS-be:P at-3S money of-3S
‘The Spaniards used to have their own money.’

(4) *nuḵna* *aḡ* *ne-ll* *mašy-in* *daɣr-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.

(5) *nya lekm-aɣ daɣr-es aḵ i-ll i-ḵrez*
when arrive:P-1S at-3S PST 3MS-be:P 3MS-plough:P
'When I arrived, he had ploughed.'

Example (6) shows the use of the anterior non-real.

(6) *saɛa aḵ lla-n š a t=šš-en.*
then PST be:P-3PL FUT AD 3FS:DO=eat:A-3PL
'Then they were going to eat it.'

9.2. Relative clauses

The use of **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 **ll** can be used. The full relative form is only used by old people, younger people prefer to use an abbreviation, **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) *nešt n muḥemmeḏ a ye-ll ḥmeḏ*
as.big.as of Mohamed REL 3MS-be:P Ahmed
'Ahmed is as big as Mohamed.'

(8) *imalḥen a ne-ll wakl-in mezyan-in*
fish REL 1PL-be:P eat:PL-PL good-PL
'The fish we have eaten are nice.'

(9) *škun a ye-lla-n daxel?*
who REL RF-be:P-RF inside
'Who is inside?'

(10) *t-an a lla g lbir*
F-REL:S REL be:P in well
'The one who is in the well.'

(11) *iṣɣaṛen=ihen a lla xuḏeṛ ma mezyan-in 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) *amḵ a lla ɣr-es seḇɛa n leḥšam*
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) *zeɛma t-a ye-nwa-n i netta, i tḇurgayezt,*
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 ḥaḏ̣-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 **ll** 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 taɛeyyalt 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 **ll** can only be used to indicate the habitual, for example:

(17) *awellu = ahen a siḏi i-ttill mabayen, mabayen lɛaṛt i lɛaṛt,*
plough = S:PRX VOC Sir 3MS-be:I between between ox and ox
i-ttill g wammas

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 **ll** 'to be' is required for non-verbal predicates which have non-real **a**, for example:

(18) *i muḥemmeḏ i-tḍewwar 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 ll
children of-3S in.front of-2MS in.front of-2MS still FUT AD [3MS-]be:A
mxebbeɛ?
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** + **ll** '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 ll 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) *ll 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 qriḇ da lmeṛṣa, š a ḵ=i-bb ḥettar lbaṛku*
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 take you to the ship.'

9.5. Negation of ll 'to be'

The verb **ll** 'to be' is negated as other verbs (cf. IV.3.4.). Some examples are:

(22) *ma aḡ i-ll ši lkaṛ*

NEG PST 3MS-be:P NEG bus
'There was no bus.'

(23) *taɛeyyalt=ahen ma ar a ll ši ɣliṭ-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 ta n tɣaṭṭ / Story about the goat

aḵ	*te-ll*	*ya*	*tɣaṭṭ*	*g*	*ya*	*teẓḡa*	*yaḵ.*	*ɣr-es tlaṯa n*
PST	3FS-be:P	one:F	goat	in	one:F	forest:EA	isn't.it.	at-3S three of

There used to be a goat in a forest. She had three

leḥšam nettaṯa	*ɣr-es tlaṯa*	*n*	*leḥšam,*	*saɛa*	*ttiṯu*	*a*
children she	at-3S three	of	children,	then	[3FS-]go:I	AD

children, she had three children. She brought

azen = d = te-bb	*haḏiḵ ay*	*a*	*tett-an.*	*saɛa,*	*amḵ*	*a*
3PL:IO = DC = 3FS-take:A	thingy INDEF	REL	eat:I-3PL	then,	when	REL

them food to eat. Then when she goes

ttiṯu	*dar*	*teggurt*	*te-qqṛ = asen:*	*'a*	*wlaḏ-i,*	*a*	*wlaḏ-i,*
[3FS-]go:I	to	door:EA	3FS-say:I = 3PL:IO	VOC	children-1S,	VOC	children-1S

to the door she says to them: 'O my children, o my children

feṯḥ-u = ni	*bḭḇan-i,*	*u*	*tteɛleq*	*fi*	*ṭehṛ-i,*	*w*	*lma*	*fi duqmi,*
open:IMP-PL = 1S:DO	doors-1S	and	food	on	back-1S	and	water	in mouth-1S

open my doors, food is on my back, water is in my mouth,

w	*lqiḥ f*	*qṛun-i,*	*w*	*lma*	*fi*	*duqmi.'*	*saɛa*	*tattḥ-an = as*
and	sprout on	my horns-1S	and	water	in	mouth-1S.	then	open:I-3PL = 3S:IO

the sprouts are on my horns, water is in my mouth,

taggurt.	*takk = asen*	*kušši,*	*ɛaweḏ*	*teqqel*	*ɛaweḏ.*	*amḵ a*
door:EL	[3FS-]give:I = 3PL:IO	everything	again	[3FS-]return:P	again	when REL

The they open the door for her. She gives them everything and goes back. When

teqqel	*a*	*d = te-qqul = d*	*ɛeqqul-en = tet*	*ɣa*	*s*
[3FS-]return:I	AD	DC = 3FS-return:A = DC	recognise:I-3PL = 3FS:DO	only	with

she returns. They recognise her

lheḍṛa nn-es.	*ɛaweḏ*	*teqqel = d,*	*ɛaweḏ*	*te-qqṛ = asen:*	*'a*	*wlaḏ-i,*
speech of-3S	again	[3FS-]return:I = DC	again	3FS-say:I = 3PL:IO	VOC	children-1S,

by her formula. She goes back again and says to them: ‘O my children,

a wlaḏ-i,	*feṯ-u = ni*	*ḇiḇan-i,*	*w*	*tteɛleq*	*fi*	*ṭṭahṛ-i,*
o children-1S	open:IMP-PL = 1S:DO	doors-1S	and	food	on	back-1S

o my children, open my doors, food is on my back,

w	*lma*	*fi duqm-i,*	*w*	*lqiḥ*	*f*	*qṛun-i,*	*w*	*leḥliḇ*	*fi*	*ṭra-y.’*
and	water	in mouth-1S	and	sprout	on	horns-1S	and	milk	in	udder-1S.

water is in my mouth, the sprouts are on my horns, the milk is in my udders.’

tattḥ-an = as	*taggurt. saɛa*	*i-dda = d*	*yan*	*nnhaṛ*	*i-susem*
open:I-3PL = 3S:IO	door:EL then	3MS-go:P = DC	one:M	day	3MS-listen:P

Then they open the door. Then one day a jackal came and listen

fx-es	*aḡḏi,*	*i-refɛ = as*	*lheḍra = ya-hen*	*a*	*he-qqeṛ*	*kaml-a.*
on-3S	jackal	3MS-lift:P = 3S:IO	speech = S-ANP	REL	3FS-say:I	all-3FS

to her. He copied the whole formula she was saying.

saɛa	*i-dda = d*	*i-nna = asen*	*lheḍra = yahen*	*a*	*he-qqeṛ*
then	3MS-go:P = DC	3MS-say:P = 3PL:IO	speech = S:ANP	REL	3FS-say:I

Then he went and told the whole formula

yemma	*nn-sen*	*kaml-a.*	*aɣižd = ahen*	*i-qqṛ = as:*	*‘t-haḏ*
mother	of-PL	all-3FS	billy.goat = S:ANP	3MS-say:I = 3PL:IO	F-S:PRX

their mother was saying. The billy goat said: ‘This

maši yemma.’	*timyanan = ihen*	*qqeṛ-n = as:*	*‘t-ha*	*yemma.’*
NEG mother	little.goats = PL:ANP	say:I-3PL = 3PL:IO	F-S:PRX	mother

is not our mother.’ The litte goats said to him: ‘This is out mother.’

aɣižd = ahen	*i-kker*	*i-xebbeɛ*	*i*	*timyanan = ihen*	*amḵ a*
billy.goat = S:ANP	3MS-get.up:P	3MS-hide:P	and	little.goats = PL:ANP	when REL

The jackal went and hid and the little goats when

feṯ-en	*taggurt*	*i-dda*	*ye-šš = ahen.*	*i-šš = ahen*	*iy*
open:P-3PL	door:EL	3MS-go:P	3MS-eat:P = 3PL:DO	3MS-eat:P = 3PL:DO	and

they opened the door, he went and ate them. He ate them

uɣižd = a-hen	*ye-ɛqel*	*aḡḏi = yahen.*	*saɛa*	*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…

taɣaṭṭ = ahen	*t-ẓeṛ*	*taggurt = ahen*	*meḥlul-a*	*zeg*	*lbuɛd.*
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.

amḵ	*a*	*t = t-ẓeṛ*	*meḥlul-a*	*zeg*	*lbuɛd*	*te-nna*	*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	*kaml-in.*	*saɛa*	*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-ttru	*taɣaṭṭ = ahen.*	*i-dda*	*daɣr-es*	*aɣižd = 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.

te-nna = as	*taɣaṭṭ = ahen:*	*‘ana*	*lla-n*	*ayeṯma-ḵ?’*	*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	*aḡḏi.’*	*te-nna = as:*	*‘d*	*a*	*ɛeql-et*
3MS-eat:P = 3PL:DO	jackal	3FS-say:P = 3S:IO	CRT	AD	[2S-]recognise:A-2S

‘The jackal ate them.’ She said: ‘Will you recognise

aḡḏi = yahen?’	*i-nna = as:*	*‘d*	*a*	*y = ɛeql-ax’.*	*saɛa*
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

te-dda	*dar*	*yan*	*haḏiḵ n*	*iḡḏan.*	*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!’*	*saɛa*	*te-dda*	*daɣ*	*ṛṛaʔis*	*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:*	*ʻu-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

leḥšam	*inu.’*	*saɛa*	*i-nna = as:*	*ʻndhu*	*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-ɣelḇ-en*	*w-ayeṭ*	*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-ayeṭ.’	*saɛa*	*dda-n*	*dar*	*ya*	*wmṛaḥ,*	*saɛa,*	*taɣaṯt*
M-S:other	then	go:P-3PL	to	one:M	open.place:EA	then	goat

eats the other.’ They went to that open place,

ɣr-es	*isekkawen*	*iy*	*uḡḏi*	*ma*	*ɣr-es*	*ši.*
at-3S	horns	and	jackal:EA	NEG	at-3S	NEG

the goat has horns and the jackal does not.

saɛa	*dda-n.*	*i-deḡḡ,*	*zeɛma-ḵ,*	*aḡḏi*	*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

lɣays.	*i-tkewwaṛ*	*ši*	*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*	*taɣaṯt ʻpiiii’. he-tfertaṯ = 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

lɣays	*nn-es.*	*ɛaweḏ*	*i-qqṛ = as:*	*ʻaq*	*a xalti lmeɛza*	*a*	*ḡḡ-ax*	*isekkawen.’*
clay	of-3S	again	3MS-say:I = 3S:IO	wait	VOC aunt goat	AD	do:A-1S	horns

his clay (horns). Then he said again: ‘Wait aunt goat I will make horns.’

ɛaweḏ	*i-tḥaḏaḵ*	*w-iyeṭ*	*i-rekkz = a-hen*	*ɛaweḏ*	*g*	*ḍḍmaɣ*	*nn-es.*	*ɛaweḏ*
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.

i-qqṛ = as:	*‘hala a ɛemmi*	*inu,*	*hala.’*	*ttakk = as*		*‘piiix’*	*te-qqim*
3MS-say:I = 3S:IO	come a uncle	my	come	[3FS-]give:I = 3S:IO		ONM	3FS-stay:P

He said again: ‘Come my uncle, come.’ She hit him again ‘bam’.

ga-s	*t-neqq.*	*i-ḥṣel*	*fx-essen*	*asalles.*	*ẓṛa-n*	*yan*
in-3S	3FS-kill:I	3MS-fall:I	on-3PL	darkness:EL	see:P-3PL	one:M

She killed him. Night fell. They saw a

ḍḍaw	*bɛiḏ.*	*ka-ḥsaḇ = la*	*ḵma-s*	*n*	*tɣaṭt = ahen.*
light	far	IMPP-think = 3FS:IO	brother-3S	of	goat:EA = S:ANP

light far away. She thought it was her brother, the goat.

i	*nihma*	*qqim-en*	*mašy-in*	*dar*	*ḍḍaw = ahen,*	*i*	*nihma*
and	they	stay:P-3PL	go:PP-PL	to	light = S:ANP	and	they

They went towards the light and they found themselves

teffɣ-en = d	*ɛaweḏ*	*dar*	*yan*	*ssaḇɛɛ*	*n*	*iḡḏan,*	*dar*	*yan*	*ssaḇɛɛ*
go.out:I-3PL = DC	again	to	one:M	feast	of	jackals	to	one:M	feast

at a party of jackals. A party of

n	*iḡḏan.*	*saɛa*	*amḵ*	*a*	*h-ṭellel*	*hamḵa*	*ttaf*
of	jackals	then	when	REL	3FS-peek:P	like.this	[3FS-]find:P

jackals. When she peeked like this, she found

ɣer-sen	*iḡḏan*	*ssaḇɛɛ.*	*nna-n = as:*	*‘ḵšem = d*	*a*	*xalti*	*lmeɛza,*	
at-3PL	jackals	feast	say:P-3PL = 3S:IO	enter:IMP = DC	VOC	aunt	goat	

that the jackals were having a party. They said to her: ‘Come in, aunty goat,

ḵšem = d,	*ḵšem = d,*	*ḵšem = d.’*	*saɛa*	*aḵ*	*lla-n*	*š*	*a*	
enter:IMP = DC	enter:IMP = DC	enter:IMP = DC	then	PST	be:P-3PL	FUT	AD	

come in, come in, come in. They wanted to

t = šš-en.	*saɛa,*	*šeṭṭḥ-en*	*i*	*nihma*	*tɣennay-en.*	
3FS:DO = eat:A-3PL	then	dance:I-3PL	and	they	sing:I-3PL	

eat her. They were dancing and singing.

qqṛ-en:	*‘ddaw,*	*ddaw,*	*men*	*lmɛiza*	*mnin*	*bda-w*	*iy*	*uɣižd*	*š*
say:I-3PL	boom	boom	from	goat	when	begin-3PL:PF	and	billy.goat:EA	FUT

They were saying ‘Boom boom, we will start with the goat and leave the billy goat for the

a	*ne-ǧ = aṯ*	*dar*	*ḍḍaw’.*	*katsemma*	*taɣaṭṭ*	*š*	*a*
AD	1PL-leave:A = 3S:DO	to	light	like	goat	FUT	AD

morning. Meaning that they wanted

t = n-ešš	*amilla*	*i*	*uɣižd*	*š*	*a*	*y = ne-žž*	*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

ṣṣḇeḥ.	*te-nna = asen:*	*‘ha*	*nekki*	*š*	*a*	*ffɣ-ax*	*s*
morning	3FS-say:P = 3PL:DO	PRES	I	FUT	AD	go.out:A-1S	with

morning. She said: ‘I will go out.’

ḍḍmaɣ	*inu.’*	*saɛa*	*te-dda*	*t-ḇerrḥ = as*	*i ḵma-s.*	*i*	*ḵma-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

ɣr-es	*ssluqiyyaṯ,*	*ɣr-es*	*ssluqiyyaṯ.*	*saɛa*	*amḵ*	*a*	*i-dda*	*i-ṭleq*
at-3S	greyhounds	at-3S	greyhounds	then	when	REL	3MS-go:P	3MS-release:P

had greyhounds. So he went and released

i	*ssluqiyyaṯ = ihen.*	*i-nna = as:*	*‘ḵšem*	*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

aɛeyyal	*nn-em*	*zɣer-sen.*	*te-ḵšem,*	*te-bb = d*	*aɛeyyal*	*nn-es.*
boy:EL	of-2FS	from-3PL	3FS-enter:P	3FS-take:P = DC	boy	of-3S

me your boy. She went in and brought her boy.

saɛa	*ye-nn = asen,*	*ssluqiyyaṯ = ihen*	*te-nn = asen:*	*‘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.’

saɛa	*šebbṛ-en*	*iḡḏan = ihen,*	*qqim-en*	*tett-an*	*ga-sen.*	*w-a*	*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	*ɣr-es*	*ši*	*n*	*tẓenniṭ,*	*ma*	*lekkm-en = t*	*ši*
NEG	at-3S	NEG	of	tail:EA	NEG	reach:I-3PL = 3MS:DO	NEG

the ones who did not have tails.

ssluqiyyaṯ = ihen.	*i*	*w-a*	*lla*	*ɣr-es*	*taẓenniṭ,*	*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*	*zerdɛen = d.*	*saɛa*	*i-qqṛ = as*
from	tail:EA = S:ANP	overthrow = 3MS:DO:DC	then	3MS-say:I = 3S:IO

them from their tails and threw them on the ground. Then the jackal said

aḡḏi	*i-qqṛ = as*	*i*	*umdakkul*	*nn-es,*	*i-qqṛ = as:*
jackal:EL	3MS-say:I = 3S:IO	to	friend:EA	of-3S	3MS-say:I = 3S:IO

to his friend, he said:

‘a	*byaṭ = leḵ*	*a*	*saḥḇi,*	*t-geṛt-et*	*taẓenniṭ = ahen*	*ɛlabeḵri.’*
o	better = 2S:IO	VOC	friend	2S-cut-2S	tail:EL = S:ANP	early

‘You are lucky that you cut your tail before.’

iwa	*ṣafi,*	*xelli-ṯ = ha*	*temma*	*u*	*ži-ṯ*	*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

ḥetta	*ƶeg*	*xemsinaṯ*	*ṭaleɛ,*	*settinaṯ,*	*seḇɛinaṯ ɛaḏ*	*a*	*d*
until	from	fifties	upwards	sixties	seventies yet	REL	AREL

Only from the fifties onwards, sixties, seventies, the Moroccans

ktaṛ-u	*lemɣarba*	*das.*	*bda-n*	*mažy-in*	*lemɣaṛba*	*ši*
increase-3PL:PF	Moroccans	there	begin:P-3PL	come:PP-PL	Moroccans	some

became numerous. The Moroccans came from

ssihan,	*ši*	*ssihan,*	*ši*	*ssihan,*	*txellṭ-u*
from.here	some	from.here	some	from.here	mix-3PL:PF

here and there, all over the place, they mingled

das	*lemɣaṛba.*	*saɛa*	*kkr-en*	*nnṣaṛa*	*ƶeyyṛ-en,*	*g*	*ddiwanaṯ*
there	Moroccans.	then	get.up-3PL	Christians	tighten:P-3PL	in	borders

the Moroccans. The Christians (Spaniards) started to be more strict in the borders

i	*g…*	*i*	*laṛaf*	*daxel*	*g*	*lemḏina.*	*deḡḡ-an*	*laṛafaṯ,* in
and …	and	riot.police		inside	in	city	do:I-3PL	apprehensions

there, and the riot police was in town. They apprehended people,

tɛayan-en	*lbeṛṛani,*	*a,*	*beṛṛani.*	*beṛṛani*	*kamel*	*aḡ*	*lla-n*
look:I-3PL	outsiders	yes	outsiders	outsiders	all	PST	be:P-3PL

they looked for outsiders. They used to

tšebbaṛ-en = t.	*w-a*	*lla*	*g*	*ddiwana,*	*w-a*	*lla*	*daxel*
grab:I-3PL = 3MS:DO	MS-PRH	be:P	in	border	MS-PRH	be:P	inside

catch all outsiders. The ones at the borders and the ones in the town.

g	*lemḏina.*	*beṛṛani*	*kamel.*	*liyanna*	*w-a*	*lla*	*das*	*ɣer-s*
in	city.	outsiders	all	because	MS-PRH	be:P	there	at-3S

All outsiders. Because the ones who were there

ɣer-s	*lkaḡiṭ.*	*ɣer-s lpaṣi.*	*nuḵna*	*ɣa*	*yan*	*nnhaṛ*	*nuḵna*	*t-šebbṛ = anex*	*lpulis*
at-3S	paper.	at-3S permit	we	only	one:M	day	we	3FS-grab:P = 1PL:DO	police

had papers. They had a permit. One day the police caught us

g	*lɛešṛa*	*n*	*llil,*	*g*	*tnaš*	*n*	*llil.*	*ne-ttill*	*xarğ-in*	*g*
in	ten	of	night	in	twelve	of	night.	1PL-be:I	outside:AP-PL	in

at ten o'clock, twelve o'clock. Were were out in

ssinimaṯ.	*n-ttill*	*g*	*leqhawi,*	*ɛlabeṛṛa,*	*ne-ttil*	*g*
cinema's	1PL-be:I	in	bars	outside	1PL-be:I	in

cinema's and in bars, outside, we used to hang out in the

leqhawi,	*hay.*	*mḵi*	*amella*	*g*	*bellil*	*nya*	*d=ne-ttiṯu*
café's	INTJ.	if	now	in	night	when	DC=1PL-go:I

café's. When we went home at night.

fḥan-na. nya	*d=ne-ttuṯu*	*fḥan-na dar…*	*ne-ttuṯu*	*fḥan-na dar*	*lbaṛku*	*g*
way-1PL when	DC=1PL-go:I	way-1PL to	1PL-go:I	way-1PL to	ship	in

When we went home, to the ship.

bellil,	*g*	*letnaš,*	*g*	*zzuž,*	*g*	*lweḥda,*	*g*	*lɛešṛa,*	*g*	*leḥḏaš,*
night	in	twelve	in	two	in	one	in	ten	in	eleven

at twelve o'clock, at two o'clock, at one o'clock, at ten o'clock, at eleven o'clock,

ka-n-tlaqa-w	*lpulis.*	*ka-n-tlaqa-w*	*lpulis*
IMPP-1PL:IMPF-meet-1PL-IMPF	police	IMPP-1PL:IMPF-meet-1PL-IMPF	police

we ran into the police. We ran into the police.

i-qqṛ=aḵ:	*'aṛa lekwaɣeṭ,*	*keği,*	*ki?*	*šw*	*a*	*he-sskar-et*	*g*
3MS-say:I=2MS:IO	give papers	you	what	what	REL	2S-do:I-2S	in

He would say to you: 'Your papers, you, what are you doing at

ssaɛa=yaḏ	*dhaḏin?*	*ma*	*h-deḡḡ-at?'*	*ne-qqṛ=asen:*	*'a*	*weddi*
hour=S:PRX	here	what	2S-do:I-2S	1PL-say:I=3PL:DO	VOC	well

this time here?' What are you doing? We would say: 'Well,

nuḵna	*lbeḥriyya*	*g*	*lbaṛku*	*flani,*	*he-ttak-at=as*	*lmeɛlumaṯ*
we	fishermen	in	ship	this.and.that	2S-give:I-2S=3S:IO	information

we are fishermen from that and that ship,

ana	*he-lla-t*	*xeddam.'*	*i-qqṛ=aḵ:*	*'aṛa*	*lkaḡiṭ'*
where	2S-be:P-2S	work:AP:MS	3MS-say:I=2MS:IO	give	paper

you would give him information about where you worked.' He would say: 'Your papers.'

ttak-at = as	*lkaḡiṭ*	*i-tɛayan*	*ga-s, llahiɛawen.*	*i-qqṛ = aḵ:*	*‘ay!’*
[2S-]give:I-2S = 3S:IO	paper	3MS-look:I	in-3S bye.bye	3MS-say:I = 2MS:IO	hé

You would give you papers, he looked at them and say goodbye. He would say: hé.

i-qqṛ = aḵ,	*i-qqṛ = aḵ:*	*‘nišan*	*da lbaṛku.’*	*ma*	*ya qqim-et*
3MS-say:I = 2MS:IO	3MS-say:I = 2MS:IO	straight	to ship	NEG	AD [2S-]stay:A-2S

He would say ‘Straight to the ship.’ You would not stay,

ši,	*mḵi*	*i-ẓṛ = aḵ*	*msexxen,*	*t-ḥessl-et*	*bweḥd-eḵ.*
NEG	if	3MS-see:P = 2MS:DO	heated:PP:MS	2S-fall:I-2S	alone-2S

if he saw you were drunk, falling by yourself.

i-qqṛ = aḵ:	*‘ay’,*	*nnda*	*nišan*	*da*	*lbaṛku.’*	*wella*	*a*
3MS-say:I = 2MS:IO	hé	go:IMP	straight	to	ship	or	AD

He would say: ‘Hé, straight to the ship.’

ḵ = i-bb	*netta*	*byedd-u.*	*mḵi*	*te-lli-t*	*qṛiḇ*	*da*	*lmeṛṣa,*
3MS:DO = 3MS-take:A	he	self-3MS	if	2S-be:A-2S	close	to	port

or he would take you there himself. If you were close to the port,

š	*a*	*ḵ = i-bb*	*ḥettar*	*lbaṛku.*
FUT	AD	2MS:DO = 3MS-take:A	until	ship.

he would take you to the ship.

Text 3 Description of living in Iɛṛaben

ɣer-nax	*axyam,*	*axyam*	*n*	*lgayza,*	*ɛlabeṛṛa*	*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	*ssuk̲na,*	*n*	*nnɛas,*	*ayeffeṭ*	*ɣer-nex*	*deryani,*	*tett-an*
of	living	of	sleep	cattle:EL	at-1PL	there	eat:I-3PL

the cattle is over there, eating

alum = ahen,	*ne-takk = asen*	*ad̲les,*	*n-ḥetš = asen*	*ṛṛb̲iɛ*	*g*	*uxedmi.*
hay = S:ANP	1PL-give:I = 3PL:IO	plant	1PL-pluck = 3PL:IO	grass	in	basket.

hay, we give them plants we pluck grass and put it in a basket.

ne-ttawɣ = ah = d	*ne-fk = asen = t*	*tett-an = t.*	*nuk̲na*	*gals-in*
1PL-take:I = 3S:DO = DC	1PL-give:A = 3PL:IO = 3MS:DO	eat:I-3PL = 3MS:DO	we	sit:AP-PL

We take it to them and give it to them to eat. We are sitting

i	*tɣerɣert,*	*ne-ssruɣ*	*lɛafya,*	*n-ḥemmu.*	*i-till*	*lehwa*	*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	*tismeṭ,*	*i*	*uɛebbiz*	*nn-es*	*daryan*	*gum*	*n*	*uḥemmal*	*dar*	*ṭaleɛ,*
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-ḥemmu	*ḥetta*	*netta,*	*tiɣaṭṭen*	*tett-an*	*ɛaweḏ*	*g*	*ḍḍaw,*
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,	*ḍḍaw*	*n*	*lɛafya,*	*i*	*lɛafya*	*ne-ssruɣ = 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

isɣaṛen,	*asɣaṛ*	*n*	*teẓ̄ga,*	*asɣaṛ*	*i-qqur,*	*maši*	*xḏer,*
sticks	stick:EL	of	wood:EA	stick:EL	3MS-dry:P	NEG	green:MS

sticks, sticks from the woods. Dry sticks, not wet ones,

asɣaṛ = ahen	*xḏer*	*i-sskar*	*dduxxan,*	*huwa*	*dduxxan*	*huwa,*
stick:EL = S:ANP	green:MS	3MS-do:I	smoke	he	smoke	he

wet sticks release smoke, and smoke,

ka-y,	*fhem-ti,*	*ka-ye-bqa*	*ɣa*	*ddxaxen.*
IMPP-3MS:IMPF	understand-2S:PF	IMPP-3MS:IMPF-stay	only	smoke

you understand, only smoke remains.

g	*lehwa,*	*nya*	*i-ttill*	*lehwa*	*nya*	*i-ttil*	*tiṣmet,*
in	rain	when	3MS-be:I	rain	when	3MS-be:I	cold

When it rains and when it is cold,

isɣaṛen = ihin	*tazzḡ-en*	*s*	*lehwa,*	*ma*	*h-ṛeqq*	*ši*	*ga-sen*
sticks PL:ANP	become.wet:I-3PL	with	rain	NEG	3FS-light:I	NEG	in-3PL

those sticks become wet from the rain, they will not catch

lɛafya,	*ne-ttawi = d*	*isɣaṛen*	*dar*	*uḥemmal = ahen,*	*u*	*ɣer-nex*
fire	1PL-take:I = DC	sticks	to	high.place = S:ANP	and	at-1PL

fire. We bring the sticks to the high place and we have

aywel,	*aywel*	*hamḵaḏin*	*nya*	*i-ttill*	*lehwa,*	*ne-sskar ga-s*
rack:EL	rack:EL	like.this	when	3MS-be:I	rain	1PL-do:I in-3S

a rack, a rack like this. When it rains we put the sticks there,

isɣaṛen,	*ne-sskar*	*ga-s*	*haḏiḵ*	*iṣettuḥen,*	*ne-sskar*
sticks	1PL-do:I	in-3S	thingy	sticks	1PL-do:I

we put sticks there, we put.

iṣettuḥen = ihen	*ttḵaw-en,*	*liyanna*	*t-tɣima*	*tmen eyyam*	*n lehwa*
sticks = PL:ANP	dry:I-3PL	because	3FS-stay:I	eight days	of rain

dry sticks there. Because for eight days the rain

fx-ennex	*i-ḥeṣṣel,*	*fhem-ti,*	*iwa*	*nuḵna*	*ne-ssruɣ*
on-1S	3MS-fall:I	understand-2S:PF	well	we	1PL-light:I

keeps falling. Understand? Well, we light

lɛafya = yahen,	*n-ḥemmu,*	*aškayqululu,*	*ne-sskar*	*taẓemmiṯ,*
fire = S:ANP	1PL-heat.up:I	whatchamacallit	1PL-do:I	fried.wheat:EL

the fire, we heat up, and we make fried wheat.

ne-ttawi = d	*lḥebb,*	*n-degg = aṯ*	*g*	*lmeqla = yahen,*
1PL-take:I = DC	wheat	1PL-do:I = 3MS:DO	in	frying.pan = S:ANP

We get wheat, put it in a frying pan,

ne-qqely = aṯ,	*iwa, netta*	*ka-y-tteqla,*	*ka-y-tteqla,*
1PL-fry:I = 3MS:DO	well he	IMPP-3MS:IMPF-be.fried	IMPP-3MS:IMPF-be.fried

and we fry it. Well, it is fried. Then we

ne-ttuṯu a	*y = n-ẓeḏ*	*g*	*rrḥa,*	*rrḥa n ufus,*
1PL-go:I AD	3MS:DO = 1PL-grind:A	in	mill	mill of hand:EA

grind it in a mill, a handmill,

hamḵa,	*ne-ẓẓaḏ = aṯ,*	*n-sekkr = as*	*ši*	*ḥaža n lemlaḥ*
like.this	1PL-grind:I = 3MS:DO	1PL-do:I = 3S:IO	some	thing of salt

like this, we grind it, we put a little bit of salt

semmen	*taẓemmiṯ = ahen*	*he-ttill*	*ḥelw-a*	*maši*	*messus-a,*
so.that	fried.wheat = S:ANP	3FS-be:I	sweet-FS	NEG	insipid-FS

in it so that the fried wheat is sweet and not insipid.

away,	*i*	*nuḵna*	*ne-ẓẓaḏ,*	*ɛaweḏ*	*ne-ttawi = d*	*ḍḍra,*	*ne-ẓẓaḏ = at*	*g*
well	and	we	1PL-grind:I	again	1PL-take:I = DC	corn	1PL-grind:I = 3FS:DO	in

Well, and we grind it. We also bring corn, we grind it

rrḥa = yahen	*n*	*ufus.*	*nya*	*t = ne-ẓẓaḏ.*	*yemma*	*te-sskar*
mill = S:ANP	of	hand:EA	when	3FS:DO = 1PL:grind:I	mother	3FS-do:I

in that handmill. When we grind it my mother makes

taftirt,	*taftirt*	*n*	*ḍḍra,*	*te-ḡḡ = anax*	*aḥelḥul*	*n*	*ḍḍra,*
bread	bread	of	corn	3FS-do:A = 1PL:DO	porridge:EL	of	corn

bread, corn bread. She makes corn porridge

te-ḡḡ = anax,	*aškayqululu,*	*aɣṛum*	*n*	*ḍḍṛa = yahen,*	*iwa*
3FS-do:A = 1PL:DO	whatchamacallit	bread:EL	of	corn = S:ANP	well

and she makes bread from the corn. Well,

nuk̲na	*ka-n-sir-u*	*n-tett*	*ɛawed̲.*
we	IMPP-1PL:IMPF-continue-1PL:IMPF	1PL-eat:I	again.

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 morphlogy, 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 ḍ ɛ f g ǧ ɣ h ḥ k l m n p q r ṛ s ṣ š t ṭ w x y z ẓ ž ʔ

b

b *bb / bb / ttawi* 'to take' (trans) B

bb *baḇa* 'father' B

bd *lbidu - lbiduwaṯ* Dim. *abdidu - ibdidwen* 'bucket' C

bd *lebdu* F. *lbidaya* 'beginning' A

bd *ḇdu / ḇda / ttaddu* 'to begin' (trans) B VN *lebdu*

bdd *bdeḏ / bdeḏ / ttaddeḏ* 'to stand up, remain, cease' (intr) B cf. wqf 'to stand' Caus. *ssebdeḏ / sseḇdeḏ / sseḇdaḏ* 'to let, make stand up' (trans) B

bdɛ *lbedɛa n uṭaṛ - lebḏaɛi n uṭaṛ* 'calf of the leg' A

bdk *aḇeddiḵ - iḇeddaḵ* Dim. *aḇdideḵ - iḇdidḵen* 'almost mature rooster' B

bdl *beddel / beddel / tbeddal* 'to put on, trade, exchange' (lab) B Pass *tbeddel* PP *mbeddel / mbeddla / mbeddlin*

bdn *buḏen* 'long strings of cooked dough' A

bdrhm *budrihem - budrihmaṯ* 'small bird' A

bdyn *budyun - budyunis* 'grey wrasse' S

bɛ Pass *tḇaɛeṯ* ~ *nbaɛeṯ* PP *mebyaɛ / mebyaɛa / mebyaɛin* cf. **znz**

bɛbš *abeɛbuš - lebɛabeš* Dim. *abɛibeš - ibɛibšen* F. *tabeɛbušt* Dim. *tabɛibešt - tibɛibšan* 'dung beetle' C

bɛd *beɛɛḏ / beɛɛeḏ / tbeɛɛaḏ* 'to go away' (trans) B

bɛd *bɛiḏ / bɛiḏ-a / ḇɛiḏ-in* 'far' A

bɛd *lbuɛd* ‘farness’ A

bɛṛ *beɛɛaṛ / beɛɛaṛ / tbeɛɛaṛ* ‘to shit’ (intr) B VN *tabɛaṛt*

bɛš *aḇeɛɛiš - iḇeɛɛaš* Dim. *aḇɛiɛeš* F. *taḇeɛɛišt - tiḇeɛɛašan* ‘lamb’ B

bɛṭ *beɛṭ* ‘some’ E.g. *beɛṭ n medden* ‘some people’ A

bf *lbuf - lbufaṯ* ‘intestine’ A

bɣ *bɣa / ibɣi* ‘to love’ (trans) A E.g. *ka-ibɣi-ha* ‘He loves her.’

bɣḍ *bɣeḏ / ibɣeḏ* ‘to be jealous’ (intr) A PP *mebɣuḏ* ~ *mebɣaḏ / mebɣuḍa* ~ *mebɣaḍa / mebɣuḏin* ~ *mebɣaḏin*

bɣl *bubɣel* ‘locust’ A

bɣl *lbeɣli* ‘mortar’ A

bgr *lbuḡira - lbuḡiraṯ* ‘fishnet for catching bogue fish’ A

bhdl *behdel / behdel / tbehdal* ‘to humiliate’ (trans) B

bhm *lebhima - lebhayem* ‘female mule’ A

bhw *aḇhaw* ‘type of plant’ B

bḥ *beḥḥa - beḥḥaṯ* ‘kiss’ A

bḥr *abeḥḥur - ibeḥḥuren* ‘big wave’ B

bḥr *abeḥri - lbeḥriyya* F. *tabeḥriṯ* ‘fisherman’ C

bḥr *lebḥar - lebḥura* ~ *leḇḥur* ‘sea’ A

bḥṭ *mbheṭ / imbheṭ* ‘to astonished’ (intr) A Pass *teḇheṭ* PP *mebhuṭ / mebhuṭa / mebhuṭin*

bk Caus *bekki / bekka / tbekkay* ‘to make cry’ (trans) B PP *mbekki / mbekkya / mbekkin* See **tr** for non-derived verb.

bk *bbuk / bbuk / tbakka* ‘to explode’ (intr) B Caus *ssḇuk / ssḇak / ssḇakka* ‘to make explode’ (trans) B

bkk *aḇaḵiḵ - iḇaḵiḵen* F. *taḇaḵiḵt - tiḇaḵiḵan* ‘vagina’ B

bkr *beḵri - beḵriyyin* F. *beḵriyya* ‘early’ A

bkr *lbaḵur* Unity F. *taḇaḵurt - tiḇaḵura* Augm. *aḇaḵur* ‘early fig’ (These are the first figs in the tree, they are ripe in May/June.) C

bkṛ *bekkeṛ / bekkeṛ / tbekkaṛ* ‘to leave early’ (intr) B PP *mbekkeṛ / mbekkṛa / mbekkṛin*

bkw *taḇekkiwt - tiḇekkiwan* ‘worm’ Augm. *aḇekkiw* B

bl *lbal* ‘mind’ E.g. *rri lbal nneḵ* ‘concentrate’ A

bḷbḷ *beḷbeḷ / beḷbeḷ / tbeḷbaḷ* ‘to have sex (animals)’ (lab) B PP *mbeḷbeḷ / mbeḷbḷa / mbeḷbḷin*

blǧ *lbelǧ - leḇlaǧ* ‘lock’ A

blɛ *yah lbelɛa* ‘many’ E.g. *yah lbelɛa n temɣaṛan* ‘many women’ A

blɛṣ *abelɛuṣ - ibelɛuṣen* ‘kind of coucous’ B

blɣ *lbelɣa - leblaɣi* ‘Moroccan leather shoe’ A

blɣm *lbelɣem - leblaɣem* ‘gums’ A

blrž *lbellarež* ‘heron’ A

blṭ *aḇelluṭ - leblaleṭ* Coll. *lbelluṭ* F. *taḇelluṭ - tiḇelluṭan* ‘chestnut’ There are two types: *aḇelluṭ n yalef* which is bitter and *aḇelluṭ n tasaft* which is sweet. B

blw *lbelwa - lbelwaṯ* ‘pride’ A

bmb *lbumba - lbumbaṯ* ‘pump’ E.g. *lbumba n waman* ‘waterpump’ A

bmn *lbimen* Unity F. *taḇiment* ‘type of tree’ Used for making tools and sticks. C

bn *lbinu* ‘wine’ A

bn *lebni* ~ *lbina* ‘building’ A

bn *ban / iḇan* ‘to appear, seem’ (intr) A Pass *tḇaneṯ* AP *bayen / bayna / baynin*

bn *beyyen / beyyen / tbeyyan* ‘to show’ (trans) B PP *mbeyyen / mbeyyna / mbeyynin*

bn *bnu / bna / bennu* ‘to build’ (trans) B Pass *tteḇna* PP *meḇni / meḇneyya / meḇniyyin*

bnk *lbanka - lbankaṯ* ‘bank’ A

bnks *taḇnaḵsa - tiḇnaḵsiwan* ‘The top of the root of the dwarf fan palm’ B

bnn *lbanan* Unity F. *taḇanant - tiḇananan* ‘banana’ C

bnṭ *buniṭu* ‘bonito (fish)’

bny *lbennay - lbennaya* ‘mason’ A

bnyḍr *benyaḏur - benyaḏuraṯ* ‘swim pants’ A

bqɛṣ *buqɛaṣ* ~ *iḇuqɛaṣen* Unity F. *tabuqɛaṣt - tiḇuqɛaṣan* Augm. *aḇuqɛaṣ*‘unripe fig’ B

bqq *lebqiqa - lebqiqaṯ* ‘moralla (fish)’

br *lburi - lbureyyaṯ* ‘mullet (fish)’

br *lber* ‘mainland’ A

br *lbir - lebyur* ‘well’ A

bṛ *taḇṛat - tiḇṛaṯan* ‘letter’ B

br *berri / ḇerra / tḇerray* ‘to exculpate’ (trans) B

br *tḇerra / itḇerra* ‘to find innocent, to clear’ (intr) A

brbnṭṛ *aḇuṛi aḇuneṭṭaṛ - aḇuṛi iḇuneṭṭaṛen* ‘type of flying fish’

brd *berreḏ / berreḏ / tḇerraḏ* ‘to make cold’ (trans) B Pass *tḇerrḏeṯ* PP *mberreḏ / mberrḏa / mberrḏin*

brd *ḇreḏ / iḇreḏ* ‘to become cold’ (intr) A AP *bareḏ / barḏa / barḏin*

brddw *aḇerdaddiw - iḇerdaddiwan* F. *taḇerdaddiwt - tiḇerdaddiwan* ‘frogspawn’ B

brdɛ *lberdaɛ - lebradeɛ* ‘saddle’ A

brdzz *aburdezizz - iburdezizzen* ‘beetle’ B

brgg *lbergag - lbergaga* ‘traitor’ A

brɣz *beryez / beryez / tberyaz* ‘to swap’ (trans) B Pass *tberɣzeṯ* PP *mberyez / mberɣza / mberɣzin* VN *ttberyiz* E.g. *tasa y aḏ tberyzeṯ s tayeṭ* ‘This cow has been

swapped with the other.’

brk *lbaṛku - lebṛakus* Dim. *lebṛiku - lebṛikuwaṯ* ‘big ship’ A

brq *aḇerruq - iḇerruqen* ‘big eye’ B

brq *berreq / berreq / tḇerraq* ‘to stare’ (intr) B E.g. *iberreq gas* ‘He stared at him.’

brq *breq / ibreq* ‘to shine’ (intr) A

brr *aḇerrar - iḇerraren* ‘rope to tie a bunch of wood on the back’ B

brr *aḇerru - iḇerriwen* ‘grasshopper’ B

brr *aḇrir* ‘road’ E.g. *šebbeṛ aḇrir* ‘hit the road’ B

brtɛyš *berreṯɛayša* ‘kind of fig’ A

brč *burraču - burračus* ‘drunk’ S

bry *lbriya - lberyaṯ* ‘corn on the foot’ A

brzx *lberzax* ‘honeycomb’ A

brn *lberrani* ‘outsiders’ A

bṛğ *lbuṛğ - lbuṛğaṯ* Dim. *lbṛeyyež - lebṛižaṯ* ‘fortress’ A

bṛk *lbaṛaḳa - lbaṛaḳaṯ* ‘blessing’ A

bṛk *lbuṛka - leḇṛaḳ* ‘duck, pond’ A

bṛk *taḇeṛṛeḳt - tiḇeṛṛeḳṯan* ‘ewe’ B

bṛm *beṛṛem / beṛṛem / tbeṛṛam* ‘to spin’ (trans) B Pass *tbeṛṛmeṯ* PP *mbeṛṛem / mbeṛṛma / mbeṛṛmin* E.g. idiomatic *mbeṛṛem i lwext* ‘to be smart’

bṛn *lbeṛṛani - lbeṛṛaniyyin* F. *lbeṛṛaniyya* ‘stranger’ A

bṛn *lbeṛṛani* Dim. *lebṛini* ‘strong wind from the sea’ The diminutive is a small storm A

bṛn *taḇeṛṛant - tiḇeṛṛanan* Dim. *taḇṛiṛent - tiḇṛiṛnan* ‘kind of fig (tree)’ B

bṛq *lebṛaq* Unity F. *lberqa* ‘lightning’ A

brḥ *berreḥ / berreḥ / tḇerraḥ* ‘to call’ (intr) B Followed by indirect object pronoun.

bṛqqn *lbeṛquq* Unity F. *taḇeṛquqt - tiḇeṛquqan* Augm. *aḇeṛquq* ‘prune’ C

bṛṛ *beṛṛa* ‘outside’ A

bṛṣ *lebṛuṣi - lebṛuṣiyyaṯ* ‘fine’ A

bṛwṭ *lbeṛwiṭa - lebṛaweṭ* ‘wheelbarrow’ A

bṛy *aḇeṛṛey - iḇeṛṛeyen* ‘ram’ B

bṛʔ *baṛaʔa - lbaṛaʔaṯ* ‘innocent (person)’ A

bs *bussa - bussaṯ* ‘kiss’ E.g. *išebbɛ as bussaṯ* ‘He gave her a lot of kisses.’ A

bs *bas / ibus* ‘to kiss’ (trans) A

bs *bus / bus ~ bas / tbus* ‘to kiss’ (trans) B

bss *lbasus* Unity F. *taḇasust - tiḇasusan* ‘unripe fig’ B

bsṭm *lbesṭem - lebsaṭem* ‘women’s wallet’ A

bṣl *leḇṣel* Unity F. *taḇṣelt - tiḇeṣlan* Augm. *aḇeṣlun ~ aḇṣel* ‘onion’ C

bṣl *ṭṭeḇṣil - ṭṭḇaṣel* Dim. *ṭṭḇiṣel - ṭṭḇiṣlaṯ* ‘dish’ A

bṣṭ *taḇṣaṭṭ - tiḇṣaṭan* Dim. *taḇṣeyyeṭ - tiḇṣiṭan* ‘mat’ B

bsnn *lbusnan* Unity F. *taḇusnant* ‘type of fish’

bṣyd *aḇuṣeyyaḏ - iḇuṣeyyaḏen* F. *taḇuṣeyyatt - tiḇuṣeyyaḏan* ‘type of snake’ B

bṣyḥ *aḇuṣayḥa - iḇuṣayḥen* ‘type of (venomous) spider’ B

bšṛ *lbašaṛ* ‘people’ A

bšṛ *lebšaṛa* ‘reward (for finding something)’ A

bš *l̥baššˑ* ‘sail’ A

bšbl *bušbel* Unity F. *taḇušbelt* Augm. *abušbel* ‘mushroom’ B

bškr *abušaḵir - ibušaḵiren* ‘white caterpillar’ (lives in dung) B

bt *lbiṯ - leḇyuṯ* ‘room’ A

btll *aḇuṭlal - iḇuṭlalen* ‘hump’ B

btlm *biṯelma - biṯelmaṯ* ‘toilet’ A

btr *lbatariyya - lbatariyyaṯ* ‘battery of a phone’ A

btr *lbatri - lbatriyyaṯ* ‘battery (of a car)’ A

btrl *lbitrul* ‘petroleum’ A

btx *lbettix* Unity F. *taḇettixt - tiḇettixan* Augm. *aḇettix* ‘mellon’ C

bṭ *lbuṭa - lbuṭaṯ* ‘boot’ A

bṭ *lbuṭa - lebwaṭ* ‘butagas cylinder’ A

bṭ *ḇṭu / ḇṭa / taṭṭu* ‘to share’ (lab/trans.) B (For older people this verb is labile, for young people it is transitive.) E.g. *talqimt teḇṭa* ‘The bread is divided.’ *neḇṭa i baɛṭiyaṯna* ‘We have divided it among each other.’

bṭḥ *taḇuṭaḥt - tiḇuṭaḥan* ‘vertical wooden lock’ B

bṭl *baṭel* ‘free’ A

bṭl *lbaṭil - lebwaṭel* ‘boat’ This noun has feminine agreement, e.g. *lbaṭil mezẓiṯ* ‘The small boat.’ A

bṭn *lbiṭun* ‘concrete’ A

bṭn *taḇeṭṭant - tiḇeṭṭanan* ‘sheepskin’ B

bṭṭ *lebṭaṭa* Unity F. *taḇaṭaṭ - tiḇaṭaṭan* Augm. *aḇaṭaṭ* ‘potato’ C

bṭy *lbuṭṭeyya - lbuṭṭeyyaṯ* ‘barrel’ A

bw *aḇaw - iḇawen* F. *taḇawt - tiḇawṯan* ‘bean’ B

bwl *taḇewwalt - tiḇewwalan* ‘bladder’ B

bxl *bxil / bxil-a / bxil-in* ‘stingy’ A

bxms *buxemsa* ‘type of fish (Mullus argentinae)’ A

bxn *bexxannu* F. *tabexxannuṯ - tibexxannuṯan* ‘type of plant’ B

byɛšry *lbeyyaɛšerray - lbeyyaɛinušerrayin* F. *lbeyyaɛaušerraya* ‘merchant’ A

byṭ *aḇeyyuṭ - iḇeyyuṭen* Dim. *aḇwiḇeṭ - iḇwiḇṭen* F. *taḇeyyuṭ - tiḇeyyuṭan* Dim. F. *taḇwiḇeṭ - tiḇwiḇṭan* ‘white one’ B

byṭ *beyyeṭ / beyyeṭ / tbeyyaṭ* ‘to whitewash’ (trans) B Pass *tbeyyṭeṯ* PP *mbeyyeṭ / mbeyyṭa / mbeyyṭin*

byṭ *byeṭ / beyṭ-a / buyeṭ* ‘white’ Dim. *bwiḇeṭ / bwiḇṭ-a / bwiḇṭ-in* ‘somewhat white’

byx *lbyixa - lbyixaṯ* ‘old woman’ A

byx *lbyixu - lebyixus* ‘old man’ A/S

bz *lbaz - lbizan* ‘hawk’ A

bẓḍ *ḇẓeḏ / ḇẓeḏ / ttaẓẓeḏ* ‘to urinate’ (intr) B

bzf *bezzaf* ‘many’ A

bzg *ibzaḡen* ‘cooked beans’ B

bzg *ḇzeḡ / ḇzeḡ / tazzeḡ* ‘to swell, become wet’ (intr) B Caus. *sseḇzeḡ / sseḇzeḡ / sseḇzaḡ* ‘to make wet’ (trans) B E.g. *iḇezg as aṯebban* ‘His trousers became wet.’ cf. **fzg** for Pass. and AP.

bzw *aḇziw - iḇziwen* F. *taḇziwt - tiḇziwan* ‘piece of meat’ B

bzm *lebzim - lebzayem* Dim. *lebzeyyem - lebzimaṯ* ‘buckle’ A

bzn *lbezzuna - lebzazen* Dim. *lebzizna - lebziznaṯ* Augm. *aḇezzun* ‘human breast’ A

bẓṛ *liḇẓaṛ* ‘pepper’ A

bžɣṭ *bežɣeṭ / bežɣeṭ / tbežɣaṭ* ‘to mumble’ (Deaf people and young childerns talk) (intr) B VN *tbežɣiṭ* E.g. *itbežɣaṭ, baqi ma itṣeṛṛaḥ lheḏra* ‘He mumbles, he still does not speak correctly.’

bžq *lebžuq* Dim. *lebžeyyeq* ‘red seabream’

bžw *aḇžaw - iḇžawen* ‘small bird, chicken’ B

č

čkḍṛ *čikaḏuṛ* ‘bottle part for pouring water out of the boat’ B

čkt *čakita - čwaket* ‘coat’ A

čmn *čimineyya - čimineyyaṯ* ‘chimney’ A

čp *čappu - čappuwaṯ* ‘hat’ A

čpy *čapeyya - čapeyyaṯ* ‘squid’ A

črg *čerreg / čerreg / tčerrag* ‘to tear’ (lab) B Pass *tčerrgeṯ* PP *mčerreg / mčerrga / mčerrgin*

čṛɣ *čaṛɣu - čaṛɣus* Dim. *čṛiɣu* ‘sparidae / sea bream’ A/S

čṛqn *čeṛqun - čṛaqen* ‘dirt on the skin’ A

ččṛ *čičaṛṛu* ‘green pea’

čwčw *ačawčaw a ykeḥlin - ičawčawen a ykeḥlin* ‘nightingale’ B

čwčw *ačawčaw - ičawčawen* ‘(small) bird’ B

d

d Imp. *nda / ddu / dda / ttuṯu ~ ttiṯu* ‘to walk’ (intr) B The Imperative is irregular. see **mšy** and **mžy** for AP.

dḍḍ *ḏeḍḍ / iḏeḍḍ* ‘to oppose’ (trans) A

dbbn *ddḇiḇen* F. *ddḇiḇna* ‘small fly’ A

dbɣ *debbeɣ / debbeɣ / tdebbaɣ* ‘to weed’ (trans) B Pass *tdebbɣeṯ* PP *mdebbeɣ / mdebbɣa / mdebbɣin* VN *ttedbiɣ* B

dbḥ *ddbiḥa* - *ddḇiḥaṯ* ‘sacrifice’ A

dbz *ddebza* - *ddebzaṯ* Augm. *adebbiz* ‘punch’ A

dbz *lemdaḇza* - *lemdaḇzaṯ* ‘fight’ A

dbz *debbez / debbez / tdebbaz* ‘to hit’ (trans) B

dbz *tdaḇez / itdaḇez* ‘to fight’ (intr) A PP *metdaḇez / metdaḇza / metdaḇzin* E.g. *ka-ytdabzu i baɛṭiyaṯem* ‘They fight each other.’

ddg *adideḡ* - *ideḡdḡen* ‘(wooden) pounder’ B

dɛ *lmudaɛi* - *lmudaɛyin* ‘plaintiff’ A

dfd *difidi* - *difidis* ‘DVD’ S

dfɛ *lmedfeɛ* - *lemdafeɛ* Dim. *lemdifeɛ* - *lemdifeɛ* - *lemdifɛaṯ* ‘canon’ A

dfɛ *dafeɛ / dafeɛ / tdafaɛ* ‘to defend’ (intr) B E.g. *idafeɛ xfes* ‘He defended him.’

dfɛ *dfeɛ / dfeɛ / ddfeɛ* ‘to push’ (trans) B Pass *ndefɛeṯ* PP *medfuɛ / medfuɛa / medfuɛin*

dfl *aḏfel* ‘snow’ B

dfl *taḏafalt* ~ *tadafalt* ‘kind of ivy’ B

dfn *lemdafna* - *lemdafnaṯ* ‘fight’ A

dfn *tdafen / itdafen* ‘to fight’ (intr) A PP *metdafen / metdafna / metdafnin*

dfṛ *ddfaṛ* - *ddfuṛa* ‘back rope of a saddle’ A

dftṛ *ddefṭar* - *ddfaṭer* ‘notebook’ A

dɣ *iḏeɣ* - *iḏɣen* ‘heap of grain’ B

dgdg *deḡdeḡ / deḡdeḡ / tdeḡdaḡ* ‘to crush’ (trans) B

dɣṣ *aḏɣeṣṣ* ‘colostrum’ B

dhb *ddheḇ* - *dduhban* Dim. *dheyyeḇ* ‘gold’ A

dhq Pass *ndehqeṯ* PP *medhuq / medhuqa / medhuqin* ‘to pound’

dḥš *ddḥeyyeš* - *ddḥišaṯ* F. *ddḥiša* ‘foal’ A

dḥs *deḥḥes / deḥḥes / tdeḥḥas* ‘to be crowded’ (trans) B Pass *tdeḥḥseṯ* PP *mdeḥḥes / mdeḥḥsa / mdeḥḥsin*

dk *taḏeḳt* ‘type of plant’ B

dkl *amdakkul* - *imdukkal* ~ *imdakkulen* F. *tamdakkult* - *timdukkalan* ‘friend’ B

dkṛ *ddikuṛ* - *ddikuṛaṯ* ‘decoration’ A

dkr *ddḳeṛ* - *ddḳuṛa* Dim. *ddḳeyyeṛ* - *ddḳiṛaṯ* ‘male’ A

dlg *dleḡ / dleḡ / ddleḡ* ‘to rub’ (trans) B PP *medluḡ / medluḡa / medluḡin* VN *ddliḡ*

dlḥ *ddellaḥ* Unity F. *tadellaḥt* - *tidellaḥan* Augm. *adellaḥ* ‘watermelon’ C

dlm *ddlem* - *ddluma* F. *tadlemt* ‘type of tree’ C

dls *aḏles* ‘plant - kind of’ B

dm *aḏem - iḏammen* ‘blood’ B

dm *lğḏam* ‘elephantiasis’ A

dm *liḏam* ‘ransid butter’ A

dm *dam / idum* ‘to last’ (intr) A

dml *demmala - ddmamel* Dim. *ddmimla - ddmimlaṯ* ‘hump’ A

dmlž *ddemliž - ddmaležˇ* Dim. *ddmileˇž* ‘bracelet’ A

dmm *aḏmam - iḏmamen* Unity F. *taḏmamt - tiḏmaman* Dim. *taḏmeyyemt* ‘cherry’ B

dmn *ddemna - ddmani* Dim. *ddmina* ‘big field’ A

dmnḍ *dumanḍa / idumanḍi* ‘to command or order’ (intr) A PP *mdumanḍi / mdumanḍya / mdumanḍin*

dn *aḏan - iḏannen (wa-)* F. *taḏant - tiḏanan (ta-)* ‘intestines, guts’ B

dn *ddin - ddyun* ‘debt’ A

dn *ddin - l?adyan* ‘religion’ A

dn *l?iḏen* ‘permission’ A

dn *taḏunt - tiḏunan* ‘fat’ B

dn *dden / idden* ‘to call for prayer’ (trans) A

dn *denni / denni / tdennay* ‘to blow the fire’ (trans) B

dnfr *ddenfir - ddnafer* ‘dolphin’ A

dny *ddenya ~ ddunya* ‘world’ A

dr *tiḏert - tiḏran (ti-)* ‘ear’ B

dr *dder / dder / tedder* ‘to live, be alive’ (intr) B See **ḥy** for AP.

dr *ḏri / ḏra ~ ḏri / ddray* ‘to pass’ (intr) B

drb *aḏerraḇ - iḏerraḇen* ‘small stone’ B

drbl *ddrabel* ‘clothes’ A

drdb *dderdiḇ - ddrdeḇ* ‘pounding (with feet)’ A

drdb *derdeḇ / derdeḇ / tderdaḇ* ‘to stamp with feet, to be used’ (intr) B PP *mderdeḇ / mderdba / mderdbin* VN *dderdiḇ* E.g. *laṭṭa y ahen mderdba* ‘That bottle has been used.’

drɛ *ddreɛ - ddruɛa* Dim. *ddreyyeɛ - ddriɛaṯ* ‘arm’ A

drɛ *derreɛ / derreɛ / tderraɛ* ‘to embrace’ (trans) B Pass *tderrɛeṯ* PP *mderreɛ / mderrɛa / mderrɛin* VN *tedriɛa - tedriɛaṯ* E.g. *ma nessen šk a t iderrɛen* ‘We do not know who embraced her.’

drgl *dergel / dergel / tdergel* ‘to roll’ (lab) B Pass *tdergleṯ* PP *mdergel / mdergla / mderglin*

drq *derreq / derreq / tderraq* ‘to hide’ (trans) B PP *mderreq / mderrqa / mderrqin*

drs *ladris - ladrisaṯ* ‘address’ A

drs VN *ddras* Augm. *aderrus* ‘big wheat heap’

drč *driču - dričus* ‘sea border between Morocco and Spain’ A

drwš *ddriweš - ddraweš* ~ *ddriwšin* F. *ddriwša* ‘poor person’ A

dry *ddurriya - durriyaṯ* ‘descendants’ A

ds *aḏas - iḏasen* ‘support beam’ B

dsk *ddisku - ddiskus* ‘song’ A/S

dšṛ *ddšeṛ - ddšuṛa* Dim. *ddšeyyeṛ - ddšiṛaṯ* ‘village’ A

dw *ddwa* ‘medicine’ A

dwṛ *taḏewwaṛt* ‘small intestine of goats’ B

dwss *ddawses - ddawsasa* F. *ddawseyya* ‘squeaker’ A

dwss *dawses / dawses / tdawsas* ‘to reveal, to blab’ (intr) B *idawses fxes* ‘He blabbed about him/her.’

dxl *daxel* ‘inside’ A

dxl *ddexla* ~ *dduxla - dduxlaṯ* ‘entrance’ A

dxl AP *daxel / daxla / daxlin* ‘to enter’ cf. **kšm**

dxl Pass of Caus *ddexxleṯ* PP *mdexxel / mdexxla / mdexxlin* ‘to enter’ cf. **kšm**

dxn *aduxxan - iduxxanen* F. *taduxxant - tiduxxanan* ‘chimney’ B

dxn *dduxxan - ddxaxen* ‘smoke’ A

dyr *ddayr* ‘front rope of a saddle’ A

dz *ddez / ddez / teddez* ‘to pound (beans)’ (trans) B see *dhq* for Pass and PP

dzr *adezzar - ddzazer* Dim. *adzizer - idzizren* F. *tadezzart - tidezzaran* Dim. *tadzizert - tidzizran* ‘a striped red and white cloth cloth which women wear around their middle’ B

ḍ

ḍb *ḍḍubb - ḍḍubbaṯ* F. *ḍḍubba* ‘bear’ A

ḍb *ḍubb-u / ḍubb-a / ḍubb-us / ḍubb-aṯ* ‘fat’ A/S

ḍbb *ḍḍḇaḇa* ‘fog’ A

ḍbɛ *ḍḍḇaɛ* ‘hyene’ A

ḍɛ *ḍiɛ / ḍaɛ / tḍaɛ* ‘to loose’ (intr) B

ḍɛf *ḍɛif / ḍɛif-a / ḍɛif-in* ‘thin’ Dim. *ḍɛiɛef / ḍɛiɛf-a / ḍɛiɛf-in* ‘somewhat thin’ A

ḍfr *ḍfeṛ / ḍfeṛ / ḍfeṛ* ‘to tie hair’ (trans) B Pass *nḍefṛeṯ* PP *meḍfuṛ / meḍfuṛa / meḍfuṛin* B

ḍftṛ *ḍḍefṭaṛ - ḍḍfaṭeṛ* Dim. *ḍḍfiṭeṛ - ḍḍfiṭṛaṯ* ‘work-book’ A

ḍɣr *ḍuɣri - ḍuɣriyy-a - ḍuɣriyy-in* ‘simple, honest’ A

ḍḥ *ḍeḥḥi / ḍeḥḥa / tḍeḥḥa* ‘to sacrifice’ (trans) B

ḍhṛ *ḍheṛ / ḍheṛ / ttuṯuṛ* ~ *ttiṯuṛ* ‘to appear, seem’ (intr) B Caus. *ḍehheṛ / ḍehheṛ / tḍehhaṛ* ‘to show, make appear’ (trans) B Pass *tḍehhṛeṯ* PP *mḍehheṛ / mḍehhṛa / mḍehhṛin*

ḍl *ḍḍell - ḍḍlula* Dim. *ḍliwla - ḍliwlaṯ* ‘shadow’ A

ḍmɣ *ḍḍmaɣ - ḍḍmuɣa* Dim. *ḍḍmeyyeɣ - leḍmiɣa* ‘head’ A

ḍṛ *ḍḍṛa* ‘corn’ There are two types: *ḍḍra lḥemṛa* ‘red corn’ and *ḍḍra tuṛkiyya* ‘Turkish corn’ A

ḍṛb *ḍḍaṛiḇa* - *ḍḍaṛa?iḇ* ~ *ḍḍariḇaṯ* ‘tax’ A

ḍṛb Pass *nḍeṛḇeṯ* PP *meḍṛuḇ / meḍṛuḇa / meḍṛuḇin* E.g. *argaz ahen haw dan meḍṛuḇ* ‘That man is there, he has been hit.’

ḍṛf *ḍḍṛafaṭ* ‘good’ A

ḍṛṣ *lmeḍṛaṣa* ~ *lmeḍ̲ṛaṣa* - *lmeḍṛaṣaṯ* ‘school’ A

ḍṣ *ḍeṣṣ / ḍeṣṣ / tḍeṣṣa* ‘to laugh’ (intr) B E.g. *iḍeṣṣ iḍes* ‘He laughed together with him.’ See **ṭḥk** for Caus, Pass and PP.

ḍṭ *taḍuṭṭ* ‘wool’ B

ḍw *ḍḍaw* - *ḍḍiwan* ~ *ḍḍwawi* Dim. *ḍḍwiwi* - *ḍḍwiwaṯ* ‘electricity, light’ A

ḍwṛ *ḍḍawṛa* - *ḍḍawṛaṯ* Dim. *ḍḍwiṛa* - *ḍdwiṛaṯ* ‘circle’ A

ḍwṛ *ḍewweṛ / ḍewweṛ / tḍewwaṛ* ‘to surround, turn around’ (lab) B Pass *tḍewwṛeṯ* **PP** *mḍewweṛ / mḍewwṛa / mḍewwṛin*

ḍyf *ḍḍayf* - *ḍḍyuf* ‘guest’ A

ḍyf *taḍeyyaft* - *tiḍeyyafan* ‘present when visiting’ B

ḍyf *ḍeyyef / ḍeyyef / tḍeyyaf* ‘to host’ (trans) B Pass *tḍeyyfeṯ* PP *mḍeyyef / mḍeyyfa / mḍeyyfin*

ḍyq *ḍeyyeq / ḍeyyeq / tḍeyyaq* ‘to narrow’ (trans) B Pass *tḍeyyqeṯ* PP *mḍeyyeq / mḍeyyqa / mḍeyyqin*

ḍyɛ *ḍeyyeɛ / ḍeyyeɛ / tḍeyyaɛ* ‘to loose (tr.)’ (trans) B

ɛ

ɛbd *lɛebbad* - *lɛebbada* ‘worshipper’ A

ɛbd *leɛḇid* - *leɛḇidaṯ* ‘slave’ A

ɛbd *ɛbed / iɛbed* ‘to worship’ (trans) A

ɛbṛ *ɛḇeṛ / ɛḇeṛ / ɛḇeṛ* ‘to measure’ (trans) B Pass *tɛeḇṛeṯ* PP *meɛbuṛ / meɛbuṛa / meɛbuṛin*

ɛbṭ *taɛebbuṭt* - *tiɛebbuṭan* Dim. *taɛbibeṭ* - *tiɛbibṭan* Augm. *aɛebbuṭ* - *iɛebbuṭen* ‘navel’ B

ɛbz *aɛebbiz* - *iɛebbaz* Dim. *aɛbibez* - *iɛbibzen* F. *taɛebbist* Dim. *taɛbibest* - *tiɛbibzan* ‘calf’ B

ɛbz *aɛebbiz* - *iɛebbaz* ‘bull’ F. *taɛebbist* - *tiɛebbizan* ‘cow’ B

ɛd *lɛaḍa* - *lɛaḍaṯ* ‘custom’ A

ɛd *lɛaḍu* - *lɛaḍuwwaṯ* ~ *lɛuḍyan* F. *leɛḍuwwa* ‘enemy’ A

ɛdb *ɛeddeḇ / ɛeddeḇ / tɛeddaḇ* ‘to make suffer’ (trans) B E.g. *š a ṯ iɛeddeḇ* ‘He is going to make him suffer.’ PP *mɛeddeḇ / mɛeddḇa / mɛeddḇin*

ɛdl *tiɛḍal* ‘women’ No SG. B

ɛds *taɛeddist* - *tiɛeddisan* Augm. *aɛeddis* - *iɛeddisen* ‘belly’ B

ɛɛb *lɛaɛeḇ* ‘slobber’ No SG. A

ɛfr *ɛafer / ɛafer / tɛafar* ‘to try’ (trans) B PP *mɛafer / mɛafra / mɛafrin*

ɛfrt *lɛefriṯ - leɛfareḏ* ‘demon, clever person’ A

ɛfy *lɛafya - leɛwafi* ‘hell, fire’ A

ɛgz *ɛgez / iɛgez* ‘to be lazy’ (intr) A AP *ɛegzan / ɛegzana / ɛegzanin*

ɛkṛ *ɛekkeṛ / ɛekkeṛ / tɛekkaṛ* ‘to make brakish’ (trans) B Pass *tɛekkeṛ* PP *mɛekkeṛ / mɛekkṛa / mɛekkṛin*

ɛkz *aɛukkaz - iɛukkiza* Dim. *aɛkikez - iɛkikzen* F. *taɛukkazt - tiɛukkazan* Dim. *taɛkikezt - tiɛkikzan* ‘walking stick’ B

ɛl *ɛelli / ɛella / tɛellay* ‘to rise, to go up’ (lab) B E.g. *aɣil ahen iɛella ṯ* ‘He ascended that mountain.’ Caus *sseɛli / sseɛla / sseɛlay* ‘to make ascend’ (trans) B Some people use the metathesized form *sselɛi*.

ɛlf *lɛelf* ‘granules for animals’ A

ɛlf *ɛellef / ɛellef / tɛellaf* ‘to feed animals’ (trans) B Pass *tɛellfeṯ* PP *mɛellef / mɛellfa / mɛellfin* B

ɛlf *ɛlef / ɛlef / ɛellef* ‘to feed animals’ (trans) B PP *meɛluf / meɛlufa / meɛlufin*

ɛlm *lɛalem - lɛulama* ‘islamic scholar’ A

ɛlm *lemɛellem - lemɛellmin* F. *lemɛellma* ‘master’ A

ɛlm *lmetɛellem - lmetɛellmin* F. *lmetɛellma* ‘assistent’ A

ɛlm *lmuɛallim - lmuɛllimin* F. *lmuɛallima - lmuɛallimaṯ* ‘teacher’ A

ɛlm *ɛellem / ɛellem / tɛellam* ‘to teach’ (trans) B

ɛlm *ɛlem / iɛlem* ‘to warn, inform’ (trans) A

ɛlm *tɛellem / itɛellem* ‘to learn’ (intr) A

ɛlq *tamɛileqt - timɛilqan* Dim. *lemɛilqa - lemɛilqaṯ* ‘spoon’ B

ɛlq *ɛelleq / ɛelleq / tɛellaq* ‘to hang up’ (trans) B Pass *tɛellqeṯ* PP *mɛelleq / mɛellqa / mɛellqin* E.g. *lḥaža y ahen tɛellqeṯ* ‘That thing has been hung up.’

ɛlwn *lɛilwan - lɛilwanaṯ* ‘address’ A

ɛly *ɛelli / ɛella / tɛellay* ‘to go up’ (trans) B

ɛlž *lmuɛalaža* ‘the healing’ A

ɛm *ɛam - snin* ‘year’ A

ɛm *ɛemmi - ɛemmiwaṯ* ‘paternal uncle’ A

ɛm *ɛum / ɛam ~ ɛum / ttɛum* ‘to swim’ (intr) B There are two possible causatives The first one is Caus *ssɛum / sseam / ssɛum* ‘to let, make swim’ (trans) B The second causative is *ɛewwem / ɛewwem / tɛewwam* ‘to let, make swim’ (trans) see **ɛwm**

ɛml *leɛmel - leɛmula* Dim. *leɛmeyyel - leɛmilaṯ* ‘fishnet’ (only the net without lead, rope and other material) A

ɛml *mul lɛumla* ‘the guilty one’ A

ɛmṛ *ɛemmeṛ / ɛemmeṛ / tɛemmaṛ* ‘to be full, to fill’ (trans) B Pass *tɛemmṛeṯ* PP *mɛemmeṛ / mɛemmṛa / mɛemmṛin*

ɛmṛ AP *ɛameṛ / ɛamṛa / ɛamṛin* ‘te be full’

ɛmṛ *leɛmaṛa - leɛmayeṛ* ‘cave’ A

ɛmt *ɛemṯi - ɛemmṯiwaṯ* ‘father’s sister’ A

ɛmt *ɛemṯi - ɛemmṯiwaṯ* ‘paternal aunt’ A

ɛnkb *taɛenkḇuṯ - tiɛenkḇuṯan* ‘spider web’ B

ɛnqš *aɛenquš - iɛenqaš ~ leɛnaqeš* F. *taɛenqušt* Dim. *taɛniqešt* ‘angry head’ B

ɛnš *taɛennušt - tiɛennužan* ‘part of the dwarf fan palm’ B

ɛnṣṛ *lɛunṣaṛ - leɛnaṣaṛ* Dim. *leɛniṣeṛ* ‘water spring’ A

ɛq *ɛiq / iɛiq* ‘to become aware of’ (intr) A AP *ɛayeq / ɛayqa / ɛaqyin*

ɛqb *lɛuquḇa - lɛuquḇaṯ* ‘penalty or punishment’ A

ɛqb *ɛaqeḇ / ɛaqeḇ / tɛaqaḇ* ‘to punish’ (trans) B Pass *tɛaqḇeṯ* PP *mɛaqeḇ / mɛaqḇa / mɛaqḇin* E.g. *tɛaqḇeṯ xfes* ‘She was punnished for that.’

ɛqd *aɛuqqaḏ - iɛuqqaḏ* F. *taɛuqqatt ~ taɛuqqaḏt - tiɛuqqaḏan* ‘knot’ B

ɛqd *ɛeqqeḏ / ɛeqqeḏ / tɛeqqaḏ* ‘to tie’ (lab) B Pass *tɛeqqḏeṯ* PP *mɛeqqeḏ / mɛeqqḏa / mɛeqqḏin*

ɛqd *ɛqeḏ / iɛqeḏ* ‘to freeze’ (trans) A PP *meɛquḏ / meɛquḏa / meɛquḏin* E.g. *aḏem meɛquḏ* ‘Frozen blood.’

ɛql *leɛqel - leɛqula* ‘mind’ A

ɛql *ɛqel / ɛqel / ɛɛqul* ‘to recognize’ (trans) B Pass *nɛeqleṯ ~ tɛeqleṯ* PP *meɛqul / meɛqula / meɛqulin* Caus *ɛeqqel / ɛeqqel / tɛeqqal* ‘to let, make recognize’ (trans) B PP *mɛeqqel / mɛeqqla / mɛeqqlin*

ɛqq *taɛquqt - tiɛqʷaq* ‘bone of the wrist and armpit’ B

ɛqṣ *lɛaqiṣa - lɛaqiṣaṯ* ‘sorcerer or witch’ A

ɛrf *ɛerref / ɛerref / tɛerraf* ‘to authenticate, to make acquaintance’ (trans) B Pass *tɛerrfeṯ* PP *mɛerref / mɛerrfa / mɛerrfin* VN *tteɛrif*

ɛrkl *ɛerkel / ɛerkel / tɛerkal* ‘to limp’ (intr) B PP *mɛerkel / mɛerkla / mɛerklin*

ɛrnn *ɛernen / ɛernen / tɛernan* ‘to growl’ B

ɛrr *taɛrurt - tiɛruran* ‘ass’ B

ɛry AP *ɛuryan ~ ɛeryan / ɛuryan-a ~ ɛeryan-a / ɛuryan-in ~ ɛeryan-in* ‘naked’ A

ɛṛḍ *lemɛaṛḏa - lemɛaṛḏin* ‘invitee’ A

ɛṛḍ *ɛaṛeḏ / ɛaṛeḏ / tɛaṛaḏ* ‘to invite’ (trans) B PP *mɛaṛeḏ ~ meɛṛuḏ / mɛaṛḏa ~ meɛṛuḏ / mɛaṛḏin ~ meɛṛuḏ*

ɛṛf *ɛerṛef / ɛerṛef / tɛerṛaf* ‘to invite’ (trans) B Pass *tɛerṛfeṯ* PP *mɛerṛef / mɛerṛfa / mɛerṛfin* VN *tteɛṛif*

ɛṛf PP *tɛerfeṯ* PP *meɛṛuf / meɛṛufa / meɛṛufin*

ɛṛm *ɛeṛṛem / ɛeṛṛem / tɛeṛṛam* ‘to pile up’ (trans) B PP *mɛeṛṛem / mɛeṛṛma / mɛeṛṛmin*

ɛṛq *leɛṛaq* ‘sweat’ A

ɛṛq *ɛṛeq / iɛṛeq* ‘to perspire’ (intr) A

ɛṛṭ *aɛaṛeṭ - iɛaṛṭen* ‘mortar’ B

ɛṛṭ *lɛaṛṭ* ‘invitation, bull’ A

ɛṛṭ *ɛaṛeṭ / ɛaṛeṭ / tɛaṛaṭ* ‘to memorize’ (trans) B Pass *tɛaṛṭeṯ*

ɛṛt *ɛeṛṛet / ɛeṛṛet / tɛeṛṛat* ‘to walk in a certain way’ (intr) B

ɛṛt *taɛaṛatt - tiɛaṛatan* ‘horizontal wooden lock’ B

ɛṛž *ameɛṛaž - imeɛṛažen* F. *tameɛṛašt - timeɛṛažan* ‘lame person’ B

ɛṛž *ɛeṛṛež / ɛeṛṛež / tɛeṛṛež* ‘to limp’ (lab) B Pass *tɛeṛṛžeṯ* PP *mɛeṛṛež / mɛeṛṛža / mɛeṛṛžin*

ɛss *lɛessas - lɛessasa* ‘guard’ A

ɛss *ɛess / iɛiss* ‘to guard’ (intr) A E.g. *netta aṯḡam a d ɛess das* ‘Yesterday he guarded there.’

ɛš *leɛša - leɛšawaṯ* ‘dinner’ A

ɛš *lɛušš - leɛwaš* Dim. *leɛweyyeš* ‘nest’ A

ɛš *ɛiš / ɛaš / ttɛiš* ‘to live’ (intr) B AP *ɛayeš / ɛayša / ɛayšin*

ɛšb *ɛeššeḇ / ɛeššeḇ / tɛeššaḇ* ‘to prune’ (trans) B Pass *tɛeššḇeṯ* PP *mɛeššeḇ / mɛeššeḇa / mɛeššeḇin*

ɛṣṛ *lɛaṣiṛ* ‘juice’ (also: *aman n tlečint* ‘water of a an orange apple) A

ɛšṛ *lɛušṛa* ‘pregnant one’ A

ɛšṛ *ɛeššeṛ / ɛeššeṛ / tɛeššeṛ* ‘to beget’ (trans) B PP *mɛeššṛa / mɛeššṛin*

ɛšṛ *ɛšaṛ / deɛšaṛ* ‘to be pregnant’ (intr) A *ɛušṛa / ɛušeṛ*

ɛšš *aɛšuš - iwɛšas* F. *taɛšušt - tiwɛšaš* ‘pen’ B

ɛṣkṛ *aɛeṣkṛi - lɛeṣkeṛ* F. *taɛeṣkṛiṯ* ‘soldier’ B

ɛtb *lɛaṯba - lɛaṯbaṯ* Augm. *aɛeṯbun* ‘sill’ A

ɛtq *aɛettuq - iɛettuqen* F. *taɛettuqt - tiɛettuqan* Dim. *taɛtiteqt - tiɛtitqan* ‘chicken’

ɛṭ Pass *neɛṭaṯ* PP *meɛṭi / meɛṭeyya / meɛṭiyyin* cf. **fk**

ɛṭ *ɛeṭṭ / ɛeṭṭ / tɛeṭṭa* ‘to bite’ (trans) B

ɛṭl *ɛeṭṭel / ɛeṭṭel / tɛeṭṭal* ‘to be late’ (lab) B Pass *tɛeṭṭleṯ* PP *mɛeṭṭel / mɛeṭṭla / mɛeṭṭlin*

ɛṭl *tɛeṭṭel / itɛeṭṭel* ‘to be late’ (intr) A Pass *tɛeṭṭleṯ* PP *mɛeṭṭel / mɛeṭṭla / mɛeṭṭlin* does not give birth’ B

ɛṭq *ɛṭeq / iɛṭeq* ‘to help, aid’ (trans) A Pass *teɛṭeq* PP *meɛṭuq / meɛṭuqa / meɛṭuqin*

ɛṭṛ *leɛṭuṛ* ‘chili pepper’ A

ɛṭṛf *ɛṭaṛef / iɛṭaṛef* ‘to admit’ (intr) A PP *meɛṭaṛef / meɛṭaṛfa / meɛṭaṛfin*

ɛṭš *ɛeṭṭeš / ɛeṭṭeš / tɛeṭṭaš* ‘to make thirsty’ (trans) B

ɛṭš *ɛṭeš / iɛṭeš* ‘to be thirsty’ (intr) A *ɛeṭšan / ɛeṭšana / ɛeṭšanin*

ɛṭs *ɛṭes / iɛṭes* ‘to sneeze’ (intr) A

ɛṭṭ *lɛeṭṭa - leɛṭuṭ* Augm. *aɛeṭṭuṭ* Dim. *leɛṭiṭa - leɛṭiṭaṯ* ‘bite’ A

ɛwd *amɛaweḏ - imɛawḏen* F. *tamɛawett - timɛawṯan* ‘second goat in a year’ B

ɛwd *lɛawda - lɛawdaṯ* ~ *leɛweḏ* ‘mare’ A

ɛwd *ɛaweḏ / ɛaweḏ / tɛawaḏ* ‘to tell’ (trans) B Pass *tɛawḏeṯ* PP *mɛaweḏ / mɛawḏa / mɛawḏin*

ɛwd *lɛawd - leɛwid* ‘stallion’ F. *lɛawda - lɛawdaṯ* ‘mare’ A

ɛwm *ɛewwem / ɛewwem / tɛewwam* ‘to let, make swim’ (trans) B Pass *tɛewwmeṯ* PP *mɛewwem / mɛewwma / mɛewwmin*

ɛwn *amɛawen - lemɛawnin* F. *tamɛawent* ‘a help’ C

ɛwn *leɛwan* ‘wind, a cold (disease)’ A

ɛwn *lmuɛawana* ‘help’ A

ɛwn *ɛawen / ɛawen / tɛawan* ‘to help’ (trans) B E.g. *š a y ɛawnax* ‘I am going to help him.’

ɛwn *ɛewwen / ɛewwen / tɛewwan* ‘to winnow’ (trans) B Pass *tɛewwneṯ* E.g. *iɛewwen leflaḥa* ‘He winnowed the crops.’

ɛwq *ɛewweq / ɛewweq / tɛewwaq* ‘to howl’ (intr) B

ɛwṛ *leɛweṛ - lɛiwaṛ* F. *lɛawṛa* ‘blind person’ A

ɛwṛ *ɛweṛ / ɛewṛ-a / ɛiwaṛ* ‘blind’ A

ɛwž *ɛewwež / ɛewwež / tɛewwaž* ‘to bend’ (trans) B Pass *tɛewwžeṯ* PP *mɛewwež / mɛewwža / mɛewwžin*

ɛwž *ɛwež / ɛewž-a / ɛiwež* ‘crooked’ A

ɛy *ɛya / iɛya* ‘to be tired’ (intr) A AP *ɛeyyan / ɛeyyana / ɛeyyanin*

ɛyb *ɛeyyeḇ / ɛeyyeḇ / tɛeyyaḇ* ‘to criticize’ (trans) B PP *mɛeyyeḇ / mɛeyyḇa / mɛeyyḇin* AP *ɛayeḇ / ɛayḇa / ɛayḇin*

ɛyɛ *aɛeyyuɛ - iwɛeyyaɛ* ~ *iɛuyyaɛ* ‘traditional singing’ B

ɛyɛ *ɛeyyeɛ / ɛeyyeɛ / tɛeyyaɛ* ‘to sing (traditionally)’ (intr) B

ɛyl *aɛeyyal - leɛwawel* Dim. *aɛweyyel - iɛweyylen* ‘boy, son’ C

ɛyl *taɛeyyalt - tiɛeyyalan* Dim. *taɛweyyelt - tiɛwilan* ‘girl, daughter’ B

ɛyn *amɛayen* ‘the fact of watching’ E.g. *ttakkax as amɛayen* ‘I’m watching’ B

ɛyn *ɛayen / ɛayen / tɛayan* ‘to look, to look for, to search, to research’ (trans) B E.g. *iɛayn aṯ* ‘He researched or checked something.’ E.g. *ɛayn as ma ṯ yuɣun* ‘Look at him what is wrong with him.’ *iɛayen gas* ‘He looked at him’. *iɛayen fxes* ‘He searched for him.’ *iɛayen gas* ‘He looked at him.’

ɛyṛ *ɛeyyeṛ / ɛeyyeṛ / tɛeyyaṛ* ‘to play’ (intr) B VN *lleɛb - lleɛbaṯ*

ɛzl *ɛzel / ɛzel / ɛɛzul* ‘to filter, separate’ (trans) B Pass *nɛezleṯ* PP *meɛzul / meɛzula*

/ meɛzulin VN *lɛezla, lɛezlaṯ* E.g. *nɛezzleṯ taɣaṭ aḏ zeg yayeṯma-s* ‘This goat has been separated from its siblings.’

ɛzr *lɛezri - leɛzara* ‘bachelor’ A

ɛzz *leɛziza - leɛzizaṯ* ~ *leɛzizawaṯ* ‘grandmother’ A

ɛz *ɛezzi* ‘older brother’ A

ɛžb *ɛžeḇ / ɛžeḇ / ɛeğeḇ* ‘to want’ (comines with the indirect object) (intr) B

ɛžn *aɛžin - iɛžinen* ‘dough’ B

ɛžn *lɛužna - leɛžani* ‘soil for building houses’ A

ɛžn *lmeɛžun* ‘cookie (drugs)’ (A mix of honey, hemp etc.) A

ɛžn Pass *nɛežneṯ* PP *meɛžun / meɛžuna / meɛžunin* ‘to knead’ cf. **rfs** ‘to knead’

ɛʔl *lɛaʔila* ‘family’ A

f

f *af* ~ *uf / uf / ttaf* ‘to find’ (trans) B cf. **žbṛ** for Pass and PP.

fbṛ *faḇuṛ* ‘free’ A

fd *afuḏ - ifadden* ‘knee’ B

fḍ *lfiḍḍa* ‘silver’ A

fḍḍ *feḍḍi / feḍḍa / tfeḍḍay* ‘to finish’ (trans) B PP *mfeḍḍi / mfeḍḍya / mfeḍḍin*

fdn *tafḏent - tifeḏnan* ‘toe’ B

fɛl *fɛel / ifɛel* ‘to rape’ (trans) A PP *mefɛul / mefɛula / mefɛulin*

fɛt *llefɛeṯ - llfuɛ* Dim. *llfiɛa* Augm. *alefɛun* ‘snake’ A

ff *afaff - ifaffen* ‘nipple’ B

fɣ *afuɣ - ifuɣen* ‘hump’ B

fɣ *ffuɣ / ffeɣ / teffeɣ* ‘to go out’ (intr) B AP cf. **xṛž** for AP and VN Caus *ssufuɣ / ssafeɣ / ssufuɣ* ‘to make go out’ (trans) B cf. **xṛž** for Pass. and PP

fgɛ *feggeɛ / feggeɛ / tfeggaɛ* ‘to stretch’ (lab) B PP *mfeggeɛ / mfeggɛa / mfeggɛin*

fhm *fhem / ifhem* ‘to understand, to boast’ (intr) A PP *mefhum / mefhuma / mefhumin* E.g. *ka-yfhem gas* ‘He understands it very well.’ *ka-yfhem fxi* ‘He is showing of to me.’ Caus. *fehhem / fehhem / tfehhem* ‘to make understand, explain’ (trans) B Pass *tfehhmeṯ* PP *mfehhem / mfehhma / mfehhmin* E.g. *fehhm aṯ spanyuleyya* ‘Teach Spanish to him.’

fḥl *lefḥel - lefḥula* Dim. *afḥeyyel - ifḥeyylen* ‘bull’ C

fḥm *lefḥem* Unity F. *tafḥemt* Dim. *tafḥeyyemt* ‘charcoal’ C

fk *tafuḵt - tafuḵan* (*ta-*) ‘sun’ *iğun tafuḵan* ‘He has had enough of sun.’ B

fk *fekk / ifukk* ‘to rescue’ (trans) A Pass *tfakk* PP *mefkuḵ / mefkuḵa / mefkuḵin*

fk *fk / fk / ttak* ‘to give’ (trans) B cf. **ɛṭ** for Pass and PP

fkr *lfikra - lfikraṯ* ‘idea’ A

fkṛ *fekkeṛ / fekkeṛ / tfekkaṛ* ‘to think, to make think’ (lab) B Pass *tfekkṛu* PP *mfekkeṛ / mfekkṛa / mfekkṛin* E.g. *ifekkṛ aṯ* ‘He reminded him.’ E.g. *ifekkeṛ gas*

‘He thought of him.’ E.g. *nya idda dar ssuq ifekkṛ aṯ, ibb as d ssuxṛa* ‘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 *lfalḍa* - *leflaḍi* Dim. *lefliḍa* ‘dress’ A

flfl *lfelfel* F. *tafelfelt* - *tifelflan* ‘paprika’ C

flḥ *leflaḥa* ‘crops’ A

flḥ *lfellaḥ* - *lfellaḥa* ‘farmer’ A

flḥ *felleḥ / felleḥ / tfellaḥ* ‘to burst, to plough, to dispose of something without profit’ (lab) B PP *mfelleḥ / mfellḥa / mfellḥin* VN *ttefliḥa, tteflihaṯ*

flḥ *fleḥ / ifleḥ* ‘to cultivate’ (trans) A Pass *tefleḥ*

flm *lfilm* - *l?aflam* Dim. *lefleyyem* ‘film’ A

fln *tafellunt* - *tifellunan* Dim. *taflilent* - *tiflilnan* ‘earthenware frying pan’ B

flq *felleq / felleq / tfellaq* ‘to cut up in two pieces’ (trans) B Pass *tfellqeṯ* PP *mfelleq / mfellqa / mfellqin* VN *ttefliqa* E.g. *tfellqeṯ lgayza yahen* ‘The stick has been cut up in two pieces.’

fls *afulus* - *ifulusen* Dim. *afliles* ‘cock, rooster’ B

fls *leflus* - Dim. *leflisaṯ* ‘money’ A

fls *taflilest* - *tiflilsan* ‘swallow’ B

fls *tafulest* ~ *tafulust* - *tifulusan* ‘chicken’ B

flṭ *lfalṭa* - *lfalṭaṯ* ‘fault’ A

flṭ *falṭa / falṭa / tfalṭay* ‘to make a mistake’ (intr) B

flt *fleṯ / fleṯ / ffleṯ* ‘to escape’ (intr) B *felleṯ / felleṯ / tfellaṯ* ‘to make escape’ B PP *mfelleṯ / mfellṯa / mfellṯin*

flṭw *tafalṭiwt* - *tifalṭiwan* ‘wart’ B

flwḥ *afalwaḥ* - *ifalwaḥen* ‘branch of a cactus bush’ B

fmly *famileyya* ‘family’ A

fnd *lfundu* - *lfundus* ‘bottom’ A/S

fnk *fanika* - *fanikaṯ* ‘pouting, pout whiting’ A

fnṭṭ *afenṭuṭ* - *ifenṭaṭ* F. *tafenṭuṭ* ‘lip’ B

fq *lefqi* - *lfuqa* ‘imam’ A

fq *fiq / faq / ttfiq* ‘to wake up’ (intr) B AP *fayeq / fayqa / fayqin*

fqy *lfuqiyya* - *lfuqiyyaṯ* ‘kind of djellaba’ A

fr *affar* - *iffaren* ‘type of plant’ B

fr *tafruṯ* - *tifruṯan* ‘type of plant’ B

frd *lferda* - *lferdaṯ* ‘pair’ A

frd *lferdi* - *lefrada* Dim. *lefridi* - *lefridiyyaṯ* ‘gun’ A

frd *freḏ / freḏ / ffreḏ* ‘to eat (animal)’ (trans) B

frg *afraḡ - ifraḡen* ‘fence’ B

frg *lferg* Dim. *lefreyyeg* ‘swarm (of birds)’ A

frɣ *ferreɣ / ferreɣ / tferraɣ* ‘to pour’ (trans) B Pass *tferrɣeṯ* PP *mferreɣ / mferrɣa / mferrɣin*

frgl *tifergallan* ‘type of plant’ B

frgnṭ *fuṛguniṭa - fuṛguniṭaṯ* ‘van’ A

frkw *taferkiwt - tiferkiwṯan* ‘small farmland’ B

fṛmž *lfuṛmaž* ‘cheese’ A

frn *afernu - iferna* ∼ *ifurna* ‘big fire’ B

frnq *afernaq - ifernaqen* Dim. *afrineq* F. *tafernaqt* ‘bulging on a stick’ B

frnz *frinzi* ‘high hair’ A

frq *lferq* ‘difference’ A

frqš *aferquš - iferqaš* ‘claw’ B

frr *tafrert* ‘whey’ B

frš *lefraš* ‘bed’ A

frs *lfiras* Unity F. *tafirast - tifirasan* ‘pear’ C

frs *fres / fres / ffres* ‘to prune’ (trans) B

frsw *afersiw* ‘type of plant’ B

frṭṭ *afeṛṭaṭṭiw - iferṭaṭṭiwen* ‘butterfly’ B

frtt *ferteṯ / ferteṯ / tfertaṯ* ‘to crumble’ (lab) B Pass *tfertṯeṯ* PP *mferteṯ / mfertṯa / mfertṯin*

frw *ifrawen* ‘money’ B

frw *tafrawt* Augm. *afraw - ifrawen* ‘leaf’ B

frw *tafriwet - tifriwṯan* ‘wing, fin’ B

frx *afrux - iferxan* Dim. *afreyyex - ifreyyxen* F. *tafruxt - tiferxaṯan* Dim. *tafreyyext - tifrixṯan* ‘small chicken, boy, girl’ B

fṛɛ *fṛeɛ / fṛeɛ / feṛṛeɛ* ‘to damage, hit painfully’ (trans) B Pass *ttefṛeɛ* PP *mefṛuɛ / mefṛuɛa / mefṛuɛin*

fṛfṛ *feṛfeṛ / feṛfeṛ / tfeṛfaṛ* ‘to clean, sort’ (trans) B Pass *tfeṛfṛeṯ* PP *mfeṛfeṛ / mfeṛfṛa / mfeṛfṛin*

fṛḥ *fṛeḥ / fṛeḥ / ffṛeḥ* ‘to happy’ (intr) B AP *feṛḥan / feṛḥana / feṛḥanin* E.g. *teṛeḥ s rrigalu* ‘She is happy with her gift.’ Caus *feṛṛeḥ / feṛṛeḥ / tfeṛṛaḥ* ‘to make happy’ (trans) B Pass *tfeṛṛheṯ* PP *mfeṛṛeḥ / mfeṛṛḥa / mfeṛṛḥin*

fṛkṭ *afeṛkuṭ - ifeṛkaṭ* F. *tafeṛkuṭṭ* ‘piglet’ B

fṛn *lfeṛn - lefṛaṛen* Dim. *afṛiṛen - ifṛiṛnen* ‘oven’ C

fṛq *fṛeq / fṛeq / ffṛuq* ‘to separate’ (lab) B Pass *nfeṛqeṯ* PP *mefṛuq / mefṛuqa / mefṛuqin* Caus. *feṛṛeq / feṛṛeq / tfeṛṛaq* ‘to separate, to divide, to share’ (trans) B Pass *tfeṛṛqeṯ* PP *mfeṛṛeq / mfeṛṛqa / mfeṛṛqin* E.g. *tfeṛṛqeṯ ṣṣadaqa g zzenqa*

‘The alms were given out in the street.’

fṛš *feṛṛeš / feṛṛeš / tfeṛṛaš* ‘to spread out (a cloth for sleeping)’ (trans) B Pass *tfeṛṛšeṯ* PP *mfeṛṛeš / mfeṛṛša / mfeṛṛšin*

fṛšṭ *lfeṛšiṭa - lfeṛšiṭaṯ* ‘fork’ A

fṛṭ *afṛaṭ - ifeṛṭen* Dim. *afṛeyyeṭ - ifṛeyyṭen* F. *tafaṛiṭ - tifaṛiṭan* ∼ *tifṛiṭan* ‘pool’ B

fṛṭṭ *feṛṭeṭ / feṛṭeṭ / tfeṛṭaṭ* ‘to flounder’ (intr) B

fṛtxyl *faṛtelxayl* ‘falcon’ A

fṛž *afeṛṛuž - ifeṛṛaž* Dim. *afṛiṛež - ifṛiṛžen* ‘cock, rooster’ B

fṛẓ *afṛeẓ - ifeṛẓen* ‘yolk’ B

fṛž *lfaṛažeyya - lfaṛažeyyaṯ* ‘kind of djellaba’ A

fs *afus - ifassen* Dim. *afweyyes* ‘hand’ *afweyyes* is also a small plot of land. E.g. *afus n uḡellu* ‘handle of the plough’ B

fsd *fseḏ / ifseḏ* ‘to rape’ (trans) A Pass *tfesḏeṯ* PP *mefsuḏ / mefsuḍa / mefsuḍin* E.g. *fesḏa yan iši* ‘Somebody raped her’.

fsr *fesser / fesser / tfessar* ‘to explain (religiously)’ (trans) B Pass *tfessreṯ* PP *mfesser / mfessra / mfessrin* E.g. *lkelma y ahen ifessr at mezyan* ‘He explained that word clearly.’

fsx *fsex / fsex / tassex* ‘to untie’ (lab) B Pass *tfesxeṯ* PP *mefsux / mefsuxa / mefsuxin*

fšd *afšeḏ* ‘type of plant’ B

fšqṛ *afešqaṛ - lefšaqeṛ* Dim. *afšiqaṛ - ifšiqṛen* F. *tafešqaṛt* Dim. *tafšiqeṛt - tifšiqṛan* ‘bale’ B

fšt *lfušta - lfuštaṯ* ‘party’ A

ft *afatt - ifatten* F. *tafattiwt - tifattiwan* ‘branch’ B

fṭ *lfuṭa - lefweṭ / lfuṭaṯ* Dim. *lefwiṭa - lefwiṭaṯ* ‘towel’ A

ft *tafattiwt - tifattiwan* ‘bud out of which figs grow’ B

fṭḥ *afettiḥ - ifettiḥen* Dim. *aftiteḥ - iftitḥen* F. *tafettiḥt - tifettiḥan* Dim. *taftiteḥt - tiftitḥan* ‘hole’ B

fṭḥ *tafuttiḥt - tifuttiḥan* ‘ass’ Augm. *afuttiḥ - ifuttiḥen* B

fṭḥ *fteḥ / fteḥ / tattaḥ* ‘to open’ (lab) B Pass *tfetḥeṯ* PP *meftuḥ / meftuḥa / meftuḥin* E.g. *taggurt ahen mefṭuḥa* ‘the door is open.’ The PP also means ‘light’.

ftl *tafṯilt - tifṯilan* ‘fuse’ B

ftl *ftel / ftel / tattel* ‘to spin, to roll (couscous)’ (trans) B Pass *tfetleṯ* PP *meftul / meftula / meftulin* B

fč *lfiča - lfičaṯ* ‘arrow’ A

ftt *aftuṯ* ∼ *afettaṯ - iftaṯ* Dim. *aftiweṯ - iftiwṯan* Dim. *taftiweṯ - tiftiwṯan* ‘small piece of bread’ B

ftt *fetteṯ / fetteṯ / tfettaṯ* ‘to crumble’ (lab) B Pass *tfettṯeṯ* PP *mfetteṯ / mfettṯa / mfettṯin* E.g. *tfettṯeṯ talqimt aḏ g taẓuxt* ‘This bread is crumbled in the milk.’

fṭn *fṭen / ifṭen* ‘to become aware of’ (intr) A AP *faṭen / faṭna / faṭnin* PP *mefṭun / mefṭuna / mefṭunin*

fṭṛ *afṭiṛ - ifṭiṛen* ‘back side, ass’ B

fṭṛ *tafṭiṛt - tifṭiṛan* ‘bread without yeast’ B

fṭṭ *afṭiṭ - ifṭaṭ* ‘kind of teak’ B

fw *faw d / faw d / ttfaw d* ‘to be in the morning’ (intr) B The deictic clitic is obligatory. Caus. *ssfaw d / ssfaw d / ssfaw d* ‘to make be in the morning’ (trans) B

fwd *lefwaḏ - lefwadaṯ* Unity F. *tafewwatt - tifewwaḏan* ‘viscera’ C

fwḥ *fewweḥ / fewweḥ / fewwaḥ* ‘to smell’ (intr) B VN *lfiḥa* E.g. *lfiḥa mezyana* ‘A good smell.’

fwkf *lfawakih* ‘fruit’ A

fwq *lfewwaqa - lfewwaqaṯ* ‘hiccough’ A

fwṛ *lefwaṛ - lefwaṛaṯ* ‘steam’ A

fwṛ *lefwiṛa - lefwiṛaṯ* ‘deep sea’ A

fx *lfexx - lfixan ~ lefxux* Dim. *lefxeyyex - lefxeyyxaṯ* ‘trap for birds’ A

fxm *tfexxem / itfexxem* ‘to boast’ (intr) A PP *metfexxem / metfexxma / metfexxmin*

fxṛ *lfaxiṛ - lfexxaṛa* ‘potter’ A

fxṛ *tafexxaṛt - tifexxaṛan* ‘treasure’ B

fxt *tafxett - tifextan* ‘calf of the leg’ B

fyt *afayeṯ* ‘moonless night’

fẓ *afaẓẓ - ifaẓẓen* ‘edible part of douma leave’ B

fzg AP *fazeg / fazga / fazgin* Pass *tfezzgeṯ* PP *mfezzeg / mfezzga / mfezzgin* see **bzg**

fžr *lefžer* ‘daybreak’ A

fzr *tafuzart - tifuzaran* ‘big ant’ B

fẓẓ *afaẓẓaẓ - ifaẓẓaẓen* ‘type of plant’ B

g

g *ḡḡ / ḡḡ / deḡḡ* ‘to do’ (trans) B

gbl *gabel / gabel / tgabel* ‘to manage’ (trans) B

gd *aḡḏi - iḡḏan* F. *taḡḏiṯ* ‘jackal’ B

gd *gaded / gaded / tgadad* ‘to flatten’ (trans) B Pass *tgaddeṯ* PP *mgaded / mgadda / mgaddin*

gğf *aḡeğuf - aḡeğfan* ‘bush’ B

gf *lgaffaṯ* ‘glasses’ A

gg *taḡiḡet - tiḡiḡṯan ~ iḡiḡen* ‘tree’ B

ggwz *legg^{w}az* ‘food (eaten with bread)’ A

gl *aḡellu ~ awellu - iḡelliwa* ‘plough’ B

gl *tiḡelt* ‘woods’ B

gl *aḡel ~ uḡel ~ aḡul / uḡel / ttaḡel* ‘to hang up food for animals’ (trans) B

gl *ggull / ggall / tgalla* ‘to swear’ (intr) B See **ḥlf** for Pass and PP. E.g. *iggall as* ‘He swore to him.’ Caus *sgull ~ sgall / sgull ~ isgall / sgall* ‘to make swear’ (trans) B

glf *aḡʷlaf - iḡʷlafen* ‘swarm of bees’ B

gll *aḡlul - iḡʷlal* F. *taḡlult - tiḡʷlal ~ tiḡlulan* ‘sea horn’ B

glmm *aḡulmam - iḡulmam* F. *taḡulmamt* ‘pool of rain water’ B

gls 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*

glzm *aḡelzim - iḡelzam* Dim. *aḡlizem - iḡlizmen* F. *taḡelzimt - tiḡelzam* ‘pickaxe’ B

gm *agʷem / yuḡem / -* ‘to deserve more punishment’ (intr) B It is followed by an indirect object.

gm *daḡem ~ daḡum ~ aḡem d ~ aḡum d / daḡem ~ yuḡem d / tdaḡam, 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 Berber-morphology verb of Berber origin, e.g. *aman ihen mdaḡmin* ‘That water has been drawn.’

gmb *gamba* ‘shrimp’ A

gmrw *aḡemraw ~ aḡumraw - iḡemrawen* ‘separation in a field’ B

gn *gana* ‘interest’ A

gn *taḡant - tiḡanan* ‘douma plant, bush’ B

gn *genna ~ agenna* ‘sky’ B

gndl *lgendil - legnadel* ‘big rock’ Augm. *agendallu* A

gns *lgins - legnusa* ‘bad people’ A

gnṭ *aḡnaṭ - iḡnaṭen* ‘edible soft white part of the root of the dwarf fan palm’ B

gnč *lganču - lgančuwwaṯ ~ lgančus* ‘kind of rake’ A/S

gnw *taḡnawt - tiḡnawan* Dim. *taḡniweḵt* Augm. *aḡnaw* ‘pumpkin’ B

gnz *legnaza - legnazaṯ* ‘funeral’ A

gr *aḡer - iḡran* (*ya-*) ‘farmland (medium size)’ B

gṛ *lgaṛṛu - lgraṛus ~ lgaṛṛus* ‘cigarette’ A/S

gr *lgirra - lgirraṯ* ‘war’ A

gr *taḡra - tiḡriwan* ‘(hand-made) bowl’ B

gr *uḡer / uger / ttaḡer* ‘to put bread in the oven’ (trans) B E.g. *tuḡer aɣṛum* ‘She put bread in the oven.’

gr *taggurt - tiḡura ~ tiggura* ‘door’ E.g. *taggurt n eḍḍmaɣ - tiggura n ḍḍmaɣ* ‘temples’ B

grd *gurḏ-u / gurḏ-a / gurḏ-us / gurḏ-aṯ* ‘fat’ A/S

grf *lgrifu - lgrifus* ‘(water) tap’ A/S

grn *agʷren - legrayen* F. *legrana* ‘frog’ C

grr *legrura - legruraṯ* ‘bay’ A

grs *tagursa - tigarsiwan* ‘ploughshare’ B

grw *agraw - igrawen* ‘group of people’ B

gryž *lgreyyaž - lgreyyažaṯ* ‘iron fence’ A

grz *agraz - igrazen* F. *tagrazt - tigrazan* Dim. *tagreyyezt* ‘kind of cherry’ B

grž *gerrež / gerrež / tgerraž* ‘to cut hair’ (trans) B

gržm *tageržumt - tigeržuman* ‘adam’s apple’ B

gṛḍ *lgeṛṛaḍ - legṛaṛeḍ* Dim. *legṛiṛeḍ - legṛiṛḍaṯ* ‘small saw’ A

gṛm *legram - legruma* ‘gṛam’ A

gṛṭ *agerṭ ~ aygerṭ - igerṭawen* ‘neck’ E.g. *agerṭ n lqmiğa* ‘collar’ B

gṛž *lgaṛaž - lgaṛažaṯ* ‘garage’ A

gsln *lgasulina - lgasulinaṯ* ‘fuel’ A

gsr *agussar - igussaren* F. *tagussart - tigussaran* Dim. *tagʷsisert - tigʷsisran* ‘descending hill’ B

gṣ *lgeṣṣ* ‘big floor’ A

gtr *lgatri - legtara* ‘bed’ A

gṭṭ *agṭiṭ - igṭaṭ* Dim. *agṭeyyeṭ - igṭeyyṭen* ‘bird’ B

gwd *gewweḍ / gewweḍ / tgewwaḍ* ‘to lead, to guide’ (trans) B Pass *ttgewweḍ* PP *mgewweḍ / mgewwḍa / mgewwḍin* E.g. *argaz ahen ttgewweḍ* ‘That man has been guided.’

gwl *aguwwal - iguwwila* Dim. *agwiwel - igwiwlen* ‘kind of fish’ B

gwz *gewwez / gewwez / tgewwaz* ‘to make pass’ (trans) B

gyṛ *tageyyaṛt (n waṭil)* ‘vine’ B

gyṭ *lgayyṭa - lgayyṭaṯ* ‘cookie’ A

gyz *lgayza - legyuz* Dim. *legwiza - legwizaṯ* Augm. *ageyyuz* ‘stick, wood, pole’ A

gyz *tagayzuṯ - tigayzuṯan ~ tiguyaz* Dim. *tagweyyezt - tigwizan* ‘cow that has not given birth’ B

gz *amuggaz - imuggiza* Dim. *amgigez - imgigzen* F. *tamuggazt - timuggiza* Dim. *tamgigezt - timgigzan* ‘stick to hit/pin animals’ B

gz *lgezza ~ 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 *lgezba - lgezbaṯ* Augm. *agezziḇ* ‘horn or trumpet’ A

gzr *legzira - legziraṯ* ‘island’ A

gzr *lgezzar - lgezzara* ‘butcher’ A

gẓl *tağẓelt - tiğeẓlan* ‘kidney (of goats and sheep)’ B

gždr *ageždir - igeždren* Dim. *agžider - igžidren* ‘big blue/green lizard’ B

ğ

ğbn *lğben* ‘cheese’ A

ğdd *lğḏuḏ* ‘ancestors’ A

ğdrm *lğaḍarmi - lğaḍarmiyya* ‘government police’ A

ğğt *lğuğeṯ* F. *tažužet - tižužṯan* ‘walnut’ A

ğɛd *lğeɛda* Dim. *lğɛida* ‘carrot’ A

ğh *lğiha - lğihaṯ* ‘side’ A

ğhd *lğuhd* ‘strength’ A

ğhd *ğuhdi / ğuhdiyy-a / ğuhdiyy-in* ‘strong’ A

ğḥğḥ *ağeḥğuḥ - iğeḥğuḥen* ‘big fire’ B

ğhl *lğahel - lğahlin* F. *lğahla* ‘infidel’ A

ğhnm *lğahennam* ‘hell’ A

ğlb *ažellaḇ - lğlaleḇ* F. *tažellaḇt - tiželliḇa* Dim. *tažlileḇt - tižlilban* ‘djellaba’ B

ğld *lğeld - lğluḏ* Dim. *lğleyyeḏ* Augm. *aželluḏ* ‘skin’ A

ğm *lğim - ležyam* Dim. *lğweyyem - lğwimaṯ* ‘pocket’ A

ğmɛ *lğumɛa* ‘friday’ A

ğml *lğmel - lğmula* Dim. *lğmeyyel - lğmilaṯ* F. *lğemla* Dim. *lğmeyyla* ‘camel’ A

ğn *lğen - lğnawen* Dim. *lğniwen* F. *lğenneyya* Dim. *lğniwna - lğniwnaṯ* ‘spirits’ A

ğn *lğenna - lğennaṯ* ‘heaven’ A

ğn *ğun / ğun / tžawan* ‘to be full (food) ‘ (intr) B

ğnb *lğumb - ležnaḇ* ‘side’ A

ğrd *lğariḍa - lğariḍaṯ* ‘newspaper’ A

ğṛd *lğaṛda - lğaṛdaṯ* ‘yard’ A

ğrm *lğarima - lğarimaṯ* ~ *lğaraʔim* ‘crime’ A

ğṛṛ *ğeṛğeṛ / ğeṛğeṛ / tğeṛğaṛ* ‘to slide’ (lab) B Pass *nğeṛṛeṯ* PP *mğeṛğeṛ / mğeṛğra / mğeṛğrin*

ğw *ğewwi / ğewwa / tğewway* ‘to put the weed-pipe back in the leather bag’ (trans) B PP *mğewwi / mğewwya / mğewwin* E.g. *iğewwa sseḇsi nnes* ‘He put his weed-pipe back in the bag.’

ğw *lğaw* ~ *lžaw* ‘weather’ A

ğwb *lğawaḇ* ‘answer’ A

ğwf *lğawf* ‘west’ A

ğwhṛ *lğawhaṛ* Unity F. *lğawhaṛa* ‘jewel’ A

ğyš *lğayš* ‘army’ A

ɣ

ɣ *ayu* (*wa-*) ‘butter mlik’ B

ɣb *ɣiḇ / ɣaḇ / ttɣiḇ* ‘to vanish’ (intr) B

ɣbr *ayebbir* Dim. *aybiber* F. *tayebbirt* Dim. *taybibert* ‘small amount of powder’ B

ɣbṛ *lɣeḇṛa* ~ *lyuḇṛa - leybaṛi* ‘dust’ A

ɣbr *ɣḇer / ɣḇer / ɣḇer* ‘to disappear’ (intr) B Caus *ɣebber / ɣebber / tɣebbar* ‘to make disappear’ (trans) B Pass *tɣebbreṯ* PP *mɣebber / mɣebbra / mɣebbrin*

ɣby *lɣaḇeyya* ~ *leɣwaḇi* ‘seagull’ A

ɣd *ayeḏ* (*wa-* ~ *ya-*) ‘ash’ B

ɣd *leɣḏa - leɣḏawaṯ* ‘lunch’ A

ɣdn *ayuddani* ~ *ayeddani* Dim. *aydiden - iɣdidnen* ‘kind of black fig’ B

ɣḍṛ *lɣeḍḍaṛ - lɣeḍḍaṛin* F. *lɣeḍḍaṛa* ‘betrayer’ A

ɣḍṛ *ɣḍeṛ / iɣḍeṛ* ‘to betray’ (trans) A Pass *nɣeḍṛeṯ* PP *meɣḍuṛ / meɣḍuṛa / meɣḍuṛin* E.g. *nettaṯa nɣeḍṛeṯ ma ɛat šku yeḍṛa, taɛeyyalt ahen* ‘She has been betrayed, I do not know who betrayed her, that girl.’

ɣḍb *lɣaḏaḇ - lɣaḏaḇaṯ* ‘anger’ A

ɣḍb *ɣeḏḏeḇ / ɣeḏḏeḇ / tɣeḏḏaḇ* ‘to make angry’ (trans) B AP *ɣeḏḇan / ɣeḏḇana / ɣeḏḇanin* PP *mɣeḏḏeḇ / mɣeḏḏḇa / mɣeḏḏḇin*

ɣl *aɣil* (ya-) - *iɣallen* F. *taɣilt - taɣilṯan* ~ *taɣillan* ‘mountain/hill’ B

ɣl *leyla* ‘expensiveness’ A

ɣl *lɣilla - lɣillaṯ* ‘harvest, profit’ A

ɣl *ɣli / ɣli / ɣelli* ‘to set, to descend, to be swallowed’ (intr) B Caus. *sseɣli / sseɣli / sseɣlay* ‘to swallow’ (trans) B

ɣlb *ɣelleḇ / ɣelleḇ / tɣellaḇ* ‘to let, make win’ (trans) B AP *ɣellaḇ / ɣellaḇa / ɣellaḇin* PP *mɣelleḇ / mɣellba / mɣellḇin* E.g. *ɣellḇ ay xfes* ‘Let me win from him.’

ɣlb *ɣleḇ / ɣleḇ / ɣelleḇ* ‘to defeat, to beat, to overcome’ (trans) B Pass *teɣleḇ* PP *meɣluḇ / meɣluḇa / meɣluḇin*

ɣlḍ *ɣelleḏ / ɣelleḏ / tɣellaḏ* ‘to thicken’ (trans) B

ɣlḍ *ɣleḏ / iɣleḏ* ‘to be wrong’ (intr) A AP *ɣaleḏ* ~ *ɣaleṭ / ɣalḏa* ~ *ɣalṭa / ɣalḏin* ~ *ɣalṭin*

ɣll *aɣlal - iɣ^{w}lalen* ‘sea snail’ B

ɣll *aɣlel (i-*)‘stalk’ B

ɣln *lɣellini* ‘calm sea’

ɣlq *ɣleq / ɣleq / ɣɣluq* ‘to cover, dark’ (trans) B Pass *teɣleq* PP *meɣluq / meɣluqa / meɣluqin*

ɣlq *leɣlaq - leɣlaqaṯ* ‘lid’ A

ɣlṭ *lɣalaṭ* ~ *lɣalad̲* - *lɣalad̲aṯ* ~ *lɣalaṭaṯ* ‘fault’ A

ɣlṭ *ɣliṭ / ɣliṭ-a / ɣliṭ-in* ‘fat’ Dim. *ɣlileṭ / ɣlilṭ-a / ɣlilṭ-in* ‘somewhat fat’ A

ɣlw *ɣla / iɣli* ‘to boil’ (trans) A This verb is used interchangeably with the Berber-morphology verb *sis* ‘to boil’. E.g. *ɣlaw aman* ‘The water is boiled.’

ɣmr *taɣmert* ‘kind of rush’ B

ɣmr *aɣumṛi - iɣumṛiyyen* ~ *iɣumṛa* ‘corner’ The feminine is only used in *taɣmeṛt n ufus* which means ‘elbow’ B

ɣmṛ *ɣmuṛ / ɣmuṛ / tteɣmuṛ* ‘to grow (generic)’ (intr) B Caus. *sseɣmuṛ / sseɣmuṛ / sseɣmuṛ* ‘to make/let grow’ (trans) B

ɣms *ɣems / ɣems / qqems* ~ *ɣemmes* ~ *ɣems* ‘to cover’ (trans) B (Used by older generations. Young people use *ɣeṭṭi*) B

ɣn *leɣna - leɣnawi* ‘song’ A

ɣn *ɣenni / ɣenna / tɣennay* ‘to sing’ (trans) B Pass *tɣenna* PP *mɣenni / mɣennya / mɣennin* E.g. *ddyasek ihen tɣennaw* ‘Thos songs have been sung.’

ɣnn *aɣennan - iɣunnan* ‘stalk’ B

ɣns *aseɣnes - iseɣnas* ‘big needle’ B

ɣrbl Pass *tɣerbleṯ* PP *mɣerbel / mɣerbla / mɣerblin* ‘to sieve’ cf. **sf** for ‘to sieve’ B

ɣrḍ *lɣarad̲ - lɣarad̲aṯ* ‘intention’ A

ɣrdm *taɣerdemt - tiɣerdman* ~ *tiɣerdmaṯan* ‘scorpion’ B

ɣrmz *taɣrimezt - tiɣermizan* ‘baby head louse’ B

ɣrng *leɣrang* ‘type of fish (safillo)’ A

ɣrs *ɣres / ɣres / qqers* ‘to slaughter’ (trans) B

ɣṛ *ɣa* ~ *ɣaṛ* ‘only’ B

ɣṛɣṛ *taɣeṛɣaṛt - tiɣeṛɣaṛan* Dim. *taɣṛiɣeṛt - tiɣṛiɣṛan* ‘fire place’ B

ɣṛb *lɣeṛb* ‘south’ A

ɣṛb *lɣeṛbi* Dim. *leɣriḇi* ‘wind from the west’ A

ɣṛb *lmeɣṛeḇ* ‘evening prayer’ A

ɣṛḍy *aɣeṛd̲ay - iɣeṛd̲ayen* F. *taɣeṛd̲ayt - tiɣeṛd̲ayan* ‘mouse’ B

ɣṛf *aɣeṛṛaf - iɣeṛṛifa* Dim. *aɣṛiṛef - iɣṛiṛfen* ‘loam plate’ B

ɣṛf *lɣeṛṛaf - leɣṛaṛef* Dim. *leɣṛiṛef* ‘cup’ A

ɣṛm *aɣṛum* ‘bread from the oven’ B

ɣṛq *leɣṛaq - leɣṛuqa* ‘bottom’ A

ɣṛq *ɣṛeq / iɣṛeq* ‘to drown’ (intr) A AP *ɣaṛeq / ɣaṛqa / ɣaṛqin* Caus. *ɣeṛṛeq / ɣeṛṛeq / tɣeṛṛaq* ‘to drown, deepen’ (trans) B PP *mɣeṛṛeq / mɣeṛṛqa / mɣeṛṛqin*

ɣṛṣ *lɣaṛseṯ - leɣṛeṣ* ~ *leɣṛuṣ* Dim. *leɣṛiṣa - leɣṛiṣaṯ* ‘vegetable garden’ A

ɣṛṣ *lɣeṛṣ* ‘plant’ A

ɣṛṣ *taɣʷṛaṣt - tiɣʷṛaṣan* ‘beehive’ B

ɣsy *taɣsayt - tiɣsayan* ‘gourd’ B

ɣsl *meɣsul / meɣsula / meɣsulin* cf. **srd**

ɣṣmṛ *tayuṣmaṛt - tiɣuṣmaṛan* ‘jaw’ B

ɣṣṣ *ayeṣṣ - iɣeṣṣan* Dim. *ayṣeyyeṣ - iɣṣeyyṣen* ‘bone’ B

ɣš *lɣaši* ‘outsiders’ A

ɣš *lɣušš* ‘deceit’ A

ɣš *ɣešš ~ ɣušš / iɣušš* ‘to deceive’ (intr) A

ɣštl *lɣeštul ~ leɣšatel* ‘partridge male’ A

ɣšš *lɣeššaš - lɣeššaša ~ lɣeššašin* ‘traitor’ A

ɣṭ *leɣṭa - leɣṭawaṯ* ‘blanket’ A

ɣṭ *tayaṭṭ - tiɣaṭen* Dim. *tayṭiweṭ - tiɣṭiwṭan* ‘goat’ B

There exist many types of goats, some of the names used for them based on appearance are: *ḥezzam*a = half white, half black *qerqašuniyya* = different colors, *qelḏuniyya* = two nipples in the neck, *sebbuḥa* = white forehead *zerrugi*yya = greyish, *beyyuṭa* = white *ḥemṛa* = red, *zegzaweyya / zegzuga* = greenish, *merruša* = hair to the side, long hair. Furthermore there are different age types based on the number of teeth the goats have:
after one year *ttniya* = gets two new teeth
after two years, *ṛṛbaɛeyya* = gets four new teeth
after three years, *lexmasiyya* = gets five new teeth
after four years, *zzdasiyya / žžamɛa* = gets new teeth
zzɛenṭa = goat that can not bare children.
tayaṭt mebṭula = the udder does not give milk

ɣṭ *ṭṭeɣṭiyya - ṭṭɣaṭi* ‘lid’ A

ɣṭ *ɣeṭṭi / ɣeṭṭi / tɣeṭṭay* ‘to cover’ (trans) B Pass *tɣeṭṭaṯ* PP *mɣeṭṭi / mɣeṭṭya / mɣeṭṭin* This verb takes the IO pronoun. E.g. *iɣeṭṭy as* ‘He has covered him/her’
A remembered verb with the same meaning is **ɣmes** ‘ to cover’, cf. **ɣms.**

ɣṭṣ *ɣeṭṭeṣ / ɣeṭṭeṣ / tɣeṭṭaṣ* ‘to drown, deepen’ (trans) B PP *mɣeṭṭeṣ / mɣeṭṭṣa / mɣeṭṭṣin*

ɣwṛ *ayewwaṛ - iɣewwiṛa* ‘hole’ B

ɣwt *ɣewweṯ / ɣewweṯ / tɣewwaṯ* ‘to shout’ (intr) B

ɣyl *ayyul - iɣ^{w}yal* Dim. *ayweyyel - iɣ^{w}eyylen* F. *tayyult* Dim. *tay^{w}eyyelt - tay^{w}ilṯan* ‘donkey’ B

ɣylf *ayayluf - iɣaylufen* ‘anger’ B

ɣylf *ɣaylef / ɣaylef / tɣaylef* ‘to become angry’ (intr) B Pass *tɣaylfeṯ* PP *mɣaylef / mɣaylfa / mɣaylfin*

ɣys *lɣays - leɣyusaṯ* ‘mud’ A

ɣyṭ *lɣayṭa - lɣayṭaṯ ~ leɣyuṭ* Augm. *aɣeyyuṭ* ‘flute’ A

ɣz *aɣez* ‘fruit inside the dwarf fan palm’ B

ɣz *ɣezzi / ɣezza / tɣezzay* ‘to add punishment’ (intr) B E.g. *ɣezzu gas* ‘Add punishment to him.’

ɣzds *taɣezdist - tiɣezdisan* ‘rib’ Augm. *aɣezdis - iɣezdas* B

ɣzl *leɣzala - leɣzalaṯ* ‘gazelle, nice lady’ A

ɣzl *taɣʷzalt - tiɣʷzalan* Dim. *taɣʷzeyyelt - tiɣʷzilan* ‘bogue fish’ B

ɣẓẓ *ɣeẓẓeẓ / ɣeẓẓeẓ / tɣeẓẓaẓ* ‘to chew’ (trans) B Pass *tɣeẓẓeṯ* PP *mɣeẓẓeẓ / mɣeẓẓa / mɣeẓẓin*

ɣžd *aɣižd - iɣežden* Dim. *aɣžeyyež - iɣžeyyžen* ‘he-kid’ B

ɣždmyn *aɣižd**a**myan - iɣežd**e**nimyanen* ‘billy goat that does not have a penis’ B

h

hbs *lḥeḇs - leḥḇasaṯ* ‘prison’ A

hd *lhedda* ‘threat’ A

hd *lihuḏi - lihuḏ* F. *lihuḏiyya* ‘jew’ A

hdd *heddeḏ / heddeḏ / theddaḏ* ‘to threaten’ (trans) B Pass *theddḏeṯ* PP *mheddeḏ / mheddḏa / mheddḏin* VN *ttehdiḏ* E.g. *aṭḡam ihedd fxi* ‘Yesterday he threatened me.’

hdm *heddem / heddem / theddam* ‘to demolish’ (trans) B Pass *theddem* PP *mheddem / mheddma / mheddmin*

hḍṛ *lheḍṛa - lheḍṛaṯ* ‘speech’ A

hğl *aheğal - lehğağel* 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 *mehluḵ ~ meɛdum / mehluḵa ~ meɛduma / mehluḵin ~ meɛdumin* B

hll *lhilal* ‘new moon’ A

hm *lhemm - lehmum* ‘anxiety’ A

hm *hemmem / hemmem / themmam* ‘to worry’ (trans) B AP *mehmum / mehmuma / mehmumin*

hmk *hemmeḵ / hemmeḵ / themmaḵ* ‘to hit’ (trans) B Pass *themmḵeṯ* PP *mhemmeḵ / mhemmḵa / mhemmḵin* VN *ttehmiḵ - ttehmiḵaṯ*

hṛhṛ *lheṛhaṛ - lehṛaheṛ* ‘type of tree’ A

hṛb *heṛṛeḇ / heṛṛeḇ / theṛṛaḇ* ‘to make flee’ (trans) B cf. **rwl** ‘to flee’

hrw *buhrawa - buhrawaṯ* ‘black bird’ (It dives into the water) A

hrw *lehrawa - lehrawaṯ* Augm. *ahraw* ‘club, stick’ A

hrz *lmehraz - lemharez* ‘mortar, insect that damages crops.’ A

hw *lehwa* ‘rain’ A

hwd *lemhawḏa* ‘conversation’ A

hwd *tthaweḏ / itthaweḏ* ‘to speak or talk’ (intr) A

hwl *hewwel / hewwel / thewwal* ‘to make loud noise, disturb’ (trans) B Pass *thewwleṯ* PP *mhewwel / mhewwla / mhewwlin* VN *lhawl* ‘loud noise, disturbance’

hyḍr *tahayḍurt - tihayḍuran* ‘sheepskin’ B

hyš *lhayša n lebḥar - lhayšaṯ n lebḥar* ‘whale’ A

hz *hezz / hezz / thezza* ‘to shake, move’ (lab) B Pass *thezzeṯ* ~ *nhezzeṯ* PP *mehzuz / mehzuza / mehzuzin*

hžm *lhužum* ‘attack’ A

hžm *hžem / ihžem* ‘to attack’ (intr) A E.g. *hžem x tmeṭṭuṯ nnes* ‘He attacked his wife.’

hžr *hažeṛ / hažeṛ / thažaṛ* ‘to migrate’ (intr) B

ḥ

ḥ *aḥu / aḥu /* - ‘to deserve more punishment’ (intr) B It is followed by the preposition **g** ‘in’.

ḥb *lḥebb* ‘barley’ A

ḥb *taḥebbet - tiḥebba* Dim. *taḥbibet - tiḥbibṯan* ‘granule, pimple’ B

ḥb *ḥibb / iḥibb* ‘to love’ (trans) A

ḥbb *ḥḇiḇi - ḥḇiḇiwaṯ* ‘maternal uncle’ A

ḥbl *buḥḇel* ‘life’ A

ḥblq *lḥeḇlaqa* ‘kind of white fig’ A

ḥbšbb *ḥebbešḇaḇ* ‘freckles’ A

ḥbsw *ḥebbessaw - ḥebbessawaṯ* ‘little pimple’ A

ḥd *lḥedd - lḥudud* ‘border’ A

ḥd *lḥedd* ‘sunday’ A

ḥd *ḥaḏi / ḥaḏa / tḥaḏa* ‘to touch’ (trans) B PP *mhaḏi / mḥaḏya / mḥaḏin*

ḥḍ *ḥḍi / ḥḍi / ḥeḍḍi* ~ *ḥeḍḍi* ‘to keep an eye on’ (trans) B

ḥdd *leḥdada - lḥudud* ~ *leḥdadaṯ* ‘boundary’ A

ḥdd *leḥḍiḍ* Dim. *leḥḍeyyeḏ - leḥḍiḍaṯ* F. *leḥḍiḍa - leḥḍayeḏ* ‘iron to cut woods with.’ A

ḥdd *lḥeddaḏ - lḥeddaḏa* F. *taḥeddatt* ~ *taḥeddaṯt* ‘blacksmith’ (The feminine also refers to the job.) E.g. *lemɛellem n tḥeddatt* ‘the blacksmith’ (Lit. ‘the knower of blacksmithing’) A

ḥdd *ḥeddeḏ / ḥeddeḏ / tḥeddaḏ* ‘to press’ (trans) B Pass *nḥeddeṯ* ~ *tḥeddeṯ* PP *mḥeddeḏ / mḥeddḏa / mḥeddḏin*

ḥḍr *amḥaḏri - lemḥaḏra* ‘pupil’ C

ḥḍṛ *ḥḍeṛ / ḥḍeṛ / ḥeḍḍeṛ* ‘to attend’ (trans) B E.g. *iḥeḍṛ tameɣra yahen* ‘He attended that wedding.’

ḥğ *lḥağ - lḥuğağ* F. *lḥağa* ‘haji’ A

ḥğ *lḥiğ* ‘pelgrimage to mekka’ A

ḥğṛ *ameḥğuṛ - lemḥažeṛ* Dim. *amḥižer* F. *tameḥğuṛt* Dim. *tamḥižert* ‘orphan’ C

ḥf *ḥfa / iḥfa* ‘to be blunt’ (intr) A Caus. *ḥeffi / ḥeffa / ḥeffi* ‘to make blunt’ (trans) B

ḥfr *lḥafer - leḥwafer* Augm. *aḥawfer ~ aḥefṛun* ‘footprint’ A

ḥfṛ *aḥfaṛ - iḥfaṛen* Dim. *aḥfeyyeṛ - iḥfiṛen* F. *taḥfaṛt - tiḥfaṛan* Dim. *taḥfeyyeṛt - tiḥfiṛan* ‘hole’ *taḥfaṛt n tayṯwan - tiḥfaṛan n tayṯwan* ‘armpit’ lit. ‘hole of the shoulders’ B

ḥfṛ *ḥfeṛ / ḥfeṛ / ḥeffaṛ ~ ḥḥfuṛ* ‘to dig’ (trans) B Pass *tteḥfeṛ* B

ḥfṭ *ḥfeṭ / iḥfeṭ* ‘to memorize’ A AP *ḥafeṭ / ḥafṭa / ḥafṭin* PP *meḥfuṭ / meḥfuṭa / meḥfuṭin*

ḥk *lḥikka - lḥikkaṯ* ‘scratching disease’ A

ḥk *lḥukk - leḥkaḵ* ‘ankle, wrist’ A

ḥk *ḥekk / ḥekk / tḥekka* ‘to scratch’ (trans) B

ḥk *ḥka / iḥki* ‘to tell’ (trans) A Pass *teḥkaṯ* PP *meḥki / meḥkiyya / meḥkiyyin*

ḥkm *lmeḥkama - lmaḥakim* ‘court’ A

ḥkm *ḥkem / iḥkem* ‘to adjudicate, to govern’ (intr) A Pass *tḥekmeṯ* PP *meḥkum / meḥkuma / meḥkumin*

ḥkṣl *ḥekkayṣla - ḥekkayṣlaṯ* ‘grey lizard without spots’ A

ḥl *ḥlu / ḥluw-a / ḥluw-in* ‘sweet’ A

ḥlbṭ *aḥelbuṭ - iḥelbaṭ* ‘spout’

ḥlf Pass *tḥellfeṯ* PP *mḥellef / mḥellfa / mḥellfin* see **gl**

ḥlḥl *aḥelḥul* ‘couscous with milk’ B

ḥlḥl *aḥelḥal* ‘kind of plant’ B

ḥll *aḥlallu - iḥlulla* F. *taḥlalluṯ - tiḥlulla* ‘bees gauze’ B

ḥlm *lḥellama* ‘type of fish’

ḥlq *ḥelleq / helleq / tḥellaq* ‘to fish’ (trans) B Pass *tḥellqeṯ* PP *mḥelleq / mḥellqa / mḥellqin* VN *teḥliqa*

ḥlw *lḥelwa - lḥelwaṯ / leḥlawi* Dim. *leḥliwa - leḥliwaṯ* ‘candy’ A

ḥm *aḥeğam - iḥeğamen* ‘person who circumcises’ B

ḥm *ḥmu / ḥma / ḥemmu* ‘to heat’ (intr) B Caus *sseḥmu / sseḥma / sseḥmaw* ‘to make hot’ (trans) B

ḥml *aḥemmal - iḥemmila* F. *taḥemmalt - tiḥemmila* ‘high place in traditional houses’ B

ḥml *lḥemla - lḥemlaṯ* ‘flood’ A

ḥml *ḥmel / deḥmel* ‘to be pregnant, to flood’ (intr) A AP *ḥamel / ḥamla / ḥamlin*

ḥmm *aḥmam - iḥmamen* Dim. *aḥmeyyem - iḥmiyymen* F. *taḥmamt - tiḥmaman* Dim. *taḥmeyyemt - tiḥmiman* ‘pigeon’ B

ḥmq *ḥemmeq / ḥemmeq / tḥemmaq* ‘to make mad, crazy’ (trans) B PP *mḥemmeq / mḥemmqa / mḥemmqin*

ḥmq *ḥmeq / iḥmeq* ‘to become crazy’ (intr) A AP *ḥmaq / ḥamqa / ḥumeq*

ḥmṛ *aḥemṛaw - iḥemṛawen* Dim. *aḥmimeṛ - iḥmimṛen* F. *taḥemṛawt - tiḥemṛawan* Dim. *taḥmimeṛt - tiḥmimṛan* ‘red person/thing’ B

ḥmṛ *lḥumṛa - lḥumṛaṯ* ‘school of fish during the day’ A

ḥmṛ *ḥemmeṛ / ḥemmeṛ / tḥemmaṛ* ‘to ask and answer in a game’ (intr) B

ḥmṛ *ḥmaṛ / iḥmaṛ* ‘to tan’ (intr) A

ḥmṛ *ḥmeṛ / ḥemṛ-a / ḥumeṛ* ‘red’ Dim. *ḥmimeṛ / ḥmimṛ-a / ḥmimṛ-in* ‘somewhat red’ A

ḥmṛ *tteḥmiṛa* ‘red pepper’ A

ḥmṣ *lḥummiṣ* Unity F. *taḥummiṣt - tiḥummiṣan* ‘chick pea’ C

ḥn *lḥinna* ‘henna’ A

ḥn *ḥni / ḥni / ḥenni* ‘to bend over’ (intr) B

ḥnğṛ *mḥenğeṛ* ‘type of disease’ A

ḥnk *lḥinka - lḥinkaṯ* ‘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

ḥnš *lḥinš - leḥnuša* Dim. *leḥneyyeš* Dim.F. *leḥniša - leḥnišaṯ* ‘kind of snake’ A

ḥnšš *tḥenšiš* ‘fuss’ A

ḥnt *lḥanuṯ - leḥwaneṯ* F. *leḥwinṯa - leḥwinṯaṯ* ‘shop, store’ A

ḥqq *lḥaqiqa* ‘truth’ A

ḥqq *lḥeqq - lḥuquq* ‘right’ A

ḥqq *ḥeqqeq / ḥeqqeq / tḥeqqeq* ‘to check’ (trans) B Pass *tḥeqqeṯ* PP *mḥeqqeq / mheqqa / mḥeqqin*

ḥqq *ḥqiqi / ḥqiqiyy-a / ḥqiqiyy-in* ‘real’ A

ḥrb *taḥrabbayt* ‘crushed barley with water’ (for children.) B

ḥrr *aḥrir - iḥriren* ‘trouble’ B

ḥrr *leḥrir* ‘silk’ C

ḥrr *taḥrirt - tiḥriran* Dim.F. *taḥreyyert - tiḥriran* Augm. *aḥrir* ‘harira’ (The augmentative has thick meal and winter pumpkin. The diminutives contain very thin meal.) B

ḥrr *ḥruru / ḥruru / tteḥruru(ṯ)* ‘to crawl’ (intr) B

ḥry *lḥurreyya - lḥurreyyaṯ* ‘freedom’ A

ḥṛ *lḥaṛa* ‘land, place’ A

ḥṛb *lḥaṛḇ - lḥuṛuḇ* ‘war’ A

ḥṛb *ḥaṛeḇ / haṛeḇ / tḥaṛaḇ* ‘to wage war’ (intr) B PP *mḥaṛeḇ / mḥaṛḇa / mḥaṛḇin*

ḥṛb *ḥeṛṛeḇ / ḥeṛṛeḇ / tḥeṛṛaḇ* ‘to make war, fight against’ (trans) B Pass *tḥeṛṛḇeṯ* PP *mḥeṛṛeḇ / mḥeṛṛḇa / mḥeṛṛḇin*

ḥṛb *tḥaṛeḇ / itḥaṛeḇ* ‘to wage war’ (trans) A

ḥṛbt *ḥeṛbeṭ / ḥeṛbeṭ / tḥeṛbaṭ* ‘to slave away’ (lab) B Pass *tḥeṛbṭeṯ* PP *mḥeṛbeṭ / mḥeṛbṭa / mḥeṛbṭin*

ḥṛk *ḥeṛṛeḵ / ḥeṛṛeḵ / tḥeṛṛaḵ* ‘to stir or mix’ (trans) B Pass *tḥeṛṛḵeṯ* PP *mḥeṛṛeḵ / mḥeṛṛḵa / mḥeṛṛḵin*

ḥṛk *tḥeṛṛeḵ / itḥeṛṛeḵ* ‘to move’ (intr) A

ḥṛm *ḥṛem / ḥṛem / tḥeṛṛam* ‘to forbid’ (trans) B PP *meḥṛum / meḥṛuma / meḥṛumin š a t iḥṛem zgaḵ* ‘He will forbid her from you.’

ḥṛq *leḥṛaq* ‘pain’ A

ḥṛq *leḥṛiq* ‘burn mark’ A

ḥṛq *ḥeṛq / ḥeṛq / ḥeṛq* ‘to feel pain’ (intr) B VN *teḥṛiq* Caus. *ḥeṛṛeq / ḥeṛṛeq / tḥeṛṛaq* ‘to hurt’ (trans) B

ḥṛṛ *ḥeṛṛeṛ / ḥeṛṛeṛ / tḥeṛṛaṛ* ‘to liberate’ (trans) B Pass *tḥeṛṛeṯ* PP *mḥeṛṛeṛ / mḥeṛṛa / mḥeṛṛin* E.g. *iḥeṛṛ ahen* ‘He liberated them.’

ḥṛš *lḥeṛṛašiyya - lḥeṛṛašiyyaṯ* ‘grouper (fish)’ A

ḥṛš *taḥeṛṛušt - tiḥeṛṛušan* Dim. *taḥṛiṛešt - tiḥṛiṛšan* ‘chestnut tree’ B

ḥṛš *ḥeṛṛeš / ḥeṛṛeš / tḥeṛṛaš* ‘to roughen’ (trans) B

ḥṛš *ḥṛeš / ḥeṛš-a / ḥuṛeš* ‘rough’ A

ḥṛt *lḥeṛṛaṯ - leḥṛiṛaṯ* ‘kind of worm’ (It eats fruit and vegetables.) A

ḥṛt Pass. *tteḥṛeṯ* PP *meḥṛuṯ / meḥṛuṭa / meḥṛuṯin* ‘to plough’ cf. **krz** ‘to plough’

ḥs *ḥas / iḥis* ‘to feel’ (intr) A AP *ḥayes / ḥaysa / ḥaysin*

ḥsb *leḥsaḇ - leḥsaḇaṯ* ‘bill, calculation’ A

ḥsb *ḥseḇ / ḥseḇ / ḥesseḇ ~ ḥḥsuḇ* ‘to count’ (trans) B Pass *tḥessḇeṯ* PP *meḥsuḇ / meḥsuba / meḥsuḇin*

ḥsd *leḥseḏ* ‘jealousy’ A

ḥsd *ḥseḏ / ḥseḏ / ḥesseḏ* ‘to envy’ (trans) B AP *ḥaseḏ / ḥasḏa / ḥasḏin* E.g. *uha ḥaseḏ uha* ‘The one envied the other.’

ḥsḥs *ḥesḥes / ḥesḥes / tḥesḥas* ‘to whisper’ (intr) B VN *tḥesḥis*

ḥsn *ḥessen / ḥessen / tḥessan* ‘to cut hair’ (trans) B

ḥss *lḥessas - leḥsawes* Dim. *leḥsiwes - leḥsiwsaṯ* ‘the receiving partner in a homosexual relationship’ A

ḥss *taḥessast* ‘homosexuality’ B

ḥṣd *leḥṣaḏ* ‘harvest’ A

ḥṣd Pass *tteḥṣeḏ* PP *meḥṣuḏ / meḥṣuḍa / meḥṣudin* ‘be ploughed’ B cf. **mgr** ‘to plough’

ḥṣl *ḥṣel / ḥṣel / ḥeṣṣel* ‘to fall’ (intr.) E.g. *ša ḥṣel lehwa* ‘Rain is going to fall.’ Caus. *seḥṣel / seḥṣel / sseḥṣal* ~ *itseḥṣal* ‘to drop’ (trans) B

ḥṣl *ḥṣel / iḥṣel* ‘to be trapped’ (intr) A *ḥeṣṣel / ḥeṣṣel / tḥeṣṣal* ‘to catch’ (trans) B Pass *tḥeṣṣleṯ* PP *mḥeṣṣel / mḥeṣṣla / mḥeṣṣlin*

ḥṣṛ *ḥeṣṣeṛ / ḥeṣṣeṛ / tḥeṣṣaṛ* ‘to have pity’ (trans) B Pass *tḥeṣṣṛeṯ* PP *mḥeṣṣeṛ / mḥeṣṣṛa / mḥeṣṣṛin*

ḥṣṛ *ḥṣeṛ / iḥṣeṛ* ‘to prevent’ (trans) A PP *meḥṣuṛ / meḥṣuṛa / meḥṣuṛin*

ḥšm *leḥšam - iḥšišmen* ‘children’ C

ḥšm *leḥšuma - leḥšumaṯ* ‘shame’ A

ḥšm *ḥšem / iḥšem* ‘to be ashamed’ (intr) A E.g. *uha ḥšem zeg uha* ‘This one is ashamed of this one.’ *nekki ḥšemt zgaḵ* ‘I am ashamed of you.’ Caus. *ḥeššem / ḥeššem / tḥeššam* ‘to embarras’ (trans) B Pass *tḥeššmeṯ* PP *mḥeššem / mḥeššma / mḥeššmin* E.g. *keği ša ɣen tḥeššmet* ‘You are going to embarrase us.’

ḥšṛ *lḥašaṛa* ‘insect’ A

ḥtš *aḥettaš - iḥettiša* Dim. *aḥtiteš - iḥtitšen* F. *taḥettašt - tiḥettiša* Dim. *taḥtitešt - tiḥtitšan* ‘slash’ B

ḥtš *ḥteš / ḥteš / ḥetteš* ‘to mow, to collect bush’ (trans) B Pass *tteḥteš* PP *meḥtuš / meḥtuša / meḥtušin* VN *leḥteš*

ḥčn *aḥečun - iḥučan* Dim. *aḥčičen - iḥčičnen* F. *taḥečunt - tiḥečunan* Dim. *taḥčičent - tiḥčičnan* ‘vagina’ B

ḥtž *ḥtaž / ḥtaž / tteḥtiž* ‘to want, to love’ (trans) B

ḥtž *ḥtaž / iḥtaž* ‘to need, to want’ (trans) B PP *meḥtaž / meḥtaža / meḥtažin*

ḥw *ḥewwi / ḥewwa / tḥewway* ‘to have sex (people)’ (trans) B Pass *tḥewwaṯ* PP *mḥewwi / mḥewwya / mḥewwin*

ḥwl *ḥewwel / ḥewwel / tḥewwal* ‘to bend’ (trans) B Pass *tḥewwleṯ* PP *mḥewwel / mḥewwla / mḥewwlin* B

ḥwl *ḥawel / ḥawel / tḥawal* ‘to try’ (trans) B

ḥwl *ḥwel / ḥewl-a / ḥiwel* ‘crooked’ A

ḥwl *lmuḥawala - lmuḥawalaṯ* ‘attempt’ A

ḥwṭ *lḥawṭ - leḥwaṭ* Dim. *aḥweyyeṭ - iḥweyyṭen* ‘earth within vegetable garden’ C

ḥwyž *leḥwayež* Dim. *leḥwiža - leḥwižaṯ* ‘clothes’ A

ḥwym *ḥewwayma - ḥewwaymaṯ* ‘dragonfly’ A

ḥy *leḥya* ‘shame’ A

ḥy *lmaḥeyya* ‘fermented drink made from dried figs’ A

ḥy AP *ḥayy / ḥayya / ḥayyin* ‘be alive’ cf. **dr** ‘to live’

ḥyk *aḥayeḵ - iḥuyaḵ* ‘wool cloth’ B

ḥyt *lḥayat* ‘life’ A

ḥyṭ *lḥayṭ - leḥyuṭ* Dim. *leḥweyyeṭ* Augm. *aḥeyyuṭ* ‘wall’ A

ḥyw *lḥayawan* ‘animal’ A

ḥzm *aḥezzum - iḥezmen* F. *taḥezzumt* Dim. *taḥzizemt - tiḥzizman* ‘a bunch of wood’ B

ḥzm *leḥzam - leḥzuma* Dim. *leḥzeyyem* ‘wool belt’ A

ḥzn *ḥezzen / ḥezzen / tḥezzan* ‘to grief’ (trans) B AP *ḥeznan / ḥeznana / ḥeznanin* VN *lḥuzen*

ḥzq *leḥzeq - leḥzuq* ‘fart’ A

ḥzq *ḥezzeq / ḥezzeq / tḥezzaq* ‘to fart’ (intr) B

ḥzqxms *ḥezzaqlexmamsa* ‘kind of plant’ A

ḥž *lḥaža - leḥwayež* ‘thing’ E.g. *ši ḥaža* ‘few, a little bit’ A

ḥžb *lḥažeḇ - leḥwažeḇ ~ lḥižḇan* ‘eyebrow’ A

ḥẓṭ *aḥeẓẓuṭ - iḥeẓẓuṭen* Dim. *aḥẓiẓeṭ - iḥẓiẓṭen* F. *taḥeẓẓuṭṭ - tiḥeẓẓuṭan* Dim. *taḥẓiẓeṭṭ* - *tiḥẓiẓṭan* ‘naked person’ B

ḥẓt *ḥeẓẓuti / ḥeẓẓutiy-a / ḥeẓẓutiyy-in* ‘naked’ A

iqṯel kukku ‘thumb’ (kukku are lice) A

k

k *uḵi / uḵa / ttaḵi* ‘to cross a river’ (trans) B

k *kku / kku / ttḵaw* ‘to dry up’ (intr) B *ssku / ssku / sskaw* ‘to dry’ (trans) B See **štf** for Pass and PP.

kb *kebb ~ kubb / kebb / tkebba* ‘to pour’ (trans) B Pass *tkabbeṯ* PP *mekbub / mekbuba / mekbubin*

kbd *lkebda - lekḇada* Dim. *lekḇida* ‘liver’ A

kbl *taḵʷḇalt - tiḵʷḇalan* ‘corncob’ B

kbr *taḵḇert - tiḵeḇraṯan* ‘woolen djellaba’ B

kbṛ *takebbuṛt - tikebbuṛan* ‘pride’ B

kbṛ *tkebbeṛ / itkebbeṛ* ‘to boast’ (intr) A

kdb *lkeddaḇ - lkeddaḇin* Dim. *lekḏiḏeḇ - lekḏiḏḇin* F. *lkeddaḇa* Dim. *lekḏiḏḇa* ‘liar’ A

kdb *lkuḏḇa - lekḏuḇ ~ lemkaḏeḇ* Dim. *lekḏiḇa* ‘lie’ A

kḍr *aḵayḍar - lekyaḍer* Dim. *akwiḍar - ikwiḍren* ‘horse’ C

kɛbl *kuɛballa - kuɛballaṯ* ‘female jackal’ A

kf *lkaf - lkifan* ‘cave’ A

kf *lkaffa - lkaffaṯ* ‘palm of the hand’ A

kfr *akfer - ikefran* Dim. *akfeyyer - ikfiren* F. *takfert* Dim. *takfeyyert - tikfiran* ‘turtle’ B

kft *lkefta* ‘minced meat’ A

kftr *lkafatira - lekfater* Dim. *lekfitra - lekfitraṯ* ‘coffee kettle’ A

kɣṭ *lkaɣiṭ - lekwaɣeṭ* Dim. *lekwiɣeṭ - lekwiɣṭaṯ* ‘paper’ A

kḥl *akeḥlaw - ikeḥlawen* Dim. *akḥiḥel - ikḥiḥlen* F. *takeḥlawt - tikeḥlawan* Dim. *takḥiḥelt - tikḥiḥlan* ‘black person/thing’ B

kḥl *keḥḥel / keḥḥel / tkeḥḥal* ‘to make darken’ (trans) B Pass *tkeḥḥleṯ* PP *mkeḥḥel / mkeḥḥla / mkeḥḥlin*

kḥl *kḥel / ikḥel* ‘to tan, darken’ (intr) A

kḥl *kḥel / keḥl-a / kuḥel* ‘black’ *kḥiḥel / kḥiḥl-a / kḥiḥl-in* ‘somewhat black’ A

kk *tikkuk̲* ‘type of bird’ A

kl *ak̲al* ‘soil’ Types of soil are: *ak̲al aḥemri* is red soil, *ak̲al buɣriḇ* is black soil, *ak̲al amlil* resembles sand, *ak̲al milkeyya* is good farmland. B

kl *akkil* (*wa-*)‘curdled milk’ B

kl *lmak̲la* ‘food’ A

kl *ak̲el ~ ak̲ul / uk̲el / ttak̲el* ‘to step on’ (intr) B

kl *tk̲el / itk̲el* ‘to rely’ (trans) A E.g. *ka-ytk̲el fxes a s d ibb ssuxra inši* ‘He relies on him to bring him some groceries.’

klm *lkelma - lkelmaṯ / leklam* ‘word, speech’ A

klw *lkelwa - leklawi* ‘kidney’ A

km *k̲ma - ayeṯma* ‘brother’ B

km *lkama - lkamaṯ* ‘bed’ A

km *lkumm - luk̲mam* ‘sleeve’ A

km *kma / ikmi* ‘to smoke’ (trans) A

kml *k̲mel / k̲mel / kemmel* ‘to finish’ (trans) B Pass *tkemmleṯ* AP *kamel / kamla / kamlin* PP *mkemmel / mkemmla / mkemmlin*

kmm *tak̲ʷmamt - tik̲ʷmaman* ‘muzzle’ B

kmr *ak̲emmar - ik̲emmira* Dim. *ak̲mimer - ik̲mimren* F. *tak̲emmart - tik̲emmira* Dim. *tak̲mimert - tik̲mimran* ‘face’ B

kmš *ak̲emmiš - ik̲emmišen* Dim. *ak̲mimeš - ik̲mimšen* F. *tak̲emmišt - tik̲emmišan* Dim. *tak̲mimešt - tik̲mimšan* ‘fistful’ B

kmš *kemmeš / kemmeš / tkemmaš* ‘to fold’ (lab) B Pass *tkemmšeṯ* PP *mkemmeš / mkemmša / mkemmšin* VN *tekmiša* ‘a fold’

kms *kemmes / kemmes / tkemmas* ‘to pack’ (trans) B Pass *tkemmseṯ* PP *mkemmes / mkemmsa / mkemmsin*

kmṭ *k̲meṭ / k̲meṭ / kemmeṭ* ‘to burn’ (intr) B

kmṭ *sek̲meṭ / sek̲meṭ / sek̲maṭ* ‘to burn’ (trans) B

kmy *lekmaya - lekmayaṯ* ‘smoking’ A

kmyn *lkamyun - lkamyunaṯ ~ lkamyunis* ‘truck’ C

kmz *ak̲mez - ik̲emzan* ‘nail’ B

kn *tak̲int - tik̲inan* ‘big plate’ (The harvest is collected in it.) B

kn *taḵna* (*ta-*) - *taḵniwan* (*ta-*) ‘co-wife’ B

knk *lkanki* - *leknaka* Dim. *lekniki* - *leknikeyyaṯ* ‘gas lamp’ A

kns *ḵnes / ḵnes / kknes* ‘to fight, to argue’ (intr) B cf. *šṛṛ* for PP

kntr *lkuntru* - *lkuntrus* ‘square’ A/S

knw *aḵenniw* - *iḵenniwen* F. *taḵenniwt* - *tiḵenniwan* ‘twins’ B

knz *lkinz* - *leknuz* ‘treasure’ A

kpṭ *akeppuṭ* - *ikeppaṭ* ~ *lekpapeṭ* Dim. *akpipeṭ* - *ikpipṭen* ‘coat’ C

kr *aḵur / yuḵer / ttaḵer* ‘to steal’ (trans) B See **ṣṛq** for Pass and PP.

kr *kkur / kker / tekker* ‘to wake up’ (intr) B

kr *kra / ikri* ‘to hire’ (trans) A Pass *tekra* AP *kari / karya / karin* PP *mekri / mekriyya / mekriyyin*

krbš *akarḇaš* - *lekraḇeš* Dim. *akriḇaš* - *ikriḇšen* F. *takarḇašt* - *tikarḇašan* ‘claw’ C

krd *lekridi* - *lekridiyyaṯ* ‘debt’ A

krf *aḵurfa* ‘chaff’ B

krk *ḵerreḵ / ḵerreḵ / tḵerraḵ* ‘to lie’ (intr) B E.g. *iḵerreḵ fxes* ‘He lied to him.’

krkb *kerkeḇ / kerkeḇ / tkerkaḇ* ‘to roll’ (lab) B Pass *tkerkḇeṯ* PP *mkerkeḇ / mkerkḇa / mkerkḇin*

krm *lekrima* - *lekrimaṯ* ‘ointment’ A

krs *lkursi* - *lekrasa* Dim. *lekrisi* - *lekrisiyyaṯ* ‘chair’ A

krš *taḵeršišt* - *tiḵeršišan* ‘belly of a sheep’ B

krš *kerreš / kerreš / tkerraš* ‘to remove skin of fish, make a hole’ (trans) B Pass *tkerršeṯ* PP *mkerreš / mkerrša / mkerršin*

krsn *kersanna* ‘bitter vetch’ A

kršš *taḵeršišt* - *tiḵeršišan* Dim. *taḵrišešt* ‘animal stomach’ B

krtl *amkertel* - *imkertlen* ‘big rock’ B

krčn *lkurčun* - *lkurčus* ‘mattress’ A/S

kry *lkari* - *lkurray* F. *lkarya* ‘renter’ A

kry *lkreyya* - *lkreyyaṯ* ‘small octopus’ A

krz *lkurzeyya* - *lkurzeyyaṯ* ‘wool belt’ A

krz *ḵrez / ḵrez / kkrez* ‘to plough’ (trans) B cf. for **ḥṛt** for Pass and PP

krṭr *lkarṭera* - *lkarṭeraṯ* ‘men’s wallet’ A

knṭṛ *kanaṭiṛu* - *kanaṭiṛus* ‘type of fish’ S

kṛ *lkaṛ* - *lkiṛan* ‘intercity bus’ A

kṛ *lkuṛa* - *lkuṛaṯ* ~ *lekwaṛi* ‘ball’ A

kṛfz *lekṛafez* ‘celery’ A

kṛh *lkiṛaha* - *lkiṛahaṯ* ‘hatred’ A

kṛh *kṛeh / ikṛeh* ‘to hate’ (trans) A AP *kaṛeh / kaṛha / kaṛhin* PP *mekruh / mekṛuha / mekṛuhin* E.g. *nekki kaṛeh ddenya* ‘I hate the world.’

kṛny *kuṛuneyya - kuṛuneyyaṯ* ‘fragant’ A

kṛṣ *lkeṛṛuṣa - lekṛaṛeṣ* ~ *lkeṛṛuṣaṯ* Augm. *akeṛṛus* ‘cart or wagon’ A

kṛṭ *lkeṛṛaṭ - lekṛaṛeṭ* ‘type of ship’ (It has a net that scrapes the sea floor to catch fish.) A

kṛṭ *lkeṛṛiṭa - lkeṛṛiṭaṯ* ‘spindle’ A

kṛṭ *timeḵraṭ* ‘scissors’ B

kṛṭ *keṛṛeṭ / keṛṛeṭ / tkeṛṛaṭ* ‘to scrape’ (trans) B Pass *tkeṛṛteṯ* PP *mkeṛṛeṭ / mkeṛṛṭa / mkeṛṛṭin*

ks *ḵes / ḵes / ttḵes* ~ *iḵessa* ‘to tend (goats, sheep)’ (trans) B

ks *kkus / kkes / tekkes* ‘to remove’ (trans) B

ksb *leksiḇa* ‘livestock’ A

ksb *ḵseḇ / iḵseḇ* ‘to own and raise animals’ (trans) A

ksb *ḵseḇ / ḵseḇ / ḵesseḇ* ‘to own animals and raise them’ (trans) B Pass *nḵesḇeṯ* PP *meḵsuḇ / meḵsuḇa / meḵsuḇin* E.g. *tasa yahen nḵesḇeṯ ɣer yan iši* ‘That cow was raised by someone.’

ksk *kseksu* ‘couscous’ A

ksk *lkaṣk - lkaṣkaṯ* ‘helmet’ A

ksks *akeskes - ikesksa* ~ *ikeskas* Dim. *aksikes - iksiksen* F. *takeskast - tikskisan* Dim. *taksikest* ‘coucous pan’ B

ksl *kessel / kessel / tkessal* ‘to massage’ (trans) B E.g. *š a s ikessel* ‘He is going to massage him.’

ksṛ *kesseṛ / kesseṛ / tkessaṛ* ‘to harrow’ (trans) B

ksr *taḵʷsert - tiḵʷsaran* Dim. *taḵʷseyyert - tiḵʷsiran* Augm. *aḵʷser - iḵʷsaren* ‘piece of bread’ B

kss *kesses / kesses / tkessas* ‘to fart softly’ (intr) B

ksṭ *ḵsuṭ / ḵsuṭ / ttaḵsaṭ* ‘to be afraid’ (intr) B

kšm *ḵšem / ḵšem / kečem* ‘to enter’ (intr) B cf. **dxl** for AP, Pass and PP. Caus. *šše ḵšem / šše ḵšem / tše ḵšam* ‘to make enter’ (trans) B

kšṭ *keššeṭ / keššeṭ / tkeššaṭ* ‘to rob’ (trans) B

kṣṭ *lkaṣiṭa - lkaṣiṭaṯ* ~ *lekwaṣeṭ* ‘casette’ A

ktb *lektaḇ - lektuḇa* Dim. *lekteyyeḇ* ‘book’ A

ktb *lekṯaḇa - lekṯayeḇ* ‘writing’ A

ktb *kteḇ* ~ *ḵteḇ / kteḇ* ~ *ḵteḇ / kktuḇ* ‘to write’ (trans) B Pass *tketḇeṯ* ~ *nketḇeṯ* PP *mektuḇ* ~ *meḵtuḇ / mektuḇa* ~ *meḵtuḇa / mektuḇin* ~ *meḵtuḇin*

ktn *lkettana - lkettanaṯ* ‘linen’ A

ktṛ *ḵteṛ* ~ *xteṛ* ‘more’ A

ktšf *ktašef / iktašef* ‘to guess’ (intr) A Pass *tektašfeṯ* PP *mektašef / mektašfa / mektašfin* E.g. *ktašef fxes* ‘He guessed it.’

kčṛ *lkučaṛra* - *lkučaṛraṯ* ‘spoon’ A

kčy *lkučeyya* ~ *lčukeyya* - *lkučeyyaṯ* ~ *lčukkiyaṯ* ‘razor’ A

kwdr *lkwaḏru* - *lkwaḏrus* ‘door frame, window’ A/S

kwṛ *aḵewwaṛ* - *iḵewwiṛa* F. *taḵewwaṛt* - *tiḵewwiṛa* Dim. *taḵwiweṛt* - *tiḵwiwṛan* ‘ball, circle’ B

kwẓ *lkawẓa* ‘pride’ A

kwẓ *kewweẓ / kewweẓ / tkewwaẓ* ‘to boast, to duck’ (intr) B PP *mkewweẓ / mkewwẓa / mkewwẓin*

kyf *tkeyyef / itkeyyef* ‘to smoke’ (trans) A PP *mkeyyef / mkeyyfa / mkeyyfin*

kyl *keyyel / keyyel / tkeyyal* ‘to weigh’ (trans) B Pass *tkeyyleṯ* PP *mkeyyel / mkeyyla / mkeyylin* E.g. *tkeyyleṯ taferkiwt ahen* ‘The (fruits of the) plot of land has been weighed.’

kzn *lkuzina* - *lkuzinaṯ* ‘cookhouse’ A

l

l *alu / ulu / ttalu* ‘to pick, pluck’ (trans) B

l *ll / ll / ttill* ‘to be’ (intr) B

l *tala* (*ta*-) - *taliwan* ‘spring’ B

l *ul* - *leqluba* ‘heart’ C

lbb *laḇaḇu* - *laḇaḇus* ‘sink’ S

lblb *lleḇlaḇ* ‘type of plant’ A

lbq *lebbeq / lebbeq / tlebbaq* ‘to become fat’ (lab) B PP *mlebbeq / mlebbqa / mlebbqin* E.g. *aɛeyyal nnes ilebbeq* ‘His child has become fat.’ *ilebbq aṯ* ‘He has made him fat.’

lbč *llḇač* ‘hot rain’ A

lby *lluḇeyya* ‘beans’ A

lbyṭ *llḇayṭ* Dim. *llḇeyyeṭ* Dim.F. *llḇiṭa* ‘great-grandchildren’ A

lbnṭ *liḇanṭi* ‘eastern wind and waves in the sea’

lbẓ *alabbaẓ* ~ *arabbaẓ* - *ilabbaẓen* ~ *irabbaẓen* Dim. *albibeẓ* ‘bread chunk’ B

lbẓ *lebbeẓ / lebbeẓ / tlebbaẓ* ‘to form a bread chunk’ (trans) B

lbɛɛ *lbelɛuɛa* - *lbelɛuɛaṯ* ‘big snail’ A

lf *alef* (*ya*-) - *ilfan* ‘boar’ B

lft *lleft* Unity F. *taleftunt* - *tileftunan* Augm. *aleftun* ‘sweet potato’ B

lfṭ *taleffiṭt* - *tileffiṭan* Dim. *talfifeṭt* - *tilfifṭan* ‘blister’ B

lɣ *llya* - *llyaṯ* ‘sound (from a distance)’ A

lɣ *lluɣa* - *lluɣaṯ* ‘language’ A

lḥm *llḥem* F. *lleḥma* Dim. *llḥima* ‘flesh’ (The feminine refers to a tasty peace of meat.) A

lḥs *lḥes / lḥes / leḥḥes* ‘to lick’ (trans) B

lk *tilket - tilkan ~ tirkan* ‘head louse’ B

lkm *lkem ~ lkum / lkem / lekkem* ‘to arrive’ (trans) B E.g. *ilekm aṯ* ‘he reached it.’ Caus *sselkem ~ sselkum / sselkem / sselkam* ‘to make arrive’ (trans) B

lkm *tilḵaman ~ tirḵaman* ‘kind of spinach’ B

lkptr *ilikupter ~ alikupter* ‘helicopter’ A

lkš *likuš* ‘pampers’ A

ll *alili* ‘oleander (laurus nobilis)’ B

ll *llil - llyali* ‘night’ *bellil* Adv ‘at night’ A

ll *lluli - lluleyyin* F. *lluleyya* ‘first’ A

llf *talelluft* ‘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.’

lmn *llimin* ‘right ‘ E.g. *afus n llimin* ‘the right hand’ A

lmny *alumunyu* ‘aluminium’ A

lngd *lingwaḏu - lingwaḏus* ‘tongue (fish)’ S

lngṣ *llingaṣ* Unity F. *talingaṣt - tilingaṣan* ‘pear’ C

lps *lappis - lpapes* ‘pen’ A

lq *laqi / laqa / tlaqay* ‘to let, make meet’ (trans) B

lq *tlaqa / itlaqa* ‘to join, meet’ (trans) A

lqḥ *llqiḥ* ‘sprout’ A

lqḥ *lqeḥ / lqeḥ / leqqeḥ* ‘to graft’ (intr) B PP *melqaḥ / melqaḥa / melqaḥin*

lqm *leqqem / leqqem / tleqqem* ‘to cast’ (trans) B Pass *tleqqmeṯ* PP *mleqqem / mleqqma / mleqqmin*

lqm *luqma - luqmaṯ* ‘mould’ A

lqm *talqimt - tilqiman* ‘bread’ cf. **xbz** B

lqṭ *leqqeṭ / leqqeṭ / tleqqaṭ* ‘to pick up’ (trans) B Pass *tleqqṭeṯ* PP *mleqqeṭ / mleqqṭa / mleqqṭin*

lr *tellirt - telliran* ‘type of plant’ B

lṛ *lliṛa - lliṛaṯ* ‘ass’ A

lṛṭ *lluṛṭi* ‘sea has northern wind and waves’

lṛḍ *llaṛḏa - llaṛḏaṯ* ‘school of fish at night’ A

ls *alus - ilusan* F. *talust - tilusṯan* ‘husband’s brother/sister’ C

ls *iles - ilsan* ‘tongue’ (The plural is not accepted by everbody.) B

lsq *lseq / lseq / lesseq* ‘to stick, to glue’ (intr) B Pass *tlessqeṯ* PP *mlesseq / mlessqa / mlessqin*

ltm *llṯam - llṯamaṯ* Dim. *llṯeyyem* ‘veil to cover the face’ A

ltm *uleṯma - ayeṯma* ‘sister’ (The plural refers to brothers as well as sisters.) B

lčn *lečin* F. *talečint - tilečinan* ‘orange’ C

ltx *ltex / ltex / lettex* ‘to fling, throw’ (trans) B Pass *tletxeṯ* PP *meltux / meltuxa / meltuxin*

lṭ *llaṭṭa - lliṭan* Dim. *llṭiṭa - llṭiṭaṯ* ‘bottle’ A

lṭ *luṭa - luṭaṯ* Dim. *lwiṭa - lwiṭaṯ* ‘plain’ A

lw *lewwi / lewwi / tlewway* ‘to spin, to roll a cigarette or joint’ (lab) B Pass *tlewwaṯ* PP *mlewwi / mlewwya / mlewwin*

lw *lmelwi* ‘pan cake made out of meal baked in oil’ A

lwgr *talawgart - tilawgaran* ‘white bird that follows the farmer’ B

lwḥ *lluḥ - llwayeḥ* Unity F. *talwiḥett - tilwiḥṯan* ‘shelf’ C

lwn *llawn - lʕalwan* Dim. *llweyyen - llweyynaṯ* ‘colour’ (The diminutive refers to a nice colour.) A

lwn *llwina - llwinaṯ* ‘picarel (fish)’ A

lwqd *lewqiṯ* Unity F. *talewqitt - tilewqitan* ‘match’ C

lwṛ *llawṛeyya - llawṛeyyaṯ* ‘ass’ A

lwy *llewway* ‘kind of ivy’ A

lwz *llawz* Unity F. *talawziṯ - tilawziṯan* ‘almond’ C

lymn *llaymun* Unity *F. talaymunt - tilaymunan* ‘lemon’ C

lyn *llyan* ‘traditional shampoo’ (It is made by boiling ash from the fireplace in a big bowl.) A

lẓ *alaẓen* (*wa-*) ‘tomorrow’ B

lẓ *lluẓ / llaẓ ~ lluẓ / ttlaẓ* ‘to be hungry’ (intr) B

lžṛ *llažuṛ - llwažeṛ* Unity F. *talažuṛt - tilažuṛan* Dim. *lwižṛa* ‘brick’ C

m

m *am* ‘like’ E.g. *am umaleḥ aḏ* ‘like this fish’ B

m *yemma* ‘mother’ B

mbṛ *lmembaṛ* ‘islamic pulpit’ A

md *medd / medd / tmedda* ‘to lie down’ (lab) B PP *memduḏ / memduḏa / memduḏin*

md *tamḏa - timḏiwan* ‘lake’ B

md *tamuḏa - timuḏiwan* ‘sow’ B

mdd *tamedda - timeddiwan* ‘eagle’ B

mdg *amdaggu - imdugga* ‘warble fly’ B

mdn *lemḏina - lemḏun* ‘city’ A

mdr *amḏer - imeḏren* Dim. *amḏeyyer - imḏeyyren* ‘branch’ B

mdwd *lmeḏweḏ - lemḏaweḏ* Dim. *lemḏiweḏ - lemḏiwḏaṯ* ‘trough’ A

mḍ *meḍ̱ḏ̱i / meḍ̱ḏ̱a / tmeḍ̱ḏ̱ay* ‘to sharpen’ (trans) B PP *mmeḍ̱ḏ̱i / mmeḍ̱ḏ̱ya / mmeḍ̱ḏ̱in*

mḍy *maḍi / maḍy-a / maḍ(y)-in* ‘pointed’

mšy AP *maši / mašš-a / mašy-in ~ maš-in* ‘go’ see **d** for ‘to go’

mžy AP *maži / maǧ-a / mažy-in* ~ *maǧ-in* ‘come’ see **d** for ‘to go’

mɛd *lmaɛida - lmaɛidaṯ* ‘stomach’ A

mɣ *mɣi d / mɣi d / ttemɣi d* ‘to grow’ (intr) B Caus *issemɣa d / ssemɣa d / ssemɣay d* ‘to (make) grow’ (trans) B (The **d** is obligatory.) E.g. *azgasneṭ a d issemɣa isanen* ‘Last year he grew teeth.’

mgn *lmaḡana - lemwaḡen* ~ *lmaḡanaṯ* ‘watch’ A

mgn *tmeggen / itmeggen* ‘to feel good, be calm’ (intr) A VN *ttemgin*

mgnn *tamuḡnant - timuḡnanan* ‘cooked egg’ B

mgr *mger / mger / megger* ‘to harvest’ (trans) B cf. *ḥṣd* for Pass and PP

mɣṛ *tameɣṛa - timeɣṛiwan* ‘wedding’ B

mɣṛ *amɣaṛ - imɣaṛen* ‘old man’ F. *tamɣaṛt - timɣaṛan* Dim. *tamɣeyyeṛt* ‘old women’ B

mɣṛ *amɣaṛ* ‘father-in-law of a woman’ B

mgr *amḡer - imeḡran* Dim. *amḡeyyer - imḡeyyren* ‘sickle’ B

mɣṛ *tamɣaṛt* ‘mother-in-law of a woman’ B

mɣṛb *ameɣṛaḇi - lemɣaṛḇa* F. *tameɣṛaḇiṯ* ‘Moroccan’ C

mɣṭ *meɣɣeṭ / meɣɣeṭ / tmeɣɣaṭ* ‘to hit’ (trans) B Pass *tmeɣɣṭeṯ* PP *mmeɣɣeṭ / mmeɣɣṭa / mmeɣɣṭin*

mɣz *amɣuz - imɣaz* ‘nit’ B

mgl *amaḡal - imaḡalen* ~ *imuḡal* F. *tamaḡalt - timaḡalan* ‘piece of bush’ (piece of bush that is hung in the stable for goats to eat.) B

mgyz *ameggayzu* ‘type of plant’ B

mḥ *mḥa / mḥi* ~ *imḥa / meḥḥa - imeḥḥi* ‘to wipe clean’ (trans) B

mḥ *miḥ / maḥ / ttmiḥ* ‘to empty water’ (trans) B Pass *tmaḥeṯ* PP *memyaḥ / memyaḥa / memyaḥin* E.g. *tmaḥeṯ lbaṭil* ‘The boat has been emptied from the water.’

mḥl *lmaḥal - lemwaḥel* ‘room’ A

mḥrb *lmeḥraḇ - lemḥareḇ* Dim. *lemḥireḇ* ‘place where the imam prays’ A

mhrz *lmehraz - imehrazen* ‘type of insect’ It eats wheat. C

mḥsd *lmeḥsaḏ - lmeḥsaḏin* F. *lmeḥsaḏa* ‘jealous person’ A

mḥṭ *lmuḥiṭ - lmuḥiṭaṯ* ‘ocean’ A

mk *lmika - lmikaṯ* ‘platic bag’ A

mk *muḵa - muḵaṯ* ‘owl’ A

mkl *yemmawaḵal - immawaḵalen* ‘kind of worm’ B

mklt *meklitta* ‘type of fish’ A

mkn *lmaḵina - lmaḵinaṯ* ~ *lemwaḵen* ‘machine’ A

mkr *amaḵar - imuḵar* F. *tamaḵart - timuḵar* ~ *timaḵaran* ‘thief’ B

mktr *ameḵter - imeḵtaren* ~ *imeḵtira* ‘part of the plough’ B

ml *amalu - imula* F. *tamaluk̲t* Dim. *tamwilek̲t - timwilk̲an* ‘shadowy hill’ B

ml *lmal* ‘capital’ A

ml *mel / mel / mmal* ‘to show’ (intr) B PP *mwerri / mwerrya / mwerrin* E.g. *daʔimen mmalaɣ as imalḥen inu* ‘I always show him my fish.’

ml *mul - mwalin* F. *mula* ‘owner’ A E.g. *mul axyam - mwalin axyam* F. *mulat̲ axyam* ‘host’

mlḥ *amaleḥ - imalḥen* Dim. *amwileḥ* F. *tamaleḥt* Dim. *tamwileḥt* ‘fish’ B

mlḥ *lemlaḥ* ‘salt’ A

mlḥ *maleḥ / malḥ-a / malḥ-in* ‘salty’

mlk *lmalik̲ - lmuluk̲at̲* F. *lmalik̲a - lmalik̲at̲* ‘king’ A

mlk *lmilk ~ lmulk - lamlak̲* ‘property’ A

mlk *lmilkeyya - lmilkeyyat̲* ‘fishing permit’ A

mlk *mlek̲ / mlek̲ / melle k̲* ‘to marry’ (trans) B PP *mmelle k̲ / mmellk̲a / mmellk̲in* Caus *ssemlek̲ / ssemlek̲ / ssemlak̲* ‘to let, make marry’ (trans) B *imlek̲ id̲es* ‘He married with her.’ *imlek̲ fxes* ‘He married another (additional) wife.’

mll *amellul - imellulen* Dim. *amliwel - imliwlen* F. *tamellult - timellulan* Dim. *tamliwelt - timliwlan* ‘white person’ B

mll *mellul mellul-et̲* ‘white’ Dim. *mliwel /mliwl-a / mliwl-in* ‘somewhat white’ C

mlq *lmilaq - lemwaleq* Unity *amileq - imilqen* Dim. *amwileq - imwilqen* ‘grit’ C

mls *melles / melles / tmellas* ‘to smoothen’ (trans) B AP *males / mals-a / mals-in* PP *mmelles / mmellsa / mmellsin*

mlṭ *lmalṭa - lemlaṭi* Dim. *lemliṭa - lemliṭat̲* ‘blanket’ A

mlṭ *lmulṭa - lmulṭat̲* ‘fine’ A

mlẓt *tamelẓit̲ - timelẓa* ‘type of plant’ B

mm *memmu n ṭiṭṭ* ‘apple of the eye’ B

mm *tamemt ~ tamamt* (*ta-*) ‘honey’ B

mn *aman* (*wa-*) ‘water’ B

mn *tmenna / itmenna* ‘to hope’ (trans) A

mnḍln *manḍalina* Unity F. *tamenḍalint - timenḍalinan* ‘mandarin’ C

mndm *mnad̲em - medden* ‘human being’ C

mnɛ *mennɛ / mennɛ / tmennaɛ* ‘to make hold’ (trans) B

mngž *tamengažt - timengažan* Dim. *tamnigežt - timnigžan* ‘earring’ C

mnm *lemnama - lemnamat̲* VN ‘dream’ A

mnqṛ *lmenqeṛ - lemnaqeṛ* Dim. *lemniqeṛ - lemniqraṭ̲* ‘chisel, sting’ A

mnṭ *tamunniṭ - timunniṭan* ‘ass’ B

mntk *mantika* ‘margerine’ A

mnṭṛ *tamenṭaṛt - timenṭaṛan* ‘type of insect’ It is yellow, lives between the crops. B

mql *lmuqla* ‘The first intestines of the goat that are eaten: liver, heart, kidney’ A

mqṛ *meqquṛ / muqqṛ-eṯ* ‘big’ Dim. *mqiqeṛ / mqiqṛ-eṯ* ‘somewhat big’ B

mr *lemra - lemrayaṯ* ~ *lemrawaṯ* ‘mirror’ A

mr *lmerra - lmerraṯ* ‘goat intestine’ A

mr *merr / merr-a / merr-in* ‘bitter’ A

mr *tammart - timmira* ~ *tammira* Augm. *ammar - immira* (*wa-*) ‘beard’ E.g. *ɣres 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 *lmareyya* ‘tide’ E.g. *lmareyya n šširq* = east tide *lmareyya n ṣṣafi* = west tide A

mrnd *mirinda - mirindaṯ* ‘afternoon meal’ Small meal at about five o’clock S

mṛ *umeṛ* ~ *ameṛ / umeṛ* ~ *ameṛ / ttameṛ* ‘to send’ (trans) B E.g. *amṛax imalḥen dar uxyam* ‘I sent the fish home.’

mṛ *lmiṛu* ‘grouper (fish)’

mṛbṭ *ameṛbuṭ - imṛibṭen* Dim. *amṛibeṭ* ‘small piece of rope’ B

mṛɣ *tamuṛɣa* ‘locust’ B

mṛḥ *amṛaḥ - imṛahen* ‘open place’ B

mṛq *lemṛaq* F. *lmeṛqa* Dim. *lemṛiqa* ‘sauce’ A

mṛṣ *lmaṛṣa - lemṛaṣi* Dim. *lemṛiṣa - lemṛiṣaṯ* ‘port’ A

mṛṭ *lmeṛṭ - lʕamṛaḏ* ‘sickness’ A

mṛtl *lmuṛtal - lmuṛtalis* ‘flip in the water’ A/S

mṛtn *meṛṯayn* ‘twice, two times’ A

mṛwḥ *tameṛwaḥt - timeṛwaḥan* ‘fan (in the hand)’ B

mṛx *meṛṛaxu - meṛṛaxuwaṯ* ‘mako shark’ S

mṛyṭ *amaṛyaṭ - imaṛyaṭen* ‘stick for hitting’ B

mṛyṭ *meṛyeṭ / meṛyeṭ / tmeṛyaṭ* ‘to bend repeatedly’ (intr) B

mṛž *lmeṛža - lemṛuž* ‘swamp’ A

ms *amass - imassen* ‘block on the head of cattle to tie the yoke to’ B

ms *ammas - immasen* ‘waist’ B

ms *lmissa - lemses* ~ *lmissaṯ* Dim. *lemsisa - lemsisaṯ* ‘table’ A

ms *lmus - lemwas* Dim. *lemweyyes - lemweyysen* ‘retractable knife’ A

msḥ *mseḥ / mseḥ / messeḥ* ~ *itasseḥ* ‘to wipe’ (trans) B

msḥ *ttimsaḥ* ‘crocodile’ A

msq *lmusiqa - lemwaseq* ‘music’ A

mss *messus / messus-eṯ* ‘insipid’ Dim. *msiwes / msiws-a / msiws-in* ‘somewhat insipid’ C

mss *tamessust - timessusan* ‘unsalted bread’ B

mslm *ameslem - lemselmin* F. *tameslemt - timselman* ‘muslim’ C

msmn *lemsemmen* ‘type of pan cake’ A

msw *amessiw - imessiwen* F. *tamessiwt - timessiwan* ‘old basket’ B

mṣ *lmaṣṣa - lmaṣṣaṯ* ‘sledge hammer’ A

mṣṭ *amṣeṭ - imeṣṭan* ‘hip’ B

mš *amuš - imuššan* Dim. *amšišu - imšišwen* F. *tamuššet - timušṯan* Dim. *tamšišut - timšišwen* ‘cat’ B

mšbl *mešbel / mešbel / tmešbal* ‘to sift’ (trans) B

mšklṭ *meškliṭ - meškliṭaṯ* ‘bicycle’ A

mškpr *tameškeppart - timeškepparan* ‘chicken’ B

mšn *lmašina - lmašinaṯ* ‘train’ A

mšṭ *amšeṭ - imešṭen* ‘separation stone between two pieces of land to mark the boundary’ B

mšṭ *tamšeṭt - timešṭtan* ‘comb’ E.g. *tamšeṭt n uṭar - timešṭan n uṭar* ‘instep (of the foot)’ B

mštt *ameštiṯ - imeštaṯ* ‘small piece of rope’ B

mt *mmuṯ / mmuṯ / tmettaṯ* ‘to die’ (intr) B

mtɛ *lemṯaɛ* ‘property’ A

mtn *mṯen / mṯen / ttamṯen* ‘to ferment’ (trans) B

mtn *tamṯunt - timṯunan* ‘yeast’ B

mtrkl *lmatrikula - lmatrikulaṯ* ‘license plate’ A

mtwl *tameṯwalt* ‘type of plant’ B

mṭ *mṭi / mṭi / meṭṭi* ‘to lunch’ (intr) B PP *myeddi / myeddya / myeddin* Used by old people. Arabic *tyedda* is more used nowadays.

mṭ *tameṭṭuṯ - timeṭṭuṯan* ‘women’ *tameṭṭuṯ n ḇaḇa nnem* ‘stepmother’ B

mṭɛ *lmuṭaɛ - lemwaṭeɛ* Dim. *lemwiṭeɛ - lemwiṭɛaṯ* ‘place’ A

mṭl *mṭel / mṭel / meṭṭel* ‘to bury’ (trans) B

mṭṛ *lmuṭuṛ - lemwaṭeṛ* Dim. *lemwiter* ‘motorcycle, engine’ A

mṭṛḥ *lmeṭṛeḥ - lemṭaṛeḥ ~ lemṭaṛeḥ* Dim. *lemṭiṛeḥ* ‘stick to put bread in the oven’ A

mṭš *maṭiša* Unity F. *tamaṭišt ~ tumaṭišt - timaṭišan* Augm. *amaṭiš* ‘tomato’ C

mṭš *meṭṭeš / meṭṭeš / tmeṭṭaš* ‘to shake, swing’ (lab) B Pass *tmeṭṭšeṯ* PP *mmeṭṭeš / mmeṭṭša / mmeṭṭšin*

mṭṭ *amaṭṭaṭ - imaṭṭaṭen* ‘grey lizard with no spots’ B

mṭṭ *amaṭuṭ - imaṭuṭen* Dim. *amṭiweṭ - imṭiwṭan* F. *tamaṭuṭ - timaṭuṭan* Dim. *tamṭiweṭ - timṭiwṭan* ‘neglected useless person’ B

mṭw *ameṭṭaw - imeṭṭawen* ‘tear’ B

mṭyš *lmeṭṭayša - lmeṭṭayšaṯ* ‘craddle’ A

mwž *lmawža - lemwaž* ‘wave, surf’ A

mx *lmuxx - lemxax* ‘brain’ A

mxd *amuxxeḏ - imuxḏen* Dim. *amxixeḏ - imxixḏen* F. *tamuxxett - timuxṯan* Dim. *tamxixett - timxixṯan* ‘wild cat’ B

mxṣ *lmexxaṣ - lemxaxeṣ* ‘poking stick’ A

mxṭ *mexxeṭ / mexxeṭ / tmexxaṭ* ‘to shake’ (lab) B Pass *tmexxṭeṯ* PP *memxuṭ / memxuṭa / memxuṭin* VN *lemxiṭ*

my *tamya* (*ta-*) *- timyiwan* ‘throat’ B

myl *meyyel / meyyel / tmeyyal* ‘to be crooked, to be stronger’ (lab) B Pass *tmeyyleṯ* PP *mmeyyel / mmeyyla / mmeyylin* VN *lmayl*

myn *tamyant - timyanan* Dim. *tamweyyent - timwinan* ‘she-kid’ B

myt *lmayta - lmaytaṯ* ‘corpse’ A

myt *lmeyyeṯ - lmeyyṯin* F. *lmeyyṯa* ‘carcass’ A

mzl *amzal* ‘type of plant’ B

mzz *amuzziz - imuzzizen* F. *tamuzzizt - timuzzizan* ‘ass’ B

mzyn *mezyan / mezyana / mezyanin* ‘good’ A

mzr *lmizari - lmizareyyin* F. *lmizariyya* ‘stingy person’ A

mzr *tamazirt - timazirṯan* ‘country’ B

mzgd *tamezgiḏa - timezgiḏiwan* ‘mosque’ E.g. *tamezgiḏa n nnṣaṛa* ‘church’ B

mẓ *ameẓ ~ meẓ / meẓ ~ umeẓ / ttameẓ* ‘to catch, take, grab, trap’ (trans) B cf. **qbṭ** for Pass. and PP.

mẓ *meẓẓi / meẓẓi-ṯ* ‘small’ Dim. *mzizu / mzizu-ṯ* ‘very small’ B

mẓg *ameẓẓuḡ - imezgan ~ imeẓẓaḡ* F. *tameẓẓuḡt* ‘ear’ B

mẓlṭ *ameẓluṭ - imeẓlaṭ* F. *tameẓluṭt* ‘poor person’ B

mẓṭ *lmaẓuṭ* ‘diesel’ A

mẓy *amaẓay - imaẓayen* F. *tamaẓayt - timaẓayan* ‘canine tooth’ B

mẓẓ *amaẓuẓ - imaẓuẓen* F. *tamaẓuẓt - timaẓuẓan* ‘last born’ B

mžṭ *amežžuṭ - imežžaṭ* ‘weak person or animal’ B

mžf *amažuf - imažufen* F. *tamažuft - timažufan* ‘stinky person, type of plant’ B

n

n *ani ~ uni ~ ni / uni / ttani* ‘to ride, mount’ (intr) B cf. **rkb** for AP E.g. *ni g ṭṭunuḇir* ‘Get into the car.’

n *nn / nn ~ nna / qqeṛ* ‘to say’ (trans) B

nbd *taneḇduṯ* ‘harvesting season’ E.g. *nmegger g tneḇduṯ* ‘We harvest in the harvesting season.’ B

nbt *nnaḇaṯ - nnaḇaṯaṯ* ‘plant’ A

nd *nnḏa ~ nneḏwa* Dim. *nnḏiwa* ‘dew’ A

nḍf *neḍḍef / neḍḍef / tneḍḍaf* ‘to clean’ (trans) B

ndh *neddeh / neddeh / tneddah* ‘to guide (animals), to escort, to drive’ (trans) B Pass *tneddheṯ* PP *mneddeh / mneddha / mneddhin* E.g. *tneddheṯ lebhima y ahen* ‘The mule has been escorted.’

ndm *ndem / indem* ‘to regret’ (intr) A Caus. *neddem / neddem / tneddam* ‘to regret’ (trans) B Pass *tneddmeṯ* PP *mneddem / mneddma / mneddmin* VN *ttendim*

ndr *nedder / nedder / tnedder* ‘to shock after crying’ (intr) B Pass *tneddreṯ* PP *mnedder / mneddra / mneddrin* VN *ttendir*

nǧr *nǧeṛ / nǧeṛ / neǧaṛ* ‘to make furniture’ (trans) B

ndṛ *lemnaḏeṛ* ‘spectacles, glasses’ A

nǧṛ *amenǧuṛ - lemnažeṛ* Dim. *amnižeṛ* ‘wooden chair’ (This is a traditional chair made out of wood. They scrape of the bark of the *ddlem* tree to make these kind of chairs or beehives.) C

nǧṛ *nneǧaṛ - nneǧaṛa* ‘carpenter’ A

nɛs AP *naɛes / naɛsa / naɛsin* VN *nnɛas* A ‘to sleep’cf. **ṭṣ** ‘to sleep’

nfs *neffes / neffes / tneffas* ‘to breathe’ (intr) (Used by older generation.) B

nfs *nnefs* Dim. *nnfisa - nnfisaṯ* ‘soul, spirit, breath’ A

nfs *tneffes / itneffes* ‘to breathe’ (intr) (used by the young generation.) A

nfṭ *nfeṭ / nfeṭ / neffeṭ* ‘to shake’ (trans) B PP *menfuṭ / menfuṭa / menfuṭin*

nfṭ *nnefṭa - nnfaṭi* ‘light rain’ A

nfẓn *nafaẓen* ~ *lafaẓen* ‘the day after tomorrow’ E.g. *ḥetta dar nafaẓen* ‘in two days’ B

nfẓnẓ *nafaẓnaẓ* ‘in three days’ B

ng *angi - ingiyyen* ‘water under the house’ B

ng *ngi / ngi / neggi* ‘to push’ (trans) B PP *mengi / mengeyya / mengeyyin*

ngr *nigru - nigrus* ‘brown dolphin’ S

nɣ *anaɣu* ‘milk of a fig tree’ B

nɣ *inaɣ - inaɣen* ‘uvula’ B

nɣ *nɣ / nɣa / neqqa* ‘to kill’ (trans) B

nɣṛ *anɣuṛ - inɣuṛen* F. *tanɣuṛt - tinuɣraṯan* Dim. *tanɣeyyeṛt* ‘stable, stall’ B

nhṛ *nnhaṛ - nnhuṛa* Dim. *nnheyyeṛ* ‘day’ (The diminutive *nnheyyeṛ* means ‘a days wage’.) *nneṣ n nnhaṛ* ‘noon’ A

nhṛ *nnhaṛ* ‘day’ E.g. *nnhaṛ aḏ* ‘today’ A

nhr *nnhir - nnhayer* Dim. *nnheyyer* ‘threshold, separation in a field’ A

nhy *nihaya - nihayaṯ* ‘end’ A

nḥs *nneḥḥas* ‘copper’ A

nkṛ *nkeṛ / nkeṛ / nekkeṛ* ‘to deny’ (trans) B PP *menkuṛ / menkura / menkuṛin* VN *nnakeṛ*

nkt *nuḵta - nuḵtaṯ* ‘joke’ A

nm *lemnama* - *lemnamaṯ* ‘dream’ A

nmṛ *nnimiṛu* - *nnwameṛ* ‘number’ A

nmr *nnmer* - *nnmura* Dim. *nnmeyyer* F. *nnemra* Dim. *nnmeyyra* ‘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 *nneqqaḇa* ~ *nneqqaḇeṯ* - *nneqqaḇaṯ* ‘woodpecker’ (Old people use *neqqaḇeṯ* while young people use *neqqaḇa.*) A

nqb *tamenquḇt* - *timenquḇan* ‘gossip’ *gas tamenquḇt* ‘He gossips a lot.’ B

nql *tanqilt* - *tinqilṯan* Dim. *tanqeyyelt* - *tinqilṯan* ‘tobacco seedling’ B

nqṛ *nnuqṛa* ‘silver’ A

nqš *amenqaš* - *imenqašen* ‘carver’ B

nqš *nqeš / nqeš / neqqeš* ‘to carve’ (trans) B PP *menquš / menquša / menqušin*

nqṭ *neqqeṭ / neqqeṭ / tneqqaṭ* ‘to drip, leak, sow, have spots’ (lab) B Pass *tneqqṭeṯ* PP *mneqqeṭ / mneqqṭa / mneqqṭin* E.g. *tneqqṭeṯ talqimt aḏ* ‘This bread has spots on it (it’s rotten).

nqṭ *taneqqaṯ* - *tineqqaṯan* ‘drop’ B

nqz *neqqez / neqqez / tneqqaz* ‘to jump’ (lab) B PP *mneqqez / mneqqza / mneqqzin*

ns *anas* - *inasen* ‘sparkles that fly around a fire.’ B

ns *nes / nes / tnus* ‘be extinguished’ (intr) Caus *snes / snes* ~ *ssens / ssnus* ‘to extinguish’

nsb *nnsiḇ* - *lensaḇ* ‘father-in-law (of a man)’, brother-in-law’ *nnsiḇa* - *nnsiḇaṯ* ‘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 / menseyyin* Caus *nessi / nessa / tnessay* ‘to make forget’ (trans) B E.g. *inessa aṯ zeg lhemm nnes* ‘He made him forget his worries.’ cf. **t** ‘to forget’

nṣ *nneṣ* ~ *nnuṣ* - *lenṣus* Dim. *nnṣeyyeṣ* ‘half’ E.g. *nneṣṣ meqquṛ* ‘the majority’ A

nṣb *aneṣṣaḇ* - *ineṣṣaḇen* Dim. *anṣiṣeḇ* - *inṣiṣḇen* ‘piece of iron on which bait is put’ B

nṣb *nṣeḇ / nṣeḇ / neṣṣeḇ* ‘to trap’ (trans) B VN *nnṣaḇa*

nṣḥ *nṣeḥ / inṣeḥ* ‘to advise’ (trans) A

nṣr *anesṛan* - *nnṣara* F. *tanesṛant* ‘Christian, European’ C

nšl *anšel* - *inešlen* Dim. *anšeyyel* - *inšeyylen* F. *tanšelt* ‘floor for straw’ B

nš *nniš* Unity F. *tanišet* - *tinišṯan* ‘apricot’ C

nšb *nneššaḇ - nnšašeḇ* Dim. *nnšišeḇ - nnšišḇaṯ* ‘bow, catapult’ A

nšr *lmenšer - lemnašer* Dim. *lemnišer* ‘floor for drying figs’ A

nšṛ *lmenšeṛ - lemnašeṛ* Dim. *lemnišeṛ* ‘saw’ A

nt *lanta - lantawaṯ* ‘female person’ A

ntxb *lintixaḇ - lintixaḇaṯ* ‘election’ A

nṭ *tanuṭt - tinuṭan* ‘wife of the brother’ B

nṭɛ *nṭaɛ / inṭaɛ* ‘to obey’ (intr) A E.g. *ka-inṭaɛ-lu i ḇaḇa nnes* ‘He obeys his father.’

nṭg *nṭeḡ / nṭeḡ / neṭṭeḡ* ‘to fly’ (intr) B Caus. *ssenṭeḡ / ssenṭeḡ / ssenṭaḡ* ‘make fly’

nṭn *anawiṭin ~ aliwiṭin ~ liwiṭin ~ niwiṭin* ‘in three days’ B

nṭr *nṭer / nṭer / neṭṭar* ‘to fly’ (intr) B Caus. *ssenṭer / ssenṭer / ssenṭar* ‘make fly’

nṭṣṛ *lʕinṭiṣaṛ* ‘victory’ A

nṭṣṛ *nṭaṣeṛ / inṭaṣeṛ* ‘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. *anwiwel - inwiwlen* F. *tanewwalt - tinewwalan* Dim. *tanwiwelt - tinwiwlan* ‘A small hut’ B

nwṛ *nnwaṛ* F. *tanewwaṛt - tinewwaṛan* Dim. *tanwiweṛt - tinwiwṛan* ‘plant’ C

nxl *nnxel* Dim. *nnxeyyel* F. *nnexla* Dim. *nnxila* ‘palm tree’ Also called *tagīget n ṭṭmaṛ* ‘tree of dates’ A

nyš *neyyeš / neyyeš / tneyyaš* ‘to aim’ (intr) B PP *mneyyeš / mneyyeša / mneyyšin*

nzl Pass *tnezzleṯ* PP *mnezzel / mnezzla / mnezzlin* ‘to put down’ cf. **rs** ‘to land, to put down’

nžm *nnežma - nnžum* Dim. *nnžima - nnžimaṯ* ‘star’ A

nẓẓ *neẓẓeẓ / neẓẓeẓ / tneẓẓaẓ* ‘to be overripe (crops)’ (intr) B

p

pbr *puḇri - puḇreyyin* F. *puḇreyya* ‘poor man, women’ A

pɣrr *lpeɣrir* ‘pancacke’ A

pɣy *paɣeyyu - paɣeyyuwen* ‘parrot’ C

pkl *lpikaḷa - lpikaḷaṯ* ‘bicycle’ A

pkln *lpuklan - lpuklanaṯ ~ lepwakel* ‘excavator’ A

pky *lpakeyya - lpakiyaṯ ~ lepwaket* ‘pack’ A

pl *lpaḷa - lpaḷaṯ* ‘shovel’ A

plm *lepluma - leplumaṯ* ‘pen’ A

plp *lpulpu - lpulpus* ‘octopus’ A/S

plṣ *leplaṣa - leplayeṣ* Dim. *lepliṣa - lepliṣaṯ* ‘seat’ A

pls *lpulisi - lpuliseyyaṯ* F. *lpuliseyya* ‘police’ A

plstk *lplaṣtik - leplaṣtikaṯ* ‘plastic’ A

pḷ *puḷu* ‘ice cream’ S

pl̩y *lepl̩aya - lepl̩ayaṯ* ‘beach’ A

pmpɣs *lpumpɣis* ‘pampers’ A/S

pnčr *penčer / penčer / tpenčar* ‘to puncture’ (trans) B Pass *tpenčreṯ* PP *mpenčer / mpenčra / mpenčrin*

pny *lpunya - lpunyaṯ* ‘punch’ A

pp *peppa n tɣaṭen* ‘plant’ lit. ‘bread of the goats’ B

prknt *lprikanti - lprikanteyyaṯ* F. *lprikanteyya* ‘nurse’ A

prm *lperrim - leprarem* ‘drill’ A

prm *lpirmi - lpirmis* ‘driver’s licence’ A/S

prm *perrem / perrem / tperram* ‘to drill’ (trans) B PP *mperrem / mperrma / mperrmin*

prpr *iparparen* ‘money’ No singular B

prpr *perper / perper / tperper* ‘to fly’ (intr) B

prx *lparixa - lparixaṯ* ‘middle-sized boat’ It has a net that scrapes the sea-floor. A

pṛx *lpaṛixu - lpaṛixus* ‘pulley block’ A/S

pṛẓwẓ *lpuṛẓwaẓi - lpuṛẓwaẓeyyin* F. *lpuṛẓwaẓeyya* ‘rich’ A

pṣṭ *lpaṣṭeyya - lpaṣṭeyyaṯ* ‘pill, tablet’ A

pst *lpessiṭa - lepsaseṭ* ‘peseta’ A

psmn *lpasaman* ‘type of fish’

pškd *peškaḏiyya - peškaḏiyyaṯ* ‘hake (fish)’ A/S

pxṭ *pixuṭa - pixuṭaṯ* ‘type of fish’ A

pznzt *lpizniz* F. *lpeznizta - lebzanez* ‘business man, hash dealer’ A

q

qbl *lqiḇla* ‘east’ A

qbl *qḇel / iqḇel* ‘to accept’ (trans) A PP *meqḇul / meqḇula / meqḇulin*

qbl *qebbel / qebbel / tqebbal* ‘to face towards mekka’ (trans) B Pass *tqebbleṯ*

qbl *taqḇilt - tiqʷḇal* ~ *tiqḇal* ‘tribe’ B

qbṛ *lmeqbaṛa - lemqaḇeṛ* ~ *leqḇuṛa* Dim. *lemqiḇeṛ* ‘cemetery’ A

qbṭ Pass *nqebṭeṯ* PP *meqḇuṭ / meqḇuṭa / meqḇuṭin* ‘to grab’ see **mẓ** ‘to grab’

qbt *lqiḇṭa - lqiḇṭaṯ* Dim. *leqḇiṭa - leqḇiṭaṯ* ‘grip’ A

qbṭ *taqebbiṭt - tiqebbiṭan* Dim. *taqbibeṭt - tiqbibṭan* Augm. *aqebbiṭ - iqebbiṭen* ‘handful of grain’ B

qby *aqḇay - iqḇayen* Dim. *aqḇeyyeš - iqḇeyyšen* ‘billy goat’ B

qdf *lmuqdaf - lemqadef* ‘paddle’ A

qdf *qeddef / qeddef / tqeddaf* ‘to row’ (intr) B

qdṛ *qdeṛ / iqdeṛ* ‘to can’ (intr) A

qds *lmuqdis* ‘mekka’ A

qḍ *lqaḍi - lquḍḍat* ‘judge’ A

qɛ *lqaɛ - lqiɛan* ‘bottom’ A

qɛd *lqaɛḏa - lqaɛḏaṯ* ‘part of the plough’ A

qɛd *lqaɛida - lqaɛiḏaṯ ~ lqawaɛiḏ* ‘custom’ A

qf *leqfa - leqfawaṯ* ‘nape of the neck’ A

qfl *leqfel - leqfula* ‘lock’ A

qfl *lqefla - leqfalaṯ* Augm. *aqeflun* ‘button’ A

qfqf *qefqef / qefqef / tqefqaf* ‘to shiver’ (intr) B PP *mqefqef / mqefqfa / mqefqfin*

qfṭn *lqefṭan - leqfaṭen* ‘moroccan dress’ A

qfz *qfez / iqfez* ‘to be clever’ (intr) A AP *qafez / qafza / qafzin* E.g. *qfez fxes* ‘He is smarter than him.’

qht *taqahat - tiquhaṯ* ‘crow, raven’ B

qhw *lqahwa - leqhawi* Dim. *leqhiwa - leqhiwaṯ* ‘coffee’ A

qḥb *lqeḥba - leqḥaḇ* Dim. *leqḥiḥba - leqḥiḥbaṯ* ‘prostitute’ A

ql *lmeqla - lemqali* Dim. *lemqila - lemqilaṯ* ‘frying pan’ A

ql *lqulla - lqullaṯ* ‘tree trunk’ A

ql *qli / qla / qqli* ‘to fry’ (trans) B Pass *tteqlaṯ* PP *meqli / meqliyya / meqliyyin*

ql *qqul / qqel / teqqel* ‘to return, become’ (intr) B *qqlex d syas* ‘I have returned from there.’

qlb *lqaleḇ - leqwaleḇ* Dim. *leqwileḇ - leqwilbaṯ* ‘mould, suppository’ A

qlb *qelleḇ / qelleḇ / tqellaḇ* ‘to taste’ (trans) B PP *mqelleḇ / mqellḇa / mqellḇin* VN *ddawq* E.g. *atay aḏ mqelleḇ* ‘This tea has been tasted.’

qlb *qleḇ / qleḇ / qqluḇ* ‘to roll’ (lab) B Pass *nqelḇeṯ ~ tqelḇeṯ* PP *meqluḇ / meqluḇa / meqluḇin*

qld *qelleḏ / qelleḏ / tqellaḏ* ‘to imitate’ (trans) B Pass *tqellḏeṯ*

qlɛ *leqleɛ - leqluɛa* Dim. *leqleyyeɛ* ‘mast’ A

qlɛ *leqliɛ* ‘orchard’ A

qlɛ *qelleɛ / qelleɛ / tqellaɛ* ‘to leave’ (lab) B Pass *tqellɛeṯ* PP *mqelleɛ / mqellɛa / mqellɛin*

qll *qlallu* ‘type of (edible) plant’ B

qll *qlil / qlil-a / qlil-in* ‘few’ Dim. *qliwel / qliwl-a / qliwl-in* ‘somewhat few’ A

qlm *leqlem - leqluma* Dim. *leqleyyem* ‘traditional pencil (with ink)’ A

qlql *aqelqul - leqlaqel* ‘testicle’ C

qlws *aqellawes - iqelliwas* Dim. *aqliles - iqlilsen* F. *taqellawest - tiqelliwas* Dim. *taqlilest - tiqlilsan* ‘water jug’ B

qm *qqim / qqim / ttyim(a)* ‘to sit’ (intr) E.g. *iqqim gales* ‘He is sitting’ Caus *sqim / sqim / ssqim* ‘to make sit’ (trans) cf. **gls** for AP, Caus and PP.

qmǧ *leqmiǧa - leqmayež* ‘blouse’ A

qmm *aqemmum - iqemmumen* ~ *iqemmam* Dim. *aqmiqem - iqmiqmen* F. *taqemmumt - tiqemmam* Dim. *taqmiqemt - tiqmiqman* ‘mouth’ B

qmqm *aqamqam - iqamqamen* ~ *leqmaqem* F. *taqamqamt - tiqamqaman* ‘big person’ B

qmṛ *tqemmeṛ / itqemmeṛ* ‘to gamble’ (intr) A E.g. *nekki tqemmeṛt fxas* ‘I bet on it.’

qn *qqun / qqen / teqqen* ‘to tie, close’ (trans) B see **šd** and **ṛbṭ** for Pass and PP

qnbl *lqenbula - lqenbulaṯ* ~ *leqnaḇel* Augm. *aqenbul* ‘bom’ A

qndl *lqendil - leqnaḍel* Dim. *leqniḍel - leqniḍlaṯ* ‘oil lamp’ A

qndl *qendel / qendel / tqendal* ‘to be bright’ (intr) B Pass *tqendleṯ* PP *mqendel / mqendla / mqendlin* E.g. *tafuḵt hetqendal* ‘The sun is very bright.’

qnn *aqennin - iqenninen* Dim. F. *taqennint - tiqenninan* ‘ass’ B

qnn *lqanun - lqawanin* ‘law’ A

qnqb *aqenqbu - iqenqba* Dim. *aqniqeḇ* F. *taqenqbuṯ - tiqenqba* ‘beak, point of a knife’ B

qns *taqnissa - tiqnisiwan* ‘contents of the belly of cattle’ B

qnt *lqent - leqnuṯ* Dim. *leqniṯa* ‘corner’ A

qnt *qenneṯ / qenneṯ / tqennaṯ* ‘to lay on its side’ (trans) B Pass *tqennṯeṯ* PP *mqenneṯ / mqennṯa / mqennṯin*

qnṭṛ *lqenṭṛa - leqnaṭeṛ* Dim. *leqniṭṛa - leqniṭṛaṯ* ‘bridge’ A

qny *leqneyya - leqnayen* ‘rabit’ A

qqw *aqeqqiw* ‘hail’ B

qqw *taqeqqiwt* ~ *taquqet - tiqeqqiwan* ‘granule’ B

qrd *amqerreḍ - lemqerrḍin* F. *tamqerrett* ‘weak, small person’ C

qrd *lqird - leqruḍ* Dim. *leqreyyeḍ* F. *lqirda* Dim. *leqreyyḍa - leqriḍaṯ* ‘monkey’ A

qrɛ *aqurriɛ - iqurriɛen* F. *taqurriɛt - tiqurriɛan* ‘head, bundle’ B

qrqb *lqerqubi* ‘pill, kind of drugs’ A

qrqb *qerqeḇ / qerqeḇ / tqerqaḇ* ‘to knock’ (intr) B

qrqš *aqerqaššun - iqerqaššunen* F. *taqerqaššunt - tiqerqaššunan* ‘multicoloured thing, person’ B

qrš *lqerš* ‘shark’

qrt *taqerruṯṯ - tiqerruṯan* ‘cockroach’ B

qrṭṭ *aqurṭaṭ - iqurṭaṭen* ‘penis’ B

qrqšn *qerqašun-i / qerqašuni-ya / qerqašuniy-in* ‘multi-colored’ A

qṛ *qquṛ / qquṛ / ttɣaṛ* ‘to dry’ (intr) B Caus. *ssqaṛ / ssqaṛ / ssqaṛ* ~ *ssɣar* ‘to dry’ (trans) B E.g. *amaras iqquṛ* ‘The riverbed has dried.’

qṛ *qeṛ / iqiṛ* ‘to admit’ (intr) A

qṛ *qṛa / iqṛa* ‘to study, read’ (trans) A Pass *tteqṛaṯ* AP *qaṛi / qaṛya / qaṛyin* Caus. *qeṛṛi / qeṛṛa / tqeṛṛay* ‘to teach’ (trans) B PP *mqeṛṛi / mqeṛṛya / mqeṛṛin* E.g. *mqeṛṛi zɣe ḇaba nnes* ‘He is taught by his father.’

qṛb *aqṛaḇ - iqṛaḇen* Dim. *aqṛeyyeḇ - iqṛeyyḇen* F. *taqṛaḇt - tiqṛaḇan* Dim. *taqṛeyyeḇt - tiqṛiḇṯan* ‘traditional bag’ It is made from a type of plant (*taƶrint*). B

qṛb *qeṛṛeḇ / qeṛṛeḇ / tqeṛṛaḇ* ‘to approach’ (lab) B Pass *tqeṛṛḇeṯ* PP *mqeṛṛeḇ / mqeṛṛḇa / mqeṛṛḇin* E.g. *iqeṛṛeḇ daɣri* ‘He came closer to me.’ *iqeṛṛeḇ lkas* ‘He moved the glass closer.’ *tqeṛṛḇeṯ lḇaṭil ahen* ‘The boat came closer.’

qṛb *qriḇ / qriḇ-a / qṛiḇ-in* ‘near’ A

qṛɛ *qṛeɛ / qeṛɛa / quṛaɛ* A

qṛɛ *qeṛṛeɛ / qeṛṛeɛ / tqeṛṛaɛ* ‘make/become bald’ (trans) B

qṛfz *qeṛfez / qeṛfez / tqerfaz* ‘to pinch’ (trans) B PP *mqeṛfez / mqeṛfza / mqerfzin* VN *tqeṛfiza - tqerfizaṯ*

qṛm *qṛem / iqṛem* ‘to be silent’ (intr) A AP *qaṛem / qaṛma / qaṛmin*

qṛn *aqṛin - leqṛan* F. *taqṛint* ‘peer’ C

qṛqṛ *qeṛqeṛ / qeṛqeṛ / tqeṛqeṛ* ‘to be quiet after an argument’ (intr) B PP *mqeṛqeṛ / mqeṛqṛa / mqeṛqṛin*

qṛṣ *aqeṛṛaṣ - iqeṛṛiṣa* F. *taqeṛṛaṣt - tiqeṛṛaṣan* Dim. *taqṛiṛeṣt - tiqṛiṛṣan* ‘leaf of a cactus, wooden tray to put bread in the oven.’ B

qṛṣ *leqṛeṣ ~ leqṛiṣ - leqṛaṣ* ‘forcefull pull’ A

qṛṣ *qṛeṣ / iqṛeṣ* ‘to pull forcefully’ (intr) A VN *leqṛiṣ* ‘strong pulling’

qṛṭ *qṛeṭ / qṛeṭ / qqṛeṭ ~ qqṛuṭ* ‘to break’ (lab) B Pass *nqṛeṭ* PP *meqṛuṭ / meqṛuṭa / meqṛuṭin* VN *leqṛiṭ* E.g. *ameṣmaṛ ahen tteqṛeṭ* ‘That nail has been broken.’

qṛtš *aquṛtaš - iquṛtaš ~ leqṛateš* ‘type of plant’ C

qṛṭs *lqiṛṭaṣ - leqṛaṭeṣ* Dim. *leqṛiṭeṣ - leqṛiṭṣaṯ* Unity F. *taqiṛṭaṣt - tiqiṛṭaṣan* ‘bullet’ A

qṛwṭ *qeṛweṭ / qeṛweṭ / tqeṛwaṭ* ‘to stutter or stammer’ (intr) B PP *mqeṛweṭ / mqeṛwṭa / mqeṛwṭin*

qṛys *quṛṛayes* ‘kind of insect which kills trees’ B

qsbṭ *qesbaṭṭa* ‘type of plant’ A

qsl *leqsil* F. *taqsilt* Dim. *taqseyyelt* ‘Grain that has not yet grown ears.’ C

qṣ *lmeqqaṣ - lemqaqeṣ* Dim. *lemqiqeṣ - lemqiqṣaṯ* ‘scissors’ A

qṣ *qeṣṣeṣ / qeṣṣeṣ / tqeṣṣaṣ* ‘to cut’ (trans) B Pass *tqeṣṣeṣ* PP *mqeṣṣeṣ / mqeṣṣa / mqeṣṣin* VN *tteqṣiṣ*

qṣb *taqṣeḇt - tiqeṣban* Dim. *taqṣeyyeḇt - tiqṣeyyḇan* ‘bamboo’ Augm. *aqṣeḇ - iqeṣḇen* Dim. *aqṣeyyeḇ - iqṣeyyḇen* B

qṣbṛ *lqeṣbuṛ* ‘parsley’ A

qṣḥ *qaṣeḥ / qaṣḥ-a / qaṣḥ-in* ‘hard’ Dim. *qṣiṣeḥ / qṣiṣḥ-a / qṣiṣḥ-in* ‘somewhat hard’ A

qṣḥ *qeṣṣeḥ / qeṣṣeḥ / tqeṣṣaḥ* ‘to harden, to become stiff’ (trans) B Pass *tqeṣṣheṯ* PP *mqeṣṣeḥ / mqeṣṣḥa / mqeṣṣḥin* E.g. *mqeṣṣeḥ aṭaṛ nnes* = ‘His leg is stiff.’

qṣḥ *teqṣiḥa - teqṣiḥaṯ* ‘bruise’ A

qṣr *qṣir / qṣir-a / qṣir-in* ‘short’ *qṣiṣeṛ / qṣiṣṛ-a / qṣiṣṛ-in* ‘somewhat short’ A

qṣṛ *qeṣṣeṛ / qeṣṣeṛ / tqeṣṣaṛ* ‘to enjoy the night’ (intr) B

qṣṛ *qeṣṣeṛ / qeṣṣeṛ / tqeṣṣaṛ* ‘to shorten’ (trans) B PP *mqeṣṣeṛ / mqeṣṣṛa / mqeṣṣṛin* E.g. *iqeṣṣṛ as iṭaṛen* ‘He has shortened his legs.’

qṣm *qṣem / qṣem / qqṣum* ‘to share, divide’ (trans) B Pass *tqeṣmeṯ* PP *meqṣum / meqṣuma / meqṣumin* E.g. *qeṣm-aweṯ tet meṛṛa* ‘Divide it between you.’

qš *lqešš - leqšuš* ‘tree bark’ (Used to make beehyves.) A

qšbl *aqušbal* ‘type of plant’ B

qšɛ *lqešɛa - leqšuɛ* Dim. *leqšiɛa - leqšiɛaṯ* ‘tableware’ A

qšf *taqaššuft* ‘poverty’ B

qšqš *aqešquš - iqušqaš* ‘skull’ B

qšr *aqšuṛ - iʷqšaṛ* Dim. *aqšeyyeṛ - iqšeyyṛen* F. *taqšuṛt* Dim. *taqšeyyeṛṭ - tiqšeyyṛan* ‘shell, bark’ B

qšṛ *qeššeṛ / qeššeṛ / tqeššeṛ* ‘to peel’ (lab) B

qšṛ *taqšuṛt - tiqʷšaṛ* ‘dandruff’ B

qšr *tteqšiṛa - ttqašaṛ* Dim. *ttqišṛa - ttqišṛaṯ* ‘sock’ A

qšš *aqšuš - iʷqšaš* Dim. *aqšiweš - iqšiwšen* F. *taqšušt - tiwqšaš* Dim. *taqšiwešt - tiqšiwšan* ‘snail, shell, skull’ B

qt *lqetta - leqtet* Dim. *leqtiwta* ‘bunch of cane’ A

qtl *leqṯila - leqṯilaṯ* ‘murder’ A

qtl *lqettala - lqettalaṯ* ‘cobra’ Augm. *aqettalun* ‘big cobra’

qṭ *leqqaṭ* Dim. *llqiqeṭ - llqiqṭaṯ* ‘tongs’ E.g. *leqqaṭ n iḵemzan* ‘nail scissors’ A

qṭɛ *qeṭṭeɛ / qeṭṭeɛ / tqeṭṭaɛ* ‘to cut (down)’ (lab) B Pass *tqeṭṭɛeṯ* PP *mqeṭṭeɛ / mqeṭṭɛa / mqeṭṭɛin* VN *tteqṭuɛ*

qṭn *leqṭen - leqṭuna* Dim. *leqṭina - leqṭinaṯ* ‘cotton’ *leqṭina* also means ‘handcuffs’ A

qṭṛ *qeṭṭeṛ / qeṭṭeṛ / tqeṭṭaṛ* ‘to drip, leak’ (lab) B Pass *tqeṭṭṛeṯ* PP *mqeṭṭeṛ / mqeṭṭṛa / mqeṭṭṛin* E.g. *yan iši iqeṭṭeṛ aman iḏ* ‘Someone leaked this water.’

qṭṛ *taqeṭṭiṛt - tiqeṭṭiṛan* ‘drop (of liquid)’ B

qw *qwi / qwiyy-a / qwiyy-in* ‘strong’ A

qwm *lqawm* ‘people’ A

qwqš *qawqeš / qawqeš / tqawqeš* ‘to tickle’ (trans) B

qwṣ *lqawṣ - leqwaṣ* Dim. *leqweyyeṣ - leqweyyṣen* ‘arch’ A

qwṣ *qewweṣ / qewweṣ / tqewwaṣ* ‘to bend over’ (intr) B *mqewweṣ / mqewwṣa / mqewwṣin*

qy *tqiyya / itqiyya* ‘to vomit’ (trans) A

qyṭn *lqayṭun - leqwaṭen* ‘tent’ A

qzdr *lqezdar - lqezdarin* F. *lqezdara* ‘tinmaker’ A

qzdr *lqezdir - leqzader* ‘tin, can’ A

qzn *aqezzun - iqezzunen* Dim. *aqzizen - iqziznen* F. *taqezzunt - tiqezzunan* Dim. *taqzizent - tiqziznan* ‘dog puppy’ B

qzz *aquzzaz - iquzzazen* F. *taquzzazt - tiquzzazan* ‘ass’ B

qẓɛ *aquẓẓiɛ - iquẓẓiɛen* ‘squeeze’ B

qẓɛ *qeẓẓeɛ / qeẓẓeɛ / tqeẓẓeɛ* ‘to pinch’ (trans) B Pass *tqeẓzɛeṯ* PP *mqeẓzeɛ / mqeẓẓɛa / mqeẓẓɛin*

qžž *aqžižu - iqžižwen* F. *taqžižuṯ - tiqžižwṯan* ‘toy’ B

qž *aquž - iqužen* ‘kind of a blue patridge’ B

r

r *ara ~ ura / ura / ttara* ‘to write’ (trans) B See **ktb** for alternative, Pass and PP.

r *aru ~ uru / turu / ttaru* ‘to give birth’ (trans) E.g. *hettaru tafulest ku nnhaṛ tiwfalan* ‘The chicken lays eggs every day.’ B

r *rri / rri / rraz* ‘to vomit, give back, plant’ (trans) *irraz d* = ‘He vomits.’ B

r *tara - tariwan* ‘earth between meadows’ B

rb - */ raḇ / ttriḇ* ‘to destroy’ (intr) B E.g. *axyam ahen iraḇ* ‘That house is destroyed.’ cf. **ryb** for causative.

rb *rriḇa* ‘reef’ A

rb *tarbat - tirbaṯan* Dim. *tarbeyyet - tirbiṯan* ‘young woman’ B

rbb *arḇiḇ* (*wa-*) - *irḇiḇen* ‘stepson’ B

rbb *tarḇiḇt* (*ta-*) - *tirḇiḇan ~ tirḇiḇṯan* ‘stepdaughter’ B

rbɛ *larbeɛ* ‘wednesday’ A

rbḥ *rbeḥ / rbeḥ / rebbeḥ* ‘to earn, to win’ (trans) B Pass *trebbḥeṯ* PP *merbuḥ / merbuḥa / merbuḥin* VN *rrbeḥ*

rby *rruḇyu - rruḇyus* F. *rruḇya - rruḇyaṯ* ‘blond’ A/S

rby *ruḇy-u / ruḇy-a / ruḇy-us / ruḇy-aṯ* ‘blond’ A/S

rdḥ *rdeḥ / rdeḥ / reddeḥ* ‘to be aroused’ (intr) B

rdn *irden* ‘wheat’ B

rğ *rğa / irğa* ‘to hope’ A AP *raži / ražya / ražin*

rğ *rrğa - rrğawaṯ* ‘hope’ A

rḍḍ Pass *treḍḍeṯ* PP *merḍuḍ / merḍuḍa / merḍuḍin* ‘to give back, to plant, to sow’ cf. *treḍḍeṯ taferkiwt ahen s lḥebb* ‘The garden has been planted with wheat.’cf. **r** for base verb.

rɛ *rraɛi - rruɛyan* F. *rraɛya* ‘shephard’ A

rɛb *rɛeḇ / rɛeḇ / reɛɛeḇ* ‘to scare, to want badly’ (trans) B PP *merɛuḇ / merɛuḇa / merɛuḇin* VN *rruɛḇ* Caus *reɛɛeḇ / reɛɛeḇ / treɛɛaḇ* ‘to scare’ E.g. *merɛuḇ x lḥaža inši* ‘He wants something really badly.’ E.g. *reɛɛḇax aɛeyyal ahen* ‘I scared that boy.’

rf *arifi - rrwafa* F. *tarifiṯ* ‘riffian’ C

rfs *rfes / rfes / reffes* ‘to knead’ (trans) B cf. **ɛžn** for Pass and PP.

rg *targa - tirgiwan* ‘canal’ B

rg *tirgett - tirgan* ‘embers’ B

rgl *argel* ‘type of plant’ B

rgl *rrigalu - rrigalus* ‘present’ A/S

rgz *argaz - irgazen* ‘man’ B

rɣ *ssruɣ ~ ssreɣ / ssreɣ / ssruɣ* ‘to light’ (trans) B

rɣw *rreɣwa - rrɣawi* ‘foam’ A

rḥ *rrḥa - lerḥi* Augm. *areḥwin* ‘stone mill’ A

rḥ *rriḥa - rriḥaṯ* ‘fragrant, smell’ A

rḥ *rriḥeyya - rrwaḥi* Dim. *rrwiḥeyya - rrwiḥeyyaṯ* ‘tradtional women’s shoe’ A

rḥb *tarḥeḇt* Dim. *tarḥeyyeḇt* Augm. *arḥeḇ - ireḥḇawen* ‘land’ B

rḥl *reḥḥel / reḥḥel / treḥḥal* ‘to move house, migrate’ (intr) B

rk *rku / rka / rekku* ‘to rot’ (intr) B

rk *tareḵt - tireḵtan* ‘newborn calf’ B

rkb AP *raḵeḇ / raḵḇa / raḵḇin* ‘to ride, mount’ cf. **n** for verb.

rkb *rekkeḇ / rekkeḇ / trekkaḇ* ‘to make mount, place on top’ (trans) B Pass *rtekḇeṯ* PP *mrekkeḇ / mrekkḇa / mrekkḇin*

rkɛ *rkeɛ / irkeɛ* ‘to bend through the knees for prayer’ (intr) A AP *rakeɛ / rakɛa / rakɛin* PP *merkuɛ / merkuɛa / merkuɛin*

rkl *arekkal - irekkila* Dim. *arkikel - irkiklen* F. *tarekkalt - tirekkila* Dim. *tarkikelt - tirkiklan* ‘dog’ B

rkl *rkel / rkel / rekkel* ‘to kick’ (trans) B VN *rrekla*

rkl *tarkelt* ‘type of plant’ B

rkn *tterkina - tterkinaṯ* ‘place where one lies when one is sick’ A

rmk *rrmuka - rrmukaṯ* ‘big truck’ A

rn *rnu / rna / rennu* ‘to add’ (trans) B

rnb *larneḇ* ‘hare’ A

rng *luring - luringis* ‘beacon’ (This is a plastic bottle to recognize where the anchor of the net is)’ A

rqb *rreqḇa - rreqḇaṯ* ‘murder’ A

rqɛ *tarqiɛet - tirqiɛṯan* ‘rag’ B

rr *arrar - irraren* ‘threshing-floor’ B

rs *res / res / ttres* ‘to land’ (intr) B

rsn *arsin* (wa-) ‘famine, hunger’ E.g. *aṯiyupia gas arsin* ‘There is hunger in Ethiopia’ B

rš *buriš - iburišen* Dim. *abwireš* ‘ant with wings’ A

rs *res / res / trus* ‘to land, to come down’ Caus *sres / sres / ssrus* ‘to put down’ (trans) B cf. **nzl** for Pass and PP.

rš *rriša* ‘the blunt part of a pickaxe’ A

ršq *ršeq / ršeq / reššeq* ‘to split’ (lab) B PP *meršuq / meršuqa / meršuqin*

rtɛb *rtɛeḇ / irtɛeḇ* ‘to be scared’ (intr) A PP *metɛuḇ / metɛuḇa / metɛuḇin*

rtl *rrṯila* Dim. *tarṯeyyelt - tirṯilan* ‘spider’ C

rtw *tartiwt - tartiwan* ‘sleep around the eyes’ B

rṭɛ *rreṭṭaɛa - rreṭṭaɛaṯ* ‘teat’ A

rwl *rwel / rwel / reggul ~ iruggel ~ ireggel* ‘to flee’ (intr) B cf. **ḥṛb** for causative.

rwn *rrwina* ‘chaos’ Can be used as a quantifier, e.g. *rrwina n imalḥen* ‘a lot of fish’ A

rxf *rxef / rxef / rexxef* ‘to loosen’ (trans) B Pass *rtxef* PP *merxuf / merxufa / merxufin*

ry *rreyya - rreyyaṯ* ‘lung’ A

ryb *reyyeḇ / reyyeḇ / treyyaḇ* ‘to destroy’ (trans) B Pass *treyyeḇ* PP *mreyyeḇ / mreyyḇa / mreyyḇin*

ryq *reyyeq / reyyeq / treyyaq* ‘to have breakfast’ (intr) B PP *mreyyeq / mreyyqa / mreyyqin*

ryq *rryaq* ‘breakfast’ B

rzm *rezzem / rezzem / trezzam* ‘to become worse (sick), to change mood’ (trans) B Pass *trezzmeṯ* PP *mrezzem / mrezzma / mrezzmin*

ṛ

ṛ *aṛa / -* ‘to give’ A This has only the Imperative form.

ṛ *ṛṛi - leṛyay* ‘judgement, will’ A

ṛb *ṛebbi / ṛebba / tṛebbay* ‘to raise’ (trans) B

ṛbɛ *ṛṛḇiɛ* Dim. *ṛṛḇeyyeɛ - ṛṛḇiɛaṯ* F. *taṛbiɛt - tiṛḇiɛṯan* ‘spring, grass’ A

ṛbṭ *ameṛbuṭ - imṛibṭen* ‘small rope’ B

ṛbṭ Pass *tṛebbṭeṯ* PP *meṛbuṭ / meṛbuṭa / meṛbuṭin* ‘to close’

ṛby *tteṛbeyya - ttṛabi* ‘baby’ A

ṛbz *ṛṛaḇuz* ‘wooden fan’ A

ṛḍm *ṛṛḏuma - ṛṛḏaym* Dim. *ṛṛḏima - ṛṛḏimaṯ* ‘bottle’ A

ṛdy *ṛṛaḏyun - ṛraḏyunaṯ ~ ṛṛaḏyunis* ‘radio’ A/S

ṛğɛ PP *mṛeğɛɛ / mṛeğɛɛa / mṛeğɛin* ‘be planted’ cf. **r** ‘to plant’

ṛɛd *ṛṛɛaḏa - ṛṛɛaḏaṯ* ‘stingray’ A

ṛɛd *ṛṛɛeḏ* ‘thunder’ F. *ṛṛeɛḏeyya* ‘loud thunder’ A

ṛɛš *ṛeɛɛeš / ṛeɛɛeš / tṛeɛɛaš* ‘to let shiver’ (trans) B Pass *tṛeɛɛšeṯ*

ṛɛš *ṛɛeš / iṛɛeš* ‘to shiver’ (intr) A Pass *tṛeɛšeṯ* PP *meṛɛuš / meṛɛuša / meṛɛušin*

ṛɛy *ṛṛaɛi - ṛṛuɛyan* F. *ṛṛaɛya* ‘herdsman/herdswomen’ A

ṛfɛ *lmeṛfeɛ - lemṛafeɛ* Dim. *lemṛifeɛ - lemṛifɛaṯ* ‘shelf’ A

ṛfɛ *ṛfeɛ / ṛfeɛ / ṛeffeɛ* ‘to carry’ (trans) B Pass *ṭreffɛeṯ*

ṛḥ *ṛṛuḥ* ‘soul or spirit’ A

ṛḥṭ *lmurhiṭ - lemṛaheṭ* Dim. *lemṛiheṭ* ‘homosexual man’ A

ṛml *ṛṛmel* F. *ṛṛemla* Augm. *aṛemliw* ‘thick sand’ Dim. *ṛṛmila* ‘sand’ A

ṛmn *ṛṛumman* Unity F. *taṛummant - tiṛummanan* ‘pomegranate’ *taṛummant n lkemmara* ‘cheek’ B

ṛmš *ṛemmeš / ṛemmeš / ṭremmaš* ‘to blink’ (intr) B

ṛmy *ṛṛumayeṯ* ‘sling’ A

ṛn *luṛni - luṛnis* ‘wage for one day’ spanish through arabic S

ṛny *llaṛaneyya - llaṛaneyyaṯ* ‘type of mackerel’ A

ṛpṣ *aṛappaṣ - iṛappiṣa* Dim. *aṛpipeṣ - iṛpipṣen* F. *taṛappaṣt - tiṛappiṣa* Dim. *taṛpipeṣt - tiṛpipṣan* ‘straw hat’ B

ṛqɛ *ṛeqqeɛ / ṛeqqeɛ / ṭreqqaɛ* ‘to repair clothing’ (trans) B Pass *ṭreqqɛeṯ* PP *mṛeqqeɛ / mṛeqqɛa / mṛeqqɛin* VN *teṛqiɛa*

ṛqm *ṛṛaqm - lʕaṛqam* ‘number’ A

ṛqq *ṛeqqeq / ṛeqqeq / ṭreqqaq* ‘to make thin’ (trans) B Pass *ṭreqqeṯ* PP *mṛeqqeq / mṛeqqa / mṛeqqin*

ṛqq *ṛqiq / ṛqiq-a / ṛqiq-in* ‘thin’ Dim. *ṛqiweq / ṛqiwq-a / ṛqiwq-in* ‘somewhat thin’ A

ṛs *ṛṛas - leṛyus* Dim. *ṛṛweyyes* ‘cape’ A

ṛṣṣ *ṛṛṣaṣ* ‘spreading bullet’ A

ṛṣṭ *aṛṣeṭ - iṛeṣṭawen* ‘pus’ B

ṛš *ṛešš / ṛešš / ṭrešša* ‘to splash’ (trans) B PP *meṛšuš / meṛšuša / mṛeššin*

ṛṭb *ṛeṭṭeḇ / ṛeṭṭeḇ / ṭreṭṭaḇ* ‘to soften’ (trans) B Pass *ṭreṭṭḇeṯ* PP *mṛeṭṭeḇ / mṛeṭṭḇa / mṛeṭṭḇin*

ṛṭb *ṛṭeḇ / ṛeṭḇ-a / ṛuṭeḇ* ‘soft’ A

ṛṭɛ PP *mṛeṭṭeɛ / mṛeṭṭɛa / mṛeṭṭɛin* ‘to suckle (breast)’ cf. **ṭṭ** ‘to suckle’

ṛw *llaṛwi* ‘deer’ (They do not live in the ghomara area.) A

ṛwḍ *ṛṛwiḍa - ṛṛwayeḍ* ~ *ṛṛwiḍaṯ* ‘tire, wheel’ A

ṛwḍ *ṛṛwiḍu* ‘loud noise’ A

ṛwḥ *ṛewweḥ / ṛewweḥ / ṭrewwaḥ* ‘to lift, return smth, carry’ (trans) B Pass *ṭrewwḥeṯ* PP *mṛewweḥ / mṛewwḥa / mṛewwḥin* (*mṛewweḥ* can also mean ‘to have a cold).

ṛwḥ *ṛṛwaḥ* Dim. *ṛṛweyyeḥ* ‘air’ E.g. *itsuṭ ṛṛwaḥ* ‘The wind is blowing.’ A

ṛx *ṛṛxa* ‘cheapness’ A

ṛxs *ṛxis / ṛxis-a / ṛxis-in* ‘cheap’ A

ṛyḥ *reyyeḥ / reyyeḥ / treyyaḥ* ‘to rest’ (intr) B PP *mreyyeḥ / mreyyḥa / mreyyḥin*

ṛys *ṛṛays - ṛṛways* ‘leader’ A

ṛẓ *ṛeẓ / ṛeẓ / ttṛeẓ* ‘to break’ (lab) B E.g. *lkas iṛeẓ* ‘the glass is broken.’ *aẓṛu ittṛeẓ s lmaṣṣa* ‘Stone is (can be) broken with a hammer.’ *deɣya hettṛeẓ* ‘It breaks quickly.’

ṛẓ *ṛṛawẓ* ‘rice’ A

ṛẓ *ṛṛeẓẓa - ṛṛẓeẓ* Augm. *aṛṛeẓẓiw* ‘turban’ A

ṛẓn *taṛẓint - tiṛẓinan* ‘type of fig tree’ It has a red small fig. B

ṛẓẓn *aṛẓeẓẓan - iṛẓeẓẓanen* Dim. *aṛẓiẓen - iṛẓiẓnen* ‘wasp’ B

s

s *ssu / ssu / ssu* ‘to spread out blanket or carpet etc.’ (trans) B (Used by older people, *feṛṛeš* is used nowadays.) B

s *assa* ‘nowadays’ B

s *ssu / ssu / tessa* ‘to lay down a cloth for sleeping’ (trans) B + IO (remembered verb.)

s *su / su / sess* ‘to drink’ (intr) B

s *tasa - tisek̲tan* ‘cow’

s *tusut̲* ‘coughing fit’ B

s *yus d / yus d / ttas d* ‘to land, be related to’ (intr) B The deictic clitic **d** is obligatory. E.g. *ittas as d* ‘He is related to him.’ *ineqqez zeg uṣtiḥ, yus d g terḥeb̲t* ‘He jumped from the roof and landed on the ground.’

sbb *ssab̲ab̲ - ssab̲ab̲at̲* F. *ssab̲ab̲a* ‘cause’ A

sbb *ssb̲ab̲ - ssb̲ab̲at̲* ‘magical note written by imam’ A

sbɛ *ssab̲eɛ - sswab̲eɛ* ‘birth ceremony’ A

sbɛ *ssb̲eɛ - ssb̲uɛa* Dim. *ssb̲eyyeɛ* F. *ssb̲iɛa - ssb̲iɛat̲* Dim. *ssb̲iɛa - ssb̲iɛat̲* ‘lion’ A

sbɛkrwš *seb̲ɛakraweš* ‘part of the goat stomach’ A

sbɣ *sb̲eɣ / sb̲eɣ / ssbeɣ ~ ssbuɣ* ‘to dye, paint’ (trans) B Pass *tsebɣet̲* PP *mesbuɣ / mesbuɣa / mesbuɣin*

sbɣ *ssb̲iɣa - ssb̲iɣat̲* ‘paint’ A

sbḥ *ssb̲eḥ - ssb̲uḥat̲* ‘morning’ A

sbn *sseb̲neyya - ssb̲ani* Dim. *ssb̲ineyya - ssb̲ineyyat̲* ‘headband’ A

sbṛ *sebbeṛ / sebbeṛ / tsebbaṛ* ‘to support (in grievance)’ (trans) B

sbr *ssub̲ri - ssub̲ris* ‘envelope’ A/S

sbs *sseb̲si - ssb̲asa* ‘weed pipe’ A

sbt *sseb̲t* ‘saturday’ A

sbṭṛ *ssb̲iṭaṛ - ssb̲iṭaṛat̲* ‘hospital’ A

sd *lʕussad̲ - lʕussad̲at̲* ‘teacher’ A

sd *ssidi - ssidis* ‘CD’ A/S

sḍɛ *ssd̲aɛ - ssd̲aɛat̲* ‘sound or noise’ A

sdl *tasiddelt - tisiddilan* ‘small wall around the house’ B

sdr *ssḏer - ssḏura* ‘chest’ A

sğɛ *seğɛɛ / seğɛɛ / tseğaɛ* ‘to encourage’ (trans) B PP *mseğɛɛ / mseğɛa / mseğɛin* VN *ttesžiɛ*

sɛ *sɛa / isɛa* ‘to beg’ (intr) A

sɛ *tasaɛɛat* Dim. *taswiɛet - tiswiɛṯan* ‘a period, a time’ (The diminutive refers to a little while.) B

sɛd *ssɛiḏi a ymellulin - ssɛayeḏ a ymellulin* ‘type of white fig’ *ssɛiḏi lekḥel - ssɛayeḏ kuḥel* ‘type of black fig’ A

sɛy *amesɛay - imesɛayen* F. *tamesɛayt - timesɛayan* ‘beggar’ B

sf *asafu - isufa* F. *tasafuṯ - tisufa* ‘torch’ B

sf *asif* (*wa-*) *- isaffen* F. *tasift - tasifṯan* ‘river’ B

sf *ssfi / ssfa / ssfay* ‘to fester, to overflow’ (lab) B PP *messfi / messfiya / messfiyyin*

sf *tasaft - tisafan* ‘beech’ B

sff *ssifef / ssafef / ssifif* ‘to sieve’ (trans) B cf. **ɣrbl** for Pass and PP.

sfnğ *ssfenğ* Unity F. *tasfenğeḵt - tisfenğḵan* ‘kind of donut’ C

sfṛ *ssfaṛ* ‘kind of copper’ A

sg *asuggay - isuggayen* ‘dirty cloth’ (Used to pick up hot material.) B

sg *sag / isug* ‘to drive’ (trans) A Pass *tsageṯ*

sgl *asāgul - isāgulen* F. *tasāgult - tisāgulan* ‘hook’ B

sgn *asēgnu* F. *tasēgnuṯ - tisēgnuṯan* ‘cloud’ B

sɣ *suɣ / seɣ / ssaɣ* ‘to buy’ (trans) B cf. **šr** for Pass and PP

sɣn *aseɣni - iseɣna* ‘big needle’ B

sɣn *asɣun - isuɣnan* Dim. *asɣʷeyyen - isɣʷeyynen* F. *tasɣunt - tisuɣnan* Dim. *tasɣʷeyyent - tisɣʷinan* ‘rope’ B

sɣṛ *asɣaṛ - isɣaṛen* ‘wood, sticks’ B

sɣṛ *tasɣaṛt - tisɣaṛan* Dim. *tasɣeyyeṛt - tisɣeyyɣran* ‘part or piece’ B

shl *shal / ishal* ‘to become, be easy’ (intr) A AP *sahel / sahla / sahlin* Caus. *sahel / sahel / tsahel* ‘to make easy’ (intr) B also *sehhel / sehhel / tsehhal* ‘to make easy’ (intr) B

sḥr *seḥḥer / seḥḥer / tseḥḥar* ‘to do magic’ (trans) B PP *mseḥḥer / mseḥḥra / mseḥḥrin*

sḥṛ *sseḥḥar - sseḥḥarin* F. *sseḥḥara* ‘wizard’ A

sḥr *ssḥuṛ* ‘dawn, breacking of the fast in the ramadan’ A

sḥt *ssuḥt* ‘type of insect’ (It makes the grain sour.) A

sk *amessaḵi - imessaḵiyen* ‘an unploughed field’ B

sk *ssekka - sskak* ‘coin’ A

skḥ *sskuḥ / sskuḥ / sskuḥu* ‘to cough’ (intr) B

skn *aseḵni - iseḵna* ‘big needle’ B

skn *sken / isken* ‘to live’ (intr) A AP *saḵen / saḵna / saḵnin*

skn *lmeskin - lemsaḵen ~ lmusaḵen* Dim. *lemsiḵen - lemsiḵna* F. *lmeskina* ‘poor person’ A

skr *sker / isker* ‘to get drunk’ (intr) A AP *sekran / sekrana / sekranin*

skr *sker ~ sekker / sker ~ sekker / sskar* ‘to do’ (trans) B

skr *tasekkurt - tisuḵran* ‘female partridge’ B

skr *tiskert* (*ti-*) ‘garlic’ B

skṛ *ssukkaṛ* ‘sugar’ A

skt *sskeṯ ~ sskuṯ / skeṯ / sekkeṯ* ‘to be quiet, silent’ (intr) B AP *sakeṯ / sakṯa / sakṯin* Caus. *sekkeṯ / sekkeṯ / tsekkaṯ* ‘to silence’ (trans) B Pass *tsekkṯeṯ* PP *msekkeṯ / msekkṯa / msekkṯin*

skw *tasekkawt* ‘a fight between young rams’ E.g. *tkaṯen tasekkawt* ‘They (the goats) are having a fight.’ B

skw *asekkaw - isekkawen* ‘horn’

skyr *sskayri* F. *skayreyya* ‘drunk’ A

sl *asla - islan* F. *taslaṯ - tislaṯan* ‘bride(groom)’ Also *taslaṯ 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. *sellaɣ as* is ‘I have heard him.’ *sellaɣ ɣres* ‘I listened to him (I obeyed him).’

sl *tisila* (*n uwri*) ‘shoe’ No SG B

slf *aslif - islifen* F. *taslift - tislifan* ‘borther/sister of wife’

slf *salluf* ‘high hair’ A

slf *sellef / sellef / tsellaf* ‘to lend, borrow’ (trans) B Pass *tsellfeṯ* PP *msellef / msellfa / msellfin* E.g. *isellf ahen* ‘He has lent them.’ E.g. *isellf as* ‘He lent him (money).’ *isellef zgas* ‘He borrowed it from him.’ *ša ṯ isellef leflus* ‘He is going to lend me money.’

slf *taselluft - tiselfa* ‘tick’ B

slḥ *ṣaleḥ / ṣaleḥ /tṣalaḥ* ‘to reconcile’ (trans) B

slk *sselk - ssluka* Dim. *ssleyyek - sslikaṯ* ‘iron wire’ A

slm *sellem / sellem / tsellam* ‘to greet’ (trans) B Combines with the prepostion **fx**. E.g. *isellem fxes* ‘He greeted him.’

slm *sellem / sellem / tsellam* ‘to permit’ (intr) B VN *tteslim* It takes the indirect object. E.g. *isellm as* ‘He gave him permission.’

slm *sellem / sellem / tsellam* ‘to surrender’ (trans) B Pass *tsellmeṯ* PP *msellem / msellma / msellmin* E.g. *isellem ḍḍmaɣ nnes* ‘He surrendered himself.’

slm *ssellum - sslalem* ‘ladder’ A

slm *ssilm* ‘peace’ A

sls *asalles* Dim. *asliwes* 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

slsl *lmusalsal* - *lmusalsalaṯ* ‘soap’ A

slsl *selsel / selsel / tselsal* ‘to bake grain’ (trans) B Pass *tselsleṯ* PP *mselsel / mselsela / mselselin*

slt *asleṯ* ‘two years ago’ E.g. *taɣaṭ n usleṯ* ‘the goat of two years ago’ *asleṯ n usleṯ* ‘three years ago’ B

slt *sleṯ / sleṯ / ssluṯ* ‘to remove’ (trans) B Pass *tselṯeṯ* PP *mesluṯ / mesluṯa / mesluṯin*

slx *slex / slex / sslux* ‘to skin’ (lab) B Pass *tselxeṯ* PP *meslux / mesluxa / mesluxin*

sm *lisem* - *lismuwaṯ* ‘name’ A

sm *ssemm* ‘poison’ A

smɛ *semmeɛ / semmeɛ / tsemmaɛ* ‘to sound, listen to’ (trans) B

smḥ *sameḥ / sameḥ / tsamaḥ* ‘to forgive’ (intr) B Pass *tsamḥeṯ* PP *msameḥ / msamḥa / msamḥin* E.g. *ismeḥ gas* ‘He abondoned 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 iḏes* ‘He made up with him.’

smm *ssumm / ssamem / ssumum* ‘to suck’ (trans) B

smn *ssimana* - *ssimanaṯ* ‘week’ A

smr *asammer* - *isammiren* ~ *isummar* F. *tasammert* - *tisammiran* Dim. *tasmimert* - *tasmimerṯan* ‘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* - *snin* ‘age’ A

sn *ssen / ssen / ssen* ‘to know (something/someone)’ (trans) B See **ɛṛf** for Pass and

snb *lʕaṣnaḇ* ‘idol’ A

snd *ssendu / ssenda / ssendaw* ‘to churn’ (trans) B VN *lemxiṭ*

snd *tasenduṯ* ‘traditional butter’ B

snḥ *ssnaḥ* ~ *sslaḥ* ‘weapons’ A

snsl *asenslu* - *isensluwen* ‘spine’ B

snsl *ssensla* - *ssnasel* Dim. *ssnisla* - *ssnislaṯ* ‘necklace, chain’ A

snt *ssinta* - *ssintaṯ* ‘casette’ A

sntf *ssentef / ssentef / ssentaf* ‘to wound’ (lab) B PP *msentef / msentfa / msentfin*

sny *ssiniya* - *sswani* ‘tray’ A

sq *ssuq - leswaq* Dim. *sswiqa - sswiqaṯ* ‘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 *seqqeḏ / seqqeḏ / tseqqaḏ* ‘to tend (goats)’ (trans) B

sqf *ssqef - ssquf ~ ssqufaṯ* Dim. *ssqifa - ssqifaṯ* ‘roof’ A

sqwqw *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 *tasaruṯ - tisura* ‘key’ B

sr *tassart - tissaran* ‘part of the plough’ B

srbs *sserbisa - sserbisaṯ* ‘beer’ A

srd *ssireḏ / ssareḏ / ssireḏ* ‘to wash’ (trans) B cf. **ɣsl** for PP

srdn *aserdun ~ asardun - iserdunen* Dim. *asriden - isridnen* ‘male mule’ B

srdn *ssardin - ssraden* Dim. *ssriden* Augm. *asardin - isardinen* ‘sardine’

srf *ssref / ssref / ssruf* ‘to comb’ (trans) B

srf *tasraft - tisrafan* ‘grain storage, whirlpool’ B

srɣyl *aserraɣyul* ‘kind of plant’ B

srk *tasarka - tisarkiwan* Augm. *asarkiw* ‘a rubber shoe’ (Used before the use of modern shoes.)

srm *serrem / serrem / tserrem* ‘to comb’ (trans) B PP *mserrem / mserrma / mserrmin*

srqzt *serraqzziṯ* ‘cockroach’ A

srr *ssrir - ssrayer* ‘hand made bed’ A

srsr *ssersar - ssraser* Dim. *ssriser - ssrisreyyaṯ* ‘alarmclock’ A

srwt *serweṯ / serweṯ / tserwaṯ* ‘to thresh’ (lab) B cf. **drs** for VN

srx *aserrix* ‘cold’ B

sry *ssarya - ssaryaṯ ~ sswari* ‘pile’ A

sṛžm *sseṛžem - ssṛažem* Dim. *ssṛižem* ‘window’ A

ss *sis / sas / ssyas* ‘to boil’ (intr) B

ssm *susem / sasem ~ isusem / tsusum* ‘to listen’ (intr) B E.g. *isasem as i wɛeyyal ahen* ‘He listened to that boy.’ *isasem fxes* ‘He listens to him’

ssm *tasisma - tisismiwan* ‘needle’ B

ssn *sisen / sasen ~ sisen / tsisen* ‘to dab bread with gravy’ (intr) B

ssn *tasusna - tisisniwan* ‘wasp’s nest’ B

stɛžb *steɛžeḇ / isteɛžeḇ* ‘to astonished’ (intr) A PP *mesteɛžeḇ / mesteɛžḇa / mesteɛžḇin* E.g. *mesteɛžeḇ gas* ‘He is astonished by him.’

stf *asettuf - isettufen* ‘type of plant’ B

stl *stilu - stiluwaṯ ~ stilus* ‘pen’ A/S

stns *stanes / istanes* ‘to get used’ (trans) A PP *mestanes / mestansa / mestansin*

stnyḍr *sstenyaḏur - sstenyaḏuris* ‘screwdriver’ A/S

str *asaṯur - isuṯar* Dim. *aswiṯer - iswiṯren* F. *tasaṯurt - tisuṯar* Dim. *taswiṯert - tiswiṯran* ‘beam’ (It supports the roof of a traditional house.) B

stry *lastreyya - lastreyyaṯ* ‘rake’ A

sṭḥ *aseṭṭuḥ - iseṭṭuḥen* ‘firewood’ B

sw *iswa* ‘to cost’ (intr) A (Only imperfective)

swl *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. *uhaḏ isawl as iḏ uɛeyyal aḏ* or *uhaḏ isawel iḏ uɛeyyal aḏ* ‘This person has spoken to this boy.’

swn *asawen* F. *tasawent* ‘upwards hill’ B

swq *sewweq / sewweq / tsewwaq* ‘to shop, go to the market’ (intr) B PP *msewweq / msewwqa / msewwqin*

sxn *ssxana* ‘fever, summer’ A

sy *seyya* ‘moving backwards in a boat’ A

sy *sseyyu - sseyyus* ‘postage stamp’ A/S

syb *seyyeḇ / seyyeḇ / tseyyaḇ* ‘to throw’ (trans) B Pass *tseyyḇeṯ* PP *mseyyeḇ / mseyyḇa / mseyyḇin*

syd *sseyyeḏ - sseyyḏaṯ* ‘marabout’ A

syf *ssayf - ssyufa* Dim. *ssweyyef - sswifaṯ* ‘sword’ A

syl *seyyel / seyyel / tseyyal* ‘to flow’ (intr) B Pass *tseyyleṯ* PP *mseyyal / mseyyla / mseyylin*

sžd *sžed / isžed* ‘to bend on the forehead for prayer’ (intr) A AP *sažed / sažda / saždin* PP *mesžud / mesžuda / mesžudin*

sžɛ *ssžiɛa - ssžiɛaṯ* ‘bravery’ A

sžn *lmesžun - lemsažen* ‘captive or prisoner’ A

sžn *ssižn* ‘prison’ A

sžn *sžen / sžen / seẓẓen* ‘to detain’ (trans) B Pass *tseẓneṯ* PP *mesžun / meẓẓuna / mesžunin*

sʕl *ssuʕal - ssuʕalaṯ* ‘question’ A

ṣ

ṣṣf *ṣuṣef / ṣuṣef / tṣuṣuf* ‘to spit’ (intr) B

ṣṣf *tiṣuṣaf* ‘saliva’ B

ṣṣṭl *ṣṣṭel - ṣṣṭula* Dim. F. *taṣṭeyyelt - tiṣṭilan* ‘bucket’ C

ṣb *ṣṣaḇa - ṣṣyeḇ* ‘harvest’ A

ṣbn *ṣebben / ṣebben / tṣebban* ‘to wash clothes’ (trans) B Pass *tṣebbneṯ* PP *mṣebben / mṣebbna / mṣebbnin* E.g. *daʔimen ka-tṣebben g lḥedd* ‘It is always washed on Sunday.’

ṣbn *ṣṣaḇun* Unity F. *ṣṣaḇuna* ‘soap’ A

ṣbṭ *ṣṣebbaṭ - ṣṣbabeṭ* Dim. *ṣbibṭa - ṣbibṭaṯ* Unity F. *taṣebbaṭt* Dim. *taṣbibeṭt - tiṣbibṭan* Augm. *aṣebbaṭ* Dim. *aṣbibeṭ - iṣbibṭen* ‘shoe’ B

ṣḍ *ṣṣaḏ / iṣṣaḏ* ‘to hunt, to fish’ (trans) A E.g. *aṭḡam a d ṣṣaḏ* ‘He fished yesterday.’

ṣḍɛ *ṣeḍḍeɛ / ṣeḍḍeɛ / tṣeḍḍaɛ* ‘to make loud noise, disturb’ (trans) B Pass *tṣeḍḍɛeṯ* PP *mṣeḍḍeɛ / mṣeḍḍɛa / mṣeḍḍɛin* VN *ssḍaɛ* ‘noise’ E.g. *lmuṭeɛ an mṣeḍḍeɛ* ‘That place is noisy.’

ṣf *ṣeffi / ṣeffi / tṣeffay* ‘to clear, filter’ (trans) B PP *mṣeffi / mṣeffya / mṣeffin*

ṣf AP *ṣafi / ṣafya / ṣafin* ‘filtered, cleaned’

ṣf *ṣeff / ṣeff / tṣeffa* ‘to empty, dispose’ (lab) B E.g. *lkas aḏ iseff* ‘This glass has been emptied.’

ṣfṣf *ṣṣefṣaf* Unity F. *taṣefṣaft - tiṣefṣafan* ‘type of tree’ C

ṣfḥ *ṣṣfiḥa - ṣṣfayeḥ* ‘hoof’

ṣfṛ *aṣefṛaw - iṣefṛawen* Dim. *aṣfifeṛ - iṣfifṛen* F. *taṣefṛawt - tiṣefṛawṯan* Dim. *taṣfifeṛt - tiṣfifṛan* ‘yellow person/thing’ B

ṣfṛ *ṣeffeṛ / ṣeffeṛ / tṣeffaṛ* ‘to whistle’ (intr) B VN *tteṣfiṛ*

ṣfṛ *ṣfeṛ / ṣefṛ-a / ṣufeṛ* ‘yellow’ Dim. *ṣfifeṛ / ṣfifṛ-a / ṣfifṛ-in* ‘somewhat yellow’ A

ṣfṭ *aṣfeṭ - iṣefṭen* ‘torch’ B

ṣhd *ṣṣehd* ‘warmth’ A

ṣḥ *ṣḥu / ṣḥa / ṣeḥḥu* ‘to get well’ (intr) B

ṣḥ *sḥu / sḥa / seḥḥu* ‘to be strong, to be cured, to be correct’ (intr) B

ṣl *laṣel* ‘origins’ A

ṣl *ṣṣala ~ ṣṣla* ‘prayer’ A

ṣlb *ṣṣalaḇa - ṣṣalaḇaris* ‘type of fyke’ A/S

ṣlɛ *aṣelliɛ - iṣelliɛen* ‘forehead’ Arabic *selliɛa* is used as well in texts. B

ṣlṭ *ṣalṭu - ṣlaṭus* ‘jump (in the water)’ A/S

ṣlṭ *tṣalṭa / itṣalṭa* ‘to dive’ (intr) A

ṣlṭgm *aṣelaṭḡam* ‘day before yesterday’ B

ṣm *ṣum / ṣam ~ iṣum / ttṣum* ‘to fast’ (intr) B AP *ṣayem / ṣayma / ṣaymin* tr. only in *iṣam ṛṛemdan* ‘He fasted the ramadan.’

ṣmk *ṣmeḵ / ṣemḵ-a / ṣumeḵ* ‘deaf’ A

ṣmṛ *ameṣmaṛ ~ lmeṣmaṛ - lemṣumaṛ* Dim. *amṣimeṛ - imṣimṛen* ‘nail’ C

ṣmṭ *ṣemmeṭ / ṣemmeṭ / tṣemmaṭ* ‘to wrap something, to bring animals (goats) back home’ (trans) B

ṣmṭ *ṣṣemṭa - ṣṣmaṭi* Dim. *ṣṣmiṭa - ṣṣmiṭaṯ* ‘leather belt’ A

ṣmṭ *tiṣmeṭ* (*ti-*) ‘cold’ B

ṣnbṛ *aṣnuḇeṛ - iṣnuḇṛen* Dim. *aṣniḇeṛ - iṣniḇṛen* F. *taṣnuḇeṛt - ṣṣnaḇeṛ* Dim. *taṣniḇeṛt - tiṣniḇṛan* ‘pine tree’ B

ṣnḍl *aṣenḍil - iṣenḍilen* F. *taṣenḍilt* ‘forehead’ B

ṣnṛ *ṣṣennaṛa - ṣṣnayeṛ* Augm. *aṣennaṛun* Dim. *ṣṣniwṛa - ṣṣniwṛaṯ* ‘fishhook’ A

snṣlṭgm *asnuṣelaṭgam* ‘three days ago’ B

ṣnž *aṣennaž - iṣenniža* ‘type of basket’ B

ṣp *ṣṣappa - ṣṣappaṯ* ‘slash with two teeth’ A

ṣqṣ *ṣeqṣi / ṣeqṣa / tṣeqṣay* ‘to ask’ (trans) B PP *mṣeqṣi / mṣeqṣya / mṣeqṣin*

ṣṛ *ṣṣuṛ - leṣwaṛ* Dim. *ṣṣweyyeṛ* ‘wall without roof’ A

ṣṛb *ṣṣṛaḇ* ‘alcoholic drink’ A

ṣṛḥ *lmeṣṛaḥeyya - lmeṣṛaḥeyyaṯ* ‘theater’ A

ṣṛnd *ṣṣaṛanḍa - ṣṣaṛanḍaṯ* ‘big fyke’ A

ṣṛmnt *ṣaṛmuniti - ṣaṛmunitis* ‘red mullet’ S

ṣṛq Pass *tseṛqeṯ* PP *meṣṛuq / meṣṛuqa / meṣṛuqin* ‘ to steal’ see **kr** ‘to steal’

ṣṛwl *ṣeṛwel / ṣeṛwel / tṣeṛwal* ‘to put on trousers’ (trans) B Pass *tṣṛewleṯ* PP *mṣeṛwel / mṣeṛwela / mṣeṛwelin tṣṛewleṯ taɛeyyalt ahen* ‘That girl has got trousers.’

ṣṛyṛ *ṣṣṛiṛ - ṣṣṛayeṛ* ‘secret’ E.g. *ma itɛawaḏ ši ṣṣṛayeṛ nnes* ‘He does not tell his secrets.’ A

ṣṭ *ṣuṭ / ṣaṭ / tṣuṭ* ‘to blow’ (intr) B E.g. *ṛṛwaḥ itṣuṭ* ‘the wind is blowing’

ṣṭ *tamṣeṭṭ - timeṣṭan* augm. *amṣeṭ - imeṣṭen* ‘thigh’ B

ṣṭb *ašeṭṭiḇ - išeṭṭiḇen* Dim. *aštiṭeḇ - ištiṭḇen* F. *tašeṭṭiḇt - tišeṭṭiḇan* Dim. *taštiṭeḇt - tištiṭḇan* ‘bush’ B

ṣtḥ *aṣettuḥ - iṣettuḥen* ‘stick’ B

ṣṭḥ *aṣṭiḥ - iṣṭiḥen* Dim. *aṣteyyeḥ - iṣteyyḥen* Dim. F. *taṣteyyeḥt* ‘roof’ B

ṣwṭ *ṣewweṭ / ṣewweṭ / tṣewwaṭ* ‘to be emaciated, to vote’ (intr) B Pass *tṣewwṭeṯ* PP *mṣewweṭ / mṣewwṭa / mṣewwṭin*

ṣwṭ *ṣṣawṭ* ‘voice’ A

ṣyḍ *ṣeyyeḏ / ṣeyyeḏ / tṣeyyaḏ* ‘to seduce’ (trans) B Pass *tṣeyyḏeṯ* PP *mṣeyyeḏ / mṣeyyḏa / mṣeyyḏin*

ṣym AP *ṣayem / ṣayma / ṣaymin* ‘to fast’ see **ẓm** and **ṣm** ‘to fast’

ṣyṭ *aṣyaṭ - iṣyaṭen* Dim. *aṣweyyeṭ - iṣweyyṭen* ‘border in a meadow’ B

š

š *ši* E.g. *ši n medden* ‘some people’ A

š *šš / šš / tett* ‘to eat’ (trans) B cf. **wkl** for AP

ššk *tašašeḵt - tišušaḵ ~ ššwaši* Dim. *tašwišeḵt - tišwišḵan* ‘hat’ B

ššy *tašašayt n uṭar - tišašayan n uṭar* ‘instep (of the foot)’ B

šbh - / - / *tšabah* ‘to look like’ (trans) B E.g. *itšabah g yan iši* ‘He looks like someone.’ Always combined with the preposition **g**.

šbk *ššeḇḵa - ššeḇḵaṯ* ~ *ššḇuḵ* Dim. *ššḇiḵa - ššḇiḵaṯ* ‘fine long net’ (It is used for catching fish like sardines, used on the beach.) A

šbṛ *šebbeṛ / šebbeṛ / tšebbeṛ* ‘to catch, hold’ (trans) B Pass *tšebbṛeṯ* PP *mšebbeṛ / mšebbṛa / mšebbṛin* VN *ttešbiṛa - ttešbiṛaṯ*

šbṭ *šebbeṭ / šebbeṭ / tšebbaṭ* ‘to climb’ (intr) B PP *mšebbeṭ / mšebbṭa / mšebbṭin*

šby *ašbayyu* ‘rope to tie the plough to’ B

šd *šedd / šedd / tšedda* ‘to tie’ (trans) B Pass *tšeddeṯ* PP *mešdud / mešduda / mešdudin* ‘to close’

šɛb *tašɛeḇt - tišɛaḇan* Dim. *tašɛeyyeḇt - tišɛiḇan* ‘big earring’ B

šɛl *šɛel / šɛel / ššɛal* ‘to smell’ (trans) B

šɛl *šɛel / šɛel / ššɛel* ‘to bake bread’ (lab) B PP *mešɛul / mešɛula / mešɛulin* E.g. *nettaṯa tešɛel aɣṛum* ‘She baked bread.’

šɛl *šḥal* ‘how many’ A

šɛl *tašɛult - tišɛulan* ‘peaces of wood for lighting the oven’ B

šɛr *ššaɛir - ššuɛaṛa* ‘poet’ A

šɛṛ *ššɛaṛ - ššuɛṛan* ‘hair’ Unity *ašeɛṛun - išeɛṛunen* Dim. *ašɛiren - išɛeyyren* ‘one hair’ B

šɛṛ *ššeɛṛa - ššeɛṛaṯ* Dim. *ššɛiwṛa - ššɛiwṛaṯ* ‘fishing line’ A

šf *ššeffa - ššfayef* ‘lip’ A

šfṛ *ššeffaṛ - ššeffaṛa* Dim. *ššfifeṛ - ššfifṛin* Dim. *ššfifṛa* ‘thief’ A

šfṛ *ššfeṛ - ššefṛin* ~ *lešfaṛ* ‘eyelid’ A

šhd *šaheḏ - ššhuḏ* ~ *ššuhuḏ* ‘witness, martyr’ A

šhd *šheḏ - išheḏ* ‘to testify’ (trans) A AP

šhd *lmešheḏ - lemšaheḏ* Dim. *lemšiheḏ* ‘tombstone’ A

šhṛ *ššheṛ - ššhuṛa* Dual *šehṛayn*. Dim. *ššheyyeṛ* ‘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 *mešk*ak / *mešk*aka / *mešk*akin E.g. *šekku gas* ‘They doubted him.’

šk *šk*a / *išk*i ‘to complain about’ (trans) A E.g. *šk*a *xfi* ‘ He complained about me.’

šk *ššekk* ~ *ššukk* ‘doubt’ A

škl *ššk*al - *leškula* ‘rope to tie a donkey’

škm *leškama - leškamaṯ* ‘fish scale’ A

škm *šekkem / šekkem / tšekkam* ‘to squeal’ (trans) B Pass *tšekkmeṯ* PP *mšekkem / mšekkma / mšekkmin* VN *tteškim* It can take the preposition **g** or a Direct Object pronoun.

škm *ššekkam - ššekkama* Dim. *ššk*ikem - *ššk*ikmaṯ Dim. *ššk*ikma ‘traitor’ A

škṛ *šekkeṛ / šekkeṛ / tšekkeṛ* ‘to lift’ (trans) B Pass *tšekkṛeṯ* PP *mšekkeṛ / mšekkṛa / mšekkṛin*

škṛ *škeṛ / iškeṛ* ‘to praise’ (trans) A Pass *tšekṛeṯ* PP *meškuṛ / meškuṛa / meškuṛin*

škṛ *šškaṛa* Dim. *taškeyyeṛt* ~ *šškiwṛa* - *tiškiṛan* Augm. *ašekṛun* ‘bag’ C

šlgm *ašelgum* - *išelgumen* ~ *ššlagem* Dim. *ašligem* - *išligmen* F. *tašelgumt* - *tišelguman* Dim. *tašligemt* - *tišligman* ‘lip’ B

šlɣm *ššlaɣem* ‘moustache’ E.g. *bušlaɣem* ‘man with a moustache’ A

šll *šellel / šellel / tšellel* ‘to rinse’ (trans) B

šll *tašellilt* ‘diarrhoea’ B

šlq *ašelquq* - *išelqaq* ~ *ššlaqeq* ‘old clothes’

šlq *ššluq* ‘circling water’

šlx *ašallax* - *išallaxen* F. *tašallaxt* - *tišallaxan* ‘big variant of something’ B

šm *lušam* - *lušamaṯ* ‘tattoo’ A

šm *šumm / šumm* ~ *išemm / tšemma* ‘to smell’ (trans) B

šmɛ *ššmeɛ* F. *ššemɛa* - *ššemɛayaṯ* Dim. *ššmiɛa* - *ššmiɛeyyaṯ* Augm. *ašemɛun* ‘candle’ A

šml *ššmal* ‘north’ A

šmm *ššemmam* F. *tašemmamt* - *tišemmaman* ‘small ant’ A

šmnḍṛ *ššmenḍeṛ* Dim. *ššminḍeṛ* ‘sugar beet’ A

šmṛ *lmešmaṛ* - *lemšameṛ* Dim. *lemšimeṛ* ‘threads that women tie around their middle and sticks out as a tail on the back side’ A

šmṛ *ššmuṛṛa* Unity F. *tašmuṛṛeḵt* - *tišmuṛṛḵan* ‘barbary fig’ C

šnd *ššend* - *lešnaṯ* ‘plough tie’ A

šnq *ašennaq* - *išennaqen* Dim. *ašnineq* - *išninqen* ‘bundle of grass’ B

špṛ *tašeppiṛt* - *tišeppiṛan* Dim. *tašpiperṭ* - *tišpiṛan* ‘bump’ (E.g. from insect bite) B

šq *ššeqqa* - *ššeqqaṯ* ‘cut’ A

šq *tšaq* ~ *nšaq* - *itšaq* ~ *inšaq* ‘to split’ (intr) A

šqf *ašeqquf* - *išeqqifen* Dim. *ašqiqef* - *išqiqfen* ‘shard of earthenware’ B

šqf *ašqef* - *išeqfen* ‘snail shell’ B

šqf *ššqef* - *ššqufa* Dim. *ššqeyyef* ‘pipe’ A

šqṛ *ašaquṛ* - *ššwaqeṛ* ~ *išuqqaṛ* Dim. *ašwiqeṛ* - *išwiqṛen* F. *tašaquṛt* - *tišaquṛan* Dim. *tašwiqeṛṭ* - *tišwiqṛan* ‘axe’ B

šqṛ *šeqqeṛ / šeqqeṛ / tšeqqaṛ* ‘to chop’ (trans) B Pass *tšeqqṛeṯ* PP *mšeqqeṛ / mšeqqṛa / mšeqqṛin*

šr Pass *tešraṯ* PP *mešri / mešreyya / mešreyyin* ‘to buy’ cf. **sɣ** ‘to buy’

šrk *tašriḵt* - *tišriḵan* ‘stepmother’ B

šrl *ššral* ‘jack fish’

šrq *šreq / išreq* ‘to come from the east’ (trans) A E.g. *šerqaṯ tafuḵt* ‘ The sun came up from the east.’

šṛb *mešṛuḇa - mešṛuḇaṯ* ‘drink’ A

šṛb *šeṛṛeḇ / šeṛṛeḇ / tšeṛṛaḇ* ‘to give water’ (trans) B

šṛb *ššuṛba* Dim. *ššṛiba* ‘soup’ A

šṛf *šeṛṛef / šeṛṛef / tšeṛṛaf* ‘to make old’ (trans) B See **wsr** for non-causative.

šṛḥ *šṛeḥ / išṛeḥ* ‘to explain’ (trans) A PP *mešṛuḥ / mešṛuḥa / mešṛuḥin*

šṛq *ššeṛq* ‘east’ A

šṛq *ššeṛqi* ‘hard wind, high waves from the east’ A

šṛṛ PP *mešṛaṛ / mešṛaṛa / mešṛaṛin* ‘to fight, to argue’ B cf. **kns**

šṛṭ *ašeṛṛiṭ ~ ašeṛṛuṭ - išeṛṛiṭen ~ išeṛṛuṭen* Dim. *ašṛiṛeṭ - išṛiṛṭen* F. *tašeṛṛiṭ - tišeṛṛiṭan* Dim. *tašṛiṛeṭ - tišṛiṛṭan* ‘line’ B

šṛwṭ *ašeṛwiṭ - išeṛwaṭ ~ išeṛwiṭen* ‘piece of string’ B

št *ššita - ššitaṯ* ‘brush’ A

štf Pass *tšettfeṯ* PP *mšettef / mšettfa / mšettfin* ‘to dry’ see **k** ‘to dry’ for base verb

štw *ššeṯwa* ‘winter’ A

šty *ašattay - išattayen* F. *tašattayt - tišattayan* ‘big bundle of hair’ B

šṭb *šeṭṭeḇ / šeṭṭeḇ / tšeṭṭaḇ* ‘to sweep’ (trans) B Pass *tšeṭṭeḇ* PP *mšeṭṭeḇ / mšeṭṭḇa / mšeṭṭḇin* E.g. *axyam ahen mšeṭṭeḇ* ‘That room is wiped.’

šṭb *tašeṭṭaḇt - tišeṭṭaḇan* ‘broom’ B

šṭḥ *šṭeḥ / šṭeḥ / šeṭṭeḥ* ‘to dance’ (intr) B VN *ššṭiḥ* Caus *šeṭṭeḥ / šeṭṭeḥ / tšeṭṭaḥ* ‘to make dance’ (trans) B *šeṭṭḥax ṯ byeddi* ‘I made him dance myself.’

šṭn *ššiṭan - ššwaṭen ~ ššayaṭin* ‘satan’ A

šṭṛ *šṭaṛ / išṭaṛ* ‘to ruminate’ (trans) A E.g. *lḥaža a ma ka-tšṭaṛ ši ḥṛama* ‘The thing that does not ruminate is haram.’

šṭyṛ *šṭayṛi - šṭayṛeyyin* F. *šṭayṛiya* ‘stingy’ A

šwl *ašewwal - išewwila* ‘penis’ B

šwṭ *šewweṭ / šewweṭ / tšewwaṭ* ‘to grill’ (trans) B

šwṭ *šewweṭ / šewweṭ / tšewwaṭ* ‘to roast, fry’ (trans) B Pass *tšewwṭeṯ* PP *mšewweṭ / mšewwṭa / mšewwṭin* B

šxṛ *šxeṛ / išxeṛ* ‘to snore’ (intr) A

šy *tašyiṯ* ‘small handmill’ B

šṭn *ššṭun* ‘anchovy’

t

tbɛ *tḇeɛ / itḇeɛ* ‘to follow’ (trans) A

tbɛ *ttaḇeɛ* ‘part of the plough’ A

tbl *ttabla - ttḇali* Dim. *ttḇila - ttbileyyaṯ* ‘table’ A

tbn *aṯebban - iṯebbina* Dim. *aṯbiben - iṯbibnen* Dim. *taṯbibent - tiṯbibnan* ‘trousers’ B

tbt *tebbeṯ / tebbeṯ / ttebbaṯ* ‘to recognize, to focus, to be aware’ (trans) B Pass *ttebbṯeṯ* PP *mtebbeṯ / mtebbṯa / mtebbṯin* E.g. *immuṯ mtebbeṯ* ‘He died being aware of what happened.’

tbrn *tiḇurun* ‘shark’ S

tḍ *tiḍḍa* (*ti-*) - *tiḍḍiwan* (*ti-*) ‘leeche’ B

tɛlm *tteɛlem* - *ttɛalem* Dim. *ttɛilem* F. *ttɛelma* Dim. *ttɛilma* ‘fox’ A

tf *tfa / itfa* ‘to yawn’ (intr) A

tfḥ *tteffaḥ* Unity F. *tateffaḥt* - *titeffaḥan* Augm. *ateffaḥ* ‘apple’ C

thm *lmutahim* - *lmutahimin* ‘defendant’ A

thm *them / ithem* ‘to suspect’ (trans) A PP *methum / methuma / methumin* VN *ttuhma*

thṛ *tehheṛ / tehheṛ / ttehhaṛ* ‘to circumcise’ (trans) B Pass *ttehheṛ* PP *mtehheṛ / mtehhṛin*

thr *tthur / tthur / tthur* ‘to crawl ‘ (intr) B E.g. *aḡ ill itthur* ‘He was crawling.’

tk *tekki / tekki ~ tekka / tekkay* ‘to press on’ (intr) B

tk *tukka* - *tukkaṯ* ‘zipper’ A

tlbzyn *tiliḇizyun* - *tiliḇizyunaṯ* ‘television’ A

tlf PP *metluf / metlufa / metlufin* ‘ to be lost’ cf. **wšk** ‘to be lost’

tlfz *ttelfaza* - *ttelfazaṯ* ‘television’ A

tls *atellis* - *itellisen* ‘thick wool cloth’ B

tlt *taleṯ* - *talṯin* F. *talṯa* ‘third’ A

tlt *ttlaṯa* ‘tuesday’ A

tmn *ttaman* - *lʕatmina* ‘price’ A

tmn *aṯmun* - *iṯmunen* Dim. *aṯmweyyen* Dim. *taṯmweyyent* ‘haystack’ B

tn *ttani* - *ttanin* F. *ttanya* ‘second’ A

tnbṛ *tunuḇiṛ ~ tunuḇil* - *tunuḇiṛaṯ* ‘car’ A

tnɛš *itenɛašen* ‘money’ (Based on rifian *ṯinɛašin* ‘money’. Only locally used in the village.) B

tnn *leṯnin* ‘monday’ A

tntṛṛ *tuntuṛiṛa* ‘blue shark’

tq *taq / itiq* ‘to trust’ (trans) A E.g *ka-ytiq iḏes* ‘He trusts him.’

tqb *lmeṯqeḇ* - *lemṯaqeḇ* Dim. *lemṯiqeḇ* - *lemṯiqḇaṯ* ‘awl’ A

tqb *tqeḇ / tqeḇ / ttquḇ* ‘to pierce, make a hole’ (trans) B Pass *tteqḇeṯ* PP *metquḇ / metquḇa / metquḇin*

tql *tqil / tqil-a / tqil-in* ‘heavy’ A

tr *aṯar* - *iṯaren* ‘type of bird’ (resembles a pigeon) B

tr *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. *haw ittru* ‘He is crying.’

aɛeyyal ahen mbekki, ma ɛat šk a t̲ issetran / t̲ ibekkan ‘That boy is crying, I do not know who made him cry.’

trn *ttran - ttranat̲* ‘train’ A

tṛnčl *ttṛančilu - ttṛančilus* ‘katapult’ A/S

tṛny *ttuṛneyyu - ttuṛneyyus* ‘screw’ A/S

trs *ttris - ttursan* Dim. *ttreyyes - ttrisat̲* ‘big fishnet for big fish’ A

trsyn *ttrisyan - ttrisyanat̲* F. *ttrisyana* ‘electrician’ (Also used: *lmɛellem n ḍḍaw* = ‘specialist of electricity’) A

try *ttreyyat̲* ‘moving cluster of stars’ A

tṛynb *ttṛayenbu - ttṛayenbut̲* ‘spintop’ A

tt *ttat̲ - ttat̲at̲* ‘chameleon’ A

tt *ttu / ttu / tettu* ‘to forget’ (trans) B See **nsy** for AP, PP and Caus

twb *ttawb̲* Dim. *ttweyyeb* ‘cloth’ (The diminutive is a beautifull cloth.) A

ty *atay* (*wa-*) ‘tea’ B

tžr *ttažir - ttuǧaṛ* ‘rich man’ A

ṭ

ṭ *lǧaṭi - lǧaṭis* ~ *lḏžaṭṭiyyat̲* ‘sailing boat’ A

ṭ *ṭṭu / ṭṭu / ṭṭu* ‘to roll up’ (trans) B Pass *nṭwat̲* PP *meṭwi / meṭweyya / meṭweyyin*

ṭ *tiṭṭ - taṭṭiwan* ~ *ṭṭiwan* ‘eye’ (The plural noun with the prefix is used by older people.) B

ṭ *tiṭṭa* ‘nipple, animal breast’ B

ṭ *ṭṭu / ṭwi / ṭṭwi* ‘to fold’ (trans) B

ṭṭ *ṭṭeṭ / ṭṭeṭ / teṭṭeṭ* ‘to suckle (breast)’ (trans) B *ssuṭeṭ / ssaṭeṭ /ssuṭuṭ* ‘to breast-feed, to give the breast’ B See **ṛṭɛ** for PP

ṭb *ṭṭab̲a* ‘tobacco’ A

ṭb *ṭṭub̲* Unity F. *ṭṭub̲a - ṭṭub̲at̲* ‘dried clay’ A

ṭbb *ṭṭb̲ib̲ - ṭṭubba* F. *ṭṭb̲ib̲a* ‘physician, doctor’ A

ṭbɛ *ṭṭab̲iɛa* ‘nature’ A

ṭbl *ṭṭb̲el - ṭṭb̲ula* Augm. *aṭebbal* Dim. *ṭṭb̲eyyel - ṭṭb̲eyylat̲* ‘drum’ A

ṭbn *aṭebbun - iṭebbunen* Dim. *aṭb̲iben - iṭb̲ib̲nen* F. *taṭebbunt - tiṭebbunan* Dim. *taṭb̲ib̲ent - tiṭb̲ib̲nan* ‘vagina’ B

ṭbq *ṭṭb̲aq* Dim. *ṭṭb̲eyyeq - ṭṭb̲iqat̲* ‘pan’ A

ṭbs *ṭṭub̲is - ṭṭub̲isat̲* ‘bus’ A

ṭbṣl *ṭṭeb̲ṣil - ṭṭb̲aṣel* ‘plate’ A

ṭbẓ *ṭebbeẓ / ṭebbeẓ / ṭṭebbaẓ* ‘to hammer’ (trans) B Pass *ttebbẓet̲* PP *mṭebbeẓ / mṭebbẓa / mṭebbẓin*

ṭɛm *lmeṭɛem* ‘restaurant’ A

ṭɛm *ṭṭɛam* ‘couscous’ A

ṭɛm *ṭṭuɛm* - *ṭṭuɛmaṯ* Dim. *ṭṭɛeyyem* - *ṭṭɛimaṯ* ‘bait’ A

ṭf *aṭaf* - *iṭafen* ‘stalk’ B

ṭf PP *meṭfi / meṭfeyya / meṭfiyyin* ‘extinguish’ E.g. *lɛafya meṭfeyya* ‘the fire is extinguished’ B cf. **ns** ‘to extinguish’

ṭf *ṭṭef / ṭṭef / teṭṭef* ‘to hold’ (trans) B

ṭfṛ *ṭṭayfuṛ* - *ṭṭwafeṛ* Dim. *ṭṭwifeṛ* - *ṭṭwifṛaṯ* ‘low wooden table’ A

ṭgd *aṭuḡd* - *iṭuḡdan* ‘finger’ B
Names of the individual fingers are:
kḥel ssḇaɛ ~ *kḥel aṭaḏ* ‘middle finger’ A
leḥḥas lemṛaq ~ *leḥḥas ṭṭwažen* ‘index finger’ A
mul žuž n lexwaṯem ‘ring finger’ A
stitu mezyan ‘little finger’ A

ṭgm *aṭḡam* (*wa-*) ‘yesterday’ B

ṭḥk *ṭeḥḥeḵ / ṭeḥḥeḵ / ṭṭeḥḥaḵ* ‘to make laugh’ (trans) B Pass *ṭṭeḥḥḵeṯ* PP *mṭeḥḥeḵ / mṭeḥḥḵa / mṭeḥḥḵin* see **ḍṣ** ‘to laugh’

ṭḥk *ṭṭaḥk* ‘laughter’

ṭḥn *ṭṭaḥuna* - *ṭṭwaḥen* ‘electric mill’ A

ṭḥn *ṭṭḥin* ‘flour’ A

ṭḥṛ *ṭehheṛ / ṭehheṛ / ṭṭehhaṛ* ‘to circumcise’ (trans) B PP *mṭehheṛ / mṭehhṛa / mṭehhṛin* E.g. *š a ṭehṛax aɛeyyal inu* ‘I am going to circumcise my child.’

ṭḥṛ *ṭṭheṛ* - *ṭṭhuṛa* Dim. *ṭṭheyyeṛ* ‘back’ A

ṭḥṛ *ṭṭhaṛa* - *ṭṭhaṛaṯ* ‘circumcision’ A

ṭl *aṭil (wa-)* ‘grape’ *taquqet n waṭil* ‘one grape’ B

ṭl *ṭṭal / iṭṭal* ‘to guess’ (intr) A Pass *ṭṭaleṯ* PP *meṭṭal / meṭṭala / meṭṭalin*

ṭlḇ *ṭleḇ / iṭleḇ* ‘to request, to ask for, to order’ (intr) A PP *meṭluḇ / meṭluḇa / meṭluḇin* E.g. *ṭleḇt-lu* ‘I ordered from him.’

ṭlḇ *ṭṭaleḇ* - *ṭṭulḇa* ~ *ṭṭalaḇa* Dim. *ṭṭwileḇ* ‘pupil in Koran school’ A

ṭlɛ *ṭaleɛ* ‘up’ Adv *dar ṭaleɛ* ‘to up there’ A

ṭlḥ *aṭelliḥ* - *iṭelliḥen* ‘forehead’ B

ṭll *ṭellel / ṭellel / ṭellal* ‘to peek’ (intr) B E.g. *iṭellel fxes* ‘He peeked at him.’ B

ṭlq *ṭelleq / ṭelleq / ṭṭellaq* ‘to divorce’ (trans) B PP *mṭelleq / mṭellqa / mṭellqin*

ṭlq *ṭleq / ṭleq / ṭṭleq* ~ *ṭṭluq* ‘to straight, straighten, to let go’ (trans) B Pass *ṭṭelqeṯ* PP *meṭluq / meṭluqa / meṭluqin*

ṭlq *ṭṭlaq* ‘divorce’ A

ṭmɛ *ṭemmeɛ / iṭemmeɛ* ‘to lure, to entice’ (intr) A Pass *ṭṭemmɛeṯ* PP *mṭemmeɛ / mṭemmɛa / mṭemmɛin*

ṭmɛ *ṭemmeɛ / ṭemmeɛ / ṭṭemmaɛ* ‘to aspire’ (trans) B

ṭmr *ṭmer / ṭmer / ṭṭmur* ‘to bury’ (trans) B E.g. *š a neṭmer yan iši* ‘We are going to bury someone.’

ṭmr *aṭemmar - iṭemmaran ~ iṭemmira* ‘hole’ B

ṭmr *ṭṭmar* Unity F. *taṭmaṛt - tiṭmaṛan* ‘date’ C

ṭq *ṭṭaqqa - ṭṭiqqan* Dim. *ṭṭwiqa - ṭṭwiqaṯ* ‘small window’ A

ṭql *ṭeqqel / ṭeqqel / ṭṭeqqal* ‘to heavy’ (trans) B Pass *ṭṭqaleṯ*

ṭṛ *aṭaṛ - iṭaṛen* F. *taṭṭaṛt - tiṭṭaṛan* ‘leg, foot’ B

ṭṛṭṛ *ṭeṛṭeṛ / ṭeṛṭer / tteṛṭaṛ* ‘to fart hard’ (intr) B

ṭṛbq *aṭṛaḇeq - iṭṛaḇqen* ‘leather ankle strip’ B

ṭṛf *ṭṭeṛf - ṭṭṛufa* Dim. *ṭṭṛeyyef - ṭṭṛifin* ‘end, side, edge, piece’ A

ṭṛf *ṭṭeṛṛaf - ṭṭeṛṛafa* ‘shoemaker’ A

ṭṛḥ *ṭeṛṛeḥ / ṭeṛṛeḥ / ṭṭeṛṛaḥ* ‘to flatten’ (trans) B PP *mṭeṛṛeḥ / mṭeṛṛḥa / mṭeṛṛḥin*

ṭṛq *lemṭiṛqa - lemṭaṛeq* Dim. *lemṭiṛqa - lemṭiṛqaṯ* ‘hammer’ A

ṭṛq *ṭeṛṛeq / ṭeṛṛeq / ṭṭeṛṛaq* ‘to forge’ (trans) B Pass *ṭṭeṛṛqeṯ* PP *mṭeṛṛeq / mṭeṛṛqa / mṭeṛṛqin*

ṭṛq *ṭṭaṛiqa* ‘manner’ A

ṭṛš *aṭeṛṛaš - iṭerrašen~ iṭeṛṛiša* Dim. *aṭṛiṛeš - iṭṛiṛšen* ‘clay water jar’ B

ṭryll *ṭṭrayllil - ṭṭrayllilen* ‘bat’ C

ṭṣ *ṭṭaṣ n biṯelma - ṭṭiṣan n biṯelma* ‘toiletpot’ A

ṭṣ *ṭṭaṣa - ṭṭiṣan* Dim. *ṭṭwiṣa - ṭṭwiṣaṯ* ‘bowl, glass’ A

ṭṣ *ṭṭeṣ / ṭṭeṣ / teṭṭeṣ* ‘to sleep’ (intr) B Caus *saṭeṣ / suṭeṣ / suṭuṣ* cf. **nɛs** for AP and VN

ṭwṭw *aṭawṭaw - iṭawṭawen* ‘young person (derogative)’ B

ṭwl *aṭewwal - iṭulan* F. *taṭewwalt - tiṭewwalan* ‘brother-in-law, son-in-law, father-in-law, sister-in-law’ B

ṭwl *ṭewwel / ṭewwel / ṭṭewwal* ‘to prolong, to lengthen’ (trans) B Pass *ṭṭewwleṯ* PP *mṭewwel / mṭewwla / mṭewwlin*

ṭwl *ṭwil / ṭwil-a / ṭwil-in* ‘tall’ Dim. *ṭwiwel / ṭwiwl-a / ṭwiwl-in* ‘somewhat long’ A

ṭwp *ṭṭawpa - ṭṭawpaṯ* ‘rat’ A

ṭwṛ *ṭewweṛ / ṭewweṛ / ṭṭewwaṛ* ‘to let, make develop’ (trans) B Pass *ṭṭewwṛeṯ* PP *mṭewweṛ / mṭewwṛa / mṭewwṛin*

ṭwš *aṭewwiš - iṭewwiša ~ iṭewwišen* ‘waterfall, rain-pipe’ B

ṭyb PP *mṭeyyeḇ / mṭeyyḇa / mṭeyyḇin* ‘to cook’ B cf. **nw** ‘to cook’

ṭyṛ *ṭṭiyaṛa - ṭṭyayeṛ* ‘airplane’ A

ṭžk *aṭužk - iṭužken* ‘partridge male’ B

w

wḍ *tweḍḍa / itweḍḍa* ‘to do the ablution’ (intr) A E.g. *š nṭweḍḍa* ‘I will do my ablutions.’

wdql *weḏqul* ‘nothing’

wğd *weğeḏ / weğeḏ / tweğaḏ* ‘to make ready’ (trans) B Pass *tweğḏeṯ* PP *mweğeḏ / mweğḏa / mweğḏin*

wɛ *weɛɛi / weɛɛa / tweɛɛay* ‘to make wise’ (trans) B Pass *tweɛɛaṯ* PP *mweɛɛi / mweɛɛya / mweɛɛin*

wɛ AP *waɛi / waɛya / waɛin* ‘be wise’

wɛd *waɛeḏ / waɛeḏ / twaɛaḏ* ‘to promise’ (intr) B PP *mwaɛeḏ / mwaɛḏa / mwaɛḏin* VN *lɛahd* E.g. *fk ay lɛahd* ‘Give me a promise.’

wfl *tawfalt - tiwfalan* Dim. *tawfeyyelt - tiwfeyylan* Augm. *awfal - iwfalen* ‘egg’ B

wɣd *taweɣḏa - tiɣḏiwan* ‘part of the plough’ B

wɣll *taɣʷlalt - tiɣʷlalan* Dim. *taɣʷleyyelt - tiɣʷleyylan* Augm. *aɣʷlal - iɣʷlalen* Dim. ‘pot, pea soup’ B

wh *twaha / itwaha* ‘to sigh’ (intr) A

whn *wehhen / wehhen / twehhan* ‘to beat up’ (trans) B Pass *twehhneṯ* PP *mwehhen / mwehhna / mwehhnin*

wḥš *lweḥš* ‘animal’ A

wk *taweḵt* ~ *tawuḵt - tiweḵṯan* ‘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.)

wl *wali / wala / twalay* ‘to hit’ (trans) B Pass *twalaṯ* PP *mwali / mwalya / mwalin* E.g. *ma ɛat šk a t iwalan* ‘I don’t know who hit her.’

wl *tawla* ‘type of disease’ B

wld *lwalid - lwalidin* F. *lwalida* ‘parents, father, mother’ A

wld *lweld* ‘good looking young man’ A

wld *lwellaḏa - lwellaḏaṯ* ‘womb’ A

wlf *twalef / itwalef* ‘to get used’ (trans) A E.g. *nekki twaleft fxes* ‘I got used to him/her/it.’

wlk *tawleḵt - tiwelḵan* Dim. *tawleyyeḵt* ‘gunny sack’ B

wnf *tawnaft - tiwnafan* Dim. *tawneyyeft - tiwnifṯan* ‘bread from the frying pan’ B

wnts *lwanṭis* ‘gloves’ (Only a plural form.) A/S

wqɛ *wqɛɛ / yewqɛɛ* ‘to happen’ (intr) A E.g. *wqɛɛ-lu ši ḥaža* ‘something happened to him.’ E.g. *daʔimen ka-yewqɛɛ 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 *tweqqfeṯ* PP *mweqqef / mweqqfa / mweqqfin*

wqf *taweqqaft - tiweqqifa* Dim. *tawqiqeft - tiwqiqfan* Augm. *aweqqaf - iweqqifa* ‘door jamb’ B

wqr *weqqer / weqqer / tweqqar* ‘to respect’ (trans) B

wr PP *mwerri / mwerrya / mwerrin* ‘to show’ see **ml** ‘to show’

wrḍ *lwerḍa - lwerḍaṯ* ‘rose’ A

wrd *awerdu - iwerdan* ‘louse’ B

wrd *tawerdaṯ* ‘type of disease’ B

wrg *werg / werg / ttarga* ‘to dream’ (trans) cf. **mnm** for VN B

wrš *tawrišt - tiwrišan* ‘strainer’ (for flour) B

wrw *awraw - iwrawen* F. *tawrawt - tiwrawan* ‘two fistfuls’ B

wrz *awrez - iwerzen* ‘heel’ B

wṛk *weṛṛeḵ / weṛṛeḵ / tweṛṛaḵ* ‘to lie down’ (lab) B PP *mweṛṛeḵ / mweṛṛḵa / mweṛṛḵin*

wsɛ *waseɛ / wasɛ-a / wasɛ-in* ‘wide’ Dim. *wsiseɛ / wsisɛ-a / wsisɛ-in* ‘somewhat wide’ A

wsɛ *wesseɛ / wesseɛ / twessaɛ* ‘to widen’ (trans) B Pass *twessɛeṯ* PP *mwesseɛ / mwessɛa / mwessɛin*

wsm *lmawsem - lemwasem* ‘annual feast’ A

wsm *tawsamt - tiwsaman* ‘bundle of grain tied together’ B

wsr *awsir - iwesran* ‘leaf of the dwarf fan palm’

wsr *wsir / wsir / ttusir* ‘to age, become old’ (intr) B E.g. *ibda ittewsir* ‘He is becoming old.’ For caus. cf. **šṛf** for Caus.

wsx *wessex / wessex / twessax* ‘to make dirty’ (trans) B Pass *twessxeṯ* PP *mwessex / mwessxa / mwessxin*

wšk *wešk / wešk / ttaška* ‘to get lost’ (intr) B cf. **tlf** for PP E.g. *twešk ay lmagana* ‘I lost my watch.’ *qqimax metluf* ‘I stayed lost.’ Caus *ššwešk / ššušk* ~ *išwešk* ~ *iššašk / ššwešk* ‘to make lose, to make disappear’

wt *wweṯ / wweṯ / kkaṯ* ~ *itkaṯ* ‘to strike, hit, shoot’ (trans) B see **ḍṛb** for Pass and PP *iwweṯ s leklaṭa* ‘he has shot with his rifle.’

wṭn *lmuwwaṭin - lmuwwaṭinin* F. *lmuwwaṭina* ‘citizen’ A

wṭn *lwaṭan* ‘native country’ A

wxt *lwext - lʕawqat* ‘time’ (The plural is a borrowing from Standard Arabic) A

wzɛ *wezzeɛ / wezzeɛ / twezzaɛ* ‘to divide’ (trans) B Pass *twezzɛeṯ* PP *mwezzeɛ / mwezzɛa / mwezzɛin*

wzn *lwezzan - lwezzana* ‘weigher’ A

wzn *wzen / iwzen* ‘to weigh’ (trans) A Pass *twezneṯ* PP *mewzun / mewzuna / mewzunin*

wzr *awezzar - iwezzira* ~ *iwezzaren* ‘open spot in a field which is not ploughed’ B

wzr *lwazir - lwaẓaṛa* F. *lwazira* ‘president’ A

wžd *wžeḏ / iwžeḏ* ‘to prepare, to be ready’ (intr) A AP *wažeḏ / wažḏa / wažḏin* PP *mewžuḏ / mewžuḏa / mewžuḏin*

wžṛ *lwežṛa* ‘wage’ A

wzr *wezzer / wezzer / twezzar* ‘to not plough the land well’ (trans) B Pass *twezzer* PP *mwezzer / mwezzrin* E.g. *taṛḥeḇt an mwezzra* ‘That land has not been ploughed well (It has many open spots.).’

x

xbɛ *xebbeɛ / xebbeɛ / txebbaɛ* ‘to hide, preserve’ (lab) B Pass *txebbɛeṯ* PP *mxebbeɛ / mxebbɛa / mxebbɛin*

xbɛ *xubbayɛa* ‘hide and seek’ A

xbṛ *xebbeṛ / xebbeṛ / txebbaṛ* ‘to warn, inform’ (trans) B PP *mxebbeṛ / mxebbṛa / mxebbṛin*

xbṛ *xebbeṛ / xebbeṛ / txebbaṛ* ‘to announce’ (trans) B Pass *txebbṛeṯ* PP *mxebbeṛ / mxebbṛa / mxebbṛin*

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’) B

xbṭ *xebbeṭ / xebbeṭ / txebbaṭ* ‘to trot (by animals)’ (intr) B

xbz *lxubza* ‘one bread’ Augm. *axubbaz* ‘one big bread’

xd *lemxedda - lemxayedd* ∼ *lemxeddaṯ* Dim. *lemxida - lemxidaṯ* ‘pillow’ A

xdm *xdem / xdem / xeddem* ‘to work’ (trans) B Pass *txedmeṯ - nxedmeṯ* AP *xeddam / xeddama / xeddamin* PP *mexdum / mexduma / mexdumin* E.g. *nxedmeṯ 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 *lxiḏma - lexḏayem* Dim. *lexḏima - lxḏimaṯ* ‘work’ A

xdm *taxaḏemt - tixuḏam* Dim. *taxwiḏemt - tixwiḏman* ‘ring’ B

xḍṛ *axeḍṛaw - ixeḍṛawen* Dim. *axḏiḏeṛ - ixḏiḏṛen* F. *taxeḍṛawt - tixeḍṛawan* Dim. *taxḏiḏeṛt - tixḏiḏṛan* ‘green one’ B

xḍṛ *lxuḍṛa - lexḏaṛi* Dim. *lexḏiṛa* ‘vegetables’ A

xḍṛ *xḏeṛ / xeḍṛ-a / xuḍeṛ* ‘green, raw’ Dim. *xḏiḏeṛ / xḏiḏṛ-a / xḏiḏṛ-in* ‘somewhat green’ A

xff *lexfif* Dim. *lexfeyyef - lexfifaṯ* ‘lead’ A

xff *xeffef / xeffef / txeffaf* ‘to light’ (trans) B Pass *txeffeṯ*

xff *xfif / xfif-a / xfif-in* ‘light’ A

xl *lexla - lexlawi* ‘wilderness’ A

xlɛ *xelleɛ / xelleɛ / txellaɛ* ‘to preserve food’ (trans) B PP *mxelleɛ / mxellɛa / mxellɛin*

xlq *xleq / xleq / xelleq* ‘to be born’ (intr) B

xlṣ *xelleṣ / xelleṣ / txellaṣ* ‘to pay’ (trans) B Pass *txelleṣ* PP *mxelleṣ / mxellṣa / mxellṣin*

xlt *xalti - xaltiwaṯ* ‘mother’s sister’ A

xml *ttexmil - ttxamel* ‘colored scarf women put on their head’ A

xml *xemmel / xemmel / txemmal* ‘to clean’ (trans) B PP *mxemmel / mxemmla / mxemmlin*

xmm *xemmem / xemmem / txemmam* ‘to think of problems’ (intr) B

xmṛ *lexmaṛ* ‘wine’ A

xms *axemmas - ixemmasen* F. *taxemmast - tixemmasan* ‘slave, servant worker’ B

xms *lexmis* ‘thursday’ A

xn *taxna* ‘ass’ B

xn *taxxunt - tixxunan* Augm. *axxun - ixxunen* ‘ass’ B

xnb *amexniḇ - imexniḇen* F. *tamexniḇt - timexniḇan* ‘canine tooth’ B

xndf *xendef / xendef / txendaf* ‘to drudge’ (trans) B Pass *txendfeṯ* PP *mxendef / mxendfa / mxendfin*

xnfṛ *lexnafeṛ* ‘nose’ *taxenfurt - tixenfuran* Augm. *axenfuṛ - ixenfuṛen* ‘nostrill’ A

xnq *xneq / xneq / xxneq* ‘to sulk’ (trans) B Pass *txenqeṯ* PP *mexnuq / mexnuqa / mexnuqin*

xnq *aʷxnaq ~ axnaq - iʷxnaqen ~ ixnaqen* Dim. *axneyyeq - ixneyyqen* ‘corridor, passage’ B

xnš *lexniš* F. *taxništ* ‘plant’ C

xns *axennus - ixunnas* F. *taxennust* ‘piglet’ B

xnč *lxanča - lxančaṯ* Augm. *axančiw* ‘sack’ A

xnčf *axenčuf - lexnačef* Dim. *axničef* F. *taxenčuft* Dim. *taxničeft - tixničfan* ‘beak’ (pejorative) B

xnṭṭ *axenṭuṭ - ixunṭaṭ* F. *taxenṭuṭt* ‘nasal mucus’ B

xr *ttaxeṛ / ittaxeṛ* ‘to be last’ (intr) A PP *mwexxeṛ / mwexxṛa / mwexxṛin*

xrqb *xerqeb / xerqeb / txerqaḇ* ‘to eat wildly’

xrtl *lxurtal* ‘oats for cattle’ A

xrčf *xerčef / xerčef / txerčaf* ‘to speak unclearly, to be mixed up’ (intr) B Pass *txerčfeṯ* PP *mxerčef / mxerčfa / mxerčfin*

xrṣ *lxarṣi - lexraṣa* ‘sweater’ A

xrz *lxerraz - lxerraza* ‘saddle maker’ A

xrž *lxerža ~ lxurža - lxeržaṯ ~ lxuržaṯ* ‘exit’ A

xṛ *llaxṛi - llaxṛeyyin* F. *llaxṛeyya* ‘last, end’ A

xṛ *xṛa / ixṛa* ‘to shit’ (intr) A VN *lexṛa*

xṛb *lxeṛb̲eṯ* - *lexṛeb̲* Dim. *lexṛib̲a* - *lexṛib̲aṯ* ‘ruin’ A

xṛb *lxeṛṛub̲* Unity F. *taxeṛṛub̲t* - *tixeṛṛuban* ‘carob bean’ C

xṛf *lexṛif* ‘autumn’ A

xṛf *xeṛṛef / xeṛṛef / txeṛṛaf* ‘to pick fruit’

xṛṭ *taxeṛṭiṭ* - *tixeṛṭiṭan* ‘rag’ B

xṛw *amexṛaw* - *imexṛawen* Dim. *amxiṛu* - *imxiṛwen* ‘young rabbit’ B

xṛwṭ *axeṛwiṭ* - *ixeṛwiṭan* ‘harvest leftover’ B

xṛž AP *xarež / xarža / xaržin* ‘to go out’ VN *lxuṛža* ~ *lxuṛžaṯ* cf. **fɣ** for verb. The following forms are derived from the causative Pass *txeṛṛžeṯ* PP *mxeṛṛež / mxeṛṛža / mxeṛṛžin*

xṣ *lxaṣṣa* - *lxaṣṣaṯ* ‘fountain’ A

xṣ *taxʷeṣt* ~ *taxuṣt* - *tixʷṣan* ‘tooth - molar’ B

xṣṛ *xṣeṛ / ixṣeṛ* ‘to loose’ (trans) A

xṣṛ *xṣeṛ / xṣeṛ / xeṣṣeṛ* ‘to be broken’ (intr) B

xṣṛ *xṣeṛ / xṣeṛ / xeṣṣeṛ* ‘to loose’ (intr) B Caus *xeṣṣeṛ / xeṣṣeṛ / txeṣṣaṛ* ‘to make loose’ (trans) B Pass *txeṣṣṛeṯ* PP *mxeṣṣeṛ / mxeṣṣṛa / mxeṣṣṛin*

xšb *axeššab̲* ‘grass and stalks mixed’ B

xšb *taxšeb̲t* - *tixešb̲a(n)* Dim. *taxšeyyeb̲t* - *tixšeyyb̲an* Augm. *axšeb̲* - *ixešb̲an* ‘trap’ (*axšeb̲* is for pigs *taxšeb̲t* for birds and *taxšeyyeb̲t* for mice) B

xšm *lexwašem* ‘gills’ There is no singular. A

xšn *xšin / xšin-a / xšin-in* ‘thick’ A

xṭb *xṭeb̲ / ixṭeb̲* ‘to preach, to ask for marriage’ (intr) A PP *mexṭub̲ / mexṭub̲a / mexṭub̲in*

xṭb *xṭeb̲ / xṭeb̲ / xeṭṭeb̲* ‘to ask to marry’ (trans) B Pass *nxeṭb̲eṯ* PP *mexṭub̲ / mexṭub̲a / mexṭub̲in*

xṭf *lmuxṭaf* - *lemxaṭef* Dim. *lemxiṭef* - *lemxiṭfaṯ* ‘anchor’ A

xṭf *xṭef / xṭef / xeṭṭef* ‘to snatch, grab away’ (trans) B

xṭṛ AP *xaṭiṛ / xaṭiṛa / xaṭiṛin*

xṭṛ *axeṭṭaṛ* - *ixeṭṭiṛa* ‘trap for birds’ B

xṭṛ *lixṭaṛ* ‘The fact of picking’ E.g. *gas lixṭaṛ* ‘He is picky.’ A

xṭṛ *lxaṭaṛ* ‘danger’ A

xṭṛ *lxaṭeṛ* - *lexwaṭeṛ* ‘will’ A

xṭṛ *xaṭiṛ / xaṭiṛ-a / xaṭiṛ-in* ‘dangerous’ A

xṭṛ *xeṭṭeṛ / xeṭṭeṛ / txeṭṭaṛ* ‘to trap’ (trans) B Pass *txeṭṭṛeṯ* PP *mxeṭṭeṛ / mxeṭṭṛa / mxeṭṭṛin*

xṭṛ *xṭaṛ / xṭaṛ / ttexṭaṛ* ~ *ttaxṭaṛ* ‘to choose’ (trans) B Pass *texṭaṛu* PP *mexṭaṛ / mexṭaṛa / mexṭaṛin*

xč *xiča* Unity F. *taxačiwt - tixatiwan* ‘dried figs’

xṭy *lexṭeyya - lexṭeyyaṯ* ‘fine’ A

xw *lexwa* ‘valley’ A

xw *xwa / ixwi* ‘to empty’ (intr) A Pass *texwaṯ* 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 aṭḡam* ‘That man has emptied his boat yesterday.’ *ša xwix aman zeg elbaṭil* ‘I will empty water from the boat.’

xwf *lxawf* ‘fear’ A

xwf *lxewwaf - lxewwafin* F. *lxewwafa* ‘scaredy-cat’ A

xwf *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. *lexweyyeṭ - lexweyyṭaṯ* ‘thread’ A

xyṭ *lxeyyaṭ - lxeyyaṭa* F. *lxeyyaṭa* ‘tailor’ A

xyṭ *xeyyeṭ / xeyyeṭ / txeyyaṭ* ‘to sew’ (trans) B Pass *txeyyṭeṯ* PP *mxeyyeṭ / mxeyyṭa / mxeyyṭin* VN *lexyaṭa - lexyaṭaṯ* B

xyx *xeyyex / xeyyex / txeyyax* ‘to say ‘x’, to express disgust’ (intr) B

xzn *amxazni - lemxazneyya* F. *tamxazniṯ* ‘government agent’ C

xzn *lexzana - lexzanaṯ* ‘big tent’ A

xzn *lmexzen* ‘government’ A

y

yd *ayḏa - iṭan* ‘dog’ E.g. *ayḏa n lebḥar - iṭan n lebḥar* ‘shark’ B

yd *tayḏa - tayḏaṯ* ‘pine tree, fire tree’ B

yfr *tayeffert - tiyeffaren* ‘chain around the neck of cows’ B

yfṭ *ayeffeṭ* (*wa-*) ‘cattle’ Dialectal variant: *aḵfeṭ* B

yll *taylalt ~ tayellalt - taylalan* ‘little butterfly’ (It spoils the harvest.) B

yrn *ayerni* ‘arum italicum’ (kind of wild potato) B

yt *tayt - tayṯwan* ‘shoulder’ B

yw *ayaw - iyawen* F. *tayawt - tiyawṯan* ‘grandchild’ B

ywl *aywel* (*wa-*) ‘rack in the traditional house’ B

ywm *lyawmeyya - lyawmeyyaṯ* ‘calender’ A

ywr *aywer* (*wa-*) (no plural) ‘moon’ B

z

z *izi - izan* F. *tiziṯ* ‘fly’ (*tiziṯ* is a small fly) B

zž *zzaž - zzižan* ‘glass’ A

zbd *zzebda* Dim. *zzḇida* ‘butter’ A

zbg *azebg - izebgan* ‘part of the plough’ B

zbl *lmezzbala - lemzaḇel* Dim. *lemziḇla - lemziḇlaṯ* ‘refuse-dump’ A

zbl *zebbel / zebbel / tzebbal* ‘to curse’ (trans) B E.g. *izebbel gas* ‘He cursed at him/her.’

zdyd *lizdiyad* ‘birth certificate’ A

zdz *azedduz - izedduzen* ‘big pounding stick’ B

zɛbl *zzeɛbul - zzɛabel* Dim. *zzɛibla - zzɛiblaṯ* ‘leather side bag’ A

zɛf *zeɛɛef / zeɛɛef / tzeɛɛaf* ‘to reluctantly do something’ (trans) B AP *zeɛfan / zeɛfana / zeɛfanin* PP *mzeɛɛef / mzeɛɛfa / mzeɛɛfin*

zɛf *zzɛaf* ‘reluctance’ A

zɛfṛn *zzɛefṛan* ‘saffron’ A

zɛm *zɛem / izɛem* ‘to dare’ (intr) A Pass *tzeɛmeṯ* Caus. *zeɛɛem / zeɛɛem / tzeɛɛam* ‘to make dare’ PP *mzeɛɛem / mzeɛɛma / mzeɛɛmin*

zɛm *zzɛama - zzɛamaṯ* ‘nerve’ A

zɛzɛ *zeɛzeɛ / zeɛzeɛ / tzeɛzeɛ* ‘to tremble’ (tr) B Pass *tzeɛzeɛ* B

zf *zzif - zzyufa* Dim. *zzweyyef - zzwifin* ‘handkerchief’ A

zg *azzuḡ* (*wa-*) ‘wettness’ B

zɣbw *azeɣbiw - izeɣbiwen ~ izeɣbunen* ‘a single hair’ B

zɣl *azɣul - izɣʷal* Dim. *azɣʷeyyel* F. *tazɣult - tizɣʷal* Dim. *tazɣʷeyyelt - tizɣʷillan* ‘ladle’ B

zgr *azger* ‘big bull’ B

zgwzr *zgawger* / No Impf. ‘to squat’ (intr) A PP *mezgawger / mezgawgra / mezgawgrin*

zgz *zzegza* ‘type of fish’ A

zgzg *zegzeg / zegzeg / tzegzag* ‘to have sex (goats)’ (lab) B PP *mzegzeg / mzegzga / mzegzgin*

zɣr *zzuɣur / zzaɣer / zzuɣur* ‘to pull’ (trans) B

zhm *zehhem / zehhem / tzehhem* ‘to make bad’ (trans) B PP *mzehhem / mzehhma / mzehhmin*

zḥm *zeḥḥem / zeḥḥem / tzeḥḥem* ‘to narrow’ (intr) B PP *mzeḥḥem / mzeḥḥma / mzeḥḥmin* VN *zzḥam*

zhm *zham / izham* ‘to become bad’ (intr) A AP *zhim / zhima / zhimin*

zhṛ *zzheṛ* Dim. *zzheyyeṛ* ‘good luck’ A

zkṛ *zzeḳṛun - zzkaṛen* ‘latch’ A

zl *azal* ‘day, noon’ (Also the time when the goats go back to the stable) B

zl *tizelt* ‘type of berry’ B

zl *tuzzalt - tiwzzila* Dim. *tuzizelt - tiwzizlan* Augm. *awzzal - iwzzila* ‘knife’ B

zl *tuzzalt* ‘type of plant’ B

zl *uzel ~ azel / uzel ~ azel / ttazel* ‘to run’ (intr) B Some younger people know this word, but never use it, *žerri* ‘to run’ is used instead.

zl *tamezlaṯ - timezlaṯan* Dim. *tamziluṯ - timziwlṯan* ‘goat which has not given birth’ B

zlf *amzellaf - imzellifa ~ imzellifen* ‘sheep’s head’ B

zlɣ *tazalɣa* ‘type of plant’ B

zlɣ *zelliɣi / zelliɣiy-a / zelliɣiy-in* ‘bald’ A

zlɣ *azelliɣ - izelliɣen* F. *tazelliɣt - tizelliɣan* ‘baldness’ B

zlm *tazlemt - tizelman* ‘freshwater eel’ B

zlq *nezleq / inezleq* ‘to slide or slip’ (intr) A

zlq *zelleq / zelleq / tzelleq* ‘to even out’ (trans) B PP *mzelleq / mzellqa / mzellqin*

zml *zzamel - zzwamel* ‘homosexual’ A

zmr *azemmur - izemran* ‘wild olive tree’ B

zn *zna / izni* ‘to comit adultery’ (intr) A

zn *zzani - zzanin* F. *zzaneyya - zzaneyyaṯ* ‘adulterer’ A

zn *zzina - zzinaṯ* ‘adultery’ A

znq *zzenqa - zzenqaṯ ~ zznaqi* ‘street’ A

znz *znez / znez ~ zzenz / zznuz* ‘to sell’ (trans) B cf. **bɛ** for Pass and PP

znzl *zzinzal - zzanazil* ‘earthquake’ A

zr *azar - izaren* ‘feathers, fur of a chicken/bird’ B

zr *azru - izurgan* ‘mill’ (only known by old people) B

zr *tazart* (*ta-*)‘fig’ B

zr *zri / zra / zerri* ‘to pound’ (trans) B Pass *tezraṯ* PP *mezri / mezriyya / mezriyyin*

zrb *zreḇ / zreḇ / zzruḇ* ‘to hurry’ (lab) B Pass *tzerbeṯ* PP *mezruḇ / mezruḇa / mezruḇin*

zrd *zzerda ~ lezruḏ* ‘festive meal’ A

zrɛ *zzerriɛa - zzerriɛaṯ* ‘seed’ A

zrf *azref - izerfawen* F. *tazreft - tizerfawṯan* Dim. *tazreyyeft - tizriftan* ‘road, path’ (*tazreft* is a small road and *tazreyyeft* is a small path) B

zrg *azergaw - izergawen* Dim. *azrireg - izrirgen* F. *tazergawt - tizergawṯan* Dim. *tazriregt* ‘grey person/thing’ B

zrɣml *azreɣmel - izreɣmlen* ‘centipede’ B

zrmmk *tazermemmuḵt - tizermamuḵan* ‘small lizard’ B

zrn *tazrint* ‘douma plant’ B

zrq *azerqaw - izerqawen* Dim. *azrireq - izrirqen* F. *tazerqawt - tizerqawan* Dim. *tazrireqt - tizrirqan* ‘blue person/thing’ B

zrq *zreq / zerq-a / zureq* ‘blue’ A

zrq *zzerruq - zzruraq* Dim. *zzrireq* ‘firefly’ A

zrq *zzriqa* ‘wale’

zrz *azrez* ‘type of plant with berries’ B

zṛq PP *mzeṛṛeq / mzeṛṛqa / mzeṛṛqin* ‘to close with a key’

zṛq *zṛeq / zṛiṛeq / zṛiṛq-a* ‘blue’ Dim. *zṛiṛeq / zṛiṛq-a / zṛiṛq-in* ‘somewhat blue’ A

zt *zziṯ* ‘oil’ (feminine) Types: *zziṯ keḥla* ‘olive oil’, *zziṯ bayṭa* ‘cooking oil’ A

zwž *zzwaža - zzawžaṯ* Dim. *zzwiža - zzwižaṯ* ‘pair’ (*zzawža* is used for cattle, while *zzwiža* is used for donkeys.) A

zwr *zwir / zwir ~ zwar / zuggir* ‘to go first’ (intr) B

zwy *zzawya - zzawyaṯ* ‘islamic monastry’ A

zytn *zzaytun* Unity F. *tazaytunt - tizaytunan* Dim. *tazwitent - tizwitnan* ‘olive’ B

zzr *tazezzert - tizezzraṯan* ‘hayfork’ B

zzw *tazizwa - tizizwa* ‘bee’ B

ẓ

ẓ *taẓa* (*ta-*) *- taẓiwan* (*ta-*) ‘udder’ B

ẓ *ẓẓu / ẓẓa / teẓẓa* ‘to plant’ (trans) B cf. **ṛğɛ** for PP

ẓẓ *taẓeẓẓiṯ* ‘thorns of an ear’ B

ẓḍ *ẓeḍ / ẓeḍ / ẓẓaḍ* ‘to grind’ (trans) B

ẓẓṛ *taẓeẓẓaṛt ~ taẓẓaṛt - tiẓeẓẓaṛan* ‘kind of bream’ B

ẓbṛ *ẓẓebṛa - ẓẓebṛaṯ* ‘anvil’A

ẓɛṛ *aẓeɛṛaw - izeɛṛawen* Dim. *aẓɛiɛeṛ - iẓɛiɛṛen* F. *taẓeɛṛawt - tiẓeɛṛawan* Dim. *taẓɛiɛeṛt - tiẓɛiɛṛan* ‘blond one’ B

ẓg *taẓḡa - tiẓuggan* ‘forest’ B

ẓg *ẓẓeḡ / ẓẓeḡ / teẓẓeḡ* ‘to milk’ (lab) B Pass *ṭhelḇeṯ* E.g. *ka teẓẓeḡ ka baqi* ‘Has she been milked or not?’

ẓgṣnṭ *aẓgaṣneṭ ~ aẓgʷasneṭ ~ aẓeggʷaṣneṭ* ‘last year’ B

ẓk *aẓekka - iẓukkan* ‘tomb’ B

ẓkn *aẓekkun - iẓekkunen* Dim. *aẓkiken - iẓkiknen* ‘kind of plant’ (It grows together with crops) B

ẓl *ẓẓall ~ ẓẓull / ẓẓall / tẓalla* ‘to pray’ (trans) B

ẓm *taẓemmiṯ* ‘crushed barley’ B

ẓm *ẓum / ẓum / ttaẓum* ‘to fast’ (intr) B See **ṣm** for AP and alternative. (Used by old people.) E.g. *iẓum ṛṛemḍan* ‘He fasted the Ramadan.’

ẓmy *aẓmay - iẓmayen* ‘kind of plant’ (Used to make rugs) B

ẓnṭ *aẓenniṭ - iẓenniṭen ~ iẓenṭaṭ* F. *taẓenniṭ - tiẓenniṭan* ‘tail’ B

ẓṛ *aẓaṛ - iẓuṛan* Dim. *aẓweyyeṛ - iẓweyyṛen* ‘root’ B

ẓṛ *aẓṛu - iẓṛan* ‘stone, rock, battery’ B

ẓṛ *ẓeṛ / ẓeṛ / ẓẓaṛ* ‘to see’ (trans) B

ẓṛ *ẓuṛ / ẓaṛ ~ iẓuṛ / tẓuṛ* ‘to visit a marabout’ (trans) B

ẓṛb *ẓẓerb - leẓruḇ* Dim. *ẓẓreyyeḇ* ‘fence’ A

ẓṛb *ẓẓerḇeyya - ẓẓraḇi* Dim. *ẓẓriḇeyya - ẓẓriḇeyyaṯ* ‘carpet’ A

ẓṛɛ *ẓreɛ / ẓreɛ / ẓẓreɛ* ‘to sow’ (trans) B

ẓṛɛ *ẓẓraɛ* ‘grain’ A

ẓrḥ *žreḥ / žreḥ / ǧruḥ* ‘to injure’ (lab) B Pass *ttežreḥ* PP *mežruḥ / mežruḥa / mežruḥin* E.g. *ižreḥ ssiha* ‘He was wounded here.’

ẓṛmṭ *ẓẓermuṭa - ẓẓrameṭ* ‘lizard with red and white stripes’ A

ẓṛwṭ *ẓẓerwaṭa - ẓẓerwaṭaṯ* ‘club, stick (for hitting)’ A

ẓryry *aẓrayray - iẓrayrayen* ‘hawk’ B

ẓṭ *ẓẓiṭi - ẓẓiṭin* ‘a bull with one testicle’ (It doesn’t have a lot of offspring.) A

ẓwž *ẓẓawž* ‘sparrow’ A

ẓwg *aẓawg - iẓawgen* ‘twig’

ẓwṛ *ẓewweṛ / ẓewweṛ / tẓewwaṛ* ‘to forge’ (trans) B Pass *tẓewwṛeṯ* PP *mẓewweṛ / mẓewwṛa / mẓewwṛin* VN *tteẓwiṛ*

ẓwt *ẓẓwiṯ / ẓẓwiṯ / ẓẓayaṯ* ‘to miss’ (trans) B

ẓx *taẓuxt* (*ta-*) ‘milk’ (no plural) B

ẓyẓn *aẓayẓun - iẓayẓunen* F. *taẓayẓunt - tiẓayẓunan* ‘mute person’ B

ẓyẓn *ẓẓayẓuneyya* ‘sign language’ A

ẓyr *aẓeyyar - iẓeyyaren* F. *taẓeyyaṛt - tiẓeyyaṛan* ‘a bunch of grapes’ E.g. *aẓeyyar n waṭil* ‘a bunch of grapes’ B

ẓyṛ *ẓeyyeṛ / ẓeyyeṛ / tẓeyyaṛ* ‘to tighten’ (trans) B Pass *tẓeyyeṛ* PP *mẓeyyeṛ / mẓeyyṛa / mẓeyyṛin*

ž

žbd *ažebbaḏ - ižebbaḏen* ‘part of the plough’ B

žbd *žebbeḏ / žebbeḏ / tžebbaḏ* ‘to stretch’ (trans) B Pass *tžebbḏeṯ* PP *mžebbeḏ / mžebbḏa / mžebbḏin*

žbṛ Pass *nžeḇṛeṯ* PP *mežḇuṛ / mežḇuṛa / mežḇuṛin* ‘to find’ cf. **f** ‘to find’

žd *žeddi - žeddiwaṯ* ‘grandfather’ A

ždd *ždiḏ / ždiḏ-a / ždiḏ-in* ‘new’ A

žf *ažuf (wa-*)‘stench’ E.g. *ažuf n umaleḥ* ‘stench of a fish’ B

žf *žif / žaf / tžif* ‘to choke’ (intr) B

žl *ẓali / ẓala / tẓalay* ‘to separate’ (trans) B Pass *tẓalaw* PP *mẓali / mẓalya / mẓalin*

žmɛ *lmežmuɛa - lmežmuɛin* ‘crowd’ A

žmɛ *žmeɛ / žmeɛ / ǧmeɛ* ‘to gather’ (trans) B Pass *tžemɛeṯ* PP *mežmuɛ / mežmuɛa / mežmuɛin*

žmṛ *lmežmaṛ - lemžameṛ* Dim. *lemžimeṛ - lemžimṛaṯ* ‘stove, barbecue’ A

žn *žni / žni ~ ižna / ženni* ‘to pluck’ (trans) B

žṛ *ažaṛ - lǧiṛan* F. *tažaṛt - tižaṛṯan* ‘neighbour’ C

žṛb *žeṛṛeḇ / žeṛṛeḇ / tžeṛṛaḇ* ‘to try out’ (trans) B PP *mžeṛṛeḇ / mžeṛṛḇa / mžeṛṛḇin*

žrd *žžerḏa ~ žžerda - žžerḏaṯ ~ žžerdaṯ* ‘garden’ A

žr *žerri / žerra / tžerray* ‘to run’ (intr) B AP *žari / žarya / žarin* PP *mžerri / mžerrya / mžerrin* With the prepostion **fx** added it means ‘to chase away’. *ižerra fxes* ‘he chased him/her away.’

žrḥ *ažerriḥ - ižerriḥen* F. *tažerriḥt - tižerriḥan* ‘wound’ B

žrm *lmužrim - lmužrimin ~ lemžarem* F. *lmužrima* ‘criminal’ A

žrnn *žžurnan - lǧurnanaṯ* ‘newspaper’ A

žwb *žaweḇ / žaweḇ / tžawaḇ* ‘to answer’ (trans) B

žwf *žewwef / žewwef / tžewwaf* ‘to stink’ (intr) B

žyf *žeyyef / žeyyef / tžeyyaf* ‘to choke’ (trans) B Pass *tžeyyfeṯ* PP *mžeyyef / mžeyyfa / mžeyyfin* B

žymt *žaymuṯ - ižaymuṯen* ‘type of fly’ B

žyṛ *žeyyeṛ / žeyyeṛ / tžeyyeṛ* ‘to whitewash’ (trans) B Pass *tžeyyreṯ* PP *mžeyyeṛ / mžeyyṛa / mžeyyṛin* B

ʔ

ʔkd *tʔekkeḏ / itʔekkeḏ* ‘to guarantee’ (intr) A PP *metʔekkeḏ / metʔekkḏa / metʔekkḏin* VN *ttʔekiḏ*

ʔm *ʔummi - ʔummiyyin* F. *ʔummiyya* ‘stupid’ A

ʔmn *ʔammen - tʔammen* ‘to trust’ (intr) A *ʔamment gas* ‘I trust him.’

ʔmṛ *ʔameṛ / iʔameṛ* ‘to command, to order’ (intr) A PP *mʔameṛ / mʔamṛa / mʔamṛin*

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Samenvatting

De Berbertalen vormen samen met het Koesjitisch, het Tsjadisch, het Semitisch, het Omotisch en het oud-Egyptisch de Afro-Aziatische taalfamilie. Het Ghomara Berber wordt gesproken in het noordwesten van Marokko door ongeveer 10.000 mensen. De taal wordt gesproken in een aantal dorpen langs de Middelandse zeekust in een gebied dat bekend staat als de *Jbala*. In het gebied dat de Berbertalige dorpen omringt wordt Marokkaans-Arabisch gesproken. Alle sprekers van het Ghomara Berber zijn tweetalig. Deze tweetaligheid is de basis geweest voor een taal die op alle grammaticale niveaus door het Arabisch is beinvloed. Op vrijwel alle niveaus van de grammatica zijn daardoor parallelle systemen ontstaan, wat betekent dat het vaak moeilijk is om te onderscheiden welke taal, het Berber of het Arabisch, dominant is. Het Ghomara Berber kan daardoor op de meeste niveaus als mengtaal (*mixed language*) worden beschouwd. Alleen in de nominale frase (NP) is het Berber dominant. In het basislexicon is het Berber net iets prominenter aanwezig dan het Arabisch, maar daarbuiten is het Arabisch veel dominanter. In het Berberse deel van de grammatica laat de taal een aantal zeldzame of zelfs unieke kenmerken zien.

In deze grammatica komen de fonologie, de morfologie en de syntaxis aan de orde. In de appendices zijn een aantal teksten en een woordenlijst opgenomen. De data zijn verzameld in de periode tussen oktober 2009 en mei 2013. In eerste instantie zijn de data verzameld door middel van elicitatie. In een latere fase zijn er teksten opgenomen die met behulp van sprekers ter plaatse zijn getranscribeerd.

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 gelabialiseerde 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 parallelle 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

geslacht, getal en staat uit. Het onderscheidt mannelijk en vrouwelijk geslacht, enkelvoud en meervoud en gebonden en vrije staat. Afhankelijk van het woord kan het geslacht zowel geslachtverandering als verkleining uitdrukken. Het meervoud wordt gevormd door middel van affixen of door een combinatie van prefixverandering en klinkerwisseling in de stam. De gebonden staat wordt alleen gebruikt na een voorzetsel. In de functie van onderwerp na een werkwoord heeft het zelfstandig naamwoord de vrije staat. Het Arabische zelfstandig naamwoord volgt het patroon van het Arabisch. Er zijn twee manieren om het meervoud te vormen, door middel van affixen en door middel van verandering van de opeenvolging van consonanten en vokalen.

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

consonant en waarvan de eerste labiale medeklinker wegvalt. Berberse werkwoorden hebben een causatief. De causatief wordt gevormd door een **ss**- prefix aan het werkwoorden te plakken. Het Arabische werkwoord wordt in hoofdstuk acht besproken. Een aanzienlijk deel van de werkwoorden kan alleen de Arabische conjugatie krijgen. Dit betreft basiswerkwoorden zoals **tkeyyef** 'roken', **ṣṣaḍ** 'vissen', **ḥšem** 'zich schamen', **ṣberṛ** 'geduld hebben', **ɛṭeš** 'dorst hebben'. Deze werkwoorden volgen de Arabische morfologische patronen. Zij onderscheiden een conjugatie voor het perfectum en het imperfectum. De passieve derivatie geschiedt altijd volgens het Arabische systeem. Dat betekent de passief van werkwoorden met een Berberse morfologie altijd de Arabische morfologie hebben. Dit komt uitvoeriger aan bod in het hoofdstuk over het verbale predikaat in de syntaxis.

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.

De syntaxis begint met de beschrijving van een aantal kenmerken van de nominale frase en welke elementen daarin kunnen voorkomen. Vervolgens wordt in hoofdstuk twee het non-verbale predikaat besproken. Daarin komt de negatie van het non-verbale predikaat ook aan bod. In hoofdstuk drie over het verbale predikaat worden de argumenten besproken. Vervolgens komen verbale valentie en derivatie aan bod. De valentie van een werkwoord kan worden verhoogd door middel van de causatief-derivatie. Het werkwoord krijgt een **ss**- prefix of het wordt vervangen door een werkwoord met een **cCc**-structuur. Dit kan ook een suppletief werkwoord zijn. Verder komt ook de hierboven besproken passiefformatie aan bod. Het Ghomara Berber heeft ook een aantal labiele werkwoorden. Dat zijn werkwoorden die zowel intransitief als transitief kunnen zijn zondat daarbij van vorm te veranderen. In het daaropvolgende gedeelte komen de clitica van het werkwoord aan bod. De clitica vertonen ingewikkeld gedrag. Zij kunnen afhankelijk van de context zowel voor als achter het werkwoord terecht komen. Het Ghomara Berber is hierin bijzonder doordat het, anders dan veel andere Berbertalen, clitica in beide posities tegelijkertijd toelaat. Het hoofdstuk wordt afgesloten met een bespreking van de verbale negatie.

De voegwoorden worden in hoofdstuk vier behandeld. Zij kunnen ingedeeld worden in onderschikkende en nevenschikkende voegwoorden. Deze twee groepen kunnen op basis van een aantal kenmerken onderscheiden worden. De relatieve zinnen vormen het onderwerp van hoofdstuk vijf. Relatieve zinnen met een Arabisch werkwoord onderscheiden zich van relatieve zinnen met een Berbers werkwoord door een optionele relatiefmarkeerder **d**. In het daaropvolgende hoofdstuk komen de vraagwoorden aan bod. Vrijwel alle vraagwoorden komen uit het Arabisch. De manier waarop vraagwoordzinnen worden gevormd is echter typisch Berbers. Topicalisatie en focalisatie komen in hoofdstuk zeven aan bod. Zowel verbale als non-verbale zinnen zijn daarin opgenomen.

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 **ll** ‘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 labisalisation 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’, **ṣṣaḍ** ‘fish’, **ḥšem** ‘be embarrased’, **ṣbeṛ** ‘be patient’, **ɛṭeš** ‘be thirsty’. 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 ‘relative form’, 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 **ll** ‘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.