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

-	=	Morpheme Boundary
=	=	Clitic Boundary
:	=	Grammatical Information
1,2,3	=	First, second and third person
A	=	Aorist
CF	=	Counterfactual
AD	=	Non-real particle a
ANP	=	Anaphoric deictic clitic
AP	=	Active participle
AREL	=	Arabic relative marker
ART	=	Article
ASP	=	Aspect
be:R	=	Relative form of be
CAUS	=	Causative prefix
COMP	=	Complementizer
CRT	=	Certainty marker d
DC	=	Deictic clitic
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 *Tashelhiyt* (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 language². It can be safely assumed that most speakers of Berber also speak Moroccan Arabic (Moroccan Arabic is the *lingua franca* of Morocco) and, depending on the level of schooling, Standard Arabic and French.

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

1.2. Previous studies

Ghomara Berber (referred to as *ššelḥa* by the speakers themselves, i.e. by the Moroccan 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 online³.

1.3. General data

The Ghomara confederation consists of nine tribes which are located in the province of Chefchaouen. Ghomara Berber is spoken in two tribes, Beni Bouzra and an adjacent part of the Beni Mensour (the fraction of the Beni Eṛuṣ), 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 *Iṛaben*. 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 Aṛab* (usually referred to as *Iṛaben* 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 Aṛab*. 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 *Iṣṣaben*, 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 *Iṣṣaben* 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 *Iɛrabɛn*, but in addition some speakers from the village of *Amɛiqan* 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 *Iɛrabɛn* there are some lexical differences with the variant spoken in Beni Mensour (often they would refer to the variant spoken in *Isuka*, the biggest Berber speaking village in Beni Mensour). Such differences are **tawfikɛt** instead of **tafukɛt** ‘sun’ in *Iɛrabɛn*, **akfeɛ** instead of **ayeffeɛ** ‘cattle’, **niknam** instead of **nukna** ‘we’, **diha** ‘here’ instead of **dha** ‘here’, but also different lexemes such as **syeyyu** instead of **yewwet** ‘to scream’. Furthermore, there is a difference in the instrumental preposition with a pronominal suffix: **sis-** in Beni Mensour versus **id-** in *Iɛrabɛn*. The present study is essentially a grammar of the *Iɛrabɛn* 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 *æžin* ‘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:

f̣req ‘to separate, to divide’

	Aorist	Perfective	Imperfective
1S	<i>f̣eq-ax</i>	<i>f̣eq-ax</i>	<i>f̣eqq-ax</i>
2S	<i>t-f̣eq-et</i>	<i>t-f̣eq-et</i>	<i>t-f̣eqq-et</i>
3MS	<i>i-f̣eq</i>	<i>i-f̣eq</i>	<i>i-f̣eqq</i>
3FS	<i>te-f̣eq</i>	<i>te-f̣eq</i>	<i>t-f̣eqq</i>
1PL	<i>ne-f̣eq</i>	<i>ne-f̣eq</i>	<i>n-f̣eqq</i>
2PL	<i>t-f̣eq-em</i>	<i>t-f̣eq-em</i>	<i>t-f̣eqq-em</i>
3PL	<i>f̣eq-en</i>	<i>f̣eq-en</i>	<i>f̣eqq-en</i>

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.

ʃreq ‘to sweat’

	Perfect	Imperfect
1S	ʃreq-t	n-eʃreq
2S	ʃreq-t ~ti	d-eʃreq
3MS	ʃreq	y-eʃreq
3FS	ʃerq-et	d-eʃreq
1PL	ʃreq-na	n-ʃerq-u
2PL	ʃreq-tum	d-ʃerq-u
3PL	ʃerq-u	i-ʃerq-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 *ššelha* (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 *ššelha*. 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 life. Non-integrated forms are in many cases the only possible expression for concepts of daily life, like **ɛreq** ‘to sweat’, **ɛteš** ‘to be thirsty’ **ħšem** ‘to be ashamed’, **qra** ‘to learn, to read’ **tleb** ‘to ask for’ and **fleh** ‘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 **slek** is used (the original transcription is adapted). In example (2) the t- derived verb **tferrež** ‘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 k ml-ax mḵ a ka-te-slek* (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-tferrež* (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 **fhanna** ‘our way’ (p. 52), and the Arabic active participles **saktin** ‘they are quiet’ **maši** ‘he is going’ (p. 54) found in present-day Ghomara as well.

There are some differences between old people and young people’s speech which show ongoing lexical replacement of Berber terms by their Arabic equivalents. When I told people that I wanted to research Berber, many speakers confronted me with the phrase **isw = as, iyems = as** ‘he covered the ground for him/her (for sleeping), he covered him/her (with a blanket)’. According to the speakers this is ‘real’ Berber as it was once used by previous generations. Nobody uses this anymore, instead the Arabic borrowed verbs **iferrš = as, iyetty = 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 **šum** ‘to fast’ for **zum** ‘to fast’ which is still used by old people⁴. 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 **tyedda** ‘to eat lunch’. Examples of nouns are **ayef** ‘head’ which is replaced by the borrowing **ḍḍmay** ‘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 *Iɛɛaben* 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: šenni ya*
 3MS-go:Phedgehog:EL and jackal:EA 3MS-say:P=3S:IO what FUT
 The hedgehog and the jackal went. He said: ‘What are you going to take uncle
d-εebbi a εemmi ddib ka qlaeqlae, ka herrefherref?
 2S:IMPF-take VOC uncle jackal Q roots Q leaves

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

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 Consonants⁵

	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	ṯ	s	š		k̲	k̲^w	x	x^w	ħ	
vcl. phr. fric.			ʃ								
vcd. fric.	β	ḍ	z	ž		ḡ	ḡ^w	ɣ	ɣ^w	ε	
vcd. phr. fric.		ḍ̣	ẓ								
vcl. affr.				č							
vcd. affr.				ğ							
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				ħħ	
vcl. phr. fric.			ṣṣ								
vcd. fric.			zz	(žž)		(ḡḡ)				εε	
phr. vcd. fric.		(ḍḍ)	ẓẓ								
approx.					yy		ww				hh
trill			rr								
phr. trill			ṛṛ								
lateral			ll								
phr. lateral			(!l)								
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 **b**, **t**, **d**, **ḍ**, **k**, **k^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 position⁶. 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		
<i>w > gg^w</i>	<i>zwir</i>	<i>zuggir</i>	<i>/zegg^wir/</i>	‘precede’
<i>γ > qq</i>	<i>yems</i>	<i>qqems (~ yems)</i>		‘cover’

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

1.1. Labial and labiodental consonants

p [IPA: p]

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

pp [IPA: p:]

This consonant is only found in medial position.

čappu ‘cap’

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

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

<i>beḅra</i>	‘outside’
<i>baqi</i>	‘still’
<i>bezzaf</i>	‘many’
<i>beḅri</i>	‘early’
<i>berreḅ</i>	‘call!’
<i>bellarež</i>	‘stork’
<i>baḅtiyaḅna</i>	‘between us’
<i>bežžten</i>	‘they trampled’
<i>berrḅax</i>	‘I made cold’

baba 'father'

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

beddax 'I stood up'

bezdax ~ *bezdax* 'I urinated'

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

lbaɸil 'boat'

lbir 'well'

lbiɸ 'room'

lbuɸka 'pond'

lbettix 'melon'

lbibiru 'feeding bottle'

itbaɸbaɸ 'it bleats'

itbelbaɸ 'he cuddles'

tbuweh 'it mooded'

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

llbaɸt 'great-grandchildren'

llbaɸč 'sail, wind from the north'

itberrad 'he makes cold'

ketbaɸ 'I wrote'

tbaɸ 'follow'

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

first member of a consonant cluster:

ddebliž 'bracelet' vs.

lžebli 'Jebli man'

sṣiḅṭaṭ 'little shoes' vs.
teḅtut 'you divided'

ṭteḅʃil 'plate' vs.
taḅʃelt 'onion'

second member of a consonant cluster:

sṣbiya 'paint' vs.
sṣbeɛ 'lion'

teqbex 'I pierced' vs.
taqḅilt 'village'

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

intervocalic ḅ

ịeraḅen 'village of Iraben'
taḅekkiwt 'worm'
taḅerquqt 'prune'
taḅerṛikt 'sheep'
tektaḅax 'I am writing'

intervocalic b

itgaḅal 'he keeps an eye on'
tibaṭaṭan 'potatoes'

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

qelleḅ 'to try'
iheṛreḅ 'he made flee'
itseyyaḅ 'he throws'
ixṭeḅ 'he asks to marry'
aḍerraḅ 'stone'
ḷḡumb 'side'

bb [IPA: b:]

bbax 'I took'; *ḷhebb* 'wheat'

f [IPA: f]

fawen ‘they are in the morning’; *afus* ‘hand’; *tawnaft* ‘bread’

ff [IPA: f:]

ffuy /*ffey*’/ ‘get out’; *ayeffet* ‘cattle’; *afaff* ‘nipple’

m [IPA: m]

m̄tel ‘bury’; *aman* ‘water’; *aḡelzim* ‘pickaxe’

mm [IPA: m:]

mmut ‘die!’; *ikemmet* ‘he burns’; *ssem* ‘poison’

1.2. Interdental and alveolar consonants

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

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

initial **t**

<i>tæeddist</i>	‘belly’
<i>tæeyyalt</i>	‘girl’
<i>tameṭṭut</i>	‘woman’
<i>tammart</i>	‘beard’
<i>tawfalt</i>	‘egg’

medial **t**

<i>ikteḥ</i>	‘he wrote’
<i>isten</i>	‘it barks’
<i>fteḥ</i>	‘open!’
<i>atay</i>	‘tea’
<i>ameḵter</i>	‘long wooden stick of the plough’
<i>kafatira</i>	‘kettle’

medial **ṭ**

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

<i>atebban</i>	‘trousers’
<i>tlata</i>	‘three’
<i>ttitun</i>	‘they go’
<i>ayetma</i>	‘brothers’
<i>lexwatem</i>	‘rings’
<i>sektax</i>	‘I hushed’
<i>metqeb</i>	‘chisel’
<i>lemtae</i>	‘property’
<i>tamtunt</i>	‘yeast’
<i>emmtiwat</i>	‘aunts’
<i>taftilt</i>	‘fuse’

final t

<i>taqbilt</i>	‘tribe’
<i>tidert</i>	‘ear (of wheat)’
<i>taferkiwt</i>	‘small piece of land’
<i>tawnaft</i>	‘baked bread’
<i>tasefrawt</i>	‘yellow’
<i>tafirast</i>	‘pear’
<i>tayezdist</i>	‘rib’

final t

<i>lbit</i>	‘room’
<i>lhanut</i>	‘shop’
<i>taslat</i>	‘bride’
<i>tamettut</i>	‘women’
<i>taḡayzut</i>	‘calve’
<i>muqqret</i>	‘big (F./PL)’
<i>taneḥdut</i>	‘mowing season’
<i>itmettat</i>	‘he dies/is dying’

Post-vocalic final t

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

<i>tarbat</i>	‘girl’
<i>tafriwet</i>	‘wing’

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

<i>taḡiḡet</i>	‘tree’
<i>taqahat</i>	‘crow’
<i>tilket</i>	‘louse’
<i>taḥebbit</i>	‘grain’
<i>taḍuṭt</i>	‘wool’

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

SG	PL	
<i>lqent</i>	<i>leqnuṭ</i>	‘corner’
<i>ššent</i>	<i>lešnaṭ</i>	‘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-**.

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

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

<i>hettru ~ ttru</i> (< <i>tettru</i>)	‘she keeps on crying’
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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:

<i>saea tedda</i>	‘and then she went’
<i>amḵ a hedda</i> (< <i>tedda</i>)	‘when she went’
<i>heqqim</i>	‘she sat’

⁸ Lafkioui (2009: 109) notes for Senhaja de Srair: ‘L’élément **ṭ(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 occidentale). 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 dduṭ (< *š a tedduṭ*) 'you will go.'

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

tt [IPA: t:]

tthawed 'talk (to each other)!'; *netta* 'he'; *afatt* 'branch'

ṭ [IPA: tʰ]

aṭil 'grapes'; *aṭḡam* 'yesterday'; *ikemmet* 'to burn'

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

ayeffet > *ayeffed* 'cattle'
lmuṭaε > *lmuḍaε* 'to a place'
baεṭem > *baεḍem* 'to each other'
mriṭ > *mriḍ* 'ill'

ṭṭ [IPA: tʰ:]

ṭṭmar 'date'; *inettar* 'he flies'; *ṭṭett* 'suck'

Distribution of d [IPA: d] and ḍ [IPA: ɖ]

Initial position

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

initial d

daxel 'inside'
deydaḵ 'earlier'
daʔimen 'always'
dhaḍinet 'here'
das 'there'

<i>dar</i>	‘to’
<i>deggax</i>	‘I do’
<i>dleḡ</i>	‘rub!’
<i>dafεε</i>	‘defend!’
<i>derree</i>	‘embrace!’

initial **d**

<i>ḍrix</i>	‘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 **ḍ** are in free variation. Intervocalic **d** is rare, one normally finds **ḍ**. 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 **ḍ** appears in postvocalic position. However, there are a few exceptions.

medial **d** adjacent to a consonant

<i>deydaḵ</i>	‘earlier’
<i>meɛdum</i>	‘ill’
<i>lferdi</i>	‘gun’
<i>lkebda</i>	‘liver’
<i>isardunen</i>	‘mules’
<i>issendaw</i>	‘he churns’
<i>εdel</i>	‘make!’
<i>itdeḡdaḡ</i>	‘he crushes’
<i>zdu</i>	‘under’
<i>ageḡdir</i>	‘green lizard’

intervocalic **d**

<i>lbidu</i>	‘bucket’
<i>abdidu</i>	‘small bucket’
<i>lebradeε</i>	‘saddles’
<i>tamezgida</i> (~ <i>tamezḡida</i>)	‘mosque’
<i>adideḡ</i>	‘mortar’

medial **ḍ** adjacent to a consonant

<i>aḡḍi</i>	‘jackal’
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<i>tam<u>d</u>a</i>	‘pond’
<i>q<u>d</u>im</i>	‘old’
<i>ad<u>f</u>el</i>	‘snow’
<i>ad<u>y</u>es</i>	‘colostrum’
<i>lq<u>a</u>eda</i>	‘part of the plough’
<i>ta<u>f</u>dent</i>	‘toe’
<i>ttaz<u>d</u>ax</i>	‘I pee’

Intervocalic d

<i>th<u>a</u>din</i>	‘this one (F.)’
<i>tax<u>a</u>demt</i>	‘ring’
<i>mn<u>a</u>dem</i>	‘man/person’
<i>ta<u>d</u>unt</i>	‘fat’
<i>a<u>d</u>em</i>	‘blood’
<i>i<u>d</u>es</i>	‘with hem/her’
<i>tamu<u>d</u>a</i>	‘sow’

final d

<i>iss<u>e</u>nd</i>	‘he churned’
<i>ayi<u>ž</u>d</i>	‘billy goat’
<i>atu<u>g</u>d</i>	‘finger’
<i>š<u>š</u>hd</i>	‘heat’
<i>l<u>ğ</u>eld</i>	‘skin’
<i>l<u>q</u>ird</i>	‘monkey’

final d

<i>lberr<u>a</u>d</i>	‘tea pot’
<i>uha<u>d</u></i>	‘this one (msc.)’
<i>i<u>h</u>se<u>d</u></i>	‘he envied’
<i>ei<u>d</u></i>	‘still’
<i>seqq<u>e</u>d</i>	‘release (goats)’
<i>i<u>h</u>edde<u>d</u></i>	‘he threatens’
<i>aye<u>d</u></i>	‘ash’
<i>el<u>q</u>ru<u>d</u></i>	‘monkeys’
<i>le<u>ğ</u>lu<u>d</u></i>	‘skins’
<i>a<u>ž</u>ebba<u>d</u></i>	‘elastic’
<i>afu<u>d</u></i>	‘knee’

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

<i>lwalid</i>	‘father’
<i>zzrud</i> (~ <i>zzrud</i>)	‘feast meals’
<i>lʔaždad</i>	‘ancestors’

dd [IPA: d:]

dder ‘be alive’; *medden* ‘people’; *lhedd* ‘border, sunday’

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

a d idu ‘he will come’

ḏ [IPA: ʔ^s]

The consonant **ḏ** is very rare. In certain cases it is a free variant of **ṭ**. In words such as *ayerḏay* ‘mouse’ and *iḏḏad* ‘he grinds’ (I) it could be a result of the spread of pharyngealisation. An example is:

taḏuṭt ‘wool’

In some words **ḏ** and **d** are in free variation, for example:

ḥḏi ~ *ḥdi* ‘keep an eye on’

rremḏan - *rremdan* ‘ramadan’

ḏḏ [IPA: ʔ^s]

ḏḏ is very rare. Apart from *ḥeḏḏi* ~ *ḥeḏdi* ‘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’

d [IPA: d^s]

This phoneme is not found in word-final position.

ḏess ‘laugh’; *lweḏa* ‘a rose’

ḏḏ [IPA: d^s]

This phoneme is restricted to three instances in our corpus:

ḏḏbae ‘jackal’; *feḏḏi* ‘finish!’; *lyeḏḏar* ‘traitor’

n [IPA: n]

anas ‘sparkle’; *afentut* ‘lip’; *iħessen* ‘he shaved’

nn [IPA: n:]

nnan ‘they said’; *genna* ‘sky’; *inn* ‘he said’

s [IPA: s]

asif ‘river’; *tasa* ‘cow’; *iles* ‘tongue’

ss [IPA: s:]

assa ‘nowadays’; *iħesseb* ‘he counts’; *iħiss* ‘to guard’

š [IPA: sʰ]

šum ‘fast!’; *šusef* ‘spit!’; *ixelleš* ‘he payed’

šš [IPA: s:ʰ]

ššebbat ‘shoes’; *aneššab* ‘piece of iron on which bait is put’; *lgešš* ‘big floor’

z [IPA: z]

zebbel ‘curse!’; *azar* ‘fur’; *krez* ‘plough!’

zz [IPA: z:]

zzuyur ‘pull!’; *rezzwan* ‘they delouse’; *iħezz* ‘he shook’

z [IPA: zʰ]

zum ‘fast!’; *ažar* ‘root’; *illuz* ‘he is hungry’

zž [IPA: z:ʰ]

ifežžer ‘he cut open’; *ižžar* ‘he sees’; *afažž* ‘edible part of doum leaf’

1.3. Post-alveolar consonants

š [IPA: ʃ]

ašqef ‘snail shell’; *taxšəbt* ‘trap’; *iəaš* ‘he lived’

šš [IPA: ʃ:]

ššear ‘hair’; *šš* ‘eat!’; *iħešš* ‘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 **kšem** ‘to enter’.

P

ikšem ‘he entered’

I

ikečem ‘he always enters’

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

čepuxa ‘balloon’ *ahečun* ‘vagina’, *llbač* ‘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 **hetšax** ‘I have fetched the grass’ which is the first person singular form of **hteš** ‘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:

<i>lčabula</i>	‘shed’
<i>lčuppa</i>	‘lollipop’
<i>lčimineyya</i>	‘chimney’
<i>lčerqun</i>	‘filth on the skin’

ž [IPA: ʒ]

ižni ‘he picked’; *lhaža* ‘thing’; *aferruž* ‘rooster’

The phoneme ž changes to ġ when following **l**, **n** or **r**. With one exception in our corpus, ž is always realised as ġ following the Arabic article **l**. The article does not assimilate to the consonant⁹. Examples of ġ are:

<i>lğeda</i>	‘carrot’
<i>lğeld</i>	‘skin’
<i>lğmel</i>	‘camel’

⁹ In many varieties of Moroccan Arabic the article assimilates to the žž (cf. Heath 2002: 169).

<i>lǧawf</i>	‘breast’
<i>lbelǧ</i>	‘lock’
<i>nǧer</i>	‘make furniture’
<i>lxurǧa</i>	‘exit’

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

<i>lǧaw</i>	‘weather’
<i>nnǧem</i>	‘star’
<i>tagerǧumt</i>	‘Adam’s apple’
<i>lxurǧa</i> (~ <i>lxurǧa</i>)	‘exit’
<i>lmerǧa</i>	‘swamp’

We also find a few instances of **ǧ** following **h** and **w**¹¹.

<i>amehǧur</i> (PL: <i>lmħaǧer</i>)	‘orphan’
<i>zzawǧa</i> (~ <i>zzawǧa</i>)	‘a pair of animals’

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

SG		PL	
<i>lǧumb</i>	‘side’	<i>leǧnab</i>	‘sides’
<i>lǧlaleb</i>	‘djellabas’	<i>aǧellab</i>	‘djellaba’
<i>lǧim</i>	‘pocket’	<i>leǧyam</i>	‘pockets’
<i>amengǧur</i>	‘chair’	<i>lemnaǧer</i>	‘chairs’
<i>lǧdud</i>	‘ancestors’	<i>ǧeddi</i>	‘my grandfather’

An unexplained occurrence of **ǧ** is found in the verb **ǧerǧer** ‘glide/drag along the ground’ which corresponds to **ǧerǧer** ‘glide/drag along the ground’ in Moroccan Arabic (Harrell, 1966:236). The initial **ǧ** could be a geminate counterpart of **ǧ**. The second **ǧ** follows an **r**. Another case is the collective noun **lǧuǧet** ‘walnut’ in which the second affricate corresponds to **ǧ** as shown by the unity noun **taǧuǧet** ‘a walnut’. In the case of the active participle forms **maǧi** / **maǧa** (~ **maǧǧa**) / **maǧin** (~ **maǧǧin**) ‘come’ the **ǧ** can be explained as a realisation of underlying **ǧy**.

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

¹¹ In Chefchaouen Arabic **ǧ** also occurs when following **n**, **d**, **h**, **y**, **e**, **š**, **f** (Moscoso, 2002:43).

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

təežb as ~ təeǧb as 'he liked her'

ǧ [IPA: dʒ]

iǧun 'he has eaten enough'; *weǧed* '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:

<i>š</i>	<i>a</i>	<i>y = ne-žž</i>	<i>dar</i>	<i>ššbeḥ</i>
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
<i>teǧat</i> 'you left'	<i>ižž</i> '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).

<i>keǧi(n)</i>	'you'	<i>kežž</i>	'you'
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In Arabic loans, Ghomara **ǧ** often corresponds to **žž** in other variants of Moroccan Arabic, e.g.

Ghomara	Mar. Arab.
<i>leqmiǧa</i>	<i>leqmižža</i> (Harrell, 1966:109) 'shirt'
<i>lḥaǧ</i>	<i>lḥažž</i> (Harrell, 1966:251) 'pilgrim'
<i>tuǧar</i>	<i>tužžar</i> (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 ǧ¹².

P		I	
<i>wǧed</i>	‘it is prepared’	<i>iweǧed</i>	‘he prepares’
<i>iǧreh</i>	‘he is injured’	<i>iǧruḥ</i>	‘he is always injured’
<i>iǧmeε</i>	‘he gathered’	<i>iǧmue</i>	‘he gathers’

The consonant **tǧ** in for example the **t-** derived form **tǧewwi** ‘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 ǧ and the phoneme ǧ which corresponds to ǧǧ in other variants of Moroccan Arabic¹³. Therefore there are two phonemes: ǧ and ǧǧ.

We found only one invariable instance of ǧǧ in our corpus (IPA: ʒ:] which is not the result of deaffrication of ǧ, namely **beǧǧet** ‘to trample on’.

1.4. Lateral and rhotic consonants

r [IPA: r]

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

rr [IPA: r:]

rri ‘bring back’; *berrǧax* ‘I froze’; *taberriwt* ‘animal dropping’

ɾ [IPA: r^h]

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

ɾɾ [IPA: r:^h]

ɾɾmel ‘sand’; *seɾɾden* ‘they sent’; *aɾeɾɾey* ‘ram’

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

¹³ El Hannouche’s data show that there are more exceptions in Amṭiqaṅ with regards to the ǧ. In his texts (2010:177-242) we find for example **lǧeld**, **lǧemea**, **lǧiran**, but also **(e)lǧri**. Furthermore, we find **amenǧur** (273) and **nǧum** (65). The phoneme ǧ is never realised as ǧǧ as in **aheǧal** (65), **keǧ** (113) and **aǧar** (235).

ɿ [IPA: ɿ]

iles ‘tongue’; *alum* ‘hay’; *ikemmel* ‘he finished’

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

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

ɿɿ [IPA: ɿ:]

lluz ‘be hungry!’; *mellken* ‘they marry’; *ggull* ‘swear’

The pharyngealised lateral ɿ [IPA: ɿʕ] does not occur on its own in non-pharyngealised contexts. The geminate ɿɿ [IPA: ɿ:ʕ] is only found in words containing **allā** ‘God’ such as **stayfirullā** ‘may God forgive’, **wellā** ‘I swear’ and **yallā** ‘come on’.

1.5. Velar consonants

Distribution of k [IPA: k] and ḳ [IPA: x]

The consonants k and ḳ have the same place of articulation, in the front-velar/mid-velar range; ḳ 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 ḳ in initial position. The examples enumerated below are all the words beginning with ḳ in our corpus.

initial k

<i>kelwa</i>	‘kidney’
<i>kelma</i>	‘word’
<i>kuɛballa</i>	‘female jackal’
<i>kursi</i>	‘chair’
<i>kamlin</i>	‘all (PL)’
<i>kreh</i>	‘hate!’
<i>keği</i>	‘you (M:SG)’
<i>kerkeb</i>	‘roll!’

initial ḳ

<i>ḳma</i>	‘my brother’
<i>ḳra</i>	‘some’
<i>ḳrez</i>	‘plough!’

kerrek 'lie!'

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

medial k

<i>tilket</i>	'louse'
<i>ilkem</i>	'he entered'
<i>tiskert</i>	'garlic'
<i>škun</i>	'who'
<i>tirkila</i>	'bitches'
<i>muškil</i>	'problem'
<i>akerḵur</i>	'stone heap'
<i>saket</i>	'quiet'
<i>akeḵlaw</i>	'black (person)'

medial ḵ

<i>melḵen</i>	'they married'
<i>tilḵaman</i>	'type of spinach'
<i>ssḵemṭ-awet</i>	'burn!' (PL)
<i>aḵenniw</i>	'twins'
<i>tafukṭ</i>	'sun'
<i>lmaḵla</i>	'food'
<i>aḵal</i>	'soil'
<i>beḵri</i>	'early'
<i>aḵmez</i>	'nail'
<i>aḵemmar</i>	'face'
<i>imuḵar</i>	'thieves'

In word-final position, **ḵ** occurs after a vowel (including schwa) and **k** after a consonant. A singular - plural pair like **lmilk** 'possession' **amlakḵ** 'possessions' shows this alternation.

final k

<i>tṭaḵk</i>	'laughter'
<i>ifk</i>	'he gave'
<i>iwešk</i>	'he got lost'
<i>aṭužk</i>	'male partridge'
<i>sselk</i>	'iron wire'

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

lplaṣṭik 'plastic'
hak 'here!'

final k

deydak 'earlier'
lmalk 'king'
nnek 'yours'
itkerrk 'he lies'
hadik 'that'
aṣrik 'farmer's assistant'
abeddik 'rooster'

k^w [IPA: k^w]

Labialised **k^w** is only found in the Aorist form of the verb /lk^wem / [lkum] 'arrive, reach' and the derived form /sselk^wem/ [sselkum] 'make arrive, reach' (see IV.3.2.1.1. on the causative prefix).

k^w [x^w]

Labialised **k^w** is found, among others, in **tak^wmamt** 'muzzle' and the Aorist of the verb **akur** (/ak^wer/) 'steal'.

kk [IPA: k:]

Geminate **kk** stands in morphophonological opposition to **k** in **ilkem** 'he arrived' - **ilekkem** 'he arrives' as well as to **k**, e.g. in **iknes** 'he argued' - **ikknes** 'he argues'.

ikkrez 'he ploughs'; *ilekkem* 'he arrives'; *ḥekk* 'scratch'

kk^w [IPA: k:^w]

Labialised **kk^w** is only found in the Aorist forms of the verbs **kkur** /kk^wer/ 'get up!'; **ukkr-awet** /kk^wer-awet/ 'get up!' (PL) and **kkus** /kk^wes/ 'remove!' - **ukks-awet** /kk^ws-awet/ 'remove!' (PL).

Distribution of g [IPA: g] and ḡ [IPA: ɣ]

Like **k** and **k**, 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 [j]. Word-initially only **g** is attested, as in the following examples.

initial **g**

<i>genna</i>	‘sky’
<i>gum</i>	‘in front of’
<i>gas</i>	‘in it’
<i>gatri</i>	‘bed’
<i>gerru</i>	‘cigarette’
<i>gales</i>	‘seated’
<i>gewwez</i>	‘pass!’
<i>gewwed</i>	‘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 **z**, e.g. **aṭgam** ~ **aṭḡam** ‘yesterday’ and **taṣga** ~ **taṣḡa** ‘forest’.

medial **g**

<i>targa</i>	‘canal’
<i>angi</i>	‘rain water’
<i>lḡebṣ</i>	‘gypsum’
<i>azgazneṭ</i> (~ <i>azg”azneṭ</i>)	‘two years ago’
<i>imezgan</i>	‘ears’
<i>tageržumt</i>	‘adam’s apple’
<i>agamgam</i>	‘big rock’
<i>lemnagež</i>	‘earrings’
<i>ngi</i>	‘push!’
<i>ageyyar</i>	‘tree stump’

medial **ḡ**

<i>aḡdi</i>	‘jackal’
<i>aḡtiṭ</i>	‘bird’
<i>taḡiḡet</i>	‘tree’
<i>aḡellu</i> (<i>awellu</i>)	‘plough’
<i>taḡursa</i>	‘ploughshare’
<i>aṭuḡd</i>	‘finger’
<i>taḡnawt</i>	‘pumpkin’

aseḡnu

‘clouds’

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

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’

ibzeḡ

‘he moisted’

iḡzeḡ

‘he milked!’

adideḡ

‘mortar’

afraḡ

‘fence’

azzuḡ

‘wetness’

g^w [IPA: **g^w**]

This consonant is among others found in the diminutive noun **tag^wsisert** ‘small downwards slope’ and in **ag^wlaf** ‘bee swarm’.

ḡ^w [IPA: **ɣ^w**]

This consonant is found in the Aorist verb form **neḡzuḡ** (/neḡzeḡ^w/) ‘we milked’ and in the Aorist form **nsaḡum** (/nsaḡ^wem/) ‘we will wait’.

gg [IPA: **gː**]

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

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^wez /) ‘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 **k̄** intervocally. For example:

aggez ~ *uggez* ‘recognise!’ > *š a y nuḡuz* / *š a y nuḡez* ‘we will recognise him.’
gguz / *gg^wez* / ‘go down!’ > *ss-ugez* / *ss-uḡez* ‘make go down!’
tiggura ~ *tiḡura* ‘doors’

1.6. Semi-vowels

y [IPA: j]

ayaw ‘grandchild’; *taryalt* ‘basket’; *amazay* ‘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’
yuk̄i (*yuk̄a*) ~ *iw̄ka* ‘he crossed (the water)’

yy [IPA: j:]

The semi-vowel **yy** is only found in word-medial position.

seyyeb ‘throw!’; *keyyel* ‘weigh!’

w [IPA: w]

werr̄ek̄ ‘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^wel/ ‘to flee’. However, there are other verbs which have **ww** as the geminate correspondent, 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:

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

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

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

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

<i>ittawi</i>	‘he takes’
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There is free variation between the form between **ey** and **i** when followed by a suffix, e.g.

<i>ttawyen</i> ~ <i>ttawin</i>	‘they take’
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Not all final **i**’s are the result of the neutralisation of **ey**, for example:

<i>tunim</i> * <i>tunyem</i>	‘you (PL) mounted’
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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	
<i>ssku</i>	<i>sskaw</i>	‘to dry’
<i>ssnu</i>	<i>ssnaw</i>	‘to cook’
<i>sseḥmu</i>	<i>sseḥmaw</i>	‘to make hot’

<i>ssani</i>	<i>ssanay</i>	‘to make/let mount’
<i>ssfi</i>	<i>ssfay</i>	‘to fester, to overflow’

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

<i>yuf</i> ~ <i>iwf</i>	‘he found’
<i>yulu</i> ~ <i>iwlu</i>	‘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 **ḵ** (IPA: [x]).

ixebbee ‘he has stored’; *nnexla* ‘date palm tree’; *fsax* ‘untie!’

x^w [IPA: χ^w]

This consonant appears only in /tax^west/ which has realisations [taxust] and [ta^wxest] and in **tax^wraft** ‘riddle, story’.

xx [IPA: χ:]

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 **ḡ** (IPA: [ɣ]). This consonant is in morphophonological opposition to **qq**, e.g. in the verb **iyɣes** ‘he slaughtered’ - **iqqes** ‘he slaughters’.

ɣres ‘slaughter!’; *adɣes* ‘colostrum’; *idɣey* ‘heap of grain’

ɣ^w [IPA: ʁ^w]

A number of nouns exist that have labialised **ɣ^w**. It is not found in initial position.

tizɣ^wal ‘ladles’; *ffuy* (/ffɣ^w/) ‘go out!’

q [IPA: q]

qurɣayes ‘type of insect’; *aqezzun* ‘dog puppy’; *felleq* ‘cut in two pieces!’

qq [IPA: q:]

iqqes ‘he slaughters’; *taweqqaft* ‘door jamb’; *lheqq* ‘right’

qq^w [IPA: q:^w]

This phoneme occurs in the adjective ‘be big’, e.g. masculine **meqqur** /meqq^wer/, feminine/plural **muqqret** /meqq^wret/. Furthermore, the Aorist of a number of verbs have **qq^w** e.g. **qqul** /qq^wel/ ‘return!’ **uqq1-awet** /qq^w1-awet/ ‘return!’ (PL) and **qqun** /qq^wen/ ‘tie!’ **uqqn-awet** /qq^wn-awet/ ‘tie!’ (PL).

1.8. Pharyngeal and laryngeal consonants

ε [IPA: ʕ]

εuryan ‘naked’; *taεeddist* ‘belly’; *ixelleε* ‘he preserved meat’

εε [IPA: ʕ:]

This consonant is not found in initial or final position.
beεεed ‘go away!’; *abeεεiš* ‘lamb’; *reεεeš* ‘make shiver!’

ħ [IPA: ħ]

ħenni ‘stoop!’; *aħentwil* ‘tall man’; *ħrwaħ* ‘air’

ħħ [IPA: ħħ]

This consonant is not found in initial or final position.
imeħħa ‘he erases’; *seħħun* ‘they get well’

h [IPA: h]

herreb ‘make flee!’; *taheğalt* ‘widow’; *neddeh* ‘drive, guide!’

hh [IPA: h:]

This consonant is not found in initial or final position.
ifehhem ‘he explains/makes understand’ *dehher* ‘make appear!’ *tehher* ‘circumcise!’

? [IPA: ?]

This consonant only occurs in borrowings from Standard Arabic, for example:
t?ekked ‘verify!’ *da?imen* ‘always’

1.10. Summary of stops - fricatives

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

Initial position	Medial position	Final position
<i>b - <u>b</u></i>	<i>b - <u>b</u></i>	<i>Cb - V<u>b</u></i>
<i>t</i>	<i>t - <u>t</u></i>	<i>Ct - V<u>t</u></i>
<i>d - (<u>d</u>)</i>	<i>d - <u>d</u></i>	<i>Cd - V<u>d</u></i>
<i><u>ɖ</u></i>	<i><u>ɖ</u> - <u>ɖ</u></i>	<i>(X - V<u>ɖ</u>)</i>
<i>k - <u>k</u></i>	<i>k - <u>k</u></i>	<i>Ck - V<u>k</u></i>
<i>g</i>	<i>g - <u>g̣</u></i>	<i>Cg - V<u>g̣</u> (g)</i>

1.11. Spread of pharyngealisation

The consonants **t, d, s, z, r, l** have pharyngealised counterparts **ṭ, ḍ, ṣ, ẓ, ṛ, ḷ**, and marginally **ḹ**. 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 Tashelhiyt Berber). In the following examples pharyngealisation spreads over the whole word:

<i>lbaṭil</i>	>	[ḷṣṣaṭeḷ]	‘boat’
<i>ṭṭaṣin</i>	>	[ṭ̣ṣṣaṣeṇ]	‘tajine’
<i>ayeffeṭ</i>	>	[aỵṣṣaf̣ṣṣeṭ]	‘cattle’
<i>tazuxt</i>	>	[ṭṣṣaẓox̣ṭ]	‘milk’
<i>tamelẓiṭ</i>	>	[ṭṣṣaṃṣṣəḷẓṣiṭ]	‘type of plant’
<i>alaẓen</i>	>	[aḷṣṣaẓṣeṇ]	‘tomorrow’
<i>iṣeṭṭuḥen</i>	>	[iṣ̣ṣeṭṣṣoḥ̣eṇ]	‘sticks’

<i>iheṣṣel</i>	>	[ihəs:ʃəlʃ]	‘he falls’
<i>ikemmet</i>	>	[ikʃəm:ʃətʃ]	‘it burns’

Pharyngealisation that spreads to a clitic:

<i>iqqr as</i>	>	[iq:rʃ asʃ]	‘he tells him/her’
<i>šebbbran as</i>	>	[šʃəb:ʃrʃanʃ asʃ]	‘they held for him’

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

<i>aferruž aḍ</i>	>	[afʃər:ozʃ aḍʃ]	‘this rooster’
<i>rṛbiε aḍ</i>	>	[r:ʃbʃεε aḍ]	‘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: ε]

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

<i>tasajt</i>	‘chestnut tree’
<i>tasift</i>	‘small river’
<i>taslat</i>	‘bride’
<i>aslet</i>	‘two years ago’
<i>iteayan</i>	‘he is searching’
<i>ieayen</i>	‘he searched’
<i>mul</i>	‘owner’
<i>lmal</i>	‘property’

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

<i>aṭar</i>	[ɑṭɑr]	‘leg’
<i>aṣar</i>	[ɑṣɑr]	‘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’
/ɛdima/	>	[ɛdime]	‘weak’ (F)
/ṭwila/	>	[tʰwile]	‘long’ (F)
/ṭqila/	>	[tʰqele]	‘heavy’
/ləyda/	>	[ləðde]	‘lunch’
/ləarbiyya/	>	[lɛarʰbi:ye]	‘Arabic’
/mya/	>	[mje]	‘hundred’
/tamədda/	>	[təməde]	‘bird of prey’
/təməzgiða/	>	[təməzgiðe]	‘mosque’
/n tsa/	>	[n-tse]	‘of the cow’
/yemma/	>	[jəm:e]	‘mother’
/tamuda/	>	[təmuðe]	‘sow’
/g tezgā/	>	[g-təzɣe]	‘in the forest’
/assa/	>	[ɛs:e]	‘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 *Malika* becomes *Maliki* in such contexts. In Chefchaouen it is restricted to word-internal position. Its realisation is [æ] (Moscoso, 2002: 27).

/ḍḍra/	>	[dːṛˤɑ]	‘corn’
/rṛha/	>	[rːhɛ]	‘hand-mill’
/beṛra/	>	[bɛṛːˤɑ]	‘outside’
/weḥda/	>	[wəḥdɛ]	‘one’ (F)
/lmeqla/	>	[lməqlɛ]	‘frying pan’
/waha/	>	[wɛhɛ]	‘only’
/tameỵra/	>	[tɛmɛṛˤɑ]	‘wedding’

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

yemma nn-es he-tzalla [jəmːɛ nːəs həṭzˤɑlːɛ]
 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:

<i>tizezzraṭan</i>	>	[tɪzɛzːrɛθɛn]	‘heyforks’
<i>tiskert</i>	>	[tɪskɛrt]	‘garlic’
<i>akkil</i>	>	[ɛkːɪl]	‘curdled milk’
<i>inu</i>	>	[ɪnu]	‘my’
<i>aḡḡdi</i>	>	[ɛɣḡɪ]	‘jackal’
<i>izi</i>	>	[izi]	‘fly’

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

i - a

ssirdax ‘I wash’ (AOR)
ssardax ‘I washed’ (P)

aḡḡdi ‘jackal’
ayḡa ‘dog’

aḡelzim ‘pick-axe’
iḡelzam ‘pick-axes’

i - u

<i>azru</i>		‘mill’
<i>zri</i>		‘pound!’

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

<i>aṭil</i>	[at ^ʕ el ^ʕ]	‘grape’
<i>aḡtiṭ</i>	[aṭ ^ʕ t ^ʕ et ^ʕ]	‘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.

<i>n uyyul</i>	[n ʊɣjul]	‘of the donkey’
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The vowel is realised as a close-mid back rounded vowel [o] when influenced by a pharyngealised consonant, for example:

<i>teḡṣuṭ</i>	[təxs ^ʕ ot ^ʕ]	‘she was afraid’
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Below we contrast /u/ with schwa.

u - e

<i>iḥḥfuṣ</i>		‘he always digs’
<i>iḥfer</i>		‘he dug’

<i>a-fettiḥ</i>		‘hole’
<i>a-futtiḥ</i>		‘ass’

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

<i>stilus</i>	[stilus]	‘pens’
<i>rrigalus</i>	[r:ɪɣalus]	‘presents’
<i>lebyixus</i>	[b:yixus]	‘old men’
<i>lḡaṭis</i>	[lḡat ^ʕ is]	‘sailing boats’

legrarus [ləgr^ˈar^ˈus] ‘cigarette’

2.2. Diphthongs

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

Diphthong aw

<i>rrawz</i>	‘rice’
<i>lhawt</i>	‘vegetable garden’
<i>lhayt</i>	‘wall’
<i>ttawb</i>	‘cloth’
<i>llawn</i>	‘colour’
<i>lmawža</i>	‘wave’

Diphthong ay

<i>lyays</i>	‘mud’
<i>lxayt</i>	‘thread’
<i>lyayta</i>	‘flute’
<i>ssayf</i>	‘sword’

However in some cases the historical diphthong has become a monophthong, e.g.

<i>lbit</i>	‘room’
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An example of a noun which has **aw** ~ **u** is:

<i>ššawt</i> ~ <i>šut</i>	‘voice’
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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**, **h**, **q** and **ɛ**, for example:

<i>lwext</i>	[lɤɛxt]	‘time’
<i>mdewwex</i>	[mdəw:ɛx]	‘having a headache’
<i>iffey</i>	[ɪf:ɛɸ]	‘He went out.’
<i>sʂbeh</i>	[sʂ:βɛh]	‘morning’
<i>inneeneɛ</i>	[ɪn:ɛŋnɛɸ]	‘It flourished.’
<i>hmeq</i>	[hmɛq]	‘crazy’

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

<i>ifekker</i>	[ɪfɛk:ɑrʂ]	‘He grabbed.’
<i>intɛr</i>	[ɪntʂɑrʂ]	‘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.

<i>iferɾeh</i>	[ɪfɛr:ʂɑh]	‘He makes happy.’
<i>itfɾraḥ</i>	[ɪtfɛr:ʂɑh]	‘He always makes happy.’

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

<i>iferɾh ahen</i>	[ɪfɛr:ʂh ɛhən]	‘He makes them happy.’
<i>itfɾraḥ ahen</i>	[ɪtfɛr:ʂɑh ɛhən]	‘He always makes them happy.’

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

<i>xewwef</i>	[xuwwɛf]	‘to scare’
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seyyeb [siyyəb] '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:

amḍer 'branch'

imedren 'branches'

awrez 'heel'

iwetzen 'heels'

azreymel 'centipede'

izeryemlen '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	
<i>lǧmel</i>	‘male camel’	<i>lǧeml-a</i>	‘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 level¹⁶. Schwa is not inserted from right to left in a cc-string but can only be analysed as being present underlyingly, as in these examples¹⁷.

<i>lfern</i>	‘clay oven’
<i>nnefs</i>	‘breath’
<i>ššehd</i>	‘heat’
<i>lferg</i>	‘swarm’
<i>lwehš</i>	‘animal’

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

<i>azebg</i>	‘part of the plough’
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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	
<i>azref</i>	‘road’	<i>tazreft</i>	‘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.

<i>hfer</i>	‘dig!’	<i>hefr-awet̄</i>	‘dig!’	(PL)
<i>fleh</i>	‘cultivate!’	<i>felhu</i>	‘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.

<i>iwerḡ</i>	‘he dreamed’
<i>iwešk</i>	‘he got lost’

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

<i>efk</i>	‘give’
<i>ewt̄</i>	‘hit’

Other cc verbs show the cec form:

<i>zer̄</i>	‘see’
<i>ney</i>	‘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.

<i>perpren</i>	(< * <i>prepren</i>)	‘they flew’
<i>selsl-awet̄</i>	(< * <i>slesl-awet̄</i>)	‘bake grain’ (PL)
<i>beryz-awet̄</i>	(< * <i>beryez</i>)	‘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:

<i>(e)freq</i>	‘divide!’
<i>(e)nda</i>	‘go!’
<i>(e)bb</i>	‘take!’

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

<i>ferq-awet̄</i>	‘divide!’ (PL)
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qerreb '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:

inker 'he denied'
inekr at 'He denied her.'
iyers 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.

irfεc ašaqr ahen 'He lifted the axe.'
amka ikšem aḡdi 'When the jackal went in.'
iyres tayatt '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 leḡšam nnes 'His children fled.'
*rewlan as (*rewlen as)* 'They fled from him.'
*ttfan as tet (*ttfen as tet)* '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:

išebbr ay 'He caught me.'
šebbran 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

<i>tdafen</i>	>	<i>ddafen</i>	‘to fight’
<i>itdaḡam</i>	>	<i>iddaḡam</i>	‘he fetches water’

ḏ + t > t

<i>tabuṣeyyat</i>	>	<i>tabuṣeyyat</i>	‘type of snake’
<i>tæuqqat</i>	>	<i>tæuqqat</i>	‘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 > tt

<i>aḥeddaḏ</i> ‘a smith’	>	<i>taḥeddatt</i>	‘practice of being a smith’
-	>	<i>taḥerrutt</i>	‘type of insect’

t + d > d

<i>amka t d ibb</i>	>	<i>amka d ibb</i>	‘When he brought it.’
<i>themmut dha</i>	>	<i>themmu dha</i>	‘You are warming up here.’
<i>iḡ at das</i>	>	<i>iḡ a das</i>	‘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):

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

In sandhi there is regular voice assimilation.

d + t > t t

<i>isafey d taēyyalt</i>	>	<i>isafey t taēyyalt</i>	‘He took out the girl.’
<i>hedda d tamedda</i>	>	<i>hedda t tamedda</i>	‘The eagle came.’

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

d + t > d

<i>smana a d tedda</i>	>	<i>smana a d edda</i>	‘Where did she come from?’
<i>ma ḥtaž a d teqqul</i>	>	<i>ma ḥtaž a d eqqul</i>	‘He did not want to return.’
<i>a d teqqul</i>	>	<i>a d eqqul</i>	‘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

<i>aebbiz</i>	>	<i>taebbist</i>	‘calf’
<i>amuggaz</i>	>	<i>tamuggast</i>	‘stick to pin animals’

ḡ + t > ṣt

<i>amazuz</i>	>	<i>tamazust</i>	‘last born’
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ž + t > št

<i>ameṣaž</i>	>	<i>tameṣašt</i>	‘someone who limps’
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In sandhi regressive voice assimilation takes place as well, for example:

ž + š > š š

<i>ma iteṣṣaž ši</i>	>	<i>ma iteṣṣaš ši</i>	‘He does not limp.’
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t + ḡ > d ḡ

<i>a tḡall</i>	>	<i>a dḡall</i>	‘She will pray.’
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š + d > ž d

<i>š deṣṣad</i>	>	<i>ž deṣṣad</i>	‘You will hunt/fish.’
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s + d > z d

<i>tenn as d a eḡlet..</i>	>	<i>tenn az d a eḡlet..</i>	‘She told him: will you recognise..?’
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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 > šš

ma yres ši > *ma yreš ši* 'He does not have'

z + ž > žž

iggez žehħa > *iggež žehħa* 'Zehha went down.'

Finally, there is this irregular assimilation:

bb + ʃ > ppʃ

bbʃel > *ppʃel* 'onions'

3.2. Assimilation to pharyngealised consonants

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

t + ḏ > ḏḏ

ka-tḏεaf > *ka-ḏḏεaf* 'She loses weight.'

itḏeṣṣa > *iḏḏeṣṣa* 'He laughs.'

t + ṭ > ṭṭ

ittewwal > *iṭṭewwal* 'He makes longer.'

ittehħak > *iṭṭehħak* 'He makes laugh.'

ṭ + t > ṭṭ

tamaṭuṭṭ > *tamaṭuṭṭ* 'dirty woman'

taferkuṭṭ > *taferkuṭṭ* '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.

<i>tlata n leḥšam</i>	>	<i>tlata l leḥšam</i>	‘three children’
<i>ḍḍmay n lefqi</i>	>	<i>ḍḍmay n nefqi</i>	‘The head of the imam.’

n + l > l

In other cases a single **l** is the result.

<i>ikšem fxessen lweḥš</i>	>	<i>ikšem fxesse lweḥš</i>	‘Animals entered upon them.’
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n + r > rr

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

<i>nrennu</i>	>	<i>rrennu</i>	‘We add.’
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l + n > nn

Within the word boundary the result is a geminate.

<i>a nerwel fḥalna</i>	>	<i>a nerwel fḥanna</i>	‘We will flee.’
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l + n > n

Outside the word boundary the **l** is deleted.

<i>g ul n teryalt...</i>	>	<i>g u n teryalt...</i>	‘in the middle (heart) of the basket’
<i>kul nnhar</i>	>	<i>ku nnhar</i>	‘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.

<i>dar lbir</i>	>	<i>da lbir</i>	‘to the well’
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The **n** assimilates to the place of articulation of the velar and uvular consonants and labial stops, e.g.

<i>nqette</i>	>	<i>nqetteε</i>	‘We cut.’
<i>š a ngix</i>	>	<i>š a ngix</i>	‘I will push.’
<i>n-bheṭ</i>	>	<i>m-bheṭ</i>	‘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-ttiṭu *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 position¹⁸.

a k d nerry ah d > *a k nderry ah d* ‘We will return it for you.’
a d neqqul > *a ndeqqul* ‘We will return.’

3.5. Voicing of first person singular suffix -ax

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

zzerq-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 **-ay**, for example:

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

d *a* *xebbe-ay* *zdu* *ugeḡuf*
 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:

<i>ddin</i>	‘religion, debt’
<i>ssbeε</i>	‘lion’
<i>ttawb</i>	‘cloth’
<i>zzif</i>	‘handkerchief’
<i>ššfeṛ</i>	‘eyelid’
<i>rras</i>	‘cape’
<i>ttib</i>	‘doctor’

In many Moroccan 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:

<i>lǧmel</i>	‘camel’
<i>lǧeld</i>	‘skin, hide’
<i>lǧim</i>	‘pocket’
<i>lǧen</i>	‘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.

<i>lpeṣṣiṭa</i>	‘peseta’
<i>(el°)ppṣaṣeṭ</i>	‘pesetas’
<i>lberdaε</i>	‘saddle’
<i>(el°)bbḥar</i>	‘sea’

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

<i>lmalik</i>	‘king’
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<i>(e^l)mmdina</i>		‘city’
<i>lfellah</i>		‘farmer’
<i>(e^l)ffhel</i>		‘bull’
<i>(e)lkelma</i>		‘word, speech’
<i>(e^l)kksir</i>		‘big field’
<i>(e)lqent</i>		‘corner’
<i>(e^l)qqbura</i>		‘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**, **ɖ** and **ʈ** can disappear. This differs according to speech tempo. Some examples are:

n			
<i>s warsin</i>	>	<i>s warsi</i>	‘with hunger’
l			
<i>itseǧal</i>	>	<i>itseǧa</i>	‘It records.’
ɖ			
<i>εawed</i>	>	<i>εawe</i>	‘again’
ʈ			
<i>sskuʈ</i>	>	<i>ssku</i>	‘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:

<i>lhedra ahen</i>	>	<i>lhedra y ahen</i>	‘that talk’
<i>ya aεeyyal</i>	>	<i>ya y aεeyyal</i>	‘only a boy’
<i>idda ides</i>	>	<i>idda y ides</i>	‘He went with him.’

<i>lefqi aḍ</i>	>	<i>lefqi y aḍ</i>	‘this imam’
<i>aḡḍi ahen</i>	>	<i>aḡḍi y ahen</i>	‘that jackal’

Vowel becomes semi-vowel

a + i > a y

<i>idda iṣebber</i>	>	<i>idda yṣebber</i>	‘He went to grab.’
<i>netta isker</i>	>	<i>netta ysker</i>	‘he did’
<i>ddwa inši</i>	>	<i>ddwa ynši</i>	‘some drugs’

u + i > u y

<i>š ifelḥu iḃawen</i>	>	<i>š ifelḥu yḃawen</i>	‘They are going sow beans.’
<i>zdu izref inši</i>	>	<i>zdu yzref inši</i>	‘under some road’

i + i > y + i

<i>maši iḍ izref</i>	>	<i>mašy iḍ izref</i>	‘going along the road’
----------------------	---	----------------------	------------------------

a + u > a w

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

i + u > i w

<i>i wēyyal</i>	>	<i>i wēyyal</i>	‘and the boy’
-----------------	---	-----------------	---------------

u + a > w a

<i>iddu am siha daryan</i>	>	<i>iddw am siha daryan</i>	‘He goes from here to there.’
<i>hettiṭu azen d ebb</i>	>	<i>hettiṭw azen d ebb</i>	‘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).

<i>idda argaz</i>	>	<i>idd argaz</i>	‘The man went.’
<i>idda ayiḏd</i>	>	<i>idd ayiḏd</i>	‘The billy goat went.’

u + u > u

<i>zdu ugeḡuf</i>	>	<i>zdu geḡuf</i>	‘under a bush’
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4. Labialisation

Ghomara Berber has a number of labialised velar and uvular consonants. The short labialised consonants are k^w , k^w , \bar{g}^w , g^w , x^w , γ^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^wc	>	uGc	
<i>i-suyⁿ-an</i>		/i-sey ^w n-an/	‘ropes’
<i>š a lukm-et</i>		/š a lek ^w m-et/	‘You will arrive.’

cG^we	>	cGu	
<i>a-syun</i>		/asy ^w en/	‘rope’
<i>ssenkur</i>		/ssenk ^w er/	‘make stand up’

eG^w	>	uG	
<i>š a ffuy</i>		/š a ffey ^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^wc	>	$ucGc$	
<i>š a ssunkr-et</i>			‘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 ^w cV	>	G ^w cV	
a- ^w ylal			‘loam pot’
cG ^w V	>	c ^w GV	
ti- ^w zyal			‘ladles’
G ^w ce	>	G ^w ce	
a- ^w kser			‘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 ssury-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 γ-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 ffuy	/š a ffey ^w /	‘He will go out.’
š a ff ^w γ-em	/š a ffγ ^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. | <i>(e)qqur</i> | ‘dry up!’ | IMP.S |
| B. | <i>(e)qqul</i> | ‘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. | <i>qqur-awet</i> | ‘dry up!’ | IMP.PL |
| B. | <i>uqql-awet</i> | ‘return!’ | IMP.PL |

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

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

From this, we conclude that the verbs in examples A have a plain vowel /u/ (/eqqur/, /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^wel/, /ekk^wer/). 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. | <i>š a weylem</i> | ‘You (PL) will be stuck.’ |
| B. | <i>š a uqqlem</i> (*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. *aylal* ‘sea snail’
 B. *ay^wlal* ‘loam pot’

In some words, labialisation is optional:

- tay^wzalt* ~ *tayzalt*¹⁹ ‘bogue’ (fish sp.)
tizyal ~ *tiz^wyal* ‘ladles’
ney ~ *nuy* ‘kill!’
ffey ~ *ffuy* ‘go out!’
š a ryen ~ *š a r^wyen* ‘They will be lit.’
ffy-awet ~ *uffy-awet* ‘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:

- taxušt* ~ *ta^wxušt* ‘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. *tayuşmart* ‘jaw’
 B. *tiyuşmaṛan* ‘jaws’

There is nothing that allows us to decide whether these forms are phonologically /tayuşmart/, /tiyuşmaṛan/ or /tay^weşmart/, /tiy^weşmaṛan/.

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

III Morphology

1. The Berber-morphology noun

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

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

	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	
<i>a-ḥmam</i>	‘pigeon’	<i>ta-ḥmam-t</i>	‘female pigeon’
<i>a-ḡdi</i>	‘jackal’	<i>ta-ḡdi-t</i>	‘female jackal’
<i>a-berrey</i>	‘ram’	<i>ta-berreyk-t</i>	‘ewe’
<i>a-yyul</i>	‘donkey’	<i>ta-yyul-t</i>	‘female donkey’
<i>a-yaw</i>	‘grandson’	<i>ta-yaw-t</i>	‘granddaughter’

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

M:SG:EL		F:SG:EL	
<i>a-eṣkri</i>	‘soldier’	<i>ta-eṣkri-t</i>	‘female soldier’
<i>a-ḡayzun</i>	‘deaf man’	<i>ta-ḡayzun-t</i>	‘deaf woman’
<i>a-rifi</i>	‘riffian man’	<i>ta-rifi-t</i>	‘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-morphology, the Arabic-morphology or the non-affix class, for example:

M:SG(:EL)		F:SG(:EL)	
<i>a-rgaz</i>	‘man’	<i>ta-myar-t</i>	‘women’
<i>kma</i>	‘brother’	<i>uletma</i>	‘sister’
<i>a-serdun</i>	‘mule’	<i>le-bhima</i>	‘mule’ (F.)
<i>žeddi</i>	‘grandfather’	<i>le-eziza</i>	‘grandmother’
<i>le-fhel</i>	‘bull’	<i>ta-sa</i>	‘cow’
<i>a-ferruž</i>	‘rooster’	<i>ta-fulus-t</i>	‘chicken’
<i>a-qbay</i>	‘billy-goat’	<i>ta-yaṭ-t</i>	‘goat’
<i>a-tužk (~ l-yeštul)</i>	‘partridge’	<i>ta-sekkur-t</i>	‘partridge’ (F.)
<i>a-lef</i>	‘boar’	<i>ta-muḍa</i>	‘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	
<i>a-fenṭuṭ</i>	‘lip’	<i>ta-fenṭuṭ-t</i>	‘small lip’
<i>a-maras</i>	‘valley, stream’	<i>ta-maras-t</i>	‘small valley, stream’
<i>a-maleḥ</i>	‘fish’	<i>ta-maleḥ-t</i>	‘small fish’
<i>a-kfer</i>	‘turtle’	<i>ta-kfer-t</i>	‘small turtle’

F:SG:EL		M:SG:EL	
<i>ta-εeddis-t</i>	‘belly’	<i>a-εeddis</i>	‘big belly’
<i>ta-mmar-t</i>	‘beard’	<i>a-mmar</i>	‘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	
<i>a-frat</i>	‘water pool’	<i>ta-fari-t</i>	‘small water pool’
<i>a-ṭar</i>	‘leg’	<i>ta-tṭar-t</i>	‘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	
<i>ššelḥa</i>	‘Berber’	<i>ta-šelḥi-t</i>	‘Berber’
<i>lεarbiyya</i>	‘Arabic’	<i>ta-εerbi-t</i>	‘Arabic’

The following feminine nouns have an idiosyncratic meaning:

M:SG:EL		F:SG:EL	
<i>a-sekkaw</i>	‘horn’	<i>ta-sekkaw-t</i>	‘goat fight’
<i>a-syar</i>	‘stick’	<i>ta-syar-t</i>	‘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* *mteḥteḥ*
 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

<i>a-ḡal</i>	‘earth, soil’
<i>a-ywer</i>	‘moon’
<i>a-ṭil</i>	‘grapes’
<i>a-dles</i>	‘kind of plant’
<i>a-tay</i>	‘tea’

<i>a-lum</i>	‘hay’
F:SG:EL	
<i>t-a<u>ḍ</u>-tt</i>	‘wool’
<i>t-i<u>ḡ</u>el-t</i>	‘bush’
<i>ta-<u>z</u>emmi-t</i>	‘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>i-rd-en</i>	‘wheat’
<i>a-m-an</i>	‘water’
<i>i-<u>b</u>za<u>ḡ</u>-en</i>	‘beans’

F:PL:EL

<i>ti-<u>ṣ</u>u<u>ṣ</u>a<u>f</u></i>	‘saliva’
<i>ti-<u>ḷ</u>am-an</i>	‘kind of spinach’
<i>ti-<u>m</u>e<u>k</u>ra<u>t</u></i>	‘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’Annexion²⁰). The EL is the citation form. The difference of state is marked by a change in the nominal prefix. In Ghomara Berber the use of the EA is more restricted than in many other Berber languages. The EA only occurs after prepositions and after the numeral **yan** / **yat** ‘one’. In the following examples there is a change of the prefix from **a** > **u** in the masculine in example one and from **ta-** > **t-** in the feminine in example (4)²¹:

(3)	<i>i-<u>ḡ</u><u>ḡ</u> = ahen</i>	<i>g</i>	<i>u-qemum</i>	<i>nn-es</i>	(EL = <i>aqemum</i>)
	3MS-do:P = S:ANP	in	MS:EA-mouth	of-3MS	
	‘He put them in his mouth.’				

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

²¹ Both numerals have other allomorphs, which are **ya** for masculine and **yat** ~ **ya** for feminine (cf. III.12.1.2. on numerals).

- (4) *i-fk = at* *i* *ya* *t-mettu-t* (EL = *tamettut*)
 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-	<i>a-makar</i>	u-	<i>u-makar</i>	‘thief’
	a-	<i>a-dfel</i>	u- ~ i-	<i>u-dfel ~ i-dfel</i>	‘snow’
	a-	<i>a-sif</i>	wa-	<i>wa-sif</i>	‘river’
	a-	<i>a-yil</i>	wa- ~ ya-	<i>wa-yil ~ ya-yil</i>	‘hill’
	i-	<i>i-les</i>	-	<i>i-les</i>	‘tongue’
	u-	<i>u-l</i>	-	<i>u-l</i>	‘heart’
M:PL	i-	<i>i-muras</i>	i-	<i>i-muras</i>	‘valleys’
F:SG	ta-	<i>ta-fellun-t</i>	t-	<i>t-fellun-t</i>	‘frying pan’
	ta-	<i>ta-la</i>	ta-	<i>ta-la</i>	‘spring’
	ti-	<i>ti-rg-et</i>	ti-	<i>ti-rg-et</i>	‘ember’
F:PL	ti-	<i>ti-zugg-an</i>	t-	<i>t-zugg-an</i>	‘forests’
	ti-	<i>ti-rg-an</i>	ti-	<i>ti-rg-an</i>	‘embers’
	ta-	<i>ta-ziw-an</i>	t-	<i>t-ziw-an</i>	‘udders’
	ta-	<i>ta-liw-an</i>	ta-	<i>ta-liw-an</i>	‘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	
<i>a-maras</i>	<i>u-maras</i>	‘riverbed’
<i>a-myar</i>	<i>u-myar</i>	‘old man’
<i>a-makar</i>	<i>u-makar</i>	‘thieve’
<i>a-şyar</i>	<i>u-şyar</i>	‘stick’
<i>a-zru</i>	<i>u-zru</i>	‘stone’

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

<i>ya w-maras</i>	‘one valley’
<i>ya w-rheḅ</i>	‘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-ḡerṭ* ~ *a-yḡerṭ* 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	
<i>a-ylel</i>	<i>i-ylel ~ u-ylel</i>	‘stalk’
<i>a-dfel</i>	<i>i-dfel ~ u-dfel</i>	‘snow’
<i>a-zref</i>	<i>i-zref ~ u-zref</i>	‘road’
<i>a-dles</i>	<i>i-dles ~ u-dles</i>	‘kind of grass’
<i>a-ḡeṛṭ ~ a-yḡeṛṭ</i>	<i>i-ḡeṛṭ</i>	‘neck’

A group of 19 nouns in the corpus mark the EA by means of the prefix **wa-**, for example²²:

M:SG:EL	M:SG:EA	
<i>a-kaḷ</i>	<i>wa-kaḷ</i>	‘soil’
<i>a-sif</i>	<i>wa-sif</i>	‘river’
<i>a-dan</i>	<i>wa-dan</i>	‘intestines’
<i>a-ywer</i>	<i>wa-ywer</i>	‘moon’
<i>a-rsin</i>	<i>wa-rsin</i>	‘hunger’
<i>a-tḡam</i>	<i>wa-tḡam</i>	‘yesterday’
<i>a-lum</i>	<i>wa-lum</i>	‘hay’

The noun **ayeffeṭ** ‘cattle’ has the same morphology but has plural agreement²³. In addition, it has a variant which has the prefix **wi-**.

M:SG:EL	M:SG:EA	
<i>a-yeffeṭ</i>	<i>wa-yeffeṭ ~ w-iffeṭ</i> 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	
<i>a-yeḍ</i>	<i>wa-yeḍ ~ ya-yeḍ</i>	‘ash’
<i>a-dem</i>	<i>wa-dem ~ ya-dem</i>	‘blood’
<i>a-yil</i>	<i>wa-yil ~ ya-yil</i>	‘hill’
<i>a-lef</i>	<i>wa-lef ~ ya-lef</i>	‘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-lazen** ‘tomorrow’, **wa-m-an** ‘water’, **wa-mm̄ar** ‘big beard’, **wa-mm̄as**, **wa-ssa** ‘nowadays’, **wa-ssar** ‘afternoon’, **wa-ywel** ‘platform in a traditional house’, **wa-ḡuf** ‘stench’, **wa-ṭil** ‘grapes’, **wa-ššin** ‘stable in the house’.

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

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

M:SG:EL	M:SG:EA	
<i>a-ġer</i>	<i>ya-ġer</i>	‘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>i-zi</i>	<i>i-zi</i>	‘fly’
<i>i-<u>d</u>ey</i>	<i>i-<u>d</u>ey</i>	‘sheaf’
<i>i-nay</i>	<i>i-nay</i>	‘palate’
<i>i-les</i>	<i>i-les</i>	‘tongue’

One noun in the corpus starts in *u-*. This noun does not mark the EA and does not have a plural form²⁵.

M:SG:EL	M:SG:EA	
<i>u-l</i>	<i>u-l</i>	‘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)	
<i>a-maras</i>	<i>u-maras</i>	<i>i-muras</i>	‘valley’
<i>a-myar</i>	<i>u-myar</i>	<i>i-myar-en</i>	‘eldery men’
<i>a-maġar</i>	<i>u-maġar</i>	<i>i-muġar</i>	‘thieves’
<i>a-syar</i>	<i>u-syar</i>	<i>i-syar-en</i>	‘sticks’
<i>a-mm̄ar</i>	<i>wa-mm̄ar</i>	<i>i-mm̄ira</i>	‘big beards’
<i>a-lef</i>	<i>wa-lef ~ ya-lef</i>	<i>i-lf-an</i>	‘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>i-muras</i>	<i>bezzaf n i-muras</i>	‘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>ti-mḍiw-an</i>	<i>t-emḍiw-an</i>	‘lakes’
<i>ti-ḥugg-an</i>	<i>t-ḥuggan</i>	‘forests’
<i>ti-fellun-an</i>	<i>t-fellun-an</i>	‘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	
<i>ta-kna</i>	<i>t-ekna</i>	<i>ta-kniw-an</i>	<i>t-ekniw-an</i>	‘co-wife’
<i>ta-ḥa</i>	<i>t-ḥa</i>	<i>ta-ḥiw-an</i>	<i>t-ḥiw-an</i>	‘udder’
<i>ta-ylal-t</i>	<i>t-eylal-t</i>	<i>ta-ylal-an</i>	<i>t-eylal-an</i>	‘insect (sp.)’
<i>ta-rtiw-t</i>	<i>t-ertiw-t</i>	<i>ta-rtiw-an</i>	<i>t-ertiw-an</i>	‘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	
<i>ta-yil-t</i>	<i>ta-yill-an</i>	‘small mountain’
<i>ta-sif-t</i>	<i>ta-sif-tan</i>	‘small river’
<i>ta-la</i>	<i>ta-liw-an</i>	‘spring’ (water)
<i>ta-yt</i>	<i>ta-ytḥw-an</i>	‘shoulder’
<i>ta-fuk-t</i>	<i>ta-fuk-an</i>	‘sun’
<i>ti-lk-et</i>	<i>ti-lk-an</i>	‘louse’
<i>ti-rg-et</i>	<i>ti-rg-an</i>	‘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	
<i>ti-dḍa</i>	<i>ti-dḍa</i>	<i>ti-dḍiw-an</i>	<i>t-edḍiw-an</i>	‘leech’
<i>ti-tt</i>	<i>ti-tt</i>	<i>ti-ttiw-an</i>	<i>te-ttiw-an</i>	‘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 **-ṭ** (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 + **ḳ**. 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 ~ -ṭ	F:SG	- five nouns with base extension + ḳ
-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 apocoped - Some feminine nouns have one of the extensions + iw , + ṭ , + aṭ , + tw , + 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 ~ -ṭ** ‘feminine singular’

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

-t

F:SG:EL

ta-mēilaq-t

‘spoon’

ta-maras-t

‘little valley’

-ṭ

F:SG:EL

<i>ta-sla-t</i>	‘bride’
<i>ta-mettu-t</i>	‘women’

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

M:SG(:EL)

<i>ssfenġ</i>	<i>ta-sfenġe + k-t</i>	‘donut, (kind of)’
<i>šmurra</i>	<i>ta-šmurre + k-t</i>	‘cactus fruit’
<i>a-malu</i>	<i>ta-malu + k-t</i>	‘shady place’
<i>a-berrey</i>	<i>ta-berre + k-t</i>	‘sheep’ ²⁷

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

F:SG:EL

<i>ta-ġnaw-t</i>	<i>ta-ġniw + ek-t</i>	‘pumpkin’
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F:SG:EL**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

<i>ti-rg-et</i>	‘ember’
<i>ta-rqie-et</i>	‘rag’
<i>ta-mušš-et</i>	‘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 ~ -ṭ always has the fricative -ṭ after a final vowel. These are all the nouns in our corpus:

F:SG:EL

<i>ta-rba-t</i>	‘girl’
<i>ta-qaha-t</i>	‘crow’

²⁷ There is no assimilation **yt** > **kt**.

<i>ta-saεεa-t</i>	‘moment’
<i>ta-b̄ra-t</i>	‘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

<i>ta-m̄da</i>	‘lake’
<i>ta-mya</i>	‘throat’
<i>ti-d̄da</i>	‘leech’

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	
<i>a-rgaz</i>	<i>i-rgaz-en</i>	‘man’
<i>a-rrar</i>	<i>i-rrar-en</i>	‘threshing floor’
<i>a-ḡenniṭ</i>	<i>i-ḡenniṭ-en</i>	‘tail’
<i>a-fraḡ</i>	<i>i-fraḡ-en</i>	‘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	
<i>a-zref</i>	<i>i-zerf + aw-en</i> (~ <i>i-zerf-an</i>)	‘road’
<i>a-ḡerṭ</i>	<i>i-ḡerṭ + aw-en</i>	‘neck’
<i>a-rṣeṭ</i>	<i>i-rṣeṭ + aw-en</i>	‘pus’
<i>a-rḡeḡ</i>	<i>i-rḡeḡ + aw-en</i>	‘big piece of land’

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

M:SG:EL	M:PL:EL	
<i>a-messaḡi</i>	<i>i-messaḡi + y-en</i>	‘non-utilised farmland’
<i>a-yumri</i>	<i>i-yumri + y-en</i> ²⁸	‘corner’

²⁸ This plural has the free variants **i-yumri-an** ~ **i-yumra** ‘corners’.

One noun adds +w to the base when followed by -en.

M:SG:EL	M:PL:EL	
<i>a-senslu</i>	<i>i-senslu + w-en</i>	‘spine’

There is one single feminine noun which takes the masculine plural suffix -en²⁹.

Furthermore there are several nouns without affixes in the singular which form a separate group (cf. III.5.).

F:SG:EL	F:PL:EL	
<i>ta-yaṭ-t</i>	<i>ti-yaṭṭ-en</i>	‘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	
<i>a-kmez</i>	<i>i-kemz-an</i>	‘nail’
<i>a-tuḡd</i>	<i>i-tuḡd-an</i>	‘finger’
<i>a-lef</i>	<i>i-lf-an</i>	‘boar’

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

M:SG:EL	M:PL:EL	
<i>i-zi</i>	<i>i-z-an</i>	‘fly’
<i>a-zru</i>	<i>i-zr-an</i>	‘stone’
<i>a-sla</i>	<i>i-sl-an</i>	‘bride groom’
<i>a-ḡdi</i>	<i>i-ḡd-an</i>	‘jackal’
<i>a-werdu</i>	<i>i-werd-an</i>	‘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. *tyaṭṭ* PL *tiyetṭen*, Beni Snous *tyaṭṭ* - *tiyetṭen*, Ait Seghrouchen *tyaṭṭ* - *tiyetṭen*, (Kossmann, 2000:33).

F:SG:EL	F:PL:EL	
<i>ta-mazay-t</i>	<i>ti-mazay-an</i>	‘canine tooth’
<i>ta-εbbuṭ-t</i>	<i>ti-εbbuṭ-an</i>	‘navel’
<i>ta-mesεay-t</i>	<i>ti-mesεay-an</i>	‘beggar’ (F.)
<i>ta-wriš-t</i>	<i>ti-wriš-an</i>	‘sieve’

In a number of cases the plural suffix **-an** is preceded by a base extension. The base extensions are **+iw**, **+ṭ**, **+aṭ** **+ṭw** 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	
<i>ta-mezgida</i>	<i>ti-mezgid + iw-an</i>	‘mosque’
<i>ta-sarka</i>	<i>ti-sark + iw-an</i>	‘traditional shoe’
<i>ta-sisma</i>	<i>ti-sism + iw-an</i>	‘needle’
<i>ta-susna</i>	<i>ti-sisn + iw-an</i>	‘vespiary’
<i>ta-ḡursa</i>	<i>ti-ḡers + iw-an</i>	‘ploughshare’
<i>ta-y^wda</i>	<i>ti-yḏ + iw-an</i>	‘part of the plough’
<i>ta-qnissa</i>	<i>ti-qnis + iw-an</i>	‘chicken stomach’

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

F:SG:EL	F:PL:EL	
<i>ti-ṭṭ</i>	<i>ti-ṭṭ + iw-an</i>	‘eye’ ³⁰

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

F:SG:EL	F:PL:EL	
<i>ta-berrek-t</i>	<i>ti-berrek + ṭ-an</i>	‘ewe’
<i>ta-fraw-t</i>	<i>ti-fraw + ṭ-an</i>	‘leaf’
<i>ta-rba-t</i>	<i>ti-rba + ṭ-an</i>	‘girl’

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

<i>ta-sla-t</i>	<i>ti-sla + t-an</i>	‘bride’
<i>ta-mazir-t</i>	<i>ti-mazir + t-an</i>	‘land’

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

F:SG:EL	F:PL:EL	
<i>ta-nyur-t</i>	<i>ti-nuyr + at-an</i>	‘stable’
<i>ta-frux-t</i>	<i>ti-ferx + at-an</i>	‘small chicken’
<i>ta-zezzer-t</i>	<i>ti-zezzr + at-an</i>	‘pitchfork’
<i>ta-yerdem-t</i>	<i>ti-yerdm + at-an</i>	‘scorpion’
<i>ta-kber-t</i>	<i>ti-kabr + at-an</i>	‘woolen djellaba’

Some forms with the base extension **+t** 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	
<i>ta-rbib-t</i>	<i>ti-rbib-an ~ ti-rbib + t-an</i>	‘stepdaughter’
<i>ta-yil-t</i>	<i>ta-yill-an ~ ta-yil + t-an</i>	‘small hill’

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

F:SG:EL	F:PL:EL	
<i>ta-fx-et</i>	<i>ti-fex + t-an</i>	‘calf of the leg’

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

F:SG:EL	F:PL:EL	
<i>t-ay-t</i>	<i>t-ay + tw-an</i>	‘shoulder’

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

F:SG:EL	F:PL:EL	
<i>ta-zref-t</i>	<i>ti-zerf + aw + t-an</i>	‘small road’

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

extension in the plural.

F:SG:EL	F:PL:EL	
<i>ta-sfenġ + ek-t</i>	<i>ti-sfenġ + k-an</i>	‘donut’
<i>ta-šmurġ + ek-t</i>	<i>ti-šmurġ + k-an</i>	‘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	
<i>a-frat</i>	<i>i-ferġ-en</i>	‘water pool’
<i>a-yiżd</i>	<i>i-yeżd-en</i>	‘billy goat’
<i>a-ħezzum</i>	<i>i-ħezm-en</i>	‘collection of fire wood’
<i>a-geżdir</i>	<i>i-geżdr-en</i>	‘kind of lizard’

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

<i>a-ṭewwal</i>	<i>i-ṭulan</i>	‘son-in-law’
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One noun which has two plurals which are in free variation, one of which retains the geminate consonant.

<i>a-šettib</i>	<i>i-šetb-en ~ i-šettib-en</i>	‘small bush’
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The suffix **-an**

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

F:SG:EL	F:PL:EL	
<i>ta-εareġ-t</i>	<i>ti-εerġ-an</i>	‘wooden lock’

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

<i>a-mezzuġ</i>	<i>i-mezg-an (~ i-mezzaġ)</i>	‘ear’
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The suppression of a vowel or gemination is not obligatory, e.g.

F:SG:EL	F:PL:EL	
<i>ta-sekkur-t</i>	<i>ti-sukr-an</i> ³¹	‘partridge’
M:SG:EL	M:PL:EL	
<i>a-tuḡd</i>	<i>i-tuḡd-an</i>	‘finger’
<i>a-temmar</i>	<i>i-temmar-an</i> (~ <i>i-temmira</i>)	‘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	
<i>a-fus</i>	<i>i-fass-en</i>	‘hand’
<i>a-dem</i>	<i>i-damm-en</i>	‘blood’
<i>a-sif</i>	<i>i-saff-en</i>	‘river’
<i>a-yil</i>	<i>i-yall-en</i>	‘mountains’
<i>a-faf</i>	<i>i-faff-en</i> (~ <i>i-feff-en</i>)	‘nipple’

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

M:SG:EL	M:PL:EL	
<i>a-nas</i>	<i>i-nasen</i>	‘sparkle’
<i>i-nay</i>	<i>i-nayen</i>	‘palate’
<i>a-tar</i>	<i>i-tar-en</i>	‘bird’ (sp.)

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

M:SG:EL	M:PL:EL	
<i>a-zekka</i>	<i>i-zukk-an</i> ³²	‘tomb’
<i>a-muxxed</i>	<i>i-muxd-en</i> ³³	‘wild cat’
<i>a-zar</i>	<i>i-zur-an</i>	‘root, muscle’

³¹ The **u** is possibly labialisation of the **kk** and **k**. 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-zekk^w-an/.

³³ The **u** might be labialisation of the consonant **xx**, i.e. /a-mexx^wed/, /i-mex^wd-en/.

<i>a-sammer</i>	<i>i-sammir-en</i> (~ <i>i-summar</i>)	‘sunny hill’
<i>a-buša_ker</i>	<i>i-buša_kir-en</i>	‘kind of worm’

F:SG:EL	F:PL:EL	
<i>ta-yrimez-t</i>	<i>ti-yermiz-an</i>	‘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	
<i>a-<u>t</u>erraš</i>	<i>i-<u>t</u>erriša</i>	‘jar’
<i>a-<u>š</u>ennaž</i>	<i>i-<u>š</u>enniža</i>	‘basket’
<i>a-<u>t</u>ewwiš</i>	<i>i-<u>t</u>ewwiša</i>	‘rain-pipe’
<i>a-<u>ε</u>ukkaz</i>	<i>i-<u>ε</u>ukkiza</i>	‘walking stick’
<i>a-<u>t</u>ebban</i>	<i>i-<u>t</u>ebbina</i>	‘trousers’
<i>a-<u>r</u>appaš</i>	<i>i-<u>r</u>appiša</i>	‘hat’
<i>a-<u>h</u>ettaš</i>	<i>i-<u>h</u>ettiša</i>	‘slash’
<i>a-<u>g</u>ellu</i> (~ <i>a-wellu</i>)	<i>i-<u>g</u>elliwa</i> (~ <i>i-welliwa</i>)	‘plough’
<i>a-<u>r</u>ekkal</i>	<i>i-<u>r</u>ekkila</i>	‘dog’
<i>a-<u>q</u>erraš</i>	<i>i-<u>q</u>erriša</i>	‘leaf of cactus plant’
<i>a-<u>n</u>ewwal</i>	<i>i-<u>n</u>ewwila</i>	‘hut’
<i>a-<u>m</u>mar</i>	<i>i-<u>m</u>mira</i>	‘big beard’

F:SG:EL	F:PL:EL	
<i>ta-<u>m</u>uggas-t</i>	<i>ti-<u>m</u>uggiza</i>	‘stick (type)’
<i>ta-<u>r</u>ekkal-t</i>	<i>ti-<u>r</u>ekkila</i>	‘bitch’
<i>ta-<u>k</u>emmar-t</i>	<i>ti-<u>k</u>emmira</i>	‘face’
<i>ta-<u>k</u>ewwar-t</i>	<i>ti-<u>k</u>ewwira</i>	‘roll’
<i>ta-<u>r</u>appaš-t</i>	<i>ti-<u>r</u>appiša</i>	‘hat’
<i>ta-<u>ž</u>ellab-t</i>	<i>ti-<u>ž</u>elli_ba</i>	‘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	
<i>ta-zizwa</i>	<i>ti-zizwa</i>	‘bee’

prefinal i > a

M:SG:EL	M:PL:EL	
<i>a-εbbiz</i>	<i>i-εbbaz</i>	‘calf’
<i>a-šerwiṭ</i>	<i>i-šerwaṭ (~i-šerwiṭ-en)</i>	‘piece of string’
<i>a-ḡtiṭ</i>	<i>i-ḡtaṭ</i>	‘bird’
<i>a-ḡelzim</i>	<i>i-ḡelzam</i>	‘pick-axe’

final i > a

M:SG:EL	M:PL:EL	
<i>a-seḵni</i>	<i>i-seḵna</i>	‘big needle’

pre-final u > a

M:SG:EL	M:PL:EL	
<i>a-qemmum</i>	<i>i-qemmam (~ i-qemmum-en)</i>	‘mouth’
<i>a-ferkuṭ</i>	<i>i-ferkaṭ</i>	‘piglet’
<i>a-εenqaš</i>	<i>i-εenqaš</i>	‘head (angry)’
<i>a-mezzuḡ</i>	<i>i-mezzaḡ (~i-mezg-an)</i>	‘ear’
<i>a-myuz</i>	<i>i-myaz</i>	‘nit’
<i>a-keppuṭ</i>	<i>i-keppaṭ (~ le-kpapeṭ)</i>	‘coat’

final u > a

M:SG:EL	M:PL:EL
----------------	----------------

a-qenqbu *i-qenqba* ‘beak’

∅ > a

pre-final ∅ > a

M:SG:EL **M:PL:EL**
a-seynes *i-seynas* ‘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-εuqqad *i-εuqqad* ‘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-maḡar *i-muḡar* ‘thieve’

a...u > u...a

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

a...∅ > u...a

M:SG:EL **M:PL:EL**
a-xaḃeš *i-xuḃaš* ‘jug’
a-ḥayek *i-ḥuyak* ‘woolen cloth’
a-sammer *i-summar (~ i-sammir-en)* ‘sunny side of a hill’

F:SG:EL **F:PL:EL**
ta-xaḃem-t *ti-xuḃam* ‘ring’

<i>ta-šašek-t</i>	<i>ti-šušak</i>	‘hat’
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F:SG:EL

F:PL:EL

ta-saru-t

ti-sura

‘key’

ta-ḡayzu-t

ti-ḡuyaz (~ti-ḡayzu + t-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):

∅...u > c^w...a

M:SG:EL

M:PL:EL

a-ḡlul

i-ḡ^wlal

‘sea horn’

a-yyul

i-y^wyal

‘donkey’

a-qšuš

i-q^wšaš

‘snail shell’

a-zyul

i-z^wyal

‘ladle’

∅...i > c^w...a

F:SG:EL

F:PL:EL

ta-qbil-t

ti-q^wbal

‘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**.

∅..u > u...a

M:SG:EL

M:PL:EL

a-xentut

i-xuntat

‘nasal mucus’

a-xennus

i-xunnas

‘piglet’

a-ḥerruš

i-ḥurraš

‘chestnut tree’

a-ḥeččun

i-ḥuččan

‘vagina’

1.5. Different masculine and feminine plurals

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

M:SG:EL

M:PL:EL

a-yezdiz

i-yezdas

‘rib’

F:SG:EL <i>ta-yezdis-t</i>	F:PL:EL <i>ti-yezdis-an</i>	‘rib’
M:SG:EL <i>a-keskes ~ a-keskas</i>	M:PL:EL <i>i-kesksa ~ i-keskas</i>	‘couscous colander’
F:SG:EL <i>ta-keskas-t</i>	F:PL:EL <i>ti-kskis-an</i>	‘couscous colander’
M:SG:EL <i>a-maḡal</i>	M:PL:EL <i>i-muḡal (~i-maḡal-en)</i>	‘plants for goats’
F:SG:EL <i>ta-maḡal-t</i>	F:PL:EL <i>ti-maḡal-an</i>	‘plants for goats’

1.6. Irregular plural formations

final $\emptyset > a$

F:SG:EL <i>ta-ggur-t</i>	F:PL:EL <i>ti-ggura (~ti-ḡura)</i>	‘door’
<i>ta-ḥebb-et</i>	<i>ti-ḥebba</i>	‘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 <i>a-yḍa</i>	M:PL:EL <i>i-ṭ-an</i>	‘dog’
<i>a-zeybiw</i>	<i>i-zeybun-en (~i-zeybiw-en)</i>	‘hair’

The following noun has an irregular apophonic plural:

M:SG:EL <i>a-qellawes</i>	M:PL:EL <i>i-qelliwas</i>	‘water jug’
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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	
<i>ta-sa</i>	<i>ti-sekt-an</i>	‘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	
<i>ta-selluf-t</i>	<i>ti-selfa</i>	‘tick’

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

F:SG:EL	F:PL:EL	
<i>ta-keskas-t</i>	<i>ti-keskis-an</i>	‘couscous colander’
<i>ta-sammer-t</i>	<i>ti-sammir-an</i>	‘small sunny hill’
<i>ta-siddel-t</i>	<i>ti-siddil-an</i>	‘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	
<i>ta-ḡiḡ-et</i>	<i>i-ḡiḡ-en</i>	‘tree’
<i>ta-yyul-t</i>	<i>i-yʷyal</i>	‘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’ + **aḡal** ‘earth’, the second compound is a combination of **aḡižd** ‘billy goat’ and **amyan** ‘small billy goat’.

M:SG:EL	M:PL:EL	
<i>yemmawaḡal</i>	<i>i-mmawaḡal-en</i>	‘type of worm’
<i>a-ḡiždamyān</i>	<i>i-yeždenimyan-en</i>	‘penisless billy goat’

2. The Arabic-morphology noun

Ghomara Berber has borrowed a 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) *uletma-s i-g̃g̃ = at* *g* *l-kuša*
sister-3S 3MS-do:P = 3FS:DO in ART-fire.place
'He put his sister in the fireplace.'

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

- (3) *yr-i* *kuṛ-a* *muqqr-et*
at-1S ball-F big-FS
'I have a big ball.'

- (4) *te-qq̃l-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

<i>l-yeḃṛ-a</i>	‘dust’
<i>le-ksib-a</i>	‘livestock’
<i>ṣ-ṣemṭ-a</i>	‘leather belt’
<i>l-kur-a</i>	‘ball’
<i>l-keḷm-a</i>	‘word’

M:SG

<i>l-kaf</i>	‘cave’
<i>d-dker</i>	‘male’
<i>l-menqer</i>	‘chisel, sting’
<i>l-mus</i>	‘retractable knife’
<i>l-ḡim</i>	‘pocket’

There exist a couple of feminine nouns that do not take the feminine suffix **-a** but have feminine agreement³⁵, for example:

F:SG

<i>l-baṭil</i>	‘boat’
<i>l-lhem</i>	‘meat’
<i>l-kif</i>	‘cannabis’
<i>t-ṭunubir</i>	‘car’

There are five feminine nouns which have a suffix **-eṭ** instead of **-a**. In many Berber languages this suffix is much more frequent in borrowed nouns (cf. Kossmann, 2013: 210)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, **nneqqabet** ‘woodpecker’ is only used by old people. Young people use **nneqqaba**.

F:SG

<i>l-lefε-et</i>	‘snake’
<i>l-xarb-et</i>	‘ruin’
<i>n-neqqab-et</i> (~ <i>n-neqqaba</i>)	‘woodpecker’
<i>l-yarş-et</i>	‘vegetable garden’
<i>r-rumay-et</i>	‘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**, **-at**, **-wat** 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 **-wat**.

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 + dyaal + (pro)noun is dominant. Thus, the aforementioned phrase would rather be: **lemṛa dyaal muḥammad** ‘Mohammed’s wife’.

Arabic noun. Borrowed nouns from European languages (Spanish and French), except for the Spanish borrowings mentioned before, follow the Arabic patterns. If a noun has multiple plurals the variant is given between brackets. Gender is not distinguished in the plural.

2.3.1. The dual

The expression of the dual is limited to a small set of nouns. All these nouns refer to time and number concepts (cf. III.12. on numerals). The dual suffix is **-ayen**. Note that **nhar** 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	
<i>l-εam</i>	‘one year’	<i>l-εam-ayen</i>	‘two years’
<i>š-šher</i>	‘one month’	<i>š-šehṛ-ayen</i>	‘two months’
<i>n-nhar</i>	‘one day’	<i>l-yum-ayen</i>	‘two days’
<i>le-qšem</i>	‘ten minutes’	<i>le-qšem-ayen</i>	‘ten minutes’
<i>t-tutulṭ</i>	‘twenty minutes’	<i>t-tutulṭ-ayen</i>	‘fourty minutes’
<i>le-mya</i>	‘hundred’	<i>le-myat-ayen</i>	‘two hundred’
<i>l-alef</i>	‘thousand’	<i>l-alf-ayen</i>	‘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:

<i>l-berzax</i>	‘honeycomb’
<i>l-weḥš</i>	‘animals’
<i>l-ğaw</i>	‘weather’
<i>l-ḥṣad</i>	‘harvest’
<i>r-ṛawz</i>	‘rice’
<i>l-yerş</i>	‘plant’
<i>l-başar</i>	‘people’
<i>le-gg^waz</i>	‘food’
<i>r-ṛşas</i>	‘bullets’
<i>ṭ-ṭḥin</i>	‘flour’
<i>z-zit</i>	‘oil’
<i>š-šmal</i>	‘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:

<i>le-mnaḍer</i>	‘spectacles’
<i>n-ndāḍer</i>	‘glasses’
<i>d-drāḍel</i>	‘clothes’
<i>le-krafez</i>	‘celery’
<i>l-lææḍ</i>	‘slobber’
<i>l-ḥayawan</i>	‘animals’
<i>l-ḡḍam</i>	‘lepra’
<i>le-mṭæ</i>	‘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

-aṭ

-s ~ -is

-waṭ

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 **-aṭ** 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 **-waṭ** is suffixed to a limited set of kinship nouns.

-in³⁷ ~ -a

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

M:SG	F:SG	PL	
<i>s-seḥḥar</i>	<i>s-seḥḥar-a</i>	<i>s-seḥḥar-in</i>	‘wizard’
<i>l-xewwaf</i>	<i>l-xewwaf-a</i>	<i>l-xewwaf-in</i>	‘coward’

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

<i>l-keddab</i>	<i>l-keddab-a</i>	<i>l-keddab-in</i>	‘liar’
<i>l-yeddar</i>	<i>l-yeddar-a</i>	<i>l-yeddar-in</i>	‘betraye

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

M:SG	F:SG	PL	
<i>l-mežmue</i>	<i>l-mežmue-a</i>	<i>l-mežmue-in</i>	‘crowd’
<i>l-meard</i>	<i>l-meard-a</i>	<i>l-meard-in</i>	‘invitee’
<i>l-mellem</i>	<i>l-mellem-a</i>	<i>l-mellem-in</i>	‘master’
<i>l-meyyet</i>	<i>l-meyyet-a</i>	<i>l-meyyet-in</i>	‘deceased’
<i>l-mueallim</i>	<i>l-mueallim-a</i>	<i>l-mueallim-in</i>	‘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	
<i>š-šfer</i>	-	<i>ššefr-in</i> (~ <i>lešfar</i>)	‘eyelid’
<i>l-ummi</i>	<i>l-ummiyy-a</i>	<i>l-ummiyy-in</i>	‘ignorant’
<i>l-walid</i>	<i>l-walid-a</i>	<i>l-walid-in</i>	‘parent’
<i>l-purzwazi</i>	<i>l-purzwaziyy-a</i>	<i>l-purzwaziyy-in</i>	‘rich person’ (< Fr.)
<i>l-pubri</i>	<i>l-pubriyy-a</i>	<i>l-pubriyy-in</i>	‘poor person’ (< Sp.)
<i>š-štayri</i>	<i>š-štayriyy-a</i>	<i>š-štayriyy-in</i>	‘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	
<i>l-muddaēi</i>	<i>l-muddaēy-a</i>	<i>l-mudaēy-in</i>	‘plaintiff’
<i>z-zani</i>	<i>z-zaniyy-a</i>	<i>z-zan-in</i>	‘adultery committer’

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

M:SG	F:SG	PL	
<i>l-fellaḥ</i>	<i>l-fellaḥ-a</i>	<i>l-fellaḥ-a</i>	‘farmer’
<i>š-šeffar</i>	<i>š-šeffar-a</i>	<i>š-šeffar-a</i>	‘thief’
<i>š-šekkam</i>	<i>š-šekkam-a</i>	<i>š-šekkam-a</i>	‘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	
<i>l-yeššaš</i>	<i>l-yeššaš-a</i>	<i>l-yeššaš-in ~ l-yeššaš-a</i>	‘traitor’

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

M:SG	F:SG	PL	
<i>d-dawsas</i>	<i>d-dawsas-a</i>	<i>d-dawsas-a</i>	‘squeaker’
<i>l-bergag</i>	<i>l-bergag-a</i>	<i>l-bergag-a</i>	‘traitor’

2.3.4.1. The plural suffix **-aṭ**

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

SG	PL		
<i>r-rwid-a</i>	<i>r-rwid-aṭ</i>	‘tire, wheel’	(< Sp.)
<i>n-nsib-a</i>	<i>n-nsib-aṭ</i>	‘mother-in-law of a man’	
<i>s-sbiy-a</i>	<i>s-sbiy-aṭ</i>	‘paint’	
<i>l-batri</i>	<i>l-batriyy-aṭ</i>	‘battery’	(< Fr.)
<i>l-prikanti</i>	<i>l-prikantiyy-aṭ</i>	‘nurse’	(< Sp.)
<i>š-šeer-a</i>	<i>š-šeer-aṭ</i>	‘fishing line’	
<i>l-kamyuna</i>	<i>l-kamyun-aṭ</i> (~ <i>l-kamyun-is</i>)	‘big truck’	(< Sp.)
<i>l-kridi</i>	<i>l-kridiyy-aṭ</i>	‘debt’	(< Fr.)
<i>l-burğ-a</i>	<i>l-burğ-aṭ</i>	‘fortress’	
<i>l-laṛḍ-a</i>	<i>l-laṛḍ-aṭ</i>	‘school of fish at night’	(< Sp.)
<i>s-sint-a</i>	<i>s-sint-aṭ</i>	‘cassette’	(< Sp.)

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

<i>l-mdabz-a</i>	<i>l-mdabz-at</i>	‘fight’
<i>l-mdafn-a</i>	<i>l-mdafn-at</i>	‘fight’

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

M:SG	PL		
<i>l-ltam</i>	<i>l-ltam-at</i>	‘veil’	
<i>s-sɔ̃dæ</i>	<i>s-sɔ̃dæ-at</i>	‘sound, noise’	
<i>s-sb̃ab</i>	<i>s-sb̃ab-at</i>	‘amulet’	
<i>t-tran</i>	<i>t-tran-at</i>	‘train’	(< Fr.)
<i>s-sb̃itar</i>	<i>s-sb̃itar-at</i>	‘hospital’	(< Sp.)
<i>l-eilwan</i>	<i>l-eilwan-at</i>	‘address’	
<i>l-intixab</i>	<i>l-intixab-at</i>	‘election’	
<i>l-meškliṭ</i>	<i>l-meškliṭ-at</i>	‘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		
<i>l-εaḍu</i>	<i>l-εaḍuww-at</i> (~ <i>l-εuḍy-an</i>)	‘enemy’	
<i>l-meṛṛaxu</i>	<i>l-meṛṛaxuw-at</i>	‘shark’	(< Sp.)
<i>l-ganču</i>	<i>l-gančuww-at</i> (~ <i>l-ganču-s</i>)	‘kind of rake’	(< Sp.)
<i>s-stilu</i>	<i>s-stiluw-at</i> (~ <i>s-stilu-s</i>)	‘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	
<i>l-isem</i>	<i>l-ismuwaṭ</i>	‘name’

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

SG	PL		
<i>t-ṭrayenbu</i>	<i>t-ṭrayenbu-ṭ</i>	‘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		
<i>l-kuntru</i>	<i>l-kuntru-s</i>	‘crossroads’	
<i>l-byixu</i>	<i>l-byixu-s</i>	‘old man’	
<i>r-rubyu</i>	<i>r-rubyu-s</i>	‘blond’	
<i>s-subri</i>	<i>s-subri-s</i>	‘envelope’	
<i>l-funḍu</i>	<i>l-funḍu-s</i>	‘bottom’	
<i>l-kurču</i>	<i>l-kurču-s</i>	‘mattress’	
<i>l-pirmi</i>	<i>l-pirmi-s</i>	‘driver’s licence’	(< Fr.)
<i>l-grifu</i>	<i>l-grifu-s</i>	‘tap’	
<i>l-kwadru</i>	<i>l-kwadru-s</i>	‘doorframe’	
<i>d-difidi</i>	<i>d-difidi-s</i>	‘DVD’	
<i>l-laḅaḅu</i>	<i>l-laḅaḅu-s</i>	‘sink’	
<i>n-nigru</i>	<i>n-nigru-s</i>	‘brown dolphin’	
<i>t-turṇeyyu</i>	<i>t-turṇeyyu-s</i>	‘screw’	
<i>l-ḡurni</i>	<i>l-ḡurni-s</i>	‘wage for one day’	(< Fr.)
<i>r-rigalu</i>	<i>r-rigalu-s</i>	‘present’	
<i>ṣ-ṣalaba</i>	<i>ṣ-ṣalabari-s (~ṣalabat)</i>	‘fyke’	

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

M:SG	PL	
<i>l-luring</i>	<i>l-luring-is</i>	‘beacon’
<i>l-murṭal</i>	<i>l-murṭal-is</i>	‘flip (in the water)’
<i>s-stenyadur</i>	<i>s-stenyadur-is</i>	‘screwdriver’
<i>r-ṛadyun</i>	<i>r-ṛadyun-is</i>	‘radio’

There is one noun which only occurs in the plural:

M:SG	PL	
--	<i>l-want-is</i>	‘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		
<i>l-ganču</i>	<i>l-gančuww-aṭ</i>	‘rake’	(< Sp.)
<i>l-garaž</i>	<i>l-garaž-aṭ</i>	‘garage’	(< Fr.)

The internal plural

F:SG	PL		
<i>l-falḍa</i>	<i>l-flaḍi</i>	‘skirt’	(< Sp.)
<i>l-plaša</i>	<i>l-playeš</i>	‘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
----	----

<i>d-dexxan</i>	<i>d-dxaxen</i>	‘smoke’
<i>l-perrim</i>	<i>le-prarem</i>	‘drill’
<i>l-qendil</i>	<i>le-qnadil</i>	‘oil lamp’
<i>z-zeəbul</i>	<i>z-zeəbel</i>	‘kind of bag’
<i>s-sellum</i>	<i>s-slalem</i>	‘ladder’
<i>t-teelem</i>	<i>t-təalem</i>	‘fox’
<i>l-ferran</i>	<i>le-fraren</i>	‘oven’
<i>ş-şebbat</i>	<i>ş-şabat</i>	‘shoe’
<i>l-yerraf</i>	<i>le-yraraf</i>	‘cup’
<i>d-demmal-a</i>	<i>d-dmamel</i>	‘hump’
<i>z-zermut-a</i>	<i>z-zramet</i>	‘lizard’
<i>l-bezzun-a</i>	<i>l-bzazen</i>	‘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	
<i>l-medfee</i>	<i>le-mdafee</i>	‘canon’
<i>l-menşer</i>	<i>le-mnaşer</i>	‘saw’
<i>l-mehraz</i>	<i>le-mharez</i>	‘mortar’
<i>l-menqar</i>	<i>le-mnaqar</i>	‘chisel, sting’
<i>l-merfee</i>	<i>le-mrafee</i>	‘shelf’
<i>l-mexxaş</i>	<i>le-mxaxeş</i>	‘poking stick’
<i>l-meqqaş</i>	<i>le-mqaqaş</i>	‘scissors’
<i>l-muqdaf</i>	<i>le-mqadaf</i>	‘paddle’

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

M:SG	PL		
<i>l-ğenn</i>	<i>le-ğnawen</i>	‘spirit’	
<i>t-tekxi</i>	<i>t-tkases</i>	‘taxi’	(< Sp. / Fr.)

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

M:SG	PL		
<i>l-puklan</i>	<i>le-pwakel</i>	‘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	
<i>z-zamel</i>	<i>z-zwamel</i>	‘homosexual’
<i>s-sabeē</i>	<i>s-swabeē</i>	‘birth ceremony’
<i>š-šitan</i>	<i>š-šwaṭen</i>	‘satan’
<i>n-nimīru</i>	<i>n-nwamer</i>	‘number’
<i>l-muṭur</i>	<i>le-mwaṭer</i>	‘motorcycle, engine’
<i>l-kayit</i>	<i>le-kwayet</i>	‘papers’
<i>l-baṭil</i>	<i>le-bwaṭel</i>	‘boat’
<i>l-maḱina</i>	<i>le-mwaḱen</i>	‘machine’
<i>l-ḥanut</i>	<i>le-ḥwanet</i>	‘shop, store’
<i>t-ṭaḥun-a</i>	<i>t-ṭwaḥen</i>	‘electric mill’
<i>čekkiṭ-a</i>	<i>čwaket</i>	‘coat’
<i>t-ṭayfur</i>	<i>t-ṭwafer</i>	‘table’
<i>l-qayṭun</i>	<i>le-qwaṭen</i>	‘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	
<i>l-maḥal</i>	<i>le-mwaḥel</i>	‘room’
<i>l-muṭac</i>	<i>le-mwaṭec</i>	‘place’

The following noun of this type only has a plural:

SG	PL	
--	<i>le-xwašem</i>	‘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	
<i>le-bzim</i>	<i>le-bzayem</i>	‘buckle’
<i>s-srir</i>	<i>s-srayer</i>	‘hand-made bed’
<i>ṣ-ṣrīr</i>	<i>ṣ-ṣrayer</i>	‘secret’
<i>le-bhim-a</i>	<i>le-bhayem</i>	‘female mule’
<i>le-qmiḡ-a</i>	<i>le-qmayeḡ</i>	‘shirt’
<i>l-xidm-a</i>	<i>le-xdayem</i>	‘work’
<i>r-rḡdum-a</i>	<i>r-rḡdayem</i>	‘bottle’
<i>l-plaṣ-a</i>	<i>le-playeṣ</i>	‘seat’
<i>š-šeff-a</i>	<i>š-šfayef</i>	‘lip’

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

F:SG	PL	
<i>l-ḥaḡ-a</i>	<i>le-ḥwayeḡ</i>	‘thing’

ccvc / ccvvc 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	
<i>n-nsib</i>	<i>n-nsab</i>	‘father-in-law (of a man)’
<i>s-suq</i>	<i>le-swaq</i>	‘market’
<i>l-εuṣṣ</i>	<i>le-εwaṣ</i>	‘nest’
<i>l-muss</i>	<i>le-mwas</i>	‘retractable knife’
<i>l-but-a</i>	<i>le-bwaṭ</i>	‘butagas cylinder’
<i>l-ḥukk</i>	<i>le-ḥkaḡ</i>	‘ankle, wrist’
<i>l-ḡim</i>	<i>le-ḡyam</i>	‘pocket’

(< Fr./Sp.)

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.

<i>l-qeḥb-a</i>	<i>le-qḥab</i>	‘prostitute’
<i>s-sekk-a</i>	<i>s-skak</i>	‘coin’
<i>l-ḡumb</i>	<i>le-ḡnab</i>	‘side’
<i>l-burk-a</i>	<i>le-brak</i>	‘duck, pond’
<i>n-naq-a</i>	<i>n-nyaq</i>	‘female camel’

ccuc

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

SG	PL	
<i>l-hemm</i>	<i>le-hmum</i>	‘anxiety’
<i>r-ṛas</i>	<i>r-ṛyus</i>	‘cape’
<i>l-bit</i>	<i>le-byuṭ</i>	‘room’
<i>z-zerb</i>	<i>z-zrub</i>	‘fence’
<i>ḍ-dayf</i>	<i>ḍ-dyuf</i>	‘guest’
<i>n-neḡm-a</i>	<i>n-nḡum</i>	‘star’
<i>l-eṭṭ-a</i>	<i>le-eṭuṭ</i>	‘bite’
<i>l-gayz-a</i>	<i>le-gyuz</i>	‘stick, wood, pole’
<i>l-qird</i>	<i>le-qruḍ</i>	‘monkey’
<i>l-mḍin-a</i>	<i>le-mḍun</i>	‘town’
<i>l-leḡ-eṭ</i>	<i>l-lḡe</i>	‘snake’
<i>š-šahed</i>	<i>š-šhuḍ</i> (~ <i>š-šuhud</i> ⁴⁰)	‘witness’

ccc

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

F:SG	PL	
<i>l-xarḥ-eṭ</i>	<i>le-xreḥ</i>	‘ruin’
<i>l-yarṣ-eṭ</i>	<i>le-yreṣ</i> (~ <i>le-yruṣ</i>)	‘vegetable garden’
<i>r-ṛezz-a</i>	<i>r-ṛzez</i>	‘turban’
<i>l-qett-a</i>	<i>le-qtet</i>	‘bunch of cane’
<i>š-ṣab-a</i>	<i>š-ṣyeb</i>	‘harvest’
<i>l-miss-a</i>	<i>le-mses</i>	‘table’
<i>l-fuṭ-a</i>	<i>le-fweṭ</i>	‘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	
<i>l-kebd-a</i>	<i>le-kḅada</i>	‘liver’
<i>l-ḡebli</i>	<i>le-ḡbala</i>	‘man from the Jbala’
<i>l-ezri</i>	<i>le-ezara</i>	‘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-ṛwahi**. In the case of **ḍ-ḍaw** > **ḍ-ḍwawi** the vowel **w** is inserted, as in the case of **l-yabeyy-a** > **le-ywabi**. Except for the first two examples below, all nouns have the feminine singular suffix **-a**.

SG	PL	
<i>l-lil</i>	<i>l-lyali</i>	‘night’
<i>ḍ-ḍaw</i>	<i>ḍ-ḍwawi</i>	‘light’
<i>ṛ-ṛiḥ-eyya</i>	<i>ṛ-ṛwahi</i>	‘traditional women’s shoe’
<i>t-terb-eyya</i>	<i>t-trabi</i>	‘baby’
<i>t-təyt-eyya</i>	<i>t-tyaṭi</i>	‘lid’
<i>l-yab-eyya</i>	<i>le-ywabi</i>	‘seagull’
<i>l-bely-a</i>	<i>le-blayi</i>	‘traditional shoe’
<i>l-qehw-a</i>	<i>le-qhawi</i>	‘coffee’
<i>l-falḍ-a</i>	<i>le-flaḍi</i>	‘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	
<i>d-dell</i>	<i>d-dlula</i>	‘shadow’
<i>d-dker</i>	<i>d-dkura</i>	‘male’
<i>t-terf</i>	<i>t-trufa</i>	‘end, side, edge, piece’
<i>le-ktab</i>	<i>le-ktuba</i>	‘book’
<i>s-sayf</i>	<i>s-syufa</i>	‘sword’
<i>z-zif</i>	<i>z-zyufa</i>	‘handkerchief’
<i>r-rbiε</i>	<i>r-rbuεa</i>	‘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	
<i>l-kar</i>	<i>l-kir-an</i>	‘intercity bus’
<i>l-kaf</i>	<i>l-kif-an</i>	‘cave’
<i>l-baz</i>	<i>l-biz-an</i>	‘hawk’
<i>z-zaž</i>	<i>z-ziž-an</i>	‘glass’
<i>l-qaε</i>	<i>l-qie-an</i>	‘bottom’
<i>t-ṭaṣ-a</i>	<i>t-ṭiṣ-an</i>	‘cup’
<i>l-leṭṭ-a</i>	<i>l-liṭ-an</i>	‘bottle’

(< Sp.)

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	
<i>š-šear</i>	<i>š-šuer-an</i>	‘hair’
<i>d-dheb</i>	<i>d-duhb-an</i>	‘gold’
<i>t-tris</i>	<i>t-turs-an</i>	‘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	
<i>l-εadu</i>	<i>l-εudy-an</i>	‘enemies’
<i>r-ṛaēi</i>	<i>r-ṛuēy-an</i>	‘herdsman’
<i>s-saēi</i>	<i>s-suēy-an</i>	‘beggar’

cicc-an

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

M:SG	PL	
<i>l-ḥažeb</i>	<i>l-ḥižb-an</i>	‘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	
<i>r-ṛḥa</i>	<i>le-rḥi</i>	‘stone mill’

cuCac

M:SG	PL	
<i>t-tažṛ</i>	<i>t-tuğar</i>	‘rich man’
<i>l-kari</i>	<i>l-kurray</i>	‘renter’

cucac

M:SG	PL	
<i>r-ṛayeş</i>	<i>r-ṛuyaş</i>	‘chieftain’

cuCa

M:SG	PL	
<i>t-ṭib</i>	<i>t-ṭibba</i>	‘doctor’

cucca

M:SG	PL	
<i>t-ṭaleb</i>	<i>t-ṭulba</i>	‘older pupil’

cuca

M:SG	PL	
<i>le-fqi</i>	<i>l-fuqa</i>	‘imam’

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

M:SG	PL	
<i>s-sqef</i>	<i>s-squf-at</i>	‘roof’
<i>s-sbeḥ</i>	<i>s-sbuḥ-at</i>	‘morning’

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

M:SG	PL	
<i>l-garṛu</i>	<i>le-grarū-s ~ l-garṛu-s</i>	‘cigarette’
<i>l-barḳu</i>	<i>le-brakū-s</i>	‘big ship’
<i>ṣ-ṣalṭu</i>	<i>ṣ-ṣlatū-s</i>	‘dive’

ccacc

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

<i>l-qneyy-a</i>	<i>l-qnayen</i>	‘rabbit’
<i>l-pakeyy-a</i>	<i>le-pwaket</i>	‘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	
<i>l-lawn</i>	<i>l-ʔalwan</i>	‘colour’
<i>d-din</i>	<i>l-ʔadyan</i>	‘religion’ ⁴¹
<i>l-film</i>	<i>l-ʔaflam</i>	‘film’
<i>r-raqem</i>	<i>l-ʔarqam</i>	‘number’
<i>l-wext</i>	<i>l-ʔawqat</i>	‘time’
<i>l-merṭ</i>	<i>l-ʔamṛaḏ</i>	‘sickness’

cucaca

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

M:SG	PL	
<i>š-šaer</i>	<i>š-šueara</i>	‘poet’
<i>l-ealem</i>	<i>l-eulama</i>	‘Islamic scholar’

cacaca

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

M:SG	PL	
<i>l-wazir</i>	<i>l-wazara</i>	‘minister’
<i>ṭ-ṭaleb</i>	<i>ṭ-ṭalaba</i>	‘pupil in islamic education’

caca?ic

The singular pattern is **cacica**.

⁴¹ cf. **din** - **dyun** ‘debt’.

M:SG	PL	
<i>ḍ-ḍarība</i>	<i>ḍ-ḍaraʔib</i> (~ <i>ḍ-ḍarībat</i>)	‘tax’
<i>l-ḡarima</i>	<i>l-ḡaraʔim</i>	‘crime’

cucuc ~ cucac

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

M:SG	PL	
<i>l-ḥedd</i>	<i>l-ḥudud</i>	‘border’
<i>l-ḥeqq</i>	<i>l-ḥuquq</i>	‘right’
<i>l-ḥarḇ</i>	<i>l-ḥurūḇ</i>	‘war’
<i>l-ḥaḡ</i>	<i>l-ḥuḡaḡ</i>	‘hadji, pilgrim’

cacacic

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

M:SG	PL	
<i>z-zinzal</i>	<i>z-zanazil</i>	‘earthquake’
<i>l-meḥkama</i>	<i>l-maḥakim</i>	‘court’

ʔaccica

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

M:SG	PL	
<i>t-taman</i>	<i>l-ʔatmina</i>	‘price’

cuCac

M:SG	PL	
<i>l-qaḍi</i>	<i>l-quḍḍat</i>	‘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, ceceec, ceccac, ceCac, ciccac, ceccca, ceccica, cececca, cCaca, ceccuca, cCuca, cCica

m- derived nouns	mccc, mccaca, mccac, mCac, muccac, mccaca, mcccuc, muccic, mcicca
cwacec	cacec, cicac, caccuc, cici <u>c</u> , 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/e <u>t</u> , 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	
?accac	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-æddis-t** ‘belly’ is neutral regarding size, whereas **a-æddis** ‘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	
<i>le-ɛmel</i>	‘fishnet’	<i>le-ɛmeyyel</i>	‘small fishnet’
<i>l-meqqas</i>	scissors	<i>le-mqiqeš</i>	‘small scissors’

F:SG		F:SG:DIM	
<i>l-uṭa</i>	‘field’	<i>l-wiṭa</i>	‘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	
<i>a-wraw</i>	‘two fistfuls’	<i>ta-wraw-t</i>	‘two small fistfuls’
<i>a-sif</i>	‘river’	<i>ta-sif-t</i>	‘small river’
<i>a-messiw</i>	‘old basket’	<i>ta-messiw-t</i>	‘small old basket’
<i>a-safu</i>	‘torch’	<i>ta-safu-t</i>	‘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	
<i>a-beddik</i>	‘rooster’	<i>a-bdidek</i>	‘small rooster’
<i>a-yižd</i>	‘billy-goat’	<i>a-yžeyyež</i>	‘small billy-goat’
<i>ta-myan-t</i>	‘she-kid’	<i>ta-mweyyen-t</i>	‘small she-kid’

<i>ta-yaṭ-t</i>	‘goat’	<i>ta-yṭiw-et</i>	‘small goat’
<i>ta-myār-t</i>	‘woman’	<i>ta-myeyyer-t</i>	‘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	
<i>a-frux</i>	<i>a-freyyex</i>	‘boy’	<i>ta-frux-t</i>	<i>ta-freyyex-t</i>	‘girl’
<i>a-rekkal</i>	<i>a-rkikel</i>	‘dog’	<i>ta-rekkal-t</i>	<i>ta-rkikel-t</i>	‘bitch’
<i>a-εbbiz</i>	<i>a-εbibeز</i>	‘bull’	<i>ta-εbbiz-t</i>	<i>ta-εbibeز-t</i>	‘cow’
<i>a-ḥezzūt</i>	<i>a-ḥzizet</i>	‘naked one’	<i>ta-ḥezzūt</i>	<i>ta-ḥzizet</i>	‘naked one’
<i>a-yyul</i>	<i>a-yweyyel</i>	‘donkey’	<i>ta-yyul-t</i>	<i>ta-yweyyel-t</i>	‘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	
<i>a-ferkuṭ</i>	‘farrow’	<i>ta-ferkuṭ-t</i>	‘piglet’
<i>a-meslem</i>	‘muslim’	<i>ta-meslem-t</i>	‘muslima’
<i>a-yaw</i>	‘grandson’	<i>ta-yaw-t</i>	‘granddaughter’
<i>a-berrey</i>	‘ram’	<i>ta-berrek-t</i>	‘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	
<i>a-fus</i>	‘hand’	<i>a-fweyyes</i>	‘small hand’
<i>a-ṭar</i>	‘leg’	<i>ta-ṭtar-t</i>	‘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	
<i>a-geždir</i>	‘lizard’ (sp.)	<i>a-gžider</i>	‘small lizard’ (sp.)
<i>a-keppuṭ</i>	‘coat’	<i>a-kpipet</i>	‘small coat’
<i>a-mģer</i>	‘sickle’	<i>a-mģeyyer</i>	‘small sickle’
<i>a-fus</i>	‘hand’	<i>a-fweyyes</i>	‘small hand’
<i>a-ğtiṭ</i>	‘bird’	<i>a-ğteyyet</i>	‘small bird’

F:SG		F:SG:DIM	
<i>ta-fellun-t</i>	‘frying pan’	<i>ta-flilen-t</i>	‘small frying pan’
<i>ta-wleḱ-t</i>	‘gunny sack’	<i>ta-wleyyek-t</i>	‘small gunny sack’
<i>ta-xaḱem-t</i>	‘ring’	<i>ta-xwiḱem-t</i>	‘small ring’
<i>ta-bṣat-t</i>	‘mat’	<i>ta-bṣeyyet-t</i>	‘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	
<i>a-ğussar</i>	‘hill’	<i>ta-ğussar-t</i>	<i>ta-ğ^wsiser-t</i>	‘small hill’
<i>a-sammer</i>	‘sunny hillside’	<i>ta-sammer-t</i>	<i>ta-smimer-t</i>	‘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-xšeb**, **ta-xšeb-t** and **ta-xšeyyeb-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	
<i>a-zref</i>	‘road’	<i>ta-zref-t</i>	‘path’	<i>ta-zreyyef-t</i>	‘small path’
<i>a-xšeb</i>	‘boar trap’	<i>ta-xšeb-t</i>	‘bird trap’	<i>ta-xšeyyeb-t</i>	‘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	
<i>a-salles</i>	‘darkness’	<i>ta-salles-t</i>	‘slight darkness’	<i>ta-sliwes-t</i>	‘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	
<i>a-maleḥ</i>	<i>a-mwileḥ</i>	<i>ta-maleḥ-t</i>	<i>ta-mwileḥ-t</i>	‘fish’
<i>a-newwal</i>	<i>a-nwiwel</i>	<i>ta-newwal-t</i>	<i>ta-nwiwel-t</i>	‘hut’
<i>a-qemmum</i>	<i>a-qmiqem</i>	<i>ta-qemmum-t</i>	<i>ta-qmiqem-t</i>	‘mouth’
<i>a-qrab</i>	<i>a-qreyyeb</i>	<i>ta-qrab-t</i>	<i>ta-qreyyeb-t</i>	‘bag’
<i>a-satur</i>	<i>a-switer</i>	<i>ta-satur-t</i>	<i>ta-switer-t</i>	‘pole’
<i>a-syun</i>	<i>a-sy^weyyen</i>	<i>ta-syun-t</i>	<i>ta-sy^weyyen-t</i>	‘rope’
<i>a-šaqur</i>	<i>a-šwiqer</i>	<i>ta-šaqur-t</i>	<i>ta-šwiqer-t</i>	‘axe’
<i>a-rappas</i>	<i>a-rpipes</i>	<i>ta-rappas-t</i>	<i>ta-rpipes-t</i>	‘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	
<i>a-ftuṭ</i>	<i>a-ftiwet</i>	-	<i>ta-ftiwet</i>	‘piece of bread’
<i>a-ḡelzim</i>	<i>a-ḡlizem</i>	<i>ta-ḡelzim-t</i>	-	‘pick-axe’
<i>a-fraṭ</i>	<i>a-freyyet</i>	<i>ta-fariṭ-t</i>	-	‘water pool’
<i>a-nšel</i>	<i>a-nšeyyel</i>	<i>ta-nšel-t</i>	-	‘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**, **ccceu**.

<i>l-eunṣar</i>	<i>le-eniṣer</i>	‘water source’
<i>l-menṣer</i>	<i>le-mniṣer</i>	‘saw’
<i>l-qirṭaṣ</i>	<i>le-qriṭeṣ</i>	‘bullet’
<i>l-qezdir</i>	<i>le-qzider</i>	‘tin can’
<i>a-ḡelzim</i>	<i>a-ḡlizem</i>	‘pick-axe’
<i>l-meskin</i>	<i>le-msiken</i>	‘poor man’
<i>l-muṛhiṭ</i>	<i>le-mṛiheṭ</i>	‘homosexual man’
<i>a-ṣnuḃer</i>	<i>a-ṣniḃer</i>	‘pine tree’
<i>a-fernaq</i>	<i>a-frineq</i>	‘bulging on a stick’
<i>l-meḗmar</i>	<i>le-mḗzimer</i>	‘stove’

<i>ta-mengaž-t</i>	<i>ta-mnigež-t</i>	‘earring’
<i>a-keskes ~ a-keskas</i>	<i>a-ksikes</i>	‘couscous colander’

The same diminutive pattern is applied to trilateral 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:

<i>a-εbbiz</i>	<i>a-εbibež</i>	‘calf’
<i>a-ḥεεiš</i>	<i>a-ḥεiεeš</i>	‘lamb’
<i>a-ḵemmar</i>	<i>a-ḵmimer</i>	‘face’
<i>a-muggaz</i>	<i>a-mgigež</i>	‘stick to pin animals to’
<i>a-keppuṭ</i>	<i>a-kpipet</i>	‘coat’
<i>a-ṭebban</i>	<i>a-ṭbiben</i>	‘trousers’
<i>l-meqqaš</i>	<i>le-mqiqeš</i>	‘scissors’
<i>ta-gussar-t</i>	<i>ta-g^wsiser-t</i>	‘small hill’
<i>ta-ḥεzzuṭ-t</i>	<i>ta-ḥzizeṭ-t</i>	‘naked woman’
<i>ta-sammer-t</i>	<i>ta-smimer-t</i>	‘sunny hill’
<i>a-rḥεzzan</i>	<i>a-rḥizen</i>	‘wasp’
<i>a-qenqbu</i>	<i>a-qniqeḅ</i>	‘beak, point of a knife’
<i>l-keddab-a</i>	<i>l-kdidb-a</i>	‘liar’
<i>l-bezzun-a</i>	<i>l-bzizn-a</i>	‘woman’s breast’
<i>d-demmal-a</i>	<i>d-dmiml-a</i>	‘hump’

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

<i>ta-qellawes-t</i>	<i>ta-qliles-t</i>	‘small jar’
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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.).

<i>l-qeḥb-a</i>	<i>le-qḥiḥb-a</i>	‘prostitute’
<i>a-fulus</i>	<i>a-fliles</i> 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.

<i>ta-qemmum-t</i>	<i>ta-qmiqem-t</i>	‘small mouth’
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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-sbeyye** ‘small lion’, **s-sbiε-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**.

<i>l-ferg</i>	<i>le-freyyeg</i>	‘swarm’
<i>d-dker</i>	<i>d-dkeyyer</i>	‘male’
<i>ta-k^wser-t</i>	<i>ta-k^wseyyer-t</i>	‘piece of bread’
<i>a-γ^wlal</i>	<i>a-γ^wleyyel</i>	‘pot’
<i>le-bzim</i>	<i>le-bzeyyem</i>	‘buckle’
<i>a-frux</i>	<i>a-freyyex</i>	‘small chicken’
<i>ṭ-ṭuem</i>	<i>ṭ-ṭeyyem</i>	‘bait’
<i>l-qird</i>	<i>le-qreyyed</i>	‘monkey’
<i>a-yeṣṣ</i>	<i>a-γseyyēs</i>	‘bone’
<i>n-neṣṣ</i>	<i>n-nseyyēs</i>	‘half’
<i>s-sebε-a</i>	<i>s-sbiε-a</i>	‘lioness’
<i>š-šurb-a</i>	<i>š-šrib-a</i>	‘soup’
<i>l-eṭṭ-a</i>	<i>le-eṭiṭ-a</i>	‘bite’
<i>le-plaṣ-a</i>	<i>le-pliṣ-a</i>	‘seat’

⁴² Nouns which have this singular base structure have different diminutive types, compare **a-saṭur** > **a-swīter** ‘rafter’, **a-šaqr** > **a-šwiqr** ‘axe’, **a-maṭuṭ** > **a-mṭiweṭ** ‘useless person’.

⁴³ Marçais (1977:146) notes that the **cciyec-a** type is ‘*facultatif dans les parlers citadins et ruraux d’Algérie et du Maroc, des diminutifs masculins de type c₁c₂iyec*’, 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.

<i>l-malt-a</i>	<i>le-mlit-a</i>	‘blanket’
<i>l-qahw-a</i>	<i>le-qhiw-a</i>	‘coffee’
<i>l-ḥelw-a</i>	<i>le-ḥliw-a</i>	‘candy’

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

<i>s-sḥn-eyy-a</i>	<i>s-sḥin-eyy-a</i>	‘headband’
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Some Arabic-morphology nouns show their gender in the diminutive by adding a feminine suffix **-a**, for example:

<i>d-dell</i>	<i>d-dlil-a</i>	‘shadow’
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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.

<i>l-kursi</i>	<i>le-krisi</i>	‘chair’
<i>l-kanki</i>	<i>le-kniki</i>	‘gas lamp’
<i>l-barku</i>	<i>le-bṛiku</i>	‘ship’
<i>l-yarbi</i>	<i>le-yṛibi</i>	‘wind from the west’
<i>l-ferdi</i>	<i>le-fridi</i>	‘gun’
<i>a-mušš</i>	<i>a-mšišu</i>	‘cat’
<i>a-mexraw</i>	<i>a-mxiṛu</i>	‘rabbit young’
<i>ta-mezla-t</i>	<i>ta-mzilu-t</i>	‘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 way⁴⁴. 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.

<i>l-ḥessas</i>	<i>le-ḥsiwes</i>	‘submissive homosexual’
<i>ṣ-ṣennar-a</i>	<i>ṣ-ṣniwṛ-a</i>	‘fish hook’
<i>ta-salles-t</i>	<i>ta-sliwes-t</i>	‘darkness’
<i>ta-maṭuṭ-t</i>	<i>ta-mṭiweṭ-t</i>	‘dirty person’
<i>a-mellul</i>	<i>a-mliwel</i>	‘white one’
<i>ta-qṣuṣ-t</i>	<i>ta-qṣiweš-t</i>	‘shell’
<i>a-ftuṭ</i>	<i>a-ftiweṭ</i>	‘small piece of bread’
<i>š-šeṛ-a</i>	<i>š-šeiwṛ-a</i>	‘fishing line’

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

<i>ta-ḡnaw-t</i>	<i>ta-ḡniw + ek-t</i>	‘pumpkin’
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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: **cvevc** and **cvycvc**.

<i>l-kayit</i>	<i>l-kwiyet</i>	‘paper’
<i>a-maleḥ</i>	<i>a-mwileḥ</i>	‘fish’
<i>l-qaleb</i>	<i>le-qwileb</i>	‘mould’
<i>a-satur</i>	<i>a-switer</i>	‘rafter’
<i>l-muṭur</i>	<i>le-mwiter</i>	‘engine’
<i>l-muṭae</i>	<i>le-mwiṭeε</i>	‘place’
<i>ta-šaḡur-t</i>	<i>ta-šwiqer-t</i>	‘small axe’
<i>ta-maras-t</i>	<i>ta-mwires-t</i>	‘valley’
<i>t-ṭayfur</i>	<i>t-ṭwifer</i>	‘table’
<i>a-kayḍar</i>	<i>a-kwiḍar</i>	‘horse’
<i>ta-zaytun-t</i>	<i>ta-zwiten-t</i>	‘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.

<i>burīš</i>	<i>a-bwireš</i>	‘flying ant’
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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**.

<i>a-εeyyal</i>	<i>a-εweyyel</i>	‘boy’
<i>ta-εeyyal-t</i>	<i>ta-εweyyel-t</i>	‘girl’
<i>a-yyul</i>	<i>a-yweyyel</i>	‘donkey’
<i>l-ḥawṭ</i>	<i>a-ḥweyyet</i>	‘vegetable garden’
<i>l-ḥayṭ</i>	<i>a-ḥweyyet</i>	‘wall’
<i>a-ṣyaṭ</i>	<i>a-ṣweyyet</i>	‘border in a meadow’
<i>ta-myan-t</i>	<i>ta-mweyyen-t</i>	‘baby goat’
<i>r-ṛwah</i>	<i>r-ṛweyyeh</i>	‘wind’
<i>ta-gayzu-t</i>	<i>ta-gweyyez-t</i>	‘kind of cow’
<i>l-gayz-a</i>	<i>le-gwiz-a</i>	‘stick’

The following noun forms an exception because the addition of **wi** is combined with reduplication of the first base consonant⁴⁵. This could be due to its adjectival origins.

<i>a-beyyut</i>	<i>a-bwibet</i>	‘white one’
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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.

<i>a-zaṛ</i>	<i>a-zweyyer</i>	‘root’
<i>r-ṛaṣ</i>	<i>r-ṛweyyeṣ</i>	‘cape’
<i>l-ḡim</i>	<i>le-ḡweyyem</i>	‘pocket’
<i>l-mus</i>	<i>le-mweyyes</i>	‘knife’
<i>s-suq</i>	<i>s-swiqa</i>	‘market on an alternative day’ ⁴⁶
<i>t-ṭaṣ-a</i>	<i>t-ṭwiṣ-a</i>	‘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**’.

<i>t-ṭaqq-a</i>	<i>t-ṭwiq-a</i>	‘small window’ ⁴⁷
<i>ta-saεεa-t</i>	<i>ta-swīε-et</i>	‘moment, period’

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

<i>r-riḥeyy-a</i>	<i>r-rwiḥeyy-a</i>	‘traditional shoe’
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3.2.3. Exceptions

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

<i>ḍ-ḍaw</i>	<i>ḍ-ḍwiwi</i>	‘light’
<i>tu-zzal-t</i>	<i>tu-zizel-t</i>	‘knives’
<i>l-uṭa</i>	<i>l-wiṭa</i>	‘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.

<i>a-qḥbay</i>	<i>a-qḥbeyyeš</i>	‘billy goat’
<i>a-γižd</i>	<i>a-γžeyyež</i>	‘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.

<i>ta-rbat</i>	<i>ta-rbeyyet</i>	‘girl’
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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-yaṭ-t *ta-yṭiw-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	
<i>a-keḥlaw</i>	<i>a-kḥiḥel</i>	<i>ta-keḥlaw-t</i>	<i>ta-kḥiḥel-t</i>	‘black one’
<i>a-ḥemṛaw</i>	<i>a-ḥmimer</i>	<i>ta-ḥemṛaw-t</i>	<i>ta-ḥmimer-t</i>	‘red one’
<i>a-zerqaw</i>	<i>a-zrirq</i>	<i>ta-zerqaw-t</i>	<i>ta-zrirq-t</i>	‘blue one’
<i>a-xeḍraw</i>	<i>a-xḍiḍer</i>	<i>ta-xeḍraw-t</i>	<i>ta-xḍiḍer-t</i>	‘green one’
<i>a-ṣefraw</i>	<i>a-ṣfifer</i>	<i>ta-ṣefraw-t</i>	<i>ta-ṣfifer-t</i>	‘yellow one’
<i>a-zergaw</i>	<i>a-zrereg</i>	<i>ta-zergaw-t</i>	<i>ta-zrereg-t</i>	‘grey one’
<i>a-zeṣraw</i>	<i>a-zeiṣer</i>	<i>ta-zeṣraw-t</i>	<i>ta-zeiṣer-t</i>	‘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	
<i>a-mellul</i>	<i>a-mliwel</i>	<i>ta-mellul-t</i>	<i>ta-mliwel-t</i>	‘white one’
<i>a-beyyut</i>	<i>a-bwiḃet</i>	<i>ta-beyyut-t</i>	<i>ta-bwiḃet-t</i>	‘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 **-aṭ** or **-in**. The suffix **-aṭ** is used on both masculine and feminine nouns while **-in** is used on a couple of masculine nouns. Some examples are:

<i>t-ṭbiʃel</i>	<i>t-ṭbiʃl-aṭ</i>	‘little plate’
<i>t-ṭwifer</i>	<i>t-ṭwifr-aṭ</i>	‘little table’
<i>d-ḍšeyyer</i>	<i>d-ḍšeyyr-aṭ</i>	‘little village’
<i>t-ṭwiʃ-a</i>	<i>t-ṭwiʃ-aṭ</i>	‘little cup’
<i>ʃ-ʃmiṭ-a</i>	<i>ʃ-ʃmiṭ-aṭ</i>	‘little belt’
<i>le-xriḅ-a</i>	<i>le-xriḅ-aṭ</i>	‘little ruin’
<i>le-qniṭr-a</i>	<i>le-qniṭr-aṭ</i>	‘little bridge’

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

<i>le-krisi</i>	<i>l-krisiyy-aṭ</i>	‘little chairs’
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The middle vowel sequence **eyy** is reduced to **i** when **-aṭ** is suffixed.

<i>r-ṛbeyyee</i>	<i>r-ṛbiɛ-aṭ</i>	‘little/small grass’
<i>d-dreyyee</i>	<i>d-driɛ-aṭ</i>	‘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**.

<i>z-zweyyef</i>	<i>z-zwif-in</i>	‘little handkerchief’
<i>t-ṭreyyef</i>	<i>t-ṭrif-in</i>	‘little piece’
<i>š-šfifer</i>	<i>š-šfifr-in</i>	‘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**

~ **-t** or **ta-....-et** circumfix in the singular EL, **t-....-t** ~ **-t** 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 + **t** 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	
<i>a-yr̥ir̥ef</i>	<i>i-yr̥ir̥f-en</i>	‘small earthenware plate’
<i>a-ydiden</i>	<i>i-ydidn-en</i>	‘small fig tree’ (type)
<i>a-εweyyel</i>	<i>i-εweyyɫ-en</i>	‘small boy’
<i>a-xneyyeq</i>	<i>i-xneyyq-en</i>	‘small corridor’
<i>a-qzizen</i>	<i>i-qzizn-en</i>	‘small dog puppy’

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

M:SG:EL	M:PL:EL	
<i>a-ftiwet̥</i>	<i>i-ftiw̥t̥-an</i>	‘small piece of bread’
<i>a-m̥tiwet̥</i>	<i>i-m̥tiw̥t̥-an</i>	‘small useless person’

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

<i>le-mweyyes</i>	<i>le-mweyyis-en</i>	‘small retractable knife’
<i>le-qweyyes</i>	<i>le-qweyyis-en</i>	‘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	
<i>ta-f̥šiqr̥-t</i>	<i>ti-f̥šiqr̥-an</i>	‘small bale’
<i>ta-lfifet̥-t</i>	<i>ti-lfif̥t̥-an</i>	‘small blister’
<i>ta-mnigēž-t</i>	<i>ti-mnigēž-an</i>	‘small earring’

<i>ta-qzizen-t</i>	<i>ti-qzizn-an</i>	‘small female puppy’
<i>ta-wfeyyel-t</i>	<i>ti-wfeyyl-an</i>	‘small eggs’
<i>ta-wqiqef-t</i>	<i>ti-wqiqf-an</i>	‘small door jamb’
<i>ta-rpipeş-t</i>	<i>ti-rpipş-an</i>	‘small straw hat’
<i>ta-flilen-t</i>	<i>ti-fliln-an</i>	‘small clay frying pan’

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

F:SG:EL	F:SG:EA	F:PL:EL	F:PL:EA	
<i>ta-smimer-t</i>	<i>te-smimer-t</i>	<i>ta-smimer + ṭ-an</i>	<i>te-smimer + ṭ-an</i>	‘small sunny land’
<i>ta-yweyyel-t</i>	<i>te-yweyyel-t</i>	<i>ta-yweyyel + ṭ-an</i>	<i>te-yweyyel + ṭ-an</i>	‘small filly’

A couple of other nouns also have a base extension + **ṭ** 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	
<i>ta-ḥbib-et</i>	<i>ti-ḥbib + ṭ-an</i>	‘small granule, pimple’
<i>ta-rbeyy-et</i>	<i>ti-rbeyy + ṭ-an</i>	‘little girl’
<i>ta-freyyex-t</i>	<i>ti-frix + ṭ-an</i>	‘little chicken, girl’
<i>ta-nqeyyel-t</i>	<i>ti-nqil + ṭ-an</i>	‘small plant stengel’
<i>ta-wneyyef-t</i>	<i>ti-wnif + ṭ-an</i>	‘small bread’
<i>ta-zreyyef-t</i>	<i>ti-zrif + ṭ-an</i>	‘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.

<i>le-fḥel</i>	<i>a-fḥeyyel</i>	‘bull’
<i>r-ṯil-a</i>	<i>ta-rṯeyyel-t</i>	‘spider’
<i>l-ferṇ</i>	<i>a-friṛen (~ l-freyyen)</i>	‘traditional oven’
<i>ş-ştel</i>	<i>ta-şteyyel-t</i>	‘bucket’

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

a-mezbel

le-mzibl-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

ta-fraw-t ‘leaf’
ta-mm̄ar-t ‘beard’
ta-m̄ṣeṭ-t ‘thigh’
ta-εeddis-t ‘belly’
ta-r̄heḃ-t ‘land’
ta-wfal-t ‘egg’
t-uzzal-t ‘knife’
ta-qebbiṭ-t ‘bundle’
ta-γ^wlal-t ‘pot’

M:SG:EL

a-fraw ‘big leaf’
a-mm̄ar ‘big beard’
a-m̄ṣeṭ ‘big thigh’
a-εeddis ‘big belly’
a-r̄heḃ ‘big land’
a-wfal ‘big egg’
a-wzzal ‘big knife’
a-qebbiṭ ‘big bundle’
a-γ^wlal ‘big pot’

<i>ta-xxun-t</i>	‘ass’	<i>a-xxun</i>	‘big ass’
<i>ta-xšeb-t</i>	‘trap’	<i>a-xšeb</i>	‘big trap’
<i>ta-εbbuṭ-t</i>	‘navel’	<i>a-εbbuṭ</i>	‘big navel’
<i>ta-bekkiw-t</i>	‘worm’	<i>a-bekkiw</i>	‘big worm’
<i>ta-ḡnaw-t</i>	‘pumpkin’	<i>a-ḡnaw</i>	‘big pumpkin’

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

F:SG:EL		M:SG:EL	
<i>ta-sarka</i>	‘traditional shoe’	<i>a-sark + iw</i>	‘big traditional shoe’

There is one noun which has a suppletive augmentative counterpart:

F:SG:EL		M:SG:EL	
<i>ti-tt</i>	‘eye’	<i>a-berruq</i>	‘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-berquq** and **a-qšeb** 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	
<i>l-bezzun-a</i>	‘breast’	<i>a-bezzun</i>	‘big breast’
<i>le-btaṭ-a</i>	‘potatoes’	<i>a-baṭaṭ</i>	‘big potato’
<i>maṭiš-a</i>	‘tomatoes’	<i>a-maṭiš</i>	‘big tomatoe’
<i>t-teffaḥ</i>	‘apples’	<i>a-teffaḥ</i>	‘big apples’
<i>d-dellaḥ</i>	‘watermelons’	<i>a-dellaḥ</i>	‘big watermelon’
<i>l-bettix</i>	‘melons’	<i>a-bettix</i>	‘big melon’
<i>le-bšel</i>	‘onions’	<i>a-bšel</i>	‘big onion’
<i>le-qšeb</i>	‘cane’	<i>a-qšeb</i>	‘big cane’
<i>l-bakur</i>	‘fig’	<i>a-bakur</i>	‘big fig’
<i>l-berquq</i>	‘prunes’	<i>a-berquq</i>	‘big prune’
<i>l-qenbul-a</i>	‘bomb’	<i>a-qenbul</i>	‘big bomb’
<i>l-keṛṛus-a</i>	‘wagon’	<i>a-keṛṛus</i>	‘big wagon’
<i>le-hraw-a</i>	‘beating stick’	<i>a-hraw</i>	‘big beating stick’

<i>bušbel</i>	‘mushroom’	<i>a-bušbel</i>	‘big mushroom’ ⁴⁹
<i>buqeas</i>	‘unripe fig’	<i>a-buqeas</i>	‘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	
<i>š-škar-a</i>	‘bag’	<i>a-šekr-un</i>	‘big bag’
<i>l-lefε-et</i>	‘snake’	<i>a-lefε-un</i>	‘big snake’
<i>l-εatb-a</i>	‘threshold’	<i>a-εetb-un</i>	‘big threshold’
<i>š-šmeε</i>	‘candles’	<i>a-šemε-un</i>	‘big candle’
<i>le-bšel</i>	‘onions’	<i>a-bešl-un</i>	‘big onion’
<i>l-left</i>	‘sweet potato’	<i>a-left-un</i>	‘big sweet potato’
<i>l-qefl-a</i>	‘button’	<i>a-qefl-un</i>	‘big button (sea vest)’
<i>l-qettal-a</i>	‘cobra’	<i>a-qettal-un</i>	‘big cobra’
<i>š-šennara</i>	‘fish hook’	<i>a-šennar-un</i>	‘big fish hook’

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

		M:SG:EL	
<i>l-ħafer</i>	‘foot print’	<i>a-ħefr-un</i> ~ <i>a-ħawfar</i>	‘big foot print’

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

		M:SG:EL	
<i>r-reml-a</i>	‘thin sand’	<i>a-reml-iw</i>	‘thick sand’
<i>l-xanč-a</i>	‘bag’	<i>a-xanč-iw</i>	‘big bag’
<i>r-rezz-a</i>	‘turban’	<i>a-rezz-iw</i>	‘big turban’

-win

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

		M:SG:EL	
<i>r-rħ-a</i>	‘mill’	<i>a-reħ-win</i>	‘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**.

<i>d-ders-a</i>	‘wheat heap’	<i>a-derrus</i>	‘big wheat heap’
<i>l-bħar</i>	‘sea’	<i>a-beħħur</i>	‘big wave’
<i>l-εett-a</i>	‘bite’	<i>a-εettut</i>	‘big bite’
<i>t-tbel</i>	‘tambourine’	<i>a-tebbal</i>	‘big tambourine’
<i>d-debz-a</i>	‘slap’	<i>a-debbiz</i>	‘big slap’
<i>l-gezb-a</i>	‘horn’	<i>a-gezzib</i>	‘big horn’
<i>š-šteb</i>	‘heap of bush’	<i>a-šettib</i>	‘big heap of bush’
<i>l-gayz-a</i>	‘beam’	<i>a-geyyuz</i>	‘big beam’
<i>l-ħayt</i>	‘wall’	<i>a-ħeyyut</i>	‘big wall’
<i>l-yayt-a</i>	‘flute’	<i>a-γeyyut</i>	‘big flute’
<i>l-ğeld</i>	‘skin’	<i>a-žellud</i>	‘big skin’
<i>l-xubz-a</i>	‘one bread’	<i>a-xubbaz</i>	‘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**, **+t**, **+it**, **+it**, **+k**, **+iw**. Especially fruit, vegetables, trees and plants oppose a collective and a unity noun. The nouns **manḍalina** ‘mandarine’, **xiča** ‘dried fig’ and **maṭiṣa** / **tumaṭiṣ** ‘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	
<i>l-banan</i>	<i>ta-ḥanan-t</i>	<i>ti-ḥanan-an</i>	‘banana’
<i>l-baḥur</i>	<i>ta-ḥaḥur-t</i>	<i>ti-ḥaḥur-an</i>	‘fig’
<i>l-laymun</i>	<i>ta-laymun-t</i>	<i>ti-laymun-an</i>	‘lemon’
<i>manḍalin-a</i>	<i>ta-manḍalin-t</i>	<i>ti-manḍalin-an</i>	‘mandarin’
<i>l-berquq</i>	<i>ta-ḥerquq-t</i>	<i>ti-ḥerquq-an</i>	‘prune’
<i>d-dellaḥ</i>	<i>ta-dellaḥ-t</i>	<i>ti-dellaḥ-an</i>	‘watermelon’
<i>l-felfel</i>	<i>ta-felfel-t</i>	<i>ti-felfl-an</i>	‘paprika’
<i>l-firas</i>	<i>ta-firas-t</i>	<i>ti-firas-an</i>	‘pear’
<i>l-lečīn</i>	<i>ta-lečīn-t</i>	<i>ti-lečīn-an</i>	‘orange’
<i>l-lingaṣ</i>	<i>ta-lingaṣ-t</i>	<i>ti-lingaṣ-an</i>	‘pear’
<i>t-teffaḥ</i>	<i>ta-teffaḥ-t</i>	<i>ti-teffaḥ-an</i>	‘apple’
<i>s-snuḇer</i>	<i>ta-snuḇer-t</i>	<i>ti-snuḇr-an</i>	‘stone pine’

<i>l-xeṛṛub</i>	<i>ta-xeṛṛub-t</i>	<i>ti-xeṛṛub-an</i>	‘carob bean / tree’
<i>le-xniš</i>	<i>ta-xniš-t</i>	<i>ti-xniš-an</i>	‘plant’
<i>l-bettix</i>	<i>ta-bettix-t</i>	<i>ti-bettix-an</i>	‘melon’
<i>t-ṭmar</i>	<i>ta-ṭmar-t</i>	<i>ti-ṭmar-an</i>	‘date’
<i>š-šefšaf</i>	<i>ta-šefšaf-t</i>	<i>ti-šefšaf-an</i>	‘tree’ (sp.)
<i>nnwar</i>	<i>ta-newwar-t</i>	<i>ti-newwar-an</i>	‘plant’ (generic)
<i>l-lažur</i>	<i>ta-lažur-t</i>	<i>ti-lažur-an</i>	‘brick’
<i>le-fhem</i>	<i>ta-fhem-t</i>	---	‘charcoal’
<i>n-namus</i>	<i>ta-namust</i>	<i>ti-namus-an</i>	‘mosquito’

The following Berber-morphology unity nouns take base extensions.

M:SG	F:SG:EL	F:PL:EL	
<i>l-ğuğet</i>	<i>ta-žuž-et</i>	<i>ti-žuž + t-an</i>	‘peanut’ ⁵¹
<i>n-niš</i>	<i>ta-niš-et</i>	<i>ti-niš + t-an</i>	‘apricot’
<i>l-luwqit</i>	<i>ta-lewqit-t</i>	<i>ti-lewqit-an</i>	‘match’
<i>l-lawz</i>	<i>ta-lawz + i-t</i>	<i>ti-lawz + it-an</i>	‘almond’
<i>š-šmur-r-a</i>	<i>ta-šmur-r + ek-t</i>	<i>ti-šmur-r + k-an</i>	‘barbary fig’
<i>s-sfenğ</i>	<i>ta-sfenğ + ek-t</i>	<i>ti-sfenğ + k-an</i>	‘kind of donut’

In addition to a base extension the following noun also has a vowel change **i** > **a** in the plural.

<i>xič-a</i>	<i>ta-xač + iw-t</i>	<i>ti-xač + iw-an</i>	‘dried fig’
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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	
<i>maṭiša~ tumaṭiš</i>	<i>ta-maṭišt~ tumaṭiš-t</i>	<i>ti-maṭiš-an</i>	‘tomato’

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

M:SG	F:SG	F:PL	
<i>t-ṭub</i>	<i>t-ṭub-a</i>	<i>t-ṭub-at</i>	‘dried clay’
<i>l-lhem</i>	<i>l-leḥm-a</i>	-	‘meat’
<i>l-ğawhar</i>	<i>l-ğawhar-a</i>	-	‘jewel’

⁵¹ See II.1.3. phonology for **ğ** and **ž**.

<i>ṣ-ṣabun</i>	<i>ṣ-ṣabun-a</i>	-	‘soap’
<i>š-šmeε</i>	<i>š-šmeε-a</i>	<i>š-šmeε + ay-at</i>	‘candle’
<i>n-nxel</i>	<i>n-nexl-a</i>	-	‘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	
<i>ta-lqim-t</i>	<i>l-xubz-a</i>	‘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	
<i>le-ḥšam</i>	<i>i-ḥšišm-en</i>	‘children’

One noun has a Berber unity noun and an Arabic-morphology plural, for example:

M:SG	F:SG:EL	PL	
<i>d-dlem</i>	<i>ta-dlem-t</i>	<i>d-dluma</i>	‘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	
<i>l-qirṭaṣ</i>	<i>ta-qirṭaṣ-t</i>	<i>ti-qirṭaṣ-an</i>	<i>le-qraṭeṣ</i>	<i>le-qriṭeṣ</i>	<i>le-qriṭeṣ-at</i>	‘bullet’

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

M:SG	F:SG:EL	F:PL:EL	PL	
<i>l-luḥ</i>	<i>ta-lwiḥ-et</i>	<i>ti-lwiḥ + t-an</i>	<i>l-lwayeḥ</i>	‘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	
<i>a-beebuš</i>	<i>ta-beebuš-t</i>	<i>le-beabeš</i>	‘dung beetle’
<i>a-heḡal</i>	<i>ta-heḡal-t</i>	<i>le-hḡaḡel</i>	‘widow(er)’
<i>a-karbaš</i>	<i>ta-karbaš-t</i>	<i>le-kraḡeš</i>	‘claw’

<i>a-menğur</i>	-	<i>le-mnažer</i>	‘traditional chair’
<i>a-meyrabi</i>	<i>ta-meyrabi-t</i>	<i>le-myarba</i>	‘Moroccan’
<i>a-rifi</i>	<i>ta-rifi-t</i>	<i>r-rwafa</i>	‘Riffian’
<i>a-mehğur</i>	<i>ta-mehğur-t</i>	<i>le-mhažer</i>	‘orphan’
<i>a-mešmar</i>	-	<i>le-mšumar</i>	‘nail’
<i>a-mqerred</i>	<i>ta-mqerred-t</i>	<i>le-mqerrdin</i>	‘weak, small person’
<i>a-mxazni</i>	-	<i>le-mxazniyya</i>	‘government agent’
<i>a-meawen</i>	<i>ta-meawen-t</i>	<i>le-meawnin</i>	‘help’
<i>a-mhađri</i>	-	<i>le-mhađra</i>	‘pupil’
<i>a-qrin</i>	<i>ta-qrin-t</i>	<i>le-qran</i>	‘peer’
<i>a-xeddama</i>	<i>ta-xeddama-t</i>	<i>l-xeddama</i>	‘worker’
<i>a-eyyal</i>	<i>ta-eyyal-t</i>	<i>le-ewawel</i>	‘boy / girl / children’
<i>a-kaydar</i>	-	<i>le-kyader</i>	‘horse’
<i>a-fešqar</i>	<i>ta-fešqar-t</i>	<i>le-fšaquer</i>	‘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	
<i>a-g^wren</i>	<i>le-grana</i>	<i>le-grayen</i>	‘frog’
<i>a-šerriṭ</i>	<i>ta-šerriṭ~š-šert-a</i>	<i>i-šerriṭ-en~š-šrat</i>	‘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 + *t*.

M:SG:EL	F:SG:EL	F:PL:EL	PL
<i>a-žar</i>	<i>ta-žar-t</i>	<i>ti-žar + t-an</i>	<i>l-ğiran</i> ‘neighbour’

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

M:SG:EL	PL	
<i>a-keppuṭ</i>	<i>i-keppaṭ~ le-kpapeṭ</i>	‘coat’
<i>a-qurtaš</i>	<i>i-qurtaš~ le-qrateš</i>	‘plant’ (sp.)

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

M:SG	PL	
<i>l-mehraz</i>	<i>i-mehrazen</i>	‘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	
<i>le-xnafer</i>	‘nose’	<i>ta-xenfur-t</i>	<i>ti-xenfur-an</i>	‘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	
<i>kḥel</i> ‘black’	>	<i>a-keḥl + aw</i>		<i>ta-keḥl + aw-t</i>	‘black one’
<i>ḥmer</i> ‘red’	>	<i>a-ḥemr + aw</i>		<i>ta-ḥemr + aw-t</i>	‘red one’
<i>zreq</i> ‘blue’	>	<i>a-zerq + aw</i>		<i>ta-zerq + aw-t</i>	‘blue one’
<i>xḍer</i> ‘green’	>	<i>a-xeḍr + aw</i>		<i>ta-xeḍr + aw-t</i>	‘green one’
<i>šfer</i> ‘yellow’	>	<i>a-šefr + aw</i>		<i>ta-šefr + aw-t</i>	‘yellow one’
<i>zreg</i> ‘grey’	>	<i>a-zerg + aw</i>		<i>ta-zerg + aw-t</i>	‘grey one’
<i>zεer</i> ‘blond’	>	<i>a-zεer + aw</i>		<i>ta-zεer + aw-t</i>	‘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	
<i>byet</i> ‘white’	>	<i>a-beyyut</i>		<i>ta-beyyut-t</i>	‘white one’
<i>mellul</i> ‘white’	>	<i>a-mellul</i>		<i>ta-mellul-t</i>	‘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**.

<i>twil</i> ‘tall’	>	<i>a-ħentwil</i>	‘very tall person’
<i>messus</i> ‘insipid’	>	<i>ta-messus-t</i>	‘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	
<i>t-tiṭwan-i</i>	<i>t-tiṭwan-eyy-a</i>	<i>t-tiṭwan-eyy-in</i>	‘person from Tetouan’
<i>l-buzraṭ-i</i>	<i>l-buzraṭ-eyy-a</i>	<i>l-buzraṭ-eyy-in</i>	‘person from Beni Bouzra’
<i>l-menṣur-i</i>	<i>l-menṣur-eyy-a</i>	<i>l-menṣur-eyy-in</i>	‘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 preposition **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’.

<i>ay n buzra</i>	‘those of Bouzra’
<i>ay n menṣur</i>	‘those of Mensour’
<i>ay n zyaṭ</i>	‘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	
<i>l-lihud</i> ‘Jews’	<i>l-lihud-i</i>	<i>l-lihud-eyy-a</i>	‘Jew’

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

M:SG		F/PL	
<i>l-ğadarm-i</i>	‘male gendarme’	<i>ğadarm-eyy-a</i>	‘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	
<i>t-tn-eyy-a</i>	‘one year old goat (with two teeth)’

<i>r-rbaε-eyy-a</i>	‘two year old goat’
<i>le-xmas-eyy-a</i>	‘three year old goat’
<i>s-sdas-eyy-a</i> (~ <i>ž-žame-a</i>)	‘four year old goat’

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

bu-

<i>bu-t-εeddis-t</i>	‘the one with the belly’
<i>bu-i-fadd-en</i>	‘the one with the knees’
<i>bu-te-xxun-t</i>	‘the one with the ass’

šḥab

<i>šḥab ti-εebbuṭ-an</i>	‘the people with the bellies’
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mul

<i>mul l-ḥanuṭ</i>	‘the owner (M.) of the shop’
<i>mul ṭṭunubir</i>	‘the owner of the car’
<i>mul-a l-ḥanuṭ</i>	‘the owner (F.) of the shop’
<i>mwal-in ti-mmira</i>	‘the people with the beards’
<i>mwal-in bu-t-εebbuṭ-an</i>	‘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 *-at*. 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 *-wat* 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 kinship 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. *em̄ti nnes* ‘his/her paternal aunt’. There are two kinship nouns that have a suppletive plural *ayetma* ‘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	
<i>kma</i>	‘brother’	<i>ayetma</i>	‘brothers and sisters’
<i>uletma</i>	‘sister’	<i>ayetma</i>	‘brothers and sisters’
<i>em̄ti</i>	‘paternal aunt’	<i>em̄mti-wat</i>	‘paternal aunts’
<i>em̄mi</i>	‘paternal uncle’	<i>em̄mi-wat</i>	‘paternal uncles’
<i>xalti</i>	‘maternal aunt’	<i>xalti-wat</i>	‘maternal aunts’
<i>ħ̄biḃi</i>	‘maternal uncle’	<i>ħ̄biḃi-wat</i>	‘maternal uncles’
<i>žeddi</i>	‘grandfather’	<i>žeddi-wat</i>	‘grandfathers’
<i>eezzi</i>	‘older brother’	-	
<i>nanna</i>	‘older sister’	-	
<i>baḃa</i>	‘father’	-	
<i>yemma</i>	‘mother’	-	

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

<i>buqeaṣ</i> (~ <i>a-buqeaṣ</i>)	<i>i-buqeaṣ-en</i>	‘unripe fig’
<i>burīṣ</i>	<i>i-burīṣ-en</i>	‘ant with wings’
<i>žaymuṭ</i>	<i>i-žaymuṭ-en</i>	‘gadfly’

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

<i>trayllil</i>	<i>trayllil-en</i>	‘bat’
<i>payeyyu</i>	<i>payeyyu + w-en</i>	‘parrot’

Other nouns do not take the Arabic article **l-** in the singular, but have an Arabic-morphology plural **-at**. Some of these nouns are Spanish loanwords. The following two nouns which do not allow for the article take the plural suffix **-at**.

<i>budrihem</i>	<i>budrihm-at</i>	‘type of bird’
<i>muka</i>	<i>muk-at</i>	‘owl’

There are some singularia tantum which cannot be combined with the article⁵². It should be noted that a considerable amount of these nouns in our corpus are plant names. Some examples are:

<i>bušuk</i>	‘iron fence’	
<i>buden</i>	‘kind of pasta’	
<i>buhbel</i>	‘life’	
<i>buhrawa</i>	‘bird’ (sp.)	
<i>qurṛayes</i>	‘insect’ (sp.)	
<i>qlallu</i>	‘plant’ (sp.)	
<i>kersanna</i>	‘bitter vetch’	
<i>qesbatṭa</i>	‘plant’ (sp.)	
<i>gamba</i>	‘shrimp’	(< Sp.)
<i>gana</i>	‘interest’	(< Sp.)

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

<i>serraqzzit</i>	‘cockroach’
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⁵² Part of the nouns in this group have the element **bu-**. In some cases it can without problems be historically analysed as the prefix **bu-**.

6. The verbal noun

Verbal nouns are nouns derived from verbs. In Ghomara Berber by far most verbal nouns are derived from Arabic, meaning that verbs that are of Berber etymology have suppletive verbal nouns (the verbal noun is referred to as *maṣdar* in Arabic). Verbal nouns express ‘*the fact of (...) finishing a transitive or intransitive action, coming into a state*’ (cf. Marçais, 1977: 83). The feminine suffix *-a* can be a singulative marker in verbal nouns, e.g. **ḍrab**, **ḍarḅ** ‘the fact of hitting’ > **ḍerḅ-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	
<i>ḥezzen</i>	‘grief’	<i>l-ḥuzen</i>	‘the fact of grieving’
<i>hewwel</i>	‘disturb’	<i>l-hawl</i>	‘the fact of disturbing’
<i>rɛɛḅ</i>	‘scare’	<i>r-rueḅ</i>	‘the fact of scaring’
<i>qeyyes</i>	‘measure’	<i>le-qyas</i>	‘the fact of measuring’
<i>dleḡ</i>	‘rub’	<i>d-dliḡ</i>	‘the fact of rubbing’
<i>qreṭ</i>	‘break’	<i>le-qriṭ</i>	‘the fact of breaking’
<i>fɾeq</i>	‘separate’	<i>le-fɾaq</i>	‘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’exercice d’un métier*’ (Marçais 1977:86). For example:

<i>fhem</i>	‘understand’	<i>le-fham-a</i>	‘the fact of understanding’
<i>fleḅ</i>	‘cultivate’	<i>le-flaḅ-a</i>	‘the fact of cultivating’
<i>xeyyet</i>	‘sew’	<i>le-xyaṭ-a</i>	‘the fact of sewing’

ccc(-a)

<i>ḥteš</i>	‘collect bush’	<i>le-ḥteš</i>	‘the fact of collecting bush’
<i>rbeḅ</i>	‘earn’	<i>r-rbeḅ</i>	‘the fact of earning’
<i>ɛzel</i>	‘separate’	<i>l-ɛzɛl-a</i>	‘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:

<i>kšem</i>	‘enter’	<i>d-dxul</i>	‘the fact of entering’
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cvc (hollow)

<i>šum ~ šam</i>	‘fast’	<i>š-šum</i>	‘the fact of fasting’
<i>zzenz ~ znez</i>	‘sell’	<i>l-biε</i>	‘the fact of selling’

ccv (defective)

<i>žerri</i>	‘run’	<i>le-ğri</i>	‘the fact of running’
<i>qqim</i>	‘stay’	<i>le-bqa</i>	‘the fact of staying’
<i>ssyas / yli</i>	‘boil’	<i>le-yli</i>	‘the fact of boiling’
<i>xra</i>	‘defecate’	<i>le-xra</i>	‘the fact of defecating’
<i>rṛda</i>	‘exceptance’	<i>r-rda</i>	‘the fact of excepting’
<i>ddu</i>	‘go’	<i>le-mši</i>	‘the fact of going’
<i>ddu d</i>	‘come’	<i>le-mži</i>	‘the fact of coming’

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

<i>tteš</i>	‘sleep’	<i>n-neas</i>	‘the fact of sleeping’
<i>serwet</i>	‘thresh’	<i>d-dras</i>	‘the fact of threshing’
<i>werg</i>	‘dream’	<i>le-mnam</i>	‘the fact of dreaming’
<i>wwet</i>	‘hit’	<i>d-derb</i>	‘the fact of hitting’
<i>ffuy</i>	‘go out’	<i>l-xurž-a</i>	‘the fact of going out’
<i>ara (kteb)</i>	‘write’	<i>le-ktab-a</i>	‘the fact of writing’
<i>yres</i>	‘slaughter’	<i>d-dbiḥ-a</i>	‘the fact of slaughtering’
<i>ssendu</i>	‘churn’	<i>le-mxiṭ</i>	‘the fact of churning’
<i>nu</i>	‘be cook’	<i>t-tyab</i>	‘the fact of cooking’

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

<i>εeyyer</i>	‘play’	<i>l-leεb</i>	‘the fact of playing’
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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.

<i>derree</i>	‘embrace’	<i>t-tedrie</i>	‘the fact of embracing’
<i>kemmeš</i>	‘winkled’	<i>t-tekmiš</i>	‘the fact of winking’
<i>šekkeṃ</i>	‘squeal’	<i>t-teškim</i>	‘the fact of squealing’
<i>ḥelleq</i>	‘fish’	<i>t-teḥliq</i>	‘the fact of fishing’
<i>reqqeε</i>	‘repair clothes’	<i>t-terqie</i>	‘the fact of repairing’
<i>sqef</i>	‘roof’	<i>t-tešqif</i>	‘the fact of making a roof’
<i>debbey</i>	‘weed’	<i>t-tedbiy</i>	‘the fact of weeding’
<i>felleq</i>	‘cut in half’	<i>t-tefliq</i>	‘the fact of cutting in half’
<i>felleḥ</i>	‘burst, dispose of’	<i>t-tefliḥ</i>	‘the fact of bursting’
<i>hedded</i>	‘threat’	<i>t-tehdiđ</i>	‘the fact of threatening’
<i>hemmek</i>	‘hit’	<i>t-tehmik</i>	‘the fact of hitting’
<i>melleḥ</i>	‘salt’	<i>t-temliḥ</i>	‘the fact of salting’
<i>nedder</i>	‘shock after crying’	<i>t-tendir</i>	‘the fact of shocking’
<i>qeššeš</i>	‘cut’	<i>t-teqšiš</i>	‘the fact of cutting’
<i>ḥerq</i>	‘feel pain’	<i>t-teḥriq</i>	‘the fact of feeling pain’
<i>sellem</i>	‘permit’	<i>t-teslim</i>	‘the fact of permitting’
<i>seḡeε</i>	‘be brave’	<i>t-tesziε</i>	‘the fact of being brave’
<i>šebber</i>	‘catch’	<i>t-tešbir</i>	‘the fact of catching’
<i>εerref</i>	‘authenticate’	<i>t-teεrif</i>	‘the fact of authenticating’
<i>εerref</i>	‘invite’	<i>t-teεrif</i>	‘the fact of inviting’
<i>seffer</i>	‘whistle’	<i>t-tesfir</i>	‘the fact of whistling’
<i>zewwer</i>	‘forge’	<i>t-tezwir</i>	‘the fact of forging’
<i>t?ekked</i>	‘guarantee’	<i>t-te?kiđ</i>	‘the fact of guaranteeing’

ccuc(a)

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

<i>qetteε</i>	‘cut’	<i>t-teqtue</i>	‘the fact of cutting’
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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.

<i>rebbi</i>	‘raise’	<i>t-terbiyy-a</i>	‘the fact of raising’
<i>lewwi</i>	‘roll’	<i>t-telwiyy-a</i>	‘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.

<i>qerfez</i>	‘pinch’	<i>t-tqerfiz</i>	‘the fact of pinching’
<i>beryez</i>	‘swap’	<i>t-tberyiz</i>	‘the fact of swapping’
<i>bežyet</i>	‘mumble’	<i>t-tbežyit</i>	‘the fact of mumbling’
<i>ħešħeš</i>	‘whisper’	<i>t-tħešħis</i>	‘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.

<i>εayen</i>	‘look’	<i>a-mεayen</i>	‘the fact of looking’
<i>ħzeḡ</i>	‘be wet’	<i>a-zzuḡ</i>	‘the fact of being wet’
<i>mḡer</i>	‘harvest’	<i>a-mḡer</i>	‘the fact of harvesting’

Examples of their use are:

- (1) *i-ttak* = *as amεayen*
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	
<i>fhem</i>	‘understand’	<i>t-keyyef</i>	‘smoke’
<i>fleḥ</i>	‘cultivate’	<i>t-qeyya</i>	‘vomit’
<i>sken</i>	‘live’	<i>t-ḥerrek</i>	‘move’
<i>kṛeh</i>	‘hate’	<i>n-baε</i>	‘be sold’
<i>kri</i>	‘rent’	<i>ne-dfeε</i>	‘be pushed’

Berber morphology

ccc	cCc (stem II)	cacc (stem III)
<i>fṛeq</i>	<i>xebbeε</i>	<i>sahel</i>
‘separate’	‘hide’	‘make easy’
<i>qleb</i>	<i>ṣebber</i>	<i>ḥawel</i>
‘flip’	‘hold’	‘try’
<i>hleḳ</i>	<i>εeqqed</i>	<i>εafer</i>
‘be sick’	‘tie’	‘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 embarrassed, being accustomed, farming, hating etc. For example the verbs **eya** ‘be tired’ with Arabic morphology and **hleḵ** ‘be sick’ with Berber morphology have similar semantics, but different morphology. In this chapter the Berber-morphology verb is presented first. Then, the formation of the Perfective will be discussed after which the Imperfective will be discussed. The second chapter will deal with the Arabic-morphology verb. **tt-** and **n-** derived verbs will be discussed in the Arabic-morphology part, whereas the **ss-** causative of the Perfective and the Imperfective are presented separately.

7.1. The Berber-morphology verb

The Berber-morphology verb consists of a lexical base, made up of consonants and (optionally) plain vowels. Schwa does not play a role in the structure of a base. In the traditional account the base is a combination of an abstract consonantal root, which conveys lexical information, and a vowel scheme, which conveys grammatical information (e.g. Harrell, 1962: 23-28 for Arabic, cf. Galand, 2002: 87-99 for a discussion of Berber). However, this dichotomy is too simple. There are many examples of roots in which both the consonants and the vowels convey lexical information. These problems were addressed, among others, by David Cohen (1993) who proposes that a vowel can be part of the radical in the same way as a consonant can. In addition, consonant gemination may be specified in the root. This view eliminates most of the homonyms that would exist if one assumed only a consonantal root (D. Cohen, 1993: 170)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 **qleb** ‘roll’ and **qelleb** ‘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 singular⁵⁴. 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 **-awet** or **-at**. The participle is formed by a circumfix which does not express person, number or gender. The first person suffix is **-x** following a vowel (cf. II.3.5.). The normal affixes are:

		nṭeḡ ‘fly’ (P)		alu ‘pick’ (I)	
1:SG	...- <i>ax</i> /- <i>ay</i> /- <i>x</i>	<i>neṭḡ-ax</i>	‘I flew’	<i>ttalu-x</i>	‘I pick’
2:SG	<i>t</i> ... - <i>et</i>	<i>t-neṭḡ-et</i>	‘you flew’	<i>he-ttalu-t</i>	‘you pick’
3:M:SG	<i>i</i> ...	<i>i-nṭeḡ</i>	‘he flew’	<i>i-ttalu</i>	‘he picks’
3:F:SG	<i>t</i> ...	<i>t-enteḡ</i>	‘she flew’ ⁵⁵	<i>he-ttalu</i>	‘she picks’
1:PL	<i>n</i> ...	<i>n-enteḡ</i>	‘we flew’	<i>ne-ttalu</i>	‘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	<i>t...-em</i>	<i>t-net̄g-em</i>	‘you flew’	<i>he-ttalu-m</i>	‘you pick’
3:PL	<i>...-en</i>	<i>net̄g-en</i>	‘they flew’	<i>ttalu-n</i>	‘they pick’

7.3. The Imperative and injunctive affixes

The Imperative singular has no affix. The plural is marked by means of the suffix **-awet̄** or **-at̄**. 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	<i>...-∅</i>	<i>(e)n̄teḡ</i>	‘jump!’
2:PL	<i>...-awet̄ ~ at̄</i>	<i>net̄g-awet̄ ~ net̄g-at̄</i>	‘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	<i>nda</i>	‘go!’
2:PL	<i>ndhu</i>	‘go!’ (PL)

There are verbs which only occur in the Imperative, such as:

2:SG	<i>hala</i>	‘come!’
2:PL	<i>hala-w</i>	‘come!’ (PL)
2:SG	<i>aṛa</i>	‘give!’
2:PL	<i>aṛa-w</i>	‘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 keḡi a saḥbi*
 get.up:IMP go:IMP you:M VOC friend
 ‘You get up and go, buddy.’

In addition, there exists an injunctive form, which encourages the addressee to do something together with the speaker. This form combines the ‘normal’ prefix of the first person plural **n-** with the Imperative plural suffix **-awet** ~ **-at**. The non-real marker **a** always precedes the injunctive verb.

1:PL *n-...-awet*

- (5) *a n-kerz-awet*
 AD 1PL-plough:A-PL:IMP
 ‘Let’s work the land.’

Negation of the Imperative uses the normal second person forms of the Aorist and is preceded by the non-real marker **a**. Negation is accomplished by the elements **ma...ši**. The same construction is used to negate non-realised events⁵⁶. In the examples both translations are given.

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

- (7) *ma ya kerz-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 traditionally known as the ‘participle’. As the Arabic participle plays an important role in Ghomara Berber we have decided to use the term ‘relative form’ to avoid confusion. In many Berber languages it is the verbal form that appears in subject relative constructions. Adjectives have a special relative form as well (cf. III.9.1.). The reason why it is not called the subject relative form is because its use goes beyond subjects and the verb does not get a relative form in subject relative clauses of **a ra a** + Aorist (cf. III.5.9. on relative constructions).

⁵⁶ In Arabic the negative imperative is formed by negating the Imperfect, **ma deħret 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>i-....-n</i>	<i>i-tt<u>i</u>-n</i>	‘go’ (I)
	<i>y-ukr-en</i>	‘steal’ (P)

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

- (8) *ma k=y-uyu-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 Imperfective⁵⁸. Contrary to many other Berber varieties there are no negative aspectual stems⁵⁹. 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	<i>alu</i>	<i>krez</i>	<i>ttru</i>
Perfective	<i>ulu</i>	<i>krez</i>	<i>ttru</i>
Imperfective	<i>ttalu</i>	<i>kkrez</i>	<i>ttru</i>

Aorist forms are taken as the basis in describing the forms of the other aspectual stems. Base structure is presented in the form of unspecified consonant positions (using **c** for single consonants and **C** for geminates) and specified vowel positions (**a**, **i**, **u**), according to the vocalisation of the Aorist. When necessary, instead of specifying the vowel (**a**, **i**, **u**), **v** is used to convey the presence of the plain vowels in the structure.

⁵⁸ In the French literature on Berber the terminology by A. Basset and Galand is often used. Basset’s ‘prétérit’ and ‘Aoriste intensif’ correspond to our ‘Perfective’ and ‘Imperfective’ respectively. Galand’s ‘accompli’ and ‘inaccompli’ correspond to our ‘Perfective’ and ‘Imperfective’ respectively. The use of ‘Aorist’ is also found with Basset and Galand (Basset, 1952: 13, Galand, 2010: 207-232).

⁵⁹ However, many western varieties of Senhaja de 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 Tashelhiyt 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	<i>ll-ax ~ lli-x</i>
2:SG	<i>te-ll-et ~ te-lli-t</i>
3:M:SG	<i>i-ll</i>
3:F:SG	<i>te-ll</i>
1:PL	<i>ne-ll</i>
2:PL	<i>te-ll-em ~ te-lli-m</i>
3:PL	<i>ll-en ~ lli-n</i>

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	<i>kmeṭ</i>	<i>kmeṭ</i>	‘burn’
cC	<i>eṭṭ</i>	<i>eṭṭ</i>	‘bite’
cCc ⁶¹	<i>beddel</i>	<i>beddel</i>	‘swap, dress’
cCi ⁶²	<i>denni</i>	<i>denni</i>	‘blow the fire’
cccc	<i>qefqef</i>	<i>qefqef</i>	‘shiver’
cacc	<i>εayen</i>	<i>εayen</i>	‘look for, search’
Cc	<i>tteṣ</i>	<i>tteṣ</i>	‘sleep’

⁶⁰ It is interesting to note that in the fixed expression **aṛa-k illa** ‘that might be’ the third person masculine form verb ends in an **a**.

⁶¹ **cCc** (and other geminated stem **ll** 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, denominal 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 **εrēž** ‘limp’ is used, in Ghomara Berber **εerrež** ‘limp’ is used. Other examples which have underived forms in Arabic, but have geminated forms in Berber are Arabic **qter** Berber **qetter** ‘drip’ and Arabic **nder**, Berber **nedder** ‘shock after crying’. Examples of de-nominalised forms are **zehhem** ‘narrow’ from **zzham** ‘narrowness’ and **dehhes** ‘crowd’ from **ddhas** ‘crowdedness’. De-adjectival forms are quite numerous, e.g. **εewwez** ‘bend’ (< **εwez** ‘be bent’), **hewwel** ‘make crooked’ (< **hwel** ‘be crooked’), **wessee** ‘widen’ (< **waseε** ‘be wide’), **retteb** ‘soften, smoothen’ (< **rteb** ‘soft, smooth’), **tewwel** ‘lengthen’ (< **twil** ‘be tall’), **qeşşer** ‘shorten’ (< **qşir** ‘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 lose 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 disappears. There is one **ccc** and one **cc** verb which are similar.

Cc

Aorist		Perfective	
<i>kkur</i>	/kk ^w er/	<i>kker</i>	‘stand up’ ⁶³
<i>qqul</i>	/qq ^w el/	<i>qqel</i>	‘return’
<i>gguz</i>	/gg ^w ez/	<i>ggez</i>	‘descend’
<i>kkus</i>	/kk ^w es/	<i>kkes</i>	‘remove’
<i>qqun</i>	/qq ^w en/	<i>qqen</i>	‘tie, close’
<i>ffuy</i>	/ffey ^w /	<i>ffey</i>	‘go out’
<i>zzuġ (~ zzeġ)</i>	/zzeġ ^w /	<i>zzeġ</i>	‘milk’

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

<i>ukkr-awet ~ ekkr-awet</i>	‘stand up’	IMP:PL
<i>kkur ~ *kker</i>	‘stand up’	IMP:S

ccc

Aorist

lkum /lk^wem/

Perfective

lkem 'reach'

cc

Aorist

suy /sey^w/

Perfective

sey '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 **nuy** (/ny^w/) 'kill'⁶⁴. Type 2, adds the **a** in the Perfective only when the verb has an inflectional suffix. The verbs **nes** 'be extinguished', **kes** 'herd', **zer** 'see', **fk** 'give' and **res** 'land' belong to this type. The third type of **cc** verbs does not change at all. It consists of four verbs: **med** 'finish', **zed** 'grind' **mel** 'show' and **suy** 'buy'. The verb **rey** '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	
	nuy 'kill'		fk 'give'	
1:SG	<i>nya-x</i>	'I have killed'	<i>fka-x</i>	'I gave'
2:SG	<i>te-nya-t</i>	'You have killed'	<i>te-fka-t</i>	'You gave'
3:M:SG	<i>i-nya</i>	'He has killed'	<i>i-fk</i>	'He gave'
3:F:SG	<i>te-nya</i>	'She has killed'	<i>te-fk</i>	'She gave'
1:PL	<i>ne-nya</i>	'We have killed'	<i>ne-fk</i>	'We gave'
2:PL	<i>te-nya-m</i>	'You have killed'	<i>te-fka-m</i>	'You gave'
3:PL	<i>nya-n</i>	'They have killed'	<i>fka-n</i>	'They gave'

Two of the four **cc** verbs which never add a vowel in the Perfective are given below:

⁶⁴ In the dialect of Amtiqan this verb only has **a** when followed by a suffix (El Hannouche 2010: 256).

	med ‘be finished, be extinguished’	zed ‘grind’		
1:SG	<i>md-ax</i>	‘I am finished’	<i>zđ-ax</i>	‘I ground’
2:SG	<i>te-md-et</i>	‘You are finished’	<i>te-zđ-et</i>	‘You ground’
3:M:SG	<i>i-med</i>	‘He is finished’	<i>i-zed</i>	‘He ground’
3:F:SG	<i>t-med</i>	‘She is finished’	<i>t-zed</i>	‘She ground’
1:PL	<i>n-med</i>	‘We are finished’	<i>n-zed</i>	‘We ground’
2:PL	<i>te-md-em</i>	‘You are finished’	<i>te-zđ-em</i>	‘You ground’
3:PL	<i>md-en</i>	‘They are finished’	<i>zđ-en</i>	‘They ground’

7.5.2.3. (w)C verbs

This type of verb consists of one geminate consonant in the Aorist. In the Perfective these verbs add an **a** before a suffix. The one exception is the verb **nn** ‘say’ which optionally has an ending **a** in every person of the Perfective. It is therefore the only verb of this type that has type 1 endings (see above). We will give the example of the aforementioned verb **nn** and its variants and the second example of the verb **šš** ‘eat’. Other verbs of this type are **g̃g̃** ‘do/make’, **bb** ‘take/bring’, **ll** ‘be’ and **g̃ ~ wg̃** ‘leave’⁶⁵. The relative forms have an **a** before the relative suffix.

	nn ‘say’		šš ‘eat’	
1:SG	<i>nna-x</i>	‘I said’	<i>šša-x</i>	‘I ate’
2:SG	<i>te-nna-t</i>	‘You said’	<i>te-šša-t</i>	‘You ate’
3:M:SG	<i>i-nn ~ i-nna</i>	‘He said’	<i>i-šš</i>	‘He ate’
3:F:SG	<i>te-nn ~ te-nna</i>	‘She said’	<i>te-šš</i>	‘She ate’
1:PL	<i>ne-nn ~ ne-nna</i>	‘We said’	<i>ne-šš</i>	‘We ate’
2:PL	<i>te-nna-m</i>	‘You said’	<i>te-šša-m</i>	‘You ate’
3:PL	<i>nna-n</i>	‘They said’	<i>šša-n</i>	‘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 *g̃-awet* ‘leave (PL) it!’ (cf. II.1.3. phonology).

	su ‘drink’		nu ‘be ripe/cooked’	
1:SG	<i>swa-x</i>	‘I drank’	<i>nwa-x</i>	‘I am cooked’ ⁶⁶
2:SG	<i>te-swa-t</i>	‘You drank’	<i>te-nwa-t</i>	‘You are cooked’
3:M:SG	<i>i-su</i>	‘He drank’	<i>i-nwa</i>	‘He is cooked’
3:F:SG	<i>t-su</i>	‘She drank’	<i>te-nwa</i>	‘She is cooked’
1:PL	<i>n-su</i>	‘We drank’	<i>ne-nwa</i>	‘We are cooked’
2:PL	<i>te-swa-m</i>	‘You drank’	<i>te-nwa-m</i>	‘You are cooked’
3:PL	<i>swa-n</i>	‘They drank’	<i>nwa-n</i>	‘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	<i>rrya-x ~ rri-x ~ rra-x</i>	‘I returned’
2:SG	<i>te-rrya-t ~ te-rri-t ~ te-rra-t</i>	‘You returned’
3:M:SG	<i>i-rrya ~ i-rri ~ i-rra</i>	‘He returned’
3:F:SG	<i>te-rrya ~ terri ~ terra</i>	‘She returned’
1:PL	<i>ne-rrya ~ ne-rri ~ ne-rra</i>	‘We returned’
2:PL	<i>te-rrya-m ~ te-rri-m ~ te-rra-m</i>	‘You returned’
3:PL	<i>rrya-n ~ rri-n ~ rra-n</i>	‘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** 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 \emptyset 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	
<i>aḱel ~ aḱul (/aḱ^wel/)</i>	<i>uḱel</i>	‘step on’

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

<i>a_ker ~ a_kur (/a_k^wer/)</i>	<i>u_ker</i>	‘steal’
<i>alu</i>	<i>ulu</i>	‘pick’

The verb **a_gem 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 **g** can be labialised **g̃u (/g̃^w/)**.

Aorist	Perfective	
<i>a_gem d ~ a_gum d (/a_g^wem d/)</i>	<i>u_gem d ~ da_gem</i>	‘draw water’
<i>~ da_gem ~ da_gum (/da_g^wem/)</i>		

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

Aorist	Perfective	
<i>af ~ uf</i>	<i>uf</i>	‘find’
<i>as d ~ us d</i>	<i>us d</i>	‘land, be family of’
<i>ara ~ ura</i>	<i>ura</i>	‘write’
<i>aru ~ uru</i>	<i>uru</i>	‘give birth’
<i>ani ~ uni</i>	<i>uni</i>	‘ride’
<i>aggez ~ uggez</i>	<i>uggez</i>	‘recognise’
<i>a_gel ~ u_gel ~ a_gul (/a_g^wel/)</i>	<i>u_gel</i>	‘hang up food for animals’

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

Aorist	Perfective	
<i>amez ~ umez</i>	<i>mez ~ umez</i>	‘catch, take, grab’

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

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

Other verbs of this type are:

Aorist	Perfective	
<i>riḅ</i>	<i>raḅ</i>	'destroy'
<i>εiš</i>	<i>εaš</i>	'live'
<i>žif</i>	<i>žaf</i>	'choke'
<i>miḥ</i>	<i>maḥ</i>	'empty water'
<i>sis</i>	<i>sas</i>	'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	
<i>siwel</i>	<i>sawel</i>	‘speak or talk’
<i>sisen</i>	<i>sisen</i> ~ <i>sasen</i>	‘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	
<i>zwir</i>	<i>zwir</i> ~ <i>zwar</i>	‘go first’

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

Aorist	Perfective	
<i>wsir</i>	<i>wsir</i>	‘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	<i>εum-ax</i>	<i>εam-ax</i> ~ <i>εum-ax</i>	‘I swam’
2:SG	<i>t-εum-et</i>	<i>t-εam-et</i> ~ <i>t-εum-et</i>	‘You swam’
3:M:SG	<i>i-εum</i>	<i>i-εam</i> ~ <i>i-εum</i>	‘He swam’
3:F:SG	<i>t-εum</i>	<i>t-εam</i> ~ <i>t-εum</i>	‘She swam’
1:PL	<i>n-εum</i>	<i>n-εam</i> ~ <i>n-εum</i>	‘We swam’
2:PL	<i>t-εum-em</i>	<i>t-εam-em</i> ~ <i>t-εum-em</i>	‘You swam’
3:PL	<i>εum-en</i>	<i>εam-en</i> ~ <i>εum-en</i>	‘They swam’

Other verbs of this type are:

Aorist	Perfective	
<i>ṣum</i>	<i>ṣam ~ ṣum</i>	‘fast’
<i>zur</i>	<i>zar ~ zur</i>	‘visit a marabout’
<i>bus</i>	<i>bas ~ bus</i>	‘kiss’
<i>šuš</i>	<i>šaš ~ šuš</i>	‘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	
<i>ṣuṭ</i>	<i>ṣaṭ</i>	‘blow’

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

Aorist	Perfective	
<i>lluḥ</i>	<i>llaḥ ~ lluḥ</i>	‘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	
<i>zzall ~ zzull</i>	<i>zzall</i>	‘pray’
<i>ggall ~ ggull</i>	<i>ggall</i>	‘swear’

Note the following verbs which have the same structure as **zzall ~ zzull**, but do not show a vowel change. The Aorist and the Perfective remain the same.

Aorist	Perfective	
<i>mmuṭ</i>	<i>mmuṭ</i>	‘die’
<i>qqur</i>	<i>qqur</i>	‘dry up’ ⁶⁷

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

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

Aorist	Perfective	
<i>šumm</i> ~ <i>šemm</i>	<i>šumm</i> ~ <i>šemm</i>	‘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:

	šhu ‘get better, heal’		
	Aorist	Perfective	
1:SG	<i>šhu-x</i>	<i>šha-x</i>	‘I have become better’
2:SG	<i>te-šhu-t</i>	<i>te-šha-t</i>	‘You have become better’
3:M:SG	<i>i-šhu</i>	<i>i-šha</i>	‘He has become better’
3:F:SG	<i>te-šhu</i>	<i>te-šha</i>	‘She has become better’
1:PL	<i>ne-šhu</i>	<i>ne-šha</i>	‘We have become better’
2:PL	<i>te-šhu-m</i>	<i>te-šha-m</i>	‘You have become better’
3:PL	<i>šhu-n</i>	<i>šha-n</i>	‘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	
<i>rku</i>	<i>rka</i>	‘rot’
<i>bnu</i> ~ <i>ḅnu</i>	<i>ḅna</i>	‘build’
<i>šhu</i>	<i>šha</i>	‘be strong, cure’
<i>ḥmu</i>	<i>ḥma</i>	‘be hot’
<i>rnu</i>	<i>rna</i>	‘add’
<i>ḅtu</i>	<i>ḅta</i>	‘share’
<i>ḅdu</i>	<i>ḅda</i>	‘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	
<i>ʒʒu</i>		<i>ʒʒa</i>	‘plant’
<i>ddu</i>		<i>dda</i>	‘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	
<i>kku</i>		<i>kku</i>	‘dry up’
<i>ttu</i>		<i>ttu</i>	‘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	<i>ɛelli-x</i>	<i>ɛella-x</i>	‘I went up’
2:SG	<i>t-ɛelli-t</i>	<i>t-ɛella-t</i>	‘You went up’
3:M:SG	<i>i-ɛelli</i>	<i>i-ɛella</i>	‘He went up’
3:F:SG	<i>t-ɛelli</i>	<i>t-ɛella</i>	‘She went up’
1:PL	<i>n-ɛelli</i>	<i>n-ɛella</i>	‘We went up’
2:PL	<i>t-ɛelli-m</i>	<i>t-ɛella-m</i>	‘You went up’
3:PL	<i>ɛelli-n</i>	<i>ɛella-n</i>	‘They went up’

Other verbs of this type are:

Aorist		Perfective	
<i>hewwi</i>		<i>hewwa</i>	‘have sex’
<i>ɛelli</i>		<i>ɛella</i>	‘rise’
<i>ʒerri</i>		<i>ʒerra</i>	‘run’
<i>fedḍi</i>		<i>fedḍa</i>	‘finish’
<i>medḍi</i>		<i>medḍa</i>	‘sharpen’
<i>heffi</i>		<i>heffa</i>	‘make blunt’
<i>neqqi</i>		<i>neqqa</i>	‘clean’
<i>henni</i>		<i>henna</i>	‘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	
<i>tekki</i>	<i>tekki ~ tekka</i>	‘press on’

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

Aorist	Perfective	
<i>denni</i>	<i>denni</i>	‘blow the fire’
<i>lewwi</i>	<i>lewwi</i>	‘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	
<i>qli</i>	<i>qla</i>	‘fry’
<i>zri</i>	<i>zra</i>	‘pound’
<i>dri</i>	<i>dri ~ dra</i>	‘pass’

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

Aorist	Perfective	
<i>mṭi</i>	<i>mṭi</i>	‘lunch’
<i>ngi</i>	<i>ngi</i>	‘push’
<i>yli</i>	<i>yli</i>	‘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.

<i>xwi</i>	<i>xwi ~ xwa</i>	‘empty’
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caci verbs

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

Aorist	Perfective	
<i>laqi</i>	<i>laqa</i>	‘let, make meet’
<i>wali</i>	<i>wala</i>	‘hit’
<i>zali</i>	<i>zala</i>	‘separate’
<i>ħadi</i>	<i>ħada</i>	‘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	
<i>uqi ~ aqi</i>	<i>uqa ~ uqi</i>	‘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	
<i>ttu</i>	<i>ttwi</i>	‘fold’

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

Aorist	Perfective	
<i>seqsi</i>	<i>seqsa</i>	‘ask’

7.5.2.10. Defective verbs

There are two defective verbs in our corpus which have the same meaning: **uġem** and **aħu** ‘give deserved punishment’. The verb **uġem** is obligatorily combined with the indirect object pronoun, for example:

	Perfective	‘give deserved punishment’
1:SG	<i>uġm-ax as</i>	‘I gave him/her the deserved punishment’
2:SG	<i>t-uġm-et as</i>	‘You gave him/her the deserved punishment’
3:M:SG	<i>y-uġem as</i>	‘He gave him/her the deserved punishment’
3:F:SG	<i>t-uġem as</i>	‘She gave him/her the deserved punishment’
1:PL	<i>n-uġem as</i>	‘We gave him/her the deserved punishment’
2:PL	<i>t-uġm-em as</i>	‘You gave him/her the deserved punishment’
3:PL	<i>uġm-en as</i>	‘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.punishment: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	
<i>ssen</i>	<i>ssen</i>	‘know
<i>ffer</i>	<i>ffer</i>	‘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 **ney** ~ **nuḃ** ‘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	
<i>zwir</i>	<i>zuggir</i>	‘precede’
<i>knes</i>	<i>kknes</i>	‘argue’
<i>fred</i>	<i>ffred</i>	‘graze’
<i>rfes</i>	<i>reffes</i>	‘knead’
<i>dri</i>	<i>ddray</i>	‘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:

<i>tazzeġ</i>	‘dry’	<i>ttazzeġ</i>	‘pee’
<i>tʃuġ</i>	‘blow’	<i>ttεum</i>	‘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.

<i>tteħtiż</i>	‘want’	<i>tetteş</i>	‘sleep’
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When immediately followed by a consonant and schwa the prefix is always **t**, except for **cc** verbs which always have **tt**, e.g.

<i>tlebbaq</i>	‘become fat’	<i>ttreż</i>	‘break’
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The geminate consonant in the verb types **Cc**, **Cvc** and some irregular types degeminates when the **tt** ~ **t** is prefixed, for example:

Aorist	Imperfective	
<i>qqur</i>	<i>ttyar</i>	‘dry’
<i>qqim</i>	<i>ttyim</i> ~ <i>ttyima</i>	‘sit’
<i>ggull</i>	<i>tgalla</i>	‘swear’
<i>kkar</i>	<i>ttkar</i>	‘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 **d** > **dd** correspondence in our corpus. There is no **t** > **tt** correspondence. One possible candidate with **t** > **dd** correspondence would be Aorist **iddu** > Imperfective **ittitu** - **ittutu**. 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, ʀ**). 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 **kmeṭ > kemmeṭ** ‘burn’ as opposed to **knes > 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	
<i>dleḡ</i>	<i>ddleḡ</i>	‘rub’
<i>xneq</i>	<i>xxneq</i>	‘smother’ (person)
<i>knes</i>	<i>kknes</i>	‘fight’
<i>krez</i>	<i>kkrez</i>	‘plough’
<i>fred</i>	<i>ffred</i>	‘graze’

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

Aorist	Imperfective	
<i>qla</i>	<i>qqli</i>	‘bake’
<i>dri</i>	<i>ddray</i>	‘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	
<i>qlēb</i>	<i>qqlub</i>	‘roll’
<i>slet</i>	<i>sslut</i>	‘remove’
<i>freq</i>	<i>ffruq</i>	‘separate’
<i>yleq</i>	<i>yyluq</i>	‘cover’
<i>slex</i>	<i>sslux</i>	‘skin’
<i>žreḥ</i>	<i>ğruḥ</i>	‘injure’
<i>qšem</i>	<i>qqšum</i>	‘share, divide’
ccc	Ccac	
<i>sker</i>	<i>sskar</i>	‘do’
<i>šeel</i>	<i>ššēal</i>	‘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	
<i>sbey</i>	<i>ssbey ~ sbbuy</i>	‘dye, paint’
<i>tleq</i>	<i>ttleq ~ ttluq</i>	‘straighten’
<i>qreṭ</i>	<i>qqreṭ ~ qqrut</i>	‘break’
<i>sref</i>	<i>ssref ~ ssruf</i>	‘comb’
<i>ḥseb</i>	<i>ḥḥseb ~ ḥḥsub</i>	‘count’
<i>ḥfer</i>	<i>ḥeffeṭ ~ ḥḥfur</i>	‘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	
<i>yems</i>	<i>qqems ~ yemmes ~ yems</i>	‘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 **yetti** ‘cover’ instead.

Aorist	Imperfective	
cc	Cac	
<i>zēd</i>	<i>zžad</i>	‘grind’
<i>suḡ</i> (/sey ^w /)	<i>ssay</i>	‘buy’

7.6.1.2. Verbs with gemination of the second consonant

ccc verbs

Aorist	Imperfective	
ccc	cCc	
<i>xleq</i>	<i>xelleq</i>	‘be born’
<i>mṭel</i>	<i>meṭṭel</i>	‘bury’
<i>hleḵ</i>	<i>helleḵ</i>	‘be sick, ill’
<i>rfes</i>	<i>reffes</i>	‘knead’
<i>mger</i>	<i>megger</i>	‘harvest’
<i>fṛeε</i>	<i>ferṛeε</i>	‘damage, hit’
<i>lseq</i>	<i>lesseq</i>	‘stick’
<i>mleḵ</i>	<i>melleḵ</i>	‘marry’
<i>ršeḡ</i>	<i>reššeḡ</i>	‘split’
<i>lḥes</i>	<i>leḥḥes</i>	‘lick’
<i>rwel</i>	<i>ruggel</i> (/regg ^w el/)	‘flee’
<i>ḵmel</i>	<i>kemmel</i>	‘finish’
<i>lkem</i> ~ <i>lkum</i> (/lk ^w em/)	<i>lekkem</i>	‘arrive’
<i>nḡeṛ</i>	<i>neḡeṛ</i>	‘make furniture’
<i>sket</i> ~ <i>skut</i> (/sk ^w et/)	<i>sekkeṭ</i>	‘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	
<i>ḵmeṭ</i>	<i>kemmet</i>	‘burn’
<i>ḵšem</i>	<i>kečem</i>	‘enter’
<i>ḵmel</i>	<i>kemmel</i>	‘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	
<i>rku</i>	<i>rekku</i>	‘rot’
<i>bnu</i>	<i>bennu</i>	‘build’
<i>shu</i>	<i>sehhu</i>	‘be strong, cure’
<i>hmu</i>	<i>hemmu</i>	‘hot’
<i>rnu</i>	<i>rennu</i>	‘add’

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

Aorist	Imperfective	
cci	cCi	
<i>yli</i>	<i>yelli</i>	‘set, descend’
<i>zri</i>	<i>zerri</i>	‘pound’
<i>xwi</i>	<i>xewwi</i>	‘empty’
<i>m̄ti</i>	<i>met̄ti</i>	‘lunch’ ⁷²
<i>ngi</i>	<i>neggi</i>	‘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)	
<i>ney</i> ~ <i>nuy</i> (/ney ^w /)	<i>neqqa</i>	‘kill’
<i>kes</i>	<i>kess</i> ~ <i>kessa</i> (~ttkes)	‘herd’
<i>ruy</i> (/rey ^w /)	<i>reqq</i> (~ttray)	‘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	
<i>ħfer</i>	<i>ħeffeṛ ~ ħħfur</i>	‘dig’
<i>ħseb</i>	<i>ħesseb ~ ħħsub</i>	‘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	
<i>aḡel ~ uḡel</i> ~ <i>aḡul (/aḡ^wel/)</i>	<i>ttaḡel</i>	‘hang up plants for goats’
<i>aḡel ~ aḡul (/aḡ^wel/)</i>	<i>ttakeḡl</i>	‘step on’
<i>aḡer ~ aḡur (/aḡ^wer/)</i>	<i>ttakeṛ</i>	‘steal’
<i>ameḡ ~ umeḡ</i>	<i>ttameḡ</i>	‘take, grab, trap’
<i>aḡer ~ uḡer</i>	<i>ttaḡer</i>	‘put bread in the oven’
<i>ameṛ ~ umeṛ</i>	<i>ttameṛ</i>	‘send’
<i>azel ~ uzal</i>	<i>ttazel</i>	‘run’
<i>ayel ~ uyel</i>	<i>ttayel</i>	‘be stuck’

Aorist	Imperfective	
ac ~ uc	ttac	
<i>af ~ uf</i>	<i>ttaf</i>	‘find’

Aorist	Imperfective	
aca ~ ucu	ttaca	
<i>ara ~ ura</i>	<i>ttara</i>	‘write’

Aorist	Imperfective	
acu ~ ucu	ttacu	
<i>alu</i>	<i>ttalu</i>	‘pick’
<i>aru ~ uru</i>	<i>ttaru</i>	‘give birth’

Aorist	Imperfective	
aci ~ uci	ttaci	
<i>ani ~ uni</i>	<i>ttani</i>	‘ride’
<i>a_̣ki ~ w_̣ki</i>	<i>ttaki</i>	‘cross the river’

Aorist	Imperfective	
acuc	tacuc	
<i>ažuf</i>	<i>ttażuf</i>	‘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	
<i>aḡem d ~ aḡum d,</i>	<i>ttaḡam d ~ ddaḡam</i>	‘draw water’
<i>daḡem ~ daḡum</i>		

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	
<i>ḡerrek</i>	<i>tḡerrak</i>	‘lie’
<i>lebbaq</i>	<i>tlebbaq</i>	‘become fat’
<i>žewwef</i>	<i>tžewwaf</i>	‘stink’
<i>nezzež</i>	<i>tnezzaž</i>	‘be overripe’
<i>seyyel</i>	<i>tseyyal</i>	‘flow’
<i>remmeš</i>	<i>tremmaš</i>	‘blink’
<i>xebbeṭ</i>	<i>txebbaṭ</i>	‘trot’
<i>neqqez</i>	<i>tneqqaz</i>	‘jump’

<i>šetteh</i>	<i>tšettaḥ</i>	‘make dance’
<i>neddeh</i>	<i>tneddah</i>	‘guide animals’
<i>šebbet</i>	<i>tšebbat</i>	‘climb’
<i>weğed</i>	<i>tweğad</i>	‘make ready’
<i>seğee</i>	<i>tseğae</i>	‘encourage’

There are a number of **cCc** verbs that prefix **t-** and do not insert **a**.

Aorist	Imperfective	
cCc	tcCc	
<i>nessem</i>	<i>tnessem</i>	‘smell’
<i>eeššer</i>	<i>tēeššer</i>	‘beget’
<i>errež</i>	<i>tērrež</i>	‘limp’
<i>qeššer</i>	<i>tqeššer</i>	‘peel’
<i>serrem</i>	<i>tserrem</i>	‘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	
<i>wessee</i>	<i>tessee ~ twessee</i>	‘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	
<i>rib</i>	<i>ttrib</i>	‘destroy’
<i>fiq</i>	<i>ttfiq</i>	‘wake up’
<i>eiš</i>	<i>tteiš</i>	‘live’
<i>žif</i>	<i>tžif</i>	‘choke’
<i>miḥ</i>	<i>ttmiḥ</i>	‘empty water’
<i>suṭ</i>	<i>tṣuṭ</i>	‘blow’
<i>zur</i>	<i>tzur</i>	‘visit a saint’
<i>eum</i>	<i>tteum</i>	‘swim’

<i>şum</i>	<i>ttşum</i>	‘fast’
<i>bus</i>	<i>tbus</i>	‘kiss’

There is one verb of this type that has an obligatory deictic clitic **d / id**.

Aorist	Imperfective	
<i>faw d</i>	<i>ttfaw d</i>	‘be in the morning’

Two verbs of this type form their Imperfectives in an irregular way:

Aorist	Imperfective	
<i>sis</i>	<i>ssyas</i>	‘boil’
<i>zum</i>	<i>ttazum</i>	‘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	
<i>sisen</i>	<i>tsisen</i>	‘dip bread into gravy’
<i>sahel</i>	<i>tsahel</i>	‘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	
<i>εayen</i>	<i>tεayan</i>	‘look for, search’
<i>gaded</i>	<i>tgadad</i>	‘flatten’
<i>εareṭ</i>	<i>tεaraṭ</i>	‘memorise’
<i>ḥawel</i>	<i>tḥawal</i>	‘try’
<i>susem</i>	<i>tsusum</i>	‘listen’
<i>şuşef</i>	<i>tşuşuf</i>	‘spit’

There is one verb which has an irregular infixation of two a's:

Aorist	Imperfective	
cicc	tcacac	
<i>siwel</i>	<i>tsawal</i>	'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	
<i>laqi</i>	<i>tlaqay</i>	'let, make meet'
<i>wali</i>	<i>twalay</i>	'hit'
<i>zali</i>	<i>tzalay</i>	'separate'

cCi	tcCay	
<i>ħewwi</i>	<i>tħewway</i>	'have sex'
<i>eelli</i>	<i>tællay</i>	'go up'
<i>žerri</i>	<i>tžerray</i>	'run'
<i>fedḍi</i>	<i>tfedḍay</i>	'finish'
<i>medḍi</i>	<i>tmedḍay</i>	'sharpen'
<i>lewwi</i>	<i>tlewway</i>	'spin, roll'
<i>yetti</i>	<i>tyettay</i>	'cover'
<i>tekki</i>	<i>tekkay</i>	'press'

In one verb, **i** becomes **a** in the Imperfective.

Aorist	Imperfective	
caci	tcaca	
<i>ħaḍi</i>	<i>tħaḍa</i>	'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	
<i>tteṣ</i>		<i>tetteṣ</i>	‘sleep’
<i>zzeḡ ~ zzeḡ</i> (/zzeḡ ^w /)		<i>tezzeḡ</i>	‘milk’
<i>ddez</i>		<i>teddez</i>	‘pound’
<i>dder</i>		<i>tedder</i>	‘live, be alive’
<i>kkur</i> (/kk ^w er/)		<i>tekker</i>	‘stand up’
<i>qqul</i> (/qq ^w el/)		<i>teqqel</i>	‘return’
<i>gguz</i> (/gg ^w ez/)		<i>teggez</i>	‘descend’
<i>kkus</i> (/kk ^w es/)		<i>tekkes</i>	‘remove’
<i>qqun</i> (/qq ^w en/)		<i>teqqen</i>	‘tie, close’
<i>ffuy</i> (/ffey ^w /)		<i>teffey</i>	‘go out’

cC verbs

cC verbs prefix t and add a after the final consonant.

Aorist		Imperfective	
cC		tcCa	
<i>ettt</i>		<i>tætta</i>	‘bite’
<i>kebb</i>		<i>tkebb</i>	‘pour’
<i>hezz</i>		<i>thezza</i>	‘shake, move’
<i>rešš</i>		<i>třešša</i>	‘splash’
<i>medd</i>		<i>tmedda</i>	‘lie down’
<i>deṣṣ</i>		<i>ddeṣša</i>	‘laugh’
<i>seff</i>		<i>tseffa</i>	‘empty, dispose’

In one cC verb the final consonant is degeminated in the Imperfective.

Aorist		Imperfective	
<i>sell</i>		<i>tesla</i>	‘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	
<i>res</i>		<i>ttres</i>	‘to be put’

<i>reḻ</i>	<i>ttreḻ</i>	‘break’
<i>med</i>	<i>ttmed</i>	‘extinguish’
<i>kes</i>	<i>ttkes</i> (~ <i>ikess</i> ~ <i>ikessa</i>)	‘herd’
<i>ruḻ</i>	<i>ttrey</i> (~ <i>reqq</i>)	‘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	
<i>myi d</i>	<i>ttemyi d</i>	‘grow (plants)’
<i>ymur</i>	<i>tteymur</i>	‘grow (generic)’
<i>kkar</i>	<i>ttkar</i>	‘be full’
<i>hruru</i>	<i>ttehruru</i>	‘crawl’
<i>ttu</i>	<i>tettu</i>	‘forget’
<i>zzu</i> ~ <i>zza</i>	<i>tezza</i>	‘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	
<i>ḡaylef</i>	<i>tḡaylef</i>	‘become angry’
<i>qawqeš</i>	<i>tqawqeš</i>	‘tickle’

Aorist	Imperfective	
cacc	tcaccac	
<i>dawses</i>	<i>tdawsas</i>	‘squeal’

Aorist	Imperfective	
cccc	tccccac	
<i>terter</i>	<i>ttertar</i>	‘fart hard’
<i>zegzeg</i>	<i>tegzag</i>	‘mate’
<i>qefqef</i>	<i>tqefqaf</i>	‘shiver’
<i>erkerl</i>	<i>terkal</i>	‘limp’
<i>selsel</i>	<i>tselsal</i>	‘bake grain’
<i>serwet</i>	<i>tserwat</i>	‘thresh’

<i>penčər</i>	<i>tpenčar</i>	‘stab’
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Aorist	Imperfective	
cccc	tcccc	
<i>zezeze</i>	<i>tzezeze</i>	‘tremble’
<i>dergel</i>	<i>ddergel</i>	‘roll’
<i>qerqer</i>	<i>tqerqer</i>	‘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**, **ɸ**, **f**, **m** or **w**), form the Imperfective by prefixing **tt** ~ **t**, followed by an **a** which replaces the initial base consonant, and gemination of the second consonant⁷³. There are two verbs of the **ccc** type which do not geminate the second consonant but instead add a final vowel **a**⁷⁴.

Aorist	Imperfective	
ccc	t(t)aCc	
<i>bzeḡ</i>	<i>tazzeḡ</i>	‘swell, be wet’
<i>ftel</i>	<i>tattel</i>	‘spin, roll’
<i>fsex</i>	<i>tassex</i>	‘untie’
<i>fteḥ</i>	<i>tatteḥ</i>	‘open’
<i>bzeḏ</i>	<i>tazzeḏ</i>	‘urinate’
<i>bdeḏ</i>	<i>ttaddeḏ</i>	‘stand up, remain, stop’
<i>bteḥ</i>	<i>tatteḥ</i>	‘hurry up, hasten’

One verb of this type has two Imperfectives which are in free variation.

Aorist	Imperfective	
<i>mseḥ</i>	<i>tasseḥ</i> ~ <i>messeḥ</i>	‘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 **bteḥ** are loanwords from Arabic which have been integrated to this native Imperfective formation.

Aorist	Imperfective	
cc	ttac	
<i>fk</i>	<i>ttak</i>	‘give’

The following **ccu** verbs show the same procedure to form an Imperfective.

Aorist	Imperfective	
ccu	taCu ~ ttaCu	
<i>ḅtu</i>	<i>tatṭu</i>	‘share’
<i>ḅdu</i>	<i>ttaddu</i>	‘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	
<i>werg</i>	<i>ttarga</i>	‘dream’
<i>wేశk</i>	<i>ttaṣka</i>	‘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 **ḳ** after the prefix **tt**.

Aorist	Imperfective	
<i>ṃten</i>	<i>ttaṃten</i>	‘ferment’
<i>ḡ ~ wḡ</i>	<i>ttaḡ</i>	‘keep’
<i>kku</i>	<i>ttḳaw</i>	‘dry up’
<i>ḡun</i>	<i>tžawan</i>	‘be full’
<i>ẓẓwiṭ</i>	<i>ẓẓayaṭ</i>	‘miss’
<i>x̣taṛ</i>	<i>ttax̣taṛ (~ttex̣taṛ)</i>	‘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	
<i>ll</i>	<i>ttill</i>	‘be’
<i>htaž</i>	<i>ttehtaž</i>	‘want, love’

There is one irregular Imperfective in the corpus to which *y* is added.

Aorist	Imperfective	
<i>falṭa</i>	<i>tfalṭay</i>	‘make a mistake’

7.6.4.1.3. Irregular consonants

There is one verb that adds a *d* in the Imperfective.

Aorist	Imperfective	
<i>gḡ</i>	<i>degḡ</i>	‘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	
<i>dher</i>	<i>ttiṭur ~ ttuṭur</i>	‘appear’
<i>ddu</i>	<i>ttuṭu</i>	‘walk’
<i>rri</i>	<i>rraz</i>	‘return, plant’
<i>mmuṭ</i>	<i>tmettaṭ</i>	‘die’
<i>qqur</i>	<i>ttyar</i>	‘dry’
<i>lluz</i>	<i>tlaz</i>	‘be hungry’
<i>ggull</i>	<i>tgalla</i>	‘swear’
<i>bbukk</i>	<i>tḥakka</i>	‘explode’
<i>mel</i>	<i>mmal</i>	‘show’
<i>wwet</i>	<i>kkat ~ tkaṭ</i>	‘strike, hit, shoot’
<i>su</i>	<i>sess</i>	‘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	ttyim ~ ttyima	‘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 onomatopoeic in origin, which has the causative prefix.

Aorist	Perfective	
<i>ss-kuḥ</i>	<i>ss-kuḥ</i> 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		
<i>šš-ekšem</i> (~ <i>ss-ekšem</i>)		‘make enter’
<i>š-wešk</i>		‘cause to get lost’
<i>zz-enz</i> ~ <i>z-nez</i>		‘sell’

Pharyngealisation spreads to the **ss** ~ **s** prefix (cf. II.1.11. phonology).

Aorist		
<i>ss-eḥsel</i>	<i>[sṣ-eḥsel]</i>	‘drop’
<i>ss-eymur</i>	<i>[sṣ-eymur]</i>	‘make grow’

In the following **cc** and **cecc** verbs the causative prefix is not geminated:

Aorist		
<i>s-nes</i>		‘extinguish’
<i>s-res</i>		‘put down’
<i>š-wešk</i>		‘make disappear’

⁷⁶ The onomatopoeia 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
<i>ffuy</i> (/ffey ^w /) ‘go out’	>	<i>ss-ufuy</i> / <i>ss-ufey^w</i> /	‘make go out, expel’
<i>gguz</i> (/ffey ^w /) ‘descend’	>	<i>ss-aguz</i> / <i>ss-ag^wez</i> /	‘lower’

Other geminate-initial verbs degeminate the initial consonant after **ss** (without insertion of a plain vowel), for example:

non-derived Aorist			Aorist
<i>ttru</i> ‘cry’	>	<i>ss-etru</i>	‘make cry’
<i>kku</i> ‘dry’	>	<i>ss-ku</i>	‘make dry’

7.7.2. Perfective formation

A number of causative verbs formally distinguish the Aorist and the Perfective⁷⁷. 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	<i>ss-nu-x</i> ~ <i>ss-enwa-x</i>		<i>ss-enwa-x</i> ‘I cooked’
2:SG	<i>te-ss-nu-t</i> ~ <i>te-ss-enwa-t</i>		<i>te-ss-enwa-t</i> ‘You cooked’
3:M:SG	<i>i-ss-nu</i>		<i>i-ss-nu</i> ‘He cooked’
3:F:SG	<i>t-ess-nu</i>		<i>t-ess-nu</i> ‘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	<i>n-ess-nu</i>	<i>n-ess-nu</i>	‘We cooked’
2:PL	<i>te-ss-num ~ te-ss-enwa-m</i>	<i>te-ss-enwa-m</i>	‘You (P) cooked’
3:PL	<i>ss-nu-n ~ ss-enwa-n</i>	<i>ss-enwa-n</i>	‘They cooked’
	ss-nes ⁷⁸ ‘extinguish, put out’		
	Aorist	Perfective	
1:SG	<i>ssens-ax</i>	<i>sse-nsa-x</i>	‘I put out’
2:SG	<i>te-sse-ns-et</i>	<i>t-sse-nsa-t ~ t-sse-ns-et</i>	‘You put out’
3:M:SG	<i>i-s-nes ~ i-ss-ens</i>	<i>i-s-nes ~ i-ss-ens</i>	‘He put out’
3:F:SG	<i>te-s-nes ~ te-ss-ens</i>	<i>te-s-nes ~ t-ss-ens</i>	‘She put out’
1:PL	<i>ne-s-nes ~ ne-ss-ens</i>	<i>ne-s-nes ~ ne-ss-ens</i>	‘We put out’
2:PL	<i>t-s-ens-em</i>	<i>t-se-nsa-m ~ t-s-ens-em</i>	‘You put out’
3:PL	<i>ss-ens-en</i>	<i>ss-ensa-n ~ ss-ens-en</i>	‘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 **zzuṣur** ‘drag’ and **ss-umem ~ ss-umum** ‘suck’ do not have a non-derived counterpart. The voicing of the prefix of **zz-uṣur** is unexplained.

	Aorist	Perfective	
1:SG	<i>ssuṭṣ-ax</i>	<i>ssaṭṣ-ax</i>	‘I made sleep’
2:SG	<i>te-ssuṭṣ-et</i>	<i>te-ssaṭṣ-et</i>	‘You made sleep’
3:M:SG	<i>i-ssuṭuṣ</i>	<i>i-ssaṭeṣ</i>	‘He made sleep’
3:F:SG	<i>te-ssuṭuṣ</i>	<i>te-ssaṭeṣ</i>	‘She made sleep’
1:PL	<i>ne-ssuṭuṣ</i>	<i>ne-ssaṭeṣ</i>	‘We made sleep’
2:PL	<i>te-ssuṭṣ-em</i>	<i>te-ssaṭṣ-em</i>	‘You made sleep’
3:PL	<i>ssuṭṣ-en</i>	<i>ssaṭṣ-en</i>	‘They made sleep’

initial position

non-derived	Aorist	Perfective	
<i>ṭteṣ</i>	<i>ss-uṭuṣ</i>	<i>ss-aṭeṣ</i>	‘make sleep’

⁷⁸ The prefix can be simple or geminated.

<i>ṭṭṭ</i>	<i>ss-uṭuṭ</i>	<i>ss-aṭeṭ</i>	‘suckle’
---	<i>ss-umem ~ ss-umum</i>	<i>ss-amem</i>	‘suck’

In the two following verbs the **u** before the final consonant is probably the result of labialisation.

<i>ffuy</i>	<i>ss-ufuy</i>	/ss-ufey ^w /	<i>ss-afey</i>	‘make go out, expel’
---	<i>zz-uyur</i>	/zz-uy ^w er/	<i>zz-ayer</i>	‘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	
---	<i>şuşef</i>	<i>şaşef</i>	‘spit’
---	<i>susem</i>	<i>sasem ~ susem</i>	‘hear’

Medial position

non-derived	Aorist	Perfective	
<i>εum</i>	<i>ss-εum</i>	<i>ss-εam</i>	‘let, make swim’
	Aorist	Perfective	
<i>bbukk</i>	<i>ss-ḃukk</i>	<i>ss-ḃakk</i>	‘explode’

Final position

non-derived	Aorist	Perfective	
<i>ḥmu</i>	<i>ss-eḥmu</i>	<i>ss-eḥma</i>	‘heat’
---	<i>ss-endu</i>	<i>ss-enda</i>	‘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	
<i>ttru</i>	<i>ss-etru</i>	<i>ss-etra ~ ss-etru</i>	‘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	
---	<i>ss-ired</i>	<i>ss-ared</i>	‘bathe’
---	<i>ss-ifef</i>	<i>ss-afef</i>	‘sieve’

There is one other verb which shows this pattern. This verb does not have an underived counterpart either.

non-derived	Aorist	Perfective	
---	<i>ss-fi</i>	<i>ss-fa</i>	‘fester, overflow’

Medial position

non-derived	Aorist	Perfective	
<i>fiq</i>	<i>ss-fiq</i>	<i>ss-faq</i>	‘wake up’

Final position

non-derived	Aorist	Perfective	
<i>ani</i> ~ <i>uni</i>	<i>ss-ani</i>	<i>ss-ana</i>	‘mount’
<i>myi</i>	<i>ss-emyi</i> (<i>d</i>)	<i>ss-emya</i> (<i>d</i>)	‘let grow’ (plants)
<i>yli</i>	<i>ss-eyli</i>	<i>ss-eyli</i>	‘swallow’
<i>eelli</i>	<i>ss-eeli</i> ~ <i>ss-elēi</i>	<i>ss-eēla</i> ~ <i>ss-elēa</i>	‘lift, make ascend’

The verb *ss-edri* ‘make pass’ has free variation *i* ~ *a* in the Perfective:

non-derived	Aorist	Perfective	
<i>dri</i>	<i>ss-edri</i>	<i>ss-edri</i> ~ <i>ss-edra</i>	‘make pass’

There is one verb which has **u** in the Aorist and **a ~ u** in the Perfective.

non-derived	Aorist	Perfective	
<i>ggall</i>	<i>s-gull</i>	<i>s-gall ~ s-gull</i> 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 ~ rey** (/rey^w/ ~ /rey/) ‘be lit’:

non-derived	Aorist	Perfective	
<i>ruɣ ~ rey</i>	<i>ss-ruɣ ~ ss-rey</i>	<i>ss-rey</i>	‘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	
<i>gguz</i> (/gg ^w ez)	<i>ss-aguz</i> (/ss-ag ^w ez/)	<i>ss-agez</i>	‘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	
<i>lkum</i> (/lk ^w em)	<i>ss-elkem ~</i> <i>ss-elkum</i> (<i>ss-elk^wem</i>)	<i>ss-elkem</i>	‘take, bring’
<i>kkur</i> (/kk ^w er/)	<i>ss-enkur</i> (<i>ss-enk^wer</i>)	<i>ss-enker</i>	‘wake up, get up’
<i>bzuḡ</i> (/bzeḡ ^w)	<i>ss-ebzeḡ</i>	<i>ss-ebzeḡ</i>	‘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	
<i>qqur</i>	<i>ss-qar ~ ss-ɣar</i> <i>~ ss-ɣur</i>	<i>ss-qar ~ ss-ɣar</i> <i>~ ss-ɣur</i>	‘make dry’
<i>faw</i>	<i>ss-faw</i> (<i>d</i>)	<i>ss-faw</i> (<i>d</i>)	‘make become’

⁷⁹ An often used alternative is **cCc** verb **hellef** ‘make swear’.

<i>kku</i>	<i>ss-ku</i>	<i>ss-ku</i>	‘make dry’
<i>qqim</i>	<i>ss-yim ~ ss-qim</i>	<i>ss-yim ~ ss-qim</i>	‘make sit’
<i>res</i>	<i>s-res</i>	<i>s-res</i>	‘put’
<i>med</i>	<i>ss-med</i>	<i>ss-med</i>	‘empty, extinguish’
---	<i>zzenz ~ znez</i>	<i>zzenz ~ znez</i>	‘sell’
<i>ymur</i>	<i>ss-eymur</i>	<i>ss-eymur</i>	‘make grow’

The Aorist and the Perfective of **ccc** verbs which do not have a labialised consonant are the same.

non-derived	Aorist	Perfective	
<i>kmet</i>	<i>ss-ekmet</i>	<i>ss-ekmet</i>	‘burn’
<i>kšem</i>	<i>šš-ekšem</i>	<i>šš-ekšem</i>	‘make enter, let in’
<i>mlek</i>	<i>ss-emlek</i>	<i>ss-emlek</i>	‘let, make marry’
<i>bded</i>	<i>ss-ebded</i>	<i>ss-ebded</i>	‘let, make stand up’
<i>nter</i>	<i>ss-entert</i>	<i>ss-entert</i>	‘let, make fly’
<i>hşel</i>	<i>ss-ehşel</i>	<i>ss-ehşel</i>	‘drop’
<i>nteġ</i>	<i>ss-enteġ</i>	<i>ss-enteġ</i>	‘let, make fly’
<i>hleġ</i>	<i>ss-ehleġ</i>	<i>ss-ehleġ</i>	‘make sick’

One verb has three free variants in the Perfective:

non-deriv.	Aorist	Perfective	
<i>wešk</i>	<i>š-wešk</i>	<i>šš-ušk ~ š-wešk</i> <i>~ šš-ašk</i>	‘let, make loose, let, make disappear’

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	
<i>kmeṭ</i>	<i>ss-ekmeṭ</i>	<i>ss-ekmaṭ</i>	‘burn’
<i>bzeḡ ~ bzuḡ</i>	<i>ss-ebzeḡ</i>	<i>ss-ebzaḡ</i>	‘make wet’
<i>mleḵ</i>	<i>ss-emleḵ</i>	<i>ss-emlaḵ</i>	‘let, make marry’
<i>bdeḍ</i>	<i>ss-ebdeḍ</i>	<i>ss-ebdaḍ</i>	‘let, make stand up’
---	<i>ss-entef</i>	<i>ss-entaḥ</i>	‘wound’
<i>nṭer</i>	<i>ss-enṭer</i>	<i>ss-enṭar</i>	‘let, make fly’
<i>nṭeḡ</i>	<i>ss-enṭeḡ</i>	<i>ss-enṭaḡ</i>	‘let, make fly’
<i>hleḵ</i>	<i>ss-ehleḵ</i>	<i>ss-ehlaḵ</i>	‘make sick’

The following two **ccc** verbs lose their labialisation of **k** in the Imperfective:

non-derived	Aorist	Imperfective	
<i>lkem ~</i> <i>lkum (/lk^wem/)</i>	<i>ss-elkem ~</i> <i>ss-elkum (/ss-elk^wem/)</i>	<i>ss-elkam</i>	‘make arrive’
<i>kkur (/kk^wer/)</i>	<i>ss-enkur</i> <i>(/ss-enk^wer/)</i>	<i>ss-enkar</i>	‘awake’

There is one **cc** verb which inserts **a**:

non-derived	Aorist	Imperfective	
<i>med</i>	<i>ss-med</i>	<i>ss-maḍ</i>	‘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 optional⁸⁰:

non-derived	Aorist	Imperfective	
<i>kšem</i>	<i>šš-ekšem</i>	<i>t-š-ekšam</i>	‘make enter’
<i>ḥšel</i>	<i>ss-eḥšel</i>	<i>ss-eḥsal ~ t-s-eḥsal</i>	‘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	
<i>bbukk</i>	<i>ss-bukk</i>	<i>ss-bakka</i>	‘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	
<i>kku</i>	<i>ss-ku</i>	<i>ss-kaw</i>	‘dry’
<i>nu</i>	<i>ss-nu</i>	<i>ss-naw</i>	‘cook’
<i>ni</i>	<i>ss-ani</i>	<i>ss-anay</i>	‘let, make mount’
---	<i>ss-fi</i>	<i>ss-fay</i>	‘fester, overflow’
<i>ħmu</i>	<i>ss-ħmu</i>	<i>ss-ħmaw</i>	‘make hot’
---	<i>ss-endu</i>	<i>ss-endaw</i>	‘churn’
<i>ttru</i>	<i>ss-etru</i>	<i>ss-etraw</i>	‘make cry’ ⁸¹
<i>yli</i>	<i>ss-eyli</i>	<i>ss-eylay</i>	‘swallow’
<i>elli</i>	<i>ss-elli ~ ss-elɛa</i>	<i>ss-eelay</i>	‘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	
<i>myi</i>	<i>ss-emya (d)</i>	<i>ss-emyay (d)</i>	‘grow’

In the following verb, the labialisation found in the Aorist is absent in the Imperfective:

non-derived	Aorist	Imperfective	
<i>gguz (gg^wez)</i>	<i>ss-aguz (/ss-ag^wez/)</i>	<i>ss-agaz</i>	‘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	
<i>nes</i>	<i>s-nes</i>	<i>ss-nus</i>	‘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**.

<i>res</i>	<i>s-res</i>	<i>ss-rus</i>	‘put’
---	<i>zz-enz ~ z-nez</i>	<i>zz-nuz</i>	‘sell’

non-derived	Aorist ⁸²	Imperfective	
<i>ttes</i>	<i>ss-uteş</i>	<i>ss-utuş</i>	‘make sleep’
<i>tteṭ</i>	<i>ss-uteṭ</i>	<i>ss-utut</i>	‘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	
<i>rey ~ ruy (/rey^w/)</i>	<i>ss-rey ~ ss-ruy</i> <i>(/ss-rey ~ ss-rəy^w/)</i>	<i>ss-ruy (/ss-ruy/)</i>	‘light’ ⁸³
<i>ffuy (/ffey^w/)</i>	<i>ss-ufuy (/ss-ufey^w/)</i>	<i>ss-ufuy (/ss-ufuy/)</i>	‘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	
---	<i>ss-kuḥ</i>	<i>ss-kuḥu</i>	‘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	
---	<i>ss-ired</i>	<i>ss-irid</i>	‘bathe’
---	<i>ss-ifef</i>	<i>ss-ifif</i>	‘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 **ssury-ax** ‘I lit’ 3.M:SG **i-ssruy** ‘he lit’. In the Imperfective the vowel does not change position, e.g. 1:SG **ssruy-ax** ‘I lite’ 3.M:SG **i-ssruy** ‘he lites’.

non-derived	Aorist	Imperfective	
<i>εum</i>	<i>ss-εum</i>	<i>ss-εum</i>	‘let, make swim’
<i>qqur</i>	<i>ss-qar</i> ~ <i>ss-yar</i> ~ <i>ss-yur</i>	<i>ss-qar</i> ~ <i>ss-yar</i> ~ <i>ss-yur</i>	‘make dry’
<i>faw (d)</i>	<i>ss-faw (d)</i>	<i>ss-faw (d)</i>	‘make become’
<i>ymur</i>	<i>sse-ymur</i>	<i>sse-ymur</i>	‘make grow’
<i>fiq</i>	<i>ss-fiq</i>	<i>ss-fiq</i>	‘wake up’
<i>qqim</i>	<i>ss-qim</i>	<i>ss-qim</i>	‘make sit’
<i>wešk</i>	<i>š-wešk</i>	<i>š-wešk</i>	‘make disappear’
<i>ggull</i>	<i>s-gall</i>	<i>s-gall</i>	‘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	
---	<i>şuşef</i>	<i>tşuşuf</i>	‘spit’
---	<i>susem</i>	<i>tsusum</i>	‘hear’

8. The Arabic-morphology verb

In this section we present Arabic verbs that retain the original Arabic morphology in Ghomara Berber⁸⁴. Many Arabic verbs are borrowed without being integrated in the Berber system (approximately 19% of all verbs in our corpus). The borrowing can include the preverbal future marker (*š ~ maš ~ ya*) and postverbal clitics (DO and IO, see III.11.5.). Arabic verbs maximally consist of a stem, a passive derivational prefix *tt-* (*~t-*) or *n-*, and conjugational affixes. The lexical stem can be biliteral, trilateral or quadrilateral⁸⁵. 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-	bae -	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	<i>-t ~ -ṭ</i>	<i>ššad-iṭ</i>	<i>εreq-t</i>	<i>qri-ṭ</i>
2:SG	<i>-t ~ -ṭ / -ti ~ -ṭi</i>	<i>ššad-iṭ / -iṭi</i>	<i>εreq-t / -ti</i>	<i>qri-ṭ / -ṭi</i>
3:M:SG	-	<i>ššad</i>	<i>εreq</i>	<i>qra</i>
3:F:SG	<i>-ṭ</i>	<i>ššad-eṭ</i>	<i>εreq-eṭ</i>	<i>qra-ṭ</i>
1:PL	<i>-na</i>	<i>ššad-na / -ina</i>	<i>εreq-na</i>	<i>qri-na</i>
2:PL	<i>-tum ~ -ṭum / -tu</i>	<i>ššad-tum / -iṭum</i>	<i>εreq-tu(m)</i>	<i>qri-ṭu(m)</i>
3:PL	<i>-u</i>	<i>ššad-u</i>	<i>εreq-u</i>	<i>qra-w</i>

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	<i>n-</i>	<i>(ka-)ne-ṣṣad</i>	<i>(ka-)ne-eṛeq</i>	<i>(ka-)ne-ḡra</i>
2:SG	<i>d-</i>	<i>(ka-)de-ṣṣad</i>	<i>(ka-)de-eṛeq</i>	<i>(ka-)de-ḡra</i>
3:M:SG	<i>y-</i>	<i>(ka-)ye-ṣṣad</i>	<i>(ka-)ye-eṛeq</i>	<i>(ka-)ye-ḡra</i>
3:F:SG	<i>d-</i>	<i>(ka-)de-ṣṣad</i>	<i>(ka-)de-eṛeq</i>	<i>(ka-)de-ḡra</i>
1:PL	<i>n - u</i>	<i>(ka-)ne-ṣṣad-u</i>	<i>(ka-)n-eṛeq-u</i>	<i>(ka-)ne-ḡra-w</i>
2:PL	<i>d - u</i>	<i>(ka-)de-ṣṣad-u</i>	<i>(ka-)d-eṛeq-u</i>	<i>(ka-)de-ḡra-w</i>
3:PL	<i>y - u</i>	<i>(ka-)ye-ṣṣad-u</i>	<i>(ka-)y-eṛeq-u</i>	<i>(ka-)ye-ḡra-w</i>

The form **-t** immediately follows a vowel while **-ṭ** 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 Arabic⁸⁷; the suffix is either **-t** (~ **-ṭ**) or **-ti** (~ **-ṭi**). The second person plural is either **-tu** (~ **-ṭu**) or **-tum** (**-ṭum**)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 \emptyset for the singular and **-u** for the plural. The vowel **u** becomes **w** after a vowel.

Imperative

SG	PL	
<i>ṣṣad</i>	<i>ṣṣad-u</i>	‘hunt, fish’
<i>ḡra</i>	<i>ḡra-w</i>	‘learn, read’

⁸⁷ Both the Jbala dialects described in Vicente (2000:61) and Moscoso (2003: 63) do not have a gender distinction in second person singular. However, the difference with Ghomara is that both dialects only have suffix **-t** in the Perfect. The variant described by Caubet (1993: 31-32) near Fes has only second person **-ti** in the Perfect, but distinguishes gender in the second person of the Imperfect conjugation.

⁸⁸ In the Maghreb the plural suffix **-tum** / **-ṭum** is unique to the Jbala region. For the dialect of Anjra the form **t^hum** 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	<i>fekk-<u>i</u></i>	‘I rescued’	<i>n-fukk</i>	‘I rescue’
2:SG	<i>fekk-<u>i</u>(i)</i>	‘You rescued’	<i>d-fukk</i>	‘You rescue’
3:M:SG	<i>fekk</i>	‘He rescued’	<i>i-fukk</i>	‘He rescues’
3:F:SG	<i>fekk-<u>e</u></i>	‘She rescued’	<i>d-fukk</i>	‘She rescues’
1:PL	<i>fekk-(i)na</i>	‘We rescued’	<i>n-fukk-u</i>	‘We rescue’
2:PL	<i>fekk-(i)tu(m)</i>	‘You rescued’	<i>d-fukk-u</i>	‘You rescue’
3:PL	<i>fekk-u</i>	‘They rescued’	<i>y-fukk-u</i>	‘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).

<i>yešš ~ yušš</i>	<i>yušš</i>	‘deceive’
<i>šekk ~ šukk</i>	<i>šekk ~ šukk</i>	‘doubt’
<i>fekk</i>	<i>fukk</i>	‘rescue’

Perfect

cC

εess

ħebb

Imperfect

ciC

εiss

ħibb

‘guard’

‘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 **yam - iyum** ‘bottle up (anger/sorrow)’.

	Perfect		Imperfect	
1:SG	<i>yum-t</i>	‘I bottled up’	<i>(ka-)n-yum</i>	‘I bottle up’
2:SG	<i>yum-t(i)</i>	‘You bottled up’	<i>(ka-)d-yum</i>	‘You bottle up’
3:M:SG	<i>yam</i>	‘He bottled up’	<i>(ka-)y-yum</i>	‘He bottles up’
3:F:SG	<i>yam-eṭ</i>	‘She bottled up’	<i>(ka-)d-yum</i>	‘She bottles up’
1:PL	<i>yum-na</i>	‘We bottled up’	<i>(ka-)n-yum-u</i>	‘We bottle up’
2:PL	<i>yum-tum</i>	‘You bottled up’	<i>(ka-)d-yum-u</i>	‘You bottle up’
3:PL	<i>yam-u</i>	‘They bottled up’	<i>(ka-)y-yum-u</i>	‘They bottle up’

Perfect

cac

sal

ban

Imperfect

cac

sal

ban

‘owe’

‘appear, seem’

Perfect

cac

ħas

sar

εaq

qar

Imperfect

ciC

ħis

sir

εiq

qir

‘feel’

‘continue’

‘become aware of’

‘admit’

Perfect	Imperfect	
cac	cuc	
<i>sag</i>	<i>sug</i>	‘drive’ ⁹⁰
<i>bas</i>	<i>bus</i>	‘kiss’
<i>lam</i>	<i>lum</i>	‘blame’
<i>dam</i>	<i>dum</i>	‘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 **qra – yeqra** ‘read, learn’:

	Perfect		Imperfect	
1:SG	<i>qri-t</i>	‘I read/learned’	<i>(ka-)ne-qra</i>	‘I read/learn’
2:SG	<i>qri-t/qri-ti</i>	‘You read/learned’	<i>(ka-)de-qra</i>	‘You read/learn’
3:M:SG	<i>qra</i>	‘He read/learned’	<i>(ka-)ye-qra</i>	‘He reads/learns’
3:F:SG	<i>qra-t</i>	‘She read/learned’	<i>(ka-)de-qra</i>	‘She reads/learns’
1:PL	<i>qri-na</i>	‘We read/learned’	<i>(ka-)ne-qra-w</i>	‘We read/learn’
2:PL	<i>qri-tu</i>	‘You read/learned’	<i>(ka-)de-qra-w</i>	‘You read/learn’
3:PL	<i>qra-w</i>	‘They read/learned’	<i>(ka-)ye-qra-w</i>	‘They read/learn’

Other verbs of this type are:

Perfect	Imperfect	
cca	cca	
<i>hfa</i>	<i>hfa</i>	‘be blunt’
<i>tfa</i>	<i>tfa</i>	‘yawn’
<i>eya</i>	<i>eya</i>	‘tired’
<i>xra</i>	<i>xra</i>	‘defecate’
<i>rğa</i>	<i>rğa</i>	‘hope’
<i>qra</i>	<i>qra</i>	‘study, read’

Perfect	Imperfect	
cca	cci	
<i>xwa</i>	<i>xwi</i>	‘hollow out’

⁹⁰ One informant conjugated only the Perfective of this verb using Berber conjugation. Others consistently used Arabic morphology.

<i>kma</i>	<i>kmi</i>	‘smoke’
<i>kra</i>	<i>kri</i>	‘hire’
<i>bya</i>	<i>byi</i>	‘love’
<i>ḥka</i>	<i>ḥki</i>	‘tell’
<i>zna</i>	<i>zni</i>	‘commit 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	
<i>breq</i>	<i>breq</i>	‘shine’
<i>f̣ten</i>	<i>f̣ten</i>	‘become aware of’
<i>ndem</i>	<i>ndem</i>	‘regret’
<i>yleḍ</i>	<i>yleḍ</i>	‘wrong’
<i>šxer</i>	<i>šxer</i>	‘snore’
<i>egez</i>	<i>egez</i>	‘lazy’
<i>sker</i>	<i>sker</i>	‘get drunk’
<i>εteš</i>	<i>εteš</i>	‘be thirsty’
<i>qder</i>	<i>qder</i>	‘be able’
<i>wzen</i>	<i>wzen</i>	‘weigh’

cacc

The following verb has a glottal stop in initial position⁹¹.

Perfect	Imperfect	
<i>ʔamer</i>	<i>ʔamer</i>	‘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	
<i>ʔammen</i>	<i>ʔammen</i>	‘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	
<i>dumanda</i>	<i>dumandi</i>	‘command or order’

cCv

There is one **cCv** verb in our corpus which has Arabic-morphology.

Perfect	Imperfect	
<i>mella</i>	<i>melli</i>	‘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

<i>t-šedd</i>	‘be tie, be closed’
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t-cac

<i>t-baε</i> (~ <i>n-baε</i>)	‘be sold’
<i>t-maḥ</i>	‘be emptied of water’
<i>t-ban</i>	‘appear’
<i>t-ṭal</i>	‘be guessed’

t-cca

<i>t-exwa</i>	‘be hollowed out’
<i>t-ešra</i>	‘be bought’
<i>tt-eqla</i>	‘be fried’
<i>tt-eqra</i>	‘be studied, be read’

t-ccc

<i>tt-efleḥ</i>	‘be cultivated’
<i>tt-efreḥ</i>	‘be damaged, be hit painfully’
<i>tt-eyleb</i>	‘be defeated’
<i>tt-ehret</i>	‘be ploughed’

t-ccac

<i>tt-extar</i>	‘be chosen’
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t-cCc (stem V)

There are two verbs from standard Arabic in this group which have a glottal stop in stem-initial position.

<i>t-ḥerrek</i>	‘move’
<i>t-keyyef</i>	‘smoke’
<i>t-εettel</i>	‘be late’
<i>t-εellem</i>	‘learn’
<i>t-hedded</i>	‘threaten’
<i>t-seyyeb</i>	‘be thrown’
<i>t-žeyyer</i>	‘whitewash’
<i>t-εewwež</i>	‘be bent’
<i>t-rewweh</i>	‘be lifted, be returned’
<i>t-xeffef</i>	‘be light’
<i>t-?ekked</i>	‘be guaranteed’
<i>t-?ammen (~ ?ammen)</i>	‘trust’

t-cCa (stem V)

<i>t-menna</i>	‘hope’
<i>t-yedda</i>	‘have lunch’

t-cacc (stem VI)

<i>t-taxer</i>	‘be last’
<i>t-dafen</i>	‘fight (each other)’
<i>t-dabez</i>	‘fight (each other)’
<i>tt-hawed</i>	‘talk (to each other)’
<i>t-sameḥ</i>	‘forgive (each other)’

t-caca

<i>t-laqa</i>	‘join, meet’
<i>t-ḡala</i>	‘be separated’

t-caC

<i>t-gadd</i>	‘be flat, flatten’
<i>tt-fakk</i>	‘be rescued’

There are a number of quadriliteral verbs with **t-** passive derivation.

<i>t-beryez</i>	‘be swapped’
<i>t-ektašef</i>	‘guess’
<i>t-penčer</i>	‘be stabbed’
<i>t-qefqef</i>	‘shiver’
<i>t-selsel</i>	‘be baked (grain)’
<i>t-šerwel</i>	‘be clothed with trousers’
<i>t-xerčef</i>	‘speak unclearly’
<i>t-zεεzεε</i>	‘tremble’
<i>t-ḡaylef</i>	‘become angry’
<i>t-ḡerbel</i>	‘be sieved’

There is one verb of Spanish origin of the type **cacca**. In the first and second person singular the **a** becomes **i**.

<i>t-šalṭa</i>	‘dive’
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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**.

<i>n-edfee</i>	‘be pushed’
<i>n-eqrēṭ</i>	‘break’
<i>n-tellef</i>	‘be lost, be disappeared’
<i>n-exṭeb</i>	‘be asked to marry’
<i>n-εezzel</i>	‘be filtered, be separated’
<i>n-εēžen</i>	‘be kneaded’
<i>n-eyḡer</i>	‘be betrayed’

<i>n-edfer</i>	‘be tied (hair)’
<i>n-edreb</i>	‘be hit’
<i>n-bhet</i>	‘be astonished’
<i>n-efdeḥ</i> (~ <i>tt-efdeḥ</i>)	‘be caught’
<i>n-eεqel</i> (~ <i>t-eεqel</i>)	‘be recognised’
<i>n-ekteb</i> (~ <i>tt-ekteb</i>)	‘be written’
<i>n-baε</i> (~ <i>t-baε</i>)	‘be sold’
<i>n-šaq</i> (~ <i>t-šaq</i>)	‘be split’

8.3.3. Other derivations

The three schemes presented here have an infix **t**-, a prefix **st**- or a vowel **a** inserted.

ctcc ~ ctacc (stem VIII)

A small number of verbs have a **t** infix after the stem-initial consonant.

<i>rtεeb</i>	‘be scared’
<i>ntašer</i>	‘win over’
<i>ktašef</i>	‘guess’
<i>εtaref</i>	‘admit, recognise’
<i>štawer</i>	‘consult’

The verb **ššad** ‘hunt’ has initial **st** has become **šš** through assimilation⁹². The Perfect of this verb gets an optional **i** inserted between the stem and the suffix.

<i>ššad</i>	‘hunt’
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ccac (similar to stem XI)

The following verbs all have an **a** before the final vowel.

<i>štar</i>	‘ruminant’
<i>shal</i>	‘become, be easy’
<i>εšar</i>	‘be pregnant’
<i>yraq</i>	‘drown’
<i>zham</i>	‘bad’
<i>htaž</i>	‘need’
<i>hmar</i>	‘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 **šeyyed** (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.

stežeb '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 marking⁹³. Furthermore, these forms do not distinguish verbal aspectual stems. The three Berber adjectives **meqqur** ‘big’, **mezzi** ‘small’ and **messus** ‘insipid’ have only two forms: masculine singular agreement on the one hand and feminine singular / plural agreement. One adjective of Berber origin, **mellul** ‘white’, has a dedicated plural suffix **-in** in free variation with the feminine singular / plural suffix **-et**. The following scheme provides an overview of the forms.

		‘big’	‘small’	‘insipid’
M:SG	-	<i>meqqur (meqq^wer)</i>	<i>mezzi</i>	<i>messus</i>
F:SG	- <u>t</u> ~ - <u>et</u>	<i>muqqr-et</i>	<i>mezzi-t</i>	<i>messus-et</i>
PL	- <u>t</u> ~ - <u>e t</u>	<i>muqqr-et</i>	<i>mezzi-t</i>	<i>messus-et</i>

The plural suffix of adjective **mellul** ‘white’ is either **-et** or **-in**.

⁹³In 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	-	<i>mellul</i>
F:SG	- <i>eṭ</i>	<i>mellul-eṭ</i>
PL	- <i>eṭ</i> ~ - <i>in</i>	<i>mellul-eṭ/-in</i>

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	-	<i>ṭwil</i>	<i>šfer</i>
F:SG	- <i>a</i>	<i>ṭwil-a</i>	<i>šfer-a</i>
PL	- <i>in</i>	<i>ṭwil-in</i>	<i>šfar</i>

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) *iḅerriyen a y-meẓzi-n ma ga-sen šī n lhemm bezzaf*
 sheep REL RF-small-RF NEG in-3PL NEG of meat a.lot
 ‘Small sheep do not have a lot of flesh.’

(2) *lektab n umḥaḍri 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 mezzi i meqqur*
 3MS-come:P DC small and big
 The small and the big have come.

(4) *i-dda d l-mezzi i l-meqqur*
 3MS-come:P DC ART-small and ART-big
 The small and the big have come.

(5) *le-khel i le-ħmer safr-en dar ya tmazirt beid-a*
 ART-black and ART-red travel:P-3PL to one:F land far-FS
 ‘The black one and the red one traveled to a far-away country.’

3. Modifier of a Head Noun: Unlike nouns, adjectives occur as modifiers of head (pro)nouns. They agree in gender and number with the head. The following examples illustrate the use of the Berber adjectives. In (6) the adjective modifies a feminine singular head noun. In (7) the modified head noun is plural and therefore the adjective has the same agreement marker as (6). In (8), (9) and (10) Arabic-morphology adjectives are shown.

(6) *deyya h-tellay g ya tgiġet muqqr-et*
 quickly 3FS-go.up:I in one:F tree:EA big-FS
 ‘She quickly climbs a big tree.’

(7) *i-kkrez s žuž n iebbaz muqqr-et*
 3MS-plough:I with two of oxen big-PL
 ‘He ploughs with two big oxen.’

(8) *ttawi-n = d yah lgayza, ya usyar ylit*
 take-3PL=DC one:F stick one:M stick:EA thick:MS
 ‘They bring a stick, a thick stick.’

(9) *tamyart = ahen twil-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-tkewwar* *ši* *n* *isekkawen* *twil-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) *tæeyyalt* *muqqr-et* *i* *wæeyal* *baqi* *mezzi*
 girl:EL big-FS and boy:EA still small:MS
 ‘The girl is big and the boy is still small.’

- (12) *lbuffer=yahen* *n* *rṛwiḍa* *rqiqa*
 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* *meqqr*
 I big:MS
 ‘I am big’ (male speaker)

- (14) *nekki* *muqqr-et*
 I big-FS
 ‘I am big’ (female speaker)

In the remainder of this chapter, the subject relative form and the morphology of Arabic-morphology adjectives are presented. Even though borrowed Arabic passive participles are similar to adjectives, they differ in that they can not be nominalised by means of the article *l-* (cf. III.10. for the morphology of participles). In the final part of this chapter, Spanish adjectives and the element ‘other’ will be presented.

9.1. The relative form

The morphology of the relative form of adjectives shows some variation. Berber adjectives take the relative form **i-STEM-in** ~ **i-STEM-en** (cf. III.7.4. for the relative form of verbs). Arabic adjectives take **i-STEM-in**, except for adjectives that have an apophonic plural where **i-STEM-in** is in free variation with **i-PLURAL STEM**. The latter is considered a relative form because the plural stem has number agreement, but no gender agreement. The relative marker **a** obligatorily precedes the relative. Schematically, the relative forms of adjectives look as follows:

Berber Relative

	meqqur ‘big’	mezzi ‘small’
<i>i</i> -STEM- <i>in</i> ~ <i>i</i> -STEM- <i>en</i>	<i>i</i> -muqqr- <i>in/-en</i>	<i>i</i> -mezzi- <i>n</i>

messus ‘insipid’	mellul ‘white’
<i>i</i> -messus- <i>in/-en</i>	<i>i</i> -mellul- <i>in/-en</i>

Arabic Relative

	ṭwil ‘tall’	ṣfer ‘yellow’
<i>i</i> -STEM- <i>in</i> / <i>i</i> -PL-STEM	<i>i</i> -ṭwil- <i>in</i>	<i>i</i> -ṣfer- <i>in</i> ~ <i>i</i> -ṣfar

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) *uletma-s = ahen a y-muqqr-en*
 sister-3S = S:ANP REL RF-big-RF
 ‘His older sister.’

(16) *iberriyen a y-mezzi-n ma ga-sen ši n lhemm bezzaf*
 sheep REL RF-small-RF NEG in-3PL NEG of flesh much
 ‘Small sheep do not have a lot of flesh.’

(17) *lektab n umḥadri a y-ṭwil-in*
 book of student REL RF-tall-RF
 ‘The book of the tall student.’

(18) *iṣyaren = ihen a y-xeḍr-in ma mezyan-in ši*
 sticks = PL:ANP REL RF-green-RF NEG good-PL NEG
 ‘Those thick green sticks are not good.’

(19) *iṣyaren = ihen a y-xuḍer 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) *asyar* = *ahen a y-xeḍr-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	
<i>bxil</i>	<i>bxil-a</i>	<i>bxil-in</i>	‘stingy’
<i>beid</i>	<i>beid-a</i>	<i>ḥeid-in</i>	‘far’
<i>qlil</i>	<i>qlil-a</i>	<i>qlil-in</i>	‘few’
<i>qrib</i>	<i>qrib-a</i>	<i>qrib-in</i>	‘near’
<i>qṣir</i>	<i>qṣir-a</i>	<i>qṣir-in</i>	‘short’
<i>tqil</i>	<i>tqil-a</i>	<i>tqil-in</i>	‘heavy’
<i>xfif</i>	<i>xfif-a</i>	<i>xfif-in</i>	‘light’
<i>xšin</i>	<i>xšin-a</i>	<i>xšin-in</i>	‘thick’
<i>ždid</i>	<i>ždid-a</i>	<i>ždid-in</i>	‘new’
<i>ylit</i>	<i>ylit-a</i>	<i>ylit-in</i>	‘fat’
<i>ḍeif</i>	<i>ḍeif-a</i>	<i>ḍeif-in</i>	‘weak’
<i>ḥnin</i>	<i>ḥnin-a</i>	<i>ḥnin-in</i>	‘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).

<i>rqiɣ</i>	<i>rqiɣ-a</i>	<i>rqiɣ-in</i>	‘thin’
<i>rxis</i>	<i>rxis-a</i>	<i>rxis-in</i>	‘cheap’
<i>twil</i>	<i>twil-a</i>	<i>twil-in</i>	‘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-zɣa-t* *argaz = ahen* *azergaw?*
 2S-see:P-2S man = S:ANP grey:EL
 ‘Have you seen that grey man?’

- (22) *lħayt = an* *aħemɣraw* *i* *lħayt = 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	
<i>byeɣ</i>	<i>beyɣ-a</i>	<i>buyeɣ</i>	‘white’
<i>kħel</i>	<i>keħl-a</i>	<i>kuħel</i>	‘black’
<i>xɣer</i>	<i>xedɣr-a</i>	<i>xuɣer</i>	‘raw, green’
<i>zreq</i>	<i>zerq-a</i>	<i>zureq</i>	‘blue’
<i>ħmer</i>	<i>ħemɣr-a</i>	<i>ħumer</i>	‘red’
<i>ħreš</i>	<i>ħerš-a</i>	<i>ħureš</i>	‘rough’
<i>šmek</i>	<i>šemk-a</i>	<i>šumek</i>	‘deaf’
<i>šfer</i>	<i>šefr-a</i>	<i>šufer</i>	‘yellow’
<i>rteb</i>	<i>retb-a</i>	<i>ruṭeb</i>	‘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	
<i>εwež</i>	<i>εwež-a</i>	<i>εiwež</i>	‘crooked’
<i>ħwel</i>	<i>ħwel-a</i>	<i>ħiwel</i>	‘crooked’
<i>εwer</i>	<i>εwr-a</i>	<i>εiwer</i>	‘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	
<i>ħlu</i>	<i>ħluw-a</i>	<i>ħluw-in</i>	‘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	
<i>nqi</i>	<i>nqiyy-a</i>	<i>nqiyy-in</i>	‘clean’
<i>qwi</i>	<i>qwiyy-a</i>	<i>qwiyy-in</i>	‘strong’

cC / cC-a / cC-in

M:SG	F:SG	PL	
<i>merr</i>	<i>merr-a</i>	<i>merr-in</i>	‘bitter’

cacic / cacic-a / cacic-in

M:SG	F:SG	PL	
<i>xatīr</i>	<i>xatīr-a</i>	<i>xatīr-in</i>	‘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	
<i>qerqašun-i</i>	<i>qerqašuni-ya</i>	<i>qerqašuniy-in</i>	‘multi-colored’
<i>zelliyyi</i>	<i>zelliyyi-a</i>	<i>zelliyyi-in</i>	‘bald’

<i>hezzuti</i>	<i>hezzutiy-a</i>	<i>hezzutiyy-in</i>	‘naked’
<i>duyri</i>	<i>duyriyy-a</i>	<i>duyriyy-in</i>	‘simple, honest’
<i>ghudi</i>	<i>ghudiy-a</i>	<i>ghudiy-in</i>	‘strong’
<i>hqiqi</i>	<i>hqiqiy-a</i>	<i>hqiqiy-in</i>	‘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 **-t**.

M:SG	F:SG	M:PL	F:PL	
<i>ḍubb-u</i>	<i>ḍubb-a</i>	<i>ḍubb-us</i>	<i>ḍubb-at</i>	‘fat’
<i>gurd-u</i>	<i>gurd-a</i>	<i>gurd-us</i>	<i>gurd-at</i>	‘fat’
<i>ruby-u</i>	<i>ruby-a</i>	<i>ruby-us</i>	<i>ruby-at</i>	‘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 **leewawel mqiqr-et** ‘young boys’ refers to children between the age of about 12 to 15 years. There is one exception. The diminutive of the adjective **mezzi** ‘small’ is **mzizu** ‘very small’ (the diminutive form loses pharyngealisation).

c₁c₂ic₂c₃

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	
<i>kḥel</i>	<i>kḥihel</i>	<i>kḥihl-a</i>	<i>kḥihl-in</i>	‘somewhat black’
<i>qaṣeḥ</i>	<i>qsiṣeḥ</i>	<i>qsiṣh-a</i>	<i>qsiṣh-in</i>	‘somewhat hard’
<i>qṣir</i>	<i>qsiṣer</i>	<i>qsiṣr-a</i>	<i>qsiṣr-in</i>	‘somewhat short’
<i>wasee</i>	<i>wsisee</i>	<i>wsise-a</i>	<i>wsise-in</i>	‘somewhat wide’
<i>xḍer</i>	<i>xḍiḍer</i>	<i>xḍiḍr-a</i>	<i>xḍiḍr-in</i>	‘somewhat green’
<i>zreq</i>	<i>zrireq</i>	<i>zriṛq-a</i>	<i>zriṛq-in</i>	‘somewhat blue’
<i>yareq</i>	<i>yrireq</i>	<i>yriṛq-a</i>	<i>yriṛq-in</i>	‘somewhat deep’
<i>ylit</i>	<i>ylilet</i>	<i>ylilt-a</i>	<i>ylilt-in</i>	‘somewhat fat’

<i>ɖɛif</i>	<i>ɖɛiɛf</i>	<i>ɖɛiɛf-a</i>	<i>ɖɛiɛf-in</i>	‘somewhat thin’
<i>ħmer</i>	<i>ħmimer</i>	<i>ħmimr-a</i>	<i>ħmimr-in</i>	‘somewhat red’
<i>ʃfer</i>	<i>ʃfifer</i>	<i>ʃfifr-a</i>	<i>ʃfifr-in</i>	‘somewhat yellow’
<i>ɥwil</i>	<i>ɥwiwel</i>	<i>ɥwiwl-a</i>	<i>ɥwiwl-in</i>	‘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	
<i>meqqur</i>	<i>mqiqer</i>	<i>mqiqr-et</i>	‘somewhat big’
<i>mezzi</i>	<i>mzizu</i>	<i>mzizu-t</i>	‘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	
<i>mellul</i>	<i>mliwel</i>	<i>mliwl-a</i>	<i>mliwl-in</i>	‘somewhat white’ ⁹⁶
<i>messus</i>	<i>msiwes</i>	<i>msiws-a</i>	<i>msiws-in</i>	‘somewhat insipid’
<i>rqiq</i>	<i>rqiweq</i>	<i>rqiwq-a</i>	<i>rqiwq-in</i>	‘somewhat thin’
<i>qlil</i>	<i>qliwel</i>	<i>qliwl-a</i>	<i>qliwl-in</i>	‘somewhat few’

c₁wic₁c₃

There is one adjective which has this scheme.

base	M:SG	F:SG	PL	
<i>byet</i>	<i>bwibet</i>	<i>bwibt-a</i>	<i>bwibt-in</i>	‘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 Srair). Furthermore, it can function as a head. The following forms exist:

⁹⁶ This adjective has +*t* 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	
<i>wa-yeṭ</i> ~ <i>wa-yṭiṭin</i>		<i>ta-yeṭ</i> ~ <i>ta-yeṭiṭin</i>		<i>wi-yeṭ</i> ~ <i>wi-ṭiṭin</i>	‘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) *ayeṭma-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 Berber⁹⁷. 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; \emptyset 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 trilateral 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.

<i>dfεε</i>	<i>medfuε</i>	<i>medfuε-a</i>	<i>medfuε-in</i>	‘push’
<i>dleḡ</i>	<i>medluḡ</i>	<i>medluḡ-a</i>	<i>medluḡ-in</i>	‘rub’
<i>fhem</i>	<i>mefhum</i>	<i>mefhum-a</i>	<i>mefhum-in</i>	‘understand’
<i>fekk</i>	<i>mefkuk</i>	<i>mefkuk-a</i>	<i>mefkuk-in</i>	‘rescue’
<i>freq</i>	<i>mefruq</i>	<i>mefruq-a</i>	<i>mefruq-in</i>	‘separate’
<i>hfεt</i>	<i>mehfut</i>	<i>mehfut-a</i>	<i>mehfut-in</i>	‘memorise’
<i>ḥkem</i>	<i>mehkum</i>	<i>mehkum-a</i>	<i>mehkum-in</i>	‘adjudicate’
<i>rešš</i>	<i>meṛšuš</i>	<i>meṛšuš-a</i>	<i>meṛšuš-in</i>	‘splash’
<i>wzen</i>	<i>muzun</i>	<i>mezun-a</i>	<i>muzun-in</i>	‘weigh’
<i>wžed</i>	<i>mužud</i>	<i>mežud-a</i>	<i>mužud-in</i>	‘be ready’

The following verbs of Berber origin have a suppletive relation to Arabic passive participles:

<i>qgen</i>	<i>mešduḍ</i>	<i>mešduḍ-a</i>	<i>mešduḍ-in</i>	‘closed’
<i>šš</i>	<i>mukul</i>	<i>mukul-a</i>	<i>mukul-in</i>	‘eat’
<i>zžeḡ</i>	<i>mehluḅ</i>	<i>mehluḅ-a</i>	<i>mehluḅ-in</i>	‘milk’

In addition to the regular **mccuc** pattern, Ghomara Berber has the following participles with the pattern **mccac**:

	M:SG	F:SG	PL	
<i>šekk - išukk</i>	<i>meškak</i>	<i>meškak-a</i>	<i>meškak-in</i>	‘doubt’
<i>miḥ</i>	<i>memyaḥ</i>	<i>memyaḥ-a</i>	<i>memyaḥ-in</i>	‘empty water’
<i>xṭar</i>	<i>mexṭar</i>	<i>mexṭar-a</i>	<i>mexṭar-in</i>	‘choose’ ⁹⁸

cf. the following suppletive passive participles:

<i>ḵnes</i>	<i>mešṛar</i>	<i>mešṛar-a</i>	<i>mešṛar-in</i>	‘fight’
<i>znez</i>	<i>mebyaε</i>	<i>mebyaε-a</i>	<i>mebyaε-in</i>	‘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 **xṭar** is reinterpreted 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	
<i>bna</i>	<i>mēbni</i>	<i>mēbni-yya</i>	<i>mēbni-yyin</i>	‘build’
<i>qla</i>	<i>meqli</i>	<i>meqli-yya</i>	<i>meqli-yyin</i>	‘bake’
<i>xwa - ixwi</i>	<i>mexwi</i>	<i>mexwi-yya</i>	<i>mexwi-yyin</i>	‘hollow out’

cf. the following suppletive passive participles:

<i>ttu</i>	<i>mensi</i>	<i>mensi-yya</i>	<i>mensi-yyin</i>	‘forget’
<i>suy</i>	<i>mešri</i>	<i>mešri-yya</i>	<i>mešri-yyin</i>	‘buy’
<i>snes</i>	<i>metfi</i>	<i>metfi-yya</i>	<i>metfi-yyin</i>	‘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	
<i>beddel</i>	<i>mbeddel</i>	<i>mbeddl-a</i>	<i>mbeddl-in</i>	‘put on, trade’
<i>berred</i>	<i>mberred</i>	<i>mberrd-a</i>	<i>mberrd-in</i>	‘make cold’
<i>debbey</i>	<i>mdebbey</i>	<i>mdebbi-a</i>	<i>mdebbi-in</i>	‘weed’
<i>dehher</i>	<i>mdehher</i>	<i>mdehhr-a</i>	<i>mdehhr-in</i>	‘show, make appear’
<i>felleq</i>	<i>mfelleq</i>	<i>mfellq-a</i>	<i>mfellq-in</i>	‘cut up in two pieces’
<i>melleh</i>	<i>mmelleh</i>	<i>mmellh-a</i>	<i>mmellh-in</i>	‘salty’
<i>hedded</i>	<i>mhedded</i>	<i>mhedd-d-a</i>	<i>mhedd-d-in</i>	‘threat’
<i>hedded</i>	<i>mhedded</i>	<i>mheddd-a</i>	<i>mheddd-in</i>	‘press’
<i>beyyet</i>	<i>mbeyyet</i>	<i>mbeyy-t-a</i>	<i>mbeyy-t-in</i>	‘whitewash’
<i>beyyen</i>	<i>mbeyyen</i>	<i>mbeyyn-a</i>	<i>mbeyyn-in</i>	‘show’
<i>wesseε</i>	<i>mwesseε</i>	<i>mwesse-a</i>	<i>mwesse-in</i>	‘widen’

There is one passive participle in our corpus which does not have a corresponding verb:

	M:SG	F:SG	PL	
-	<i>mdexxem</i>	<i>mdexxm-a</i>	<i>mdexxm-in</i>	‘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	
<i>ibekka</i>	<i>mbekki</i>	<i>mbekky-a</i>	<i>mbekk-in</i>	‘make cry’ ⁹⁹
<i>fedda</i>	<i>mfeddi</i>	<i>mfeddy-a</i>	<i>mfedd-in</i>	‘finish’
<i>lewwi</i>	<i>mlewwi</i>	<i>mlewwy-a</i>	<i>mleww-in</i>	‘spin, roll’
<i>meddi</i>	<i>mmeddi</i>	<i>mmeddy-a</i>	<i>mmedd-in</i>	‘sharpen’
<i>neqqi</i>	<i>mneqqi</i>	<i>mneqqy-a</i>	<i>mneqq-in</i>	‘clean’
<i>qerri</i>	<i>mqerri</i>	<i>mqerry-a</i>	<i>mqerr-in</i>	‘teach’

mcacc (stem III)¹⁰⁰

	M:SG	F:SG	PL	
<i>sameh</i>	<i>msameh</i>	<i>msamh-a</i>	<i>msamh-in</i>	‘forgive’
<i>hareb</i>	<i>mhareb</i>	<i>mharb-a</i>	<i>mharb-in</i>	‘wage war’
<i>gadd</i>	<i>mgaded</i>	<i>mgadd-a</i>	<i>mgadd-in</i>	‘flat, flatten’
<i>eafer</i>	<i>mεafer</i>	<i>mεafr-a</i>	<i>mεafr-in</i>	‘try’
<i>εaqeb</i>	<i>mεaqeb</i>	<i>mεaqb-a</i>	<i>mεaqb-in</i>	‘punish’
<i>εawed</i>	<i>mεawed</i>	<i>mεawd-a</i>	<i>mεawd-in</i>	‘tell’
<i>εared</i>	<i>mεared</i>	<i>mεard-a</i>	<i>mεard-in¹⁰¹</i>	‘invite’

There is one Berber-morphology verb with Berber etymology that can form a passive participle:

	M:SG	F:SG	PL	
<i>aḡem d ~ daḡem</i>	<i>mdaḡem</i>	<i>mdaḡem-a</i>	<i>mdaḡem-in</i>	‘draw water’

mcaci (defective)

	M:SG	F:SG	PL	
<i>zali</i>	<i>mzali</i>	<i>mzaly-a</i>	<i>mzal-in</i>	‘separate’
<i>hadi</i>	<i>mhadi</i>	<i>mhad-y-a</i>	<i>mhad-in</i>	‘touch’

mcawc (hollow)

	M:SG	F:SG	PL	
<i>sawem</i>	<i>msawem</i>	<i>msawem-a</i>	<i>msawem-in</i>	‘bargain over’
<i>εawed</i>	<i>mεawed</i>	<i>mεawed-a</i>	<i>mεawed-in</i>	‘repeat’

⁹⁹ The **ss-** derived form **ss-etrū** 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 **mεerud** 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	
<i>tweqqef</i>	<i>metweqqef</i>	<i>metweqqf-a</i>	<i>metweqqf-in</i>	‘stop’
<i>theššem</i>	<i>metheššem</i>	<i>metheššm-a</i>	<i>metheššm-in</i>	‘be ashamed’

mtcacc (stem VI)

The passive participles of stem VI attested in our corpus are given below.

	M:SG	F:SG	PL	
<i>ttafeq</i>	<i>mettafeq</i>	<i>mettafq-a</i>	<i>mettafq-in</i>	‘agree’
<i>teaqeb</i>	<i>metteaqeb</i>	<i>metteaqb-a</i>	<i>metteaqb-in</i>	‘be punished’
<i>tsameh</i>	<i>metsameh</i>	<i>metsamh-a</i>	<i>metsamh-in</i>	‘forgive each other’
<i>tsara</i>	<i>metsari</i>	<i>metsary-a</i>	<i>metsar-in</i>	‘take a walk’
<i>tilaqa</i>	<i>metlaqi</i>	<i>metlaqy-a</i>	<i>metlaq-in</i>	‘meet (each other)’
<i>tqadd</i>	<i>metqadd</i>	<i>metqadd-a</i>	<i>metqadd-in</i>	‘become equal’
<i>tfakk</i>	<i>metfakk</i>	<i>metfakk-a</i>	<i>metfakk-in</i>	‘escape, to get rid of’

metcc ~ mctacc (stem VIII)

There are only sound forms of these passive participles in our corpus.

	M:SG	F:SG	PL	
<i>ktašef</i>	<i>mektašef</i>	<i>mektašf-a</i>	<i>mektašf-in</i>	‘guess’
<i>eṭaref</i>	<i>meṭaref</i>	<i>meṭarf-a</i>	<i>meṭarf-in</i>	‘admit’
<i>štawer</i>	<i>meštawer</i>	<i>meštawer-a</i>	<i>meštawer-in</i>	‘advise’
<i>ḥtařem</i>	<i>meḥtařem</i>	<i>meḥtařm-a</i>	<i>meḥtařem-in</i>	‘respect’
<i>rtæeb</i>	<i>mertæeb</i>	<i>mertæeb-a</i>	<i>mertæeb-in</i>	‘be scared’
<i>ḥtaž</i>	<i>meḥtaž</i>	<i>meḥtaž-a</i>	<i>meḥtaž-in</i>	‘need’

mstccc (stem X)

	M:SG	F:SG	PL	
<i>stežeb</i>	<i>mestežeb</i>	<i>mestežb-a</i>	<i>mestežb-in</i>	‘astonished’
<i>stanes</i>	<i>mestanes</i>	<i>mestanes-a</i>	<i>mestanes-in</i>	‘accustome’

10.1.3. Quadrilateral verbs

mcccc

Participles derived from quadrilateral verbs are well-represented. They always have a passive interpretation. For example:

	M:SG	F:SG	PL	
<i>belbel</i>	<i>mbeḷbel</i>	<i>mbeḷbl-a</i>	<i>mbeḷbl-in</i>	‘mate’
<i>beryez</i>	<i>mberyez</i>	<i>mberyz-a</i>	<i>mberyz-in</i>	‘swap’
<i>derdeb</i>	<i>mderdeb</i>	<i>mderdb-a</i>	<i>mderdb-in</i>	‘arouse’
<i>penčer</i>	<i>mpenčer</i>	<i>mpenčer-a</i>	<i>mpenčer-in</i>	‘stab’
<i>qefqef</i>	<i>mqefqef</i>	<i>mqefqf-a</i>	<i>mqefqf-in</i>	‘shiver’
<i>qendel</i>	<i>mqendel</i>	<i>mqendl-a</i>	<i>mqendl-in</i>	‘brighten’
<i>qerfez</i>	<i>mqerfez</i>	<i>mqerfz-a</i>	<i>mqerfz-in</i>	‘pinch’
<i>qerwet</i>	<i>mqerwet</i>	<i>mqerwt-a</i>	<i>mqerwt-in</i>	‘stutter or stammer’
<i>selsel</i>	<i>mselsel</i>	<i>mselsel-a</i>	<i>mselsl-in</i>	‘to bake grain’
<i>sentef</i>	<i>msentef</i>	<i>msentf-a</i>	<i>msentf-in</i>	‘wound’
<i>xerčef</i>	<i>mxerčef</i>	<i>mxerčf-a</i>	<i>mxerčf-in</i>	‘speak unclearly’
<i>zegzeg</i>	<i>mzegzeg</i>	<i>mzegzg-a</i>	<i>mzegzg-in</i>	‘mate’
<i>ærkel</i>	<i>mærkel</i>	<i>mærkl-a</i>	<i>mærkl-in</i>	‘limp’
<i>yaylef</i>	<i>myaylef</i>	<i>myaylf-a</i>	<i>myaylf-in</i>	‘become angry’
<i>ssifef</i>	<i>myerbel</i>	<i>myerbl-a</i>	<i>myerbl-in</i>	‘sieve’

The following participles have irregular schemes. The passive participle **mazuzi** does not have a feminine or plural form.

	M:SG	F:SG	PL	
<i>ğhed</i>	<i>meğhed</i>	<i>mğehd-a</i>	<i>mğehd-in</i>	‘loud’
-	<i>muxliš</i>	<i>muxliš-a</i>	<i>muxliš-in</i>	‘faithful’
<i>ziwen</i>	<i>mziwen</i>	<i>mziwn-a</i>	<i>mziwn-in</i>	‘beautiful’
<i>nezzež</i>	<i>mazuzi</i>	-	-	‘be late for ploughing’
-	<i>mezgawger</i>	<i>mezgawger-a</i>	<i>mezgawgr-in</i>	‘squatted’
-	<i>mmerr</i>	<i>mmerr-a</i>	<i>mmerr-in</i>	‘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 **ṭteṣ** ‘sleep’ corresponds to the active participle **naeəs** ‘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	
<i>bred</i>	<i>bared</i>	<i>bard-a</i>	<i>bard-in</i>	‘become cold’
<i>kmel</i>	<i>kamel</i>	<i>kaml-a</i>	<i>kaml-in</i>	‘complete’
<i>kreh</i>	<i>kareh</i>	<i>karh-a</i>	<i>karh-in</i>	‘hate’
<i>mles</i>	<i>males</i>	<i>mals-a</i>	<i>mals-in</i>	‘smooth’
<i>mleḥ</i>	<i>maleḥ</i>	<i>malh-a</i>	<i>malh-in</i>	‘salty’
<i>ban</i>	<i>bayen</i>	<i>bayn-a</i>	<i>bayn-in</i>	‘appear, seem’
<i>fiq</i>	<i>fayeq</i>	<i>fayq-a</i>	<i>fayq-in</i>	‘wake up’
<i>eiš</i>	<i>εayeš</i>	<i>εayš-a</i>	<i>εayš-in</i>	‘live’
<i>ḥas</i>	<i>ḥayes</i>	<i>ḥays-a</i>	<i>ḥays-in</i>	‘feel’
<i>ṣum ~ zum</i>	<i>ṣayem</i>	<i>ṣaym-a</i>	<i>ṣaym-in</i>	‘fast’
<i>wsee</i>	<i>wasee</i>	<i>wase-a</i>	<i>wase-in</i>	‘wide’

The active participle **kayen** is different from other active participles in that it functions as an existential (cf. IV.2.8.5. non-verbal predicate, furthermore the related element **kun** is used in counterfactuals, cf. IV.4.2.4.).

-	<i>kayen</i>	<i>kayn-a</i>	<i>kayn-in</i>	‘exist’
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Suppletive participles

	M:SG	F:SG	PL	
<i>qqim</i>	<i>gales</i>	<i>gals-a</i>	<i>gals-in</i>	‘sit’
<i>šš</i>	<i>wakel</i>	<i>wakl-a</i>	<i>wakl-in</i>	‘eat’
<i>ṭteṣ</i>	<i>naeəs</i>	<i>naeəs-a</i>	<i>naeəs-in</i>	‘sleep’
<i>bdeḍ</i>	<i>waqef</i>	<i>waqf-a</i>	<i>waqf-in</i>	‘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	
<i>kra - ikri</i>	<i>kari</i>	<i>kary-a</i>	<i>kar(y)-in</i>	‘hire’
<i>m̄di</i>	<i>mādi</i>	<i>mādy-a</i>	<i>mād(y)-in</i>	‘pointed’
<i>qra - iqra</i>	<i>qari</i>	<i>qary-a</i>	<i>qar(y)-in</i>	‘study, read’

Suppletive participles

	M:SG	F:SG	PL	
<i>ttu</i>	<i>nasi</i>	<i>nasy-a</i>	<i>nasy-in</i>	‘forget’
<i>ddu</i>	<i>maši</i>	<i>mašš-a</i>	<i>maš(y)-in</i>	‘go’
<i>ddu d</i>	<i>maži</i>	<i>mağ-a</i>	<i>mažy-in</i> ¹⁰²	‘come’

ccc-an

	M:SG	F:SG	PL	
<i>hzen</i>	<i>heznan</i>	<i>heznan-a</i>	<i>heznan-in</i>	‘be sad’
<i>ydeb</i>	<i>yedban</i>	<i>yedban-a</i>	<i>yedban-in</i>	‘be angry’
<i>zeef</i>	<i>zeefan</i>	<i>zeefan-a</i>	<i>zeefan-in</i>	‘be reluctant’
<i>sker</i>	<i>sekran</i>	<i>sekran-a</i>	<i>sekran-in</i>	‘be drunk’
<i>freh</i>	<i>ferhan</i>	<i>ferhan-a</i>	<i>ferhan-in</i>	‘be happy’
<i>eggez</i>	<i>egzan</i>	<i>egzan-a</i>	<i>egzan-in</i>	‘be lazy’

There is one adjective of this type which has an optional **u** after the first consonant.

	M:SG	F:SG	PL	
---	<i>εuryan ~ εeryan</i>	<i>εuryan-a ~ εeryan-a</i>	<i>εuryan-in ~ εeryan-in</i>	‘naked’

cCac

There is one active participles of this type in our corpus.

	M:SG	F:SG	PL	
<i>xdem</i>	<i>xeddam</i>	<i>xeddam-a</i>	<i>xeddam-in</i>	‘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	
<i>eya</i>	<i>εeyyan</i>	<i>εeyyan-a</i>	<i>εeyyan-in</i>	‘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	<i>nekk ~ nekki ~ nekkin ~ nekkinet</i>
2:M:SG	<i>kežž¹⁰³ ~ keği ~ keğin ~ keğinet</i>
2:F:SG	<i>kemm ~ kemmi ~ kemmin ~ kemminet</i>
3:M:SG	<i>netta</i>
3:F:SG	<i>nettata</i>
1:PL	<i>nuḵna</i>
2:PL	<i>kunna</i>
3:PL	<i>nihma¹⁰⁴</i>

Arabic third person pronouns can optionally follow the presentative particle **ha**. Berber pronouns can be used in this context as well.

3:M:SG	<i>ha huwwa</i>
3:F:SG	<i>ha heyya</i>
3:PL	<i>ha hum</i>

¹⁰³ At the end of a word ḡ can become žž (cf. II.1.3.).

¹⁰⁴ El Hannouche (2010: 113) gives the form **niḵma** for the dialect of Amṭiḡan, 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	<i>ay</i>	<i>ay</i>	<i>y ~ ṭ (yṭ)</i> ¹⁰⁶
2:M:SG	<i>aḳ</i>	<i>aḳ</i>	<i>ḳ</i>
2:F:SG	<i>am</i>	<i>am</i>	<i>m</i>
3:M:SG	<i>aṭ / ah</i>	<i>t</i>	<i>y ~ ṭ</i>
3:F:SG	<i>at / ah</i>	<i>t ~ tet ~ teṭ</i>	<i>t</i>
1:PL	<i>anax</i>	<i>anax</i>	<i>yen</i>
2:PL	<i>awen</i>	<i>awen</i>	<i>wen</i>
3:PL	<i>ahen</i>	<i>ten</i>	<i>n</i>

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 **yṭ** is put between brackets as it is not the common form in Iɛɾabɛn. It is encountered once in our text corpus. In Amṭiqan there is a distinction when the pronouns occur in this position (El Hannouche, 2010: 116). The third person pronoun is **ṭ**, like in Iɛɾabɛn, whereas the first person has form **yṭ. š a yṭ izzwiṭ** thus only means 'He will miss me'. The speakers in Iɛɾabɛn 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 **šebber** ‘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>i-šebbr = ay</i>	<i>šebbr-an = ay</i> ¹⁰⁷
2:M:SG	<i>i-šebbr = ak</i>	<i>šebbr-an = ak</i>
2:F:SG	<i>i-šebbr = am</i>	<i>šebbr-an = am</i>
3:M:SG	<i>i-šebbr = at</i>	<i>šebbr-en = t</i>
3:F:SG	<i>i-šebbr = at</i>	<i>šebbr-en = tet ~ teṭ</i>
1:PL	<i>i-šebbr = anax</i>	<i>šebbr-an = anax</i>
2:PL	<i>i-šebbr = awen</i>	<i>šebbr-an = awen</i>
3:PL	<i>i-šebbr = ahen</i>	<i>šebbr-en = ten</i>

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-nṭer, i-leqt = at aferruḷ.*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** ~ **teṭ**. The forms **tet** and **teṭ** 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** ~ **teṭ** 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 **ṭ** following a verbal suffix, cf. **ufax ṭ 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) *qeddd-en = tet, mmmr-en = tet*
 cut:P-3PL = 3FS:DO send:P-3PL = 3FS:DO
 ‘They cut her into pieces and sent her.’
- (3) *i ləetta tseyyab-en = tet*
 and piece.of.bread throw:I-3PL = 3FS:DO
 ‘and the chunk of bread, they throw it away’
- (4) *maši id izref i netta i-tett tay^wlalt = ahen.*
 go:AP:MS with road and he 3MS-eat:I bissara:EL = S:ANP
i-tqettar = as = t x umezzuḡ 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) *tṭf-an = as = tet*
 3FS-grab:P = 3S:IO = 3FS:DO
 ‘They grabbed her for him.’
- (7) *ma h-uf = ahen ši*
 NEG 3FS-find:P = 3PL:DO NEG
 ‘She did not find them.’
- (8) *qleb x tṭhar nn-ek te-ḡḡ-et = ten*
 turn:IMP on back of-2S 2S-do:A-2S = 3PL:DO
 ‘Turn on your back and release them.’ (lit. do them)
- (9) *i-qqn = as = ten i usebbiz = ahen*
 3MS-tie:P = 3S:IO = 3PL:DO to bull:EA = S:ANP
 ‘He tied them to that cow.’

In the third person type 1 distinguishes the masculine variants **at** / **ah** and the feminine variants **at** / **ah**. The variant **ah** appears when it follows a verb not ending in a suffix and

preceding the deictic particle **d** (after a feminine pronoun) / **id** (after a masculine pronoun), for example:

- (10) *i-šebber* *ya* *tsekkurt*, *sæa* *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 **ṭ**. The two pronouns are different, however, when preceding a third person plural verb. In this position the first person pronoun is **ṭ** 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	-	<i>y</i>
2:SG	<i>y</i>	<i>y</i>
3:M:SG	<i>ṭ</i>	<i>ṭ</i>
3:F:SG	<i>y</i>	<i>y</i>
1:PL	-	<i>y</i>
2:PL	<i>y</i>	<i>y</i>
3:PL	<i>ṭ</i>	<i>y</i>

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 **zzwiṭ** ‘miss’ without initial vowel and **uf** ‘find’ with initial vowel. First person and third person direct object pronouns precede the verb:

1:SG	<i>š a y ẓẓwītax</i>	‘I will miss him’
2:SG	<i>š a y tezẓwītet</i>	‘You will miss him/ me’
3:M:SG	<i>š a ṭ izẓwīt</i>	‘He will miss him/ me’
3:F:SG	<i>š a y tezẓwīt</i>	‘She will miss him/ me’
1:PL	<i>š a y nezẓwīt</i>	‘We will miss him’
2:PL	<i>š a y tezẓwītem</i>	‘You will miss him/ me’
3:PL	<i>š a y ẓẓwīten</i>	‘They will miss him’
3:PL	<i>š a ṭ ẓẓwīten</i> 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	<i>š a y wfax</i>	‘I will find him’
2:SG	<i>š a y tufet</i>	‘You will find him/ me’
3:M:SG	<i>š a ṭ yuf</i>	‘He will find him/ me’ ¹¹⁰
3:F:SG	<i>š a y tuf</i>	‘She will find him/ me’
1:PL	<i>š a y nuf</i>	‘We will find him’
2:PL	<i>š a y tufem</i>	‘You (PL) will find him/ me’
3:PL	<i>š a y ufen</i>	‘They will find him’
3:PL	<i>š a ṭ ufen</i>	‘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-ttutu a y = n-ẓeḍ g rṛḥa, rṛḥa n ufus,*
 1PL-go:I AD 3MS:DO = 1PL-grind:A in mill, mill of hand:EA
hamka, ne-ẓẓaḍ = aṭ....
 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 *ỵṭ* would be used here.

¹¹⁰ In the variant of Amṭiqan ‘He will find me.’ is *š a ỵṭ yuf* (elicitation in Bou Ahmed).

¹¹¹ In the variant of Amṭiqan ‘They will find me.’ is *š a ỵṭ 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 *t* is used preceding third person masculine singular verbs.

- (13) *wella a wekl-en ga-s iyežden a y=bežžt-en*
 or AD step:A-3PL in-3:MS billy.goats AD 3MS:DO = hurt:A-3PL
wella a t=ye-wwet ayižd 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, aberrey tzeyyer s ibžaden nn-es.*
 anyway sheep:EL PASS:tight:PF:3MS with urine of-3:M
š i-eiq-u id-es š a y=šš-en...
 FUT IMPF:3PL-be.aware-IMPF:3PL with-3:M FUT AD 3MS:DO = eat:A-3PL
 ‘Anyway, the sheep had to urinate. They would become aware of him, they would eat him.’

- (14b) *i-nn = as: mki ne-dda hetta tferreq-na, š*
 3MS-said:P = 3S:IO if 1PL-go:P until PASS:separate-1PL:PF FUT
i-eiss-u = li aqđi ulla nnmer ulla kđa,
 3PL:IMPF-guard-3PL:IMPF = 1PL:IO jackal:EL or leopard or something
š a t=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 *yen* and third person plural *n*, e.g:

- (15) *nhar = ađ š a yen = i-ney baba nn-em*
 day = S:PRX FUT AD 1PL:DO = 3MS-kill:A father of-2FS
 ‘Today your father is going to kill us.’

- (16) *i lyula=yahen š a n=te-šš.*
 and ogress = S:ANP FUT AD 3PL:DO = 3FS-eat:A
 ‘And the ogress is going to eat them.’

Example (17) illustrates the use of a third/first person singular pronoun *t̄* before the participle. The referent can only be inferred from the context.

- (17) *šk a t̄ i-zzwiṭ-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	<i>ay</i>	<i>y ~ t̄¹¹²</i>
2:M:SG	<i>aḵ</i>	<i>ḵ</i>
2:F:SG	<i>am</i>	<i>m</i>
3:SG	<i>as</i>	<i>s</i>
1:PL	<i>anax</i>	<i>yen</i>
2:PL	<i>awen</i>	<i>wen</i>
3:PL	<i>asen</i>	<i>sen</i>

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 *t̄* is used before third person masculine singular and third person plural verbs, e.g.:

2:M:SG	<i>š a y t̄awḍet tax^wraft</i>	‘You will tell me a story’
3:M:SG	<i>š a t̄ iṣawḍet tax^wraft</i>	‘He will tell me a story’
3:F:SG	<i>š a y t̄awḍet tax^wraft</i>	‘She will tell me a story’
2:PL	<i>š a y t̄awḍwem tax^wraft</i>	‘You will tell me a story’
3:PL	<i>š a t̄ iṣawḍen tax^wraft</i>	‘They will tell me a story’

¹¹² Just like the direct object pronoun the variant *yṭ* is used in Amṭiḡan (cf. El Hannouche, 2010: 116, 118). Speakers from Amṭiḡan 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 ṭ = 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.

		<i>fsir</i> ‘behind’	<i>g</i> ‘in’	
1:SG	<i>-i ~ y</i>	<i>fsir-i</i> ‘behind me’	<i>ga-y</i>	‘in me’
2:M:SG	<i>-k</i>	<i>fsir-ek</i> ‘behind you (M)’	<i>ga-k</i>	‘in you’
2:F:SG	<i>-m</i>	<i>fsir-em</i> ‘behind you (F)’	<i>ga-m</i>	‘in you’
3:SG	<i>-s</i>	<i>fsir-es</i> ‘behind him/her’	<i>ga-s</i>	‘in him/her’
1:PL	<i>-nax</i>	<i>fsir-nax</i> ‘behind us’	<i>ga-nax</i>	‘in us’
2:PL	<i>-un ~ -wen</i>	<i>fsir-un</i> ‘behind you (PL)’	<i>ga-wen</i>	‘in you’
3:PL	<i>-sen</i>	<i>fsir-sen</i> ‘behind them’	<i>ga-sen</i>	‘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	-∅	<i>kma-∅</i>	'my brother'
2:M:SG	- <i>k</i>	<i>kma-k</i>	'your (M) brother'
2:F:SG	- <i>m</i>	<i>kma-m</i>	'your (F) brother'
3:SG	- <i>s</i>	<i>kma-s</i>	'his brother'
1:PL	-	<i>kma nn-ax</i>	'our brother'
2:PL	-	<i>kma nn-un</i>	'your (PL) brother'
3:PL	-	<i>kma nn-sen</i>	'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 pronoun¹¹⁵. 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>i</i> / - <i>ni</i> (verbal suffix)	- <i>y</i> / - <i>ni</i> (verbal suffix)
2:SG	- <i>ek</i>	- <i>k</i>
3:M:SG	- <i>u</i>	- <i>h</i>
3:F:SG	- <i>a</i>	- <i>ha</i>
1:PL	- <i>na</i>	- <i>na</i>
2:PL	- <i>kum</i>	- <i>kum</i>
3:PL	- <i>em</i>	- <i>hem</i> ~ - <i>hum</i>

The following paradigms show direct object pronominal suffixes attached to a third person singular and a third person plural form of the verb **eteq** '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).

	ε̣teq ‘he helped’	ε̣tequ ‘they helped’
1:SG	<i>ε̣teq-ni</i>	<i>ε̣tequ-ni</i>
2:SG	<i>ε̣teq-ek</i>	<i>ε̣tequww-ek</i>
3:M:SG	<i>ε̣teq-u</i>	<i>ε̣tequww-eh</i>
3:F:SG	<i>ε̣teq-a</i>	<i>ε̣tequ-ha</i>
1:PL	<i>ε̣teq-na</i>	<i>ε̣tequ-na</i>
2:PL	<i>ε̣teq-kum</i>	<i>ε̣tequ-kum</i>
3:PL	<i>ε̣teq-em</i>	<i>ε̣tequ-hem ~ -hum</i>

In the following text excerpts the use of the pronouns is illustrated. The borrowed Arabic DO pronoun accompanies the borrowed verb:

(20) *aḡdi ε̣teq-ni zeg nnmer*
 jackal help:PF-1S from leopard
 ‘The jackal helped me (get rid of) from the leopard.’

(21) *nettaṭa ma ka-t-fehm-u ši ε̣awed*
 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	<i>l-i</i>
2:SG	<i>l-ek</i>
3:M:SG	<i>l-u</i>
3:F:SG	<i>l-a</i>
1:PL	<i>l-na</i>
2:PL	<i>l-kum</i>
3:PL	<i>l-em</i>

The following two examples show the use of the indirect object pronoun with borrowed verbs.

- (23) *ka-ḥsab = 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-εiss-u-l-i* *aḡdi 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) *amk 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 **εemmer-** ~ **εummer-** ‘never’, **fḥal-** ‘way’ shown in examples (27) and (28) and **byedd-** ‘self’ in (29) and (30) (See below for reciprocal pronoun **baεṭiyat-** / **baεṭ-** ~ **baεḍ-** and the reflexive pronoun **miss-** ~ **nefs-**.).

- (27) *εemmr-ek 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) *šetṭh-ax = t byedd-i*
 make.dance:P-1S = 3MS:DO self-1S

'I made him dance myself.'

- (30) *wella a k=i-bb netta byedd-u*
or AD 2MS=3MS-take:A he self-3MS
'Or he will take you himself.'

11.5.2. Suffix pronouns -ahu, -ahi, -ahem ~ -ahum

The interrogatives **nemmen** and **yemmen**, made up of a combination of the simple preposition **n** 'of' and **yer** 'at' with **men** ~ **mmen** 'who, what' can take the Arabic suffix pronouns: **-ahu** masculine singular, **-ahi** feminine singular and **-ahem** ~ **-ahum** plural. Furthermore, so can prepositions consisting of a preposition and the element **nemmen**, so-called prepositional complexes, except for **fsi nemmen**. For example:

- (31) *n-emn-ahu?*
of-who-3MS
'Whose is it?'

- (32) *gum ne-mmen-ahem?*
front of-who-3PL
'In front of whom are they?'

11.6. Reciprocal and reflexive pronouns

The reciprocal element **baṣṭiyat** / **baṣṭ** 'each other' and the reflexive element **miss-** ~ **nefs-** 'self' are borrowed from Arabic. They take Arabic suffixes. The form **baṣṭ** is found as well, though it is less frequent than the others. It can only be used in the plural. The reciprocal forms are:

baṣṭiyat- / **baṣṭ-** ~ **baṣṭ**

- 1:PL *baṣṭiyat-na* ~ *baṣṭ-na* 'each other'
2:PL *baṣṭiyat-kum* ~ *baṣṭ-kum* 'each other'
3:PL *baṣṭiyat-em* ~ *baṣṭ-em* 'each other'

For example:

- (33) *ne-dda i baṣṭiyat-na*
1PL-go:P with each.other-1PL

‘We went with each other.’

- (34) *te-wt-em* *baṣṭ-kum*
 2PL-hit:P-2PL each.other-2PL
 ‘You hit each other.’

- (35) *wṭa-n* *baṣṭiyat-em*
 hit:P-3PL each.other-3PL
 ‘They hit each other.’

An example of the reflexive pronoun is:

- (36) *i-deḡḡ* *miss-u* *ssḃee*
 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.	<i>a-ḍ ~ a-ḍin ~ a-ḍinet</i>	<i>a-n ~ a-ni ~ a-nit</i>	<i>a-hen</i>
PL.	<i>i-ḍ ~ i-ḍi ~ i-ḍinet</i>	<i>i-n ~ i-ni ~ i-ninet</i>	<i>i-hen ~ i-hin</i>

The agreement in number of the post-nominal clitics is shown in the following examples.

Masculine Singular

argaz a-ḍ ‘this man’
argaz a-n ‘that man’
argaz a-hen ‘that man’

Feminine Singular

tameṭṭut a-ḍ ‘this woman’
tameṭṭut a-n ‘that woman’
tameṭṭut a-hen ‘that woman’

Masculine Plural

irgazen i-ḍ ‘these men’

Feminine Plural

tiseyyalan i-ḍ ‘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).

<i>irgazen i-n</i>	‘those men’	<i>tiseyyalan i-n</i>	‘those girls’
<i>irgazen i-hen</i>	‘those men’	<i>tiseyyalan i-hen</i>	‘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	<i>u-ha ~ u-haḍ ~ u-haḍin ~ u-haḍinet</i>	<i>w-an ~ w-ani ~ w-anit</i>
F:SG	<i>t-ha ~ t-haḍ ~ t-haḍin ~ t-haḍinet</i>	<i>t-an ~ t-ani ~ t-anit</i>
PL	<i>u-hi ~ u-hiḍ ~ u-hiḍin ~ u-hiḍinet</i>	<i>w-in ~ w-ini ~ w-init</i>
	anaphoric	pronominal head
M:SG	<i>u-hen ~ u-henni ~ u-henniṭ</i>	<i>w-a</i>
F:SG	<i>t-hin ~ t-hinni ~ t-hinniṭ¹¹⁷</i>	<i>t-a</i>
PL	<i>u-hin ~ u-hinni ~ u-hinniṭ</i>	<i>w-i</i>

A number of examples of demonstrative pronouns as they are used in texts are:

(37) *u-ha εemmi nn-em afeṛṛuḥ*
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-ḡ u-ha*
 fish:EL = S:PRX MS-PRX
 ‘This fish!’

(41) *tameṭṭut = 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 ššear 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-tḥerraḥ-en?*
 who MS-PRH REL RF-call:I-RF

‘Who is that who is calling?’

(45a) *ya w-i d=i-ttitu-n=d a su*
only PL:PRH DC=RF-go:I-RF=DC AD [3MS-]drink:A
‘Only the ones who come will drink’

(45b) *ama w-in a ye-dda-n ya leɛwawel, ya ššmayet*
as.for PL-PRH REL RF-go:P-RF only children, only cowards
‘Those who have gone are children, just cowards’

11.9. Indefinite pronouns

The indefinite element **ay** either occurs on its own or combines with the singular proximal or anaphoric post-nominal deictic to form an indefinite pronoun. The proximal and anaphoric forms have several forms which are in free variation. The element **ay** marks state.

Proximal

EL *ay-ha ~ ay-haḏ ~ ay-haḏi ~ ay-haḏinet*
EA *w-ay-ha ~ w-ay-haḏ ~ w-ay-haḏi ~ w-ay-haḏinet*

Anaphoric

EL *ay-hen ~ ay-henni ~ ay-henniḏ*
EA *w-ay-hen ~ w-ay-henni ~ w-ay-henniḏ*

The element **ay** is always followed by a relative clause introduced by **a**, as in example (46) and (47). It is therefore always a focus construction (cf. chapter IV.7.2.). It is not possible to use it in any other context. The phrase **ay a nnes** means ‘property’ (lit. ‘that which is his’). The use proximal and anaphoric indefinite pronouns are shown in example (48) and (49). They get EA marking when preceded by a preposition. As shown in example (50) and (51) the EA form **way-** can be shortened to **wi-** or **uy-**.

(46) *fk=ay ay a tleb-t-ek*
give:IMP=1S INDEF REL demand:PF-1S-2S:DO
‘Give me what I demanded from you.’

(47) *i-sker ay a nn-es*
3MS-make:P INDEF REL of-3S
‘He has built up his property.’

- (48) *ay-haḏ* *a* *k = 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* *mudḥika*
 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 ḥaḏr-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** / **yaṭ** ~ **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* *tsekṭan*
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** / **yaṭ** ~ **yah** is used to modify a noun. When asked ‘could you count from one to ten’ the people use **waḥit**, **žuž** ~ **zuž**, **tlaṭa** etc. When asked ‘how much do you have?’ the answer could be **yan** / **yaṭ** ‘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 people¹¹⁸. 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 for ‘two’ is always **tnayen**. From hundred upwards the order is switched to ‘hundred 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 **myaṭayen** 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 restricted number of nouns. Combined numerals are linked

¹¹⁸ In the Arabic dialect of Anjra the same two forms exist (cf. Vicente 2000:145).

together by means of **u** ~ **w** (cf. IV.4.1. coordination). Below we present the two sets of cardinal numbers.

	Set 1	Set 2
1	<i>wahit, yan ~ yat</i>	-
2	<i>žuž / zuž, tnayen</i>	-
3	<i>tlata</i>	<i>telt</i>
4	<i>areb(b)εa</i>	<i>arβε</i>
5	<i>xemsa</i>	<i>xems</i>
6	<i>setta</i>	<i>sett</i>
7	<i>sebea</i>	<i>seβε</i>
8	<i>tmenya</i>	<i>tmen</i>
9	<i>tesεut</i>	<i>tsee</i>
10	<i>εašra</i>	<i>εšer</i>
11	<i>hdaš</i>	<i>hdašer</i>
12	<i>tnaš</i>	<i>tnašer</i>
13	<i>tlettaš</i>	<i>tlettašer</i>
14	<i>ṛbeεtaš</i>	<i>ṛbeεtašer</i>
15	<i>xemmestaš</i>	<i>xemmestašer</i>
16	<i>settaš</i>	<i>settašer</i>
17	<i>sbeεtaš</i>	<i>sbeεtašer</i>
18	<i>tmentaš</i>	<i>tmentašer</i>
19	<i>tseεtaš</i>	<i>tseεtašer</i>
20	<i>εišrin</i>	
21	<i>wahit u εišrin</i>	
22	<i>tnayen u εišrin</i>	
etc.		
30	<i>tlatın</i>	
40	<i>arebein</i>	
50	<i>xemsin</i>	
60	<i>settin</i>	
70	<i>sebein</i>	
80	<i>tmanin</i>	
90	<i>tessein</i>	
100	<i>mya</i>	<i>myat</i>

101	<i>mya w waḥit</i>
etc.	
200	<i>myatayn</i>
300	<i>teltemya</i>
400	<i>arḃeemya</i>
500	<i>xemsemya</i>
600	<i>settemya</i>
700	<i>sebēemya</i>
800	<i>temnemya</i>
900	<i>tesēemya</i>
999	<i>tesēemya</i>
1100	<i>ḥḍašermya</i>
1000	<i>alef</i>
2000	<i>alfayen</i>
3000	<i>teltalaf</i>
11000	<i>ḥḍašeralef</i>
million	<i>menyul</i> <i>žuč n mnayel</i> etc.
bilion	<i>menyar</i> <i>žuč n mnayer</i> 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 **yaṭ** 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 usyun*
 one rope:EA
 ‘one rope’
- (4) *ya wsyun*
 one rope:EA
 ‘one rope’
- (5) *ya temḍa*
 one pond:EA
 ‘a lake’
- (6) *yah temḍa*
 one pond:EA
 ‘a lake’
- (7) *yan ḍ-ḍwiwen*
 one ART-light:DIMIN
 ‘a small light’
- (8) *yah s-sennar-a*
 one ART-hook-FS
 ‘a hook’
- (9) **ya ssennara*
 one ART-hook-FS
 ‘a hook’

12.1.2. Nouns with special morphology

Besides the numerals ‘hundred’ and ‘thousand’ a limited number of nouns is preceded by the numerals from set 2. The singular is expressed by using the bare noun. The dual is expressed using the suffix **-ayen**. From three until ten the set 2 forms are followed by the plural form of the noun. The numerals eleven to nineteen take a special form with **er** ending. From twenty upwards the same numerals are used as with other nouns. The noun is in the

singular form from eleven upwards. Note that the noun ‘year’ is variable. It is **εam** for ‘one year’, **εamayen** for ‘two years’, but **snin** from three to ten years. From ten upwards it is either **εam** or **sna**.

‘day’		‘month’	
<i>nhar</i>	‘one day’	<i>šhar</i>	‘one month’
<i>yum-ayn</i>	‘two days’	<i>šehr-ayn</i>	‘two months’
<i>telt eyyam</i>	‘three days’	<i>telt šhur</i>	‘three months’
<i>r̥be eyyam</i>	‘four days’	<i>r̥be šhur</i>	‘four months’
<i>xems eyyam</i>	‘five days’	<i>xems šhur</i>	‘five months’
<i>sett eyyam</i>	‘six days’	<i>sett šhur</i>	‘six months’
<i>sebe eyyam</i>	‘seven days’	<i>sebe šhur</i>	‘seven months’
<i>tmen eyyam</i>	‘eight days’	<i>tmen šhur</i>	‘eight months’
<i>tsee eyyam</i>	‘nine days’	<i>tsee šhur</i>	‘nine months’
<i>eešr eyyam</i>	‘ten days’	<i>eešr šhur</i>	‘ten months’
<i>h̥dašer yum</i>	‘eleven days’	<i>h̥dašer šhar</i>	‘eleven months’
<i>tmanin yum</i>	‘eighty days’	<i>tmanin šhar</i>	‘eighty months’

‘year’	
<i>εam</i>	‘one year’
<i>εam-ayn</i>	‘two years’
<i>telt snin</i>	‘three years’
<i>r̥be snin</i>	‘four years’
<i>xems snin</i>	‘five years’
<i>sett snin</i>	‘six years’
<i>sebe snin</i>	‘seven years’
<i>tmen snin</i>	‘eight years’
<i>tsee snin</i>	‘nine years’
<i>eešr snin</i>	‘ten years’
<i>h̥dašer εam ~ sna</i>	‘eleven years’
<i>tmanin εam ~ sna</i>	‘eighty years’

12.1.3. Money units

The most frequently used money units in the Jbala are **ryal**, **frank** and **derhem**. One **ryal** is half a dirham and a **frank** is 1/100 of a dirham. The old term **peššita** is used by older people. The currencies are counted in different ways, either using the genitive preposition **n** or by simple juxtaposition of the numeral and the noun. When the preposition is used, the noun always has the article **l-**. Below some examples of each of the nouns will be presented.

ryal

ryal

‘one ryal’

žuž ryal ~ žuž n rryal

‘two ryal’

eešra ryal ~ eešra n rryal

‘ten ryal’

ħdaš ryal ~ ħdaš n rryal

‘eleven ryal’

alef ryal ~ alef n rryal

‘thousand ryal’

frank

frank

‘one frank’

žuž frank ~ žuž n lefrank

‘two frank’

eešra frank ~ eešra n lefrank

‘ten frank’

eišrin frank ~ eišrin n lefrank

‘twenty frank’

alef frank ~ alef n lefrank

‘thousand frank’

derhem

Note that for the numerals 11 till 19 set 2 cardinal numbers are used.

derhem

‘one dirham’

žuž derhem ~ žuž n ddrahem

‘two dirham’

eešra derhem ~ eešra n ddrahem

‘ten dirham’

ħdašer derhem ~ ħdaš n dderhem

‘eleven dirham’

ṭnašer derhem ~ ṭnaš n dderhem

‘twelve dirham’

ṭlaṭin dderhem ~ ṭlaṭin n dderhem

‘thirty dirham’

alef dderhem ~ alef n dderhem

‘thousand dirham’

menyul dderhem ~ menyul n dderhem

‘million dirham’

peşşita

Note that there are three possibilities for ‘a million peseta’.

yah peşşita

‘one peseta’

žu pşaşet ~ žuž n lepşaşet

‘two peseta’

ṭlaṭin peşşita ~ ṭlaṭin n lepşaşet

‘three peseta’

menyul peşşita ~ menyul n lpeşşita ~ menyul n lepşaşet

‘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 lweħda

‘at one o’clock’

g žžuž / zzuž ‘at two o’clock’
g tlatā ‘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	
<i>luli</i>	<i>luli-ya</i>	<i>luliyy-in</i>	first
<i>tani</i>	<i>tany-a</i>	<i>tan-in</i>	second
<i>talet</i>	<i>talt-a</i>	<i>talt-in</i>	third
<i>ṛabē</i>	<i>ṛabē-a</i>	<i>ṛabē-in</i>	fourth
<i>xames</i>	<i>xams-a</i>	<i>xams-in</i>	fifth
<i>sades (~saḍes)</i>	<i>sads-a (~saḍs-a)</i>	<i>sads-in (~saḍes)</i>	sixth
<i>sabē</i>	<i>sabē-a</i>	<i>sabē-in</i>	seventh
<i>tamen</i>	<i>tamn-a</i>	<i>tamn-in</i>	eighth
<i>tase</i>	<i>tase-a</i>	<i>tase-in</i>	ninth
<i>eašer</i>	<i>eašr-a</i>	---	tenth
<i>laxri</i>	<i>laxri-yya</i>	<i>laxri-yyin</i>	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.	<i>b weḥd-i</i>			
2.	<i>b weḥd-ek</i>			
3.	<i>b weḥd-u</i>			
3.	<i>b weḥd-a</i>			
1.	<i>b weḥd-na</i>		<i>b žuž bi-na</i>	

2. *b wehd-kum*

b arba bi-kum

3. *b wehd-em*

b tlaṭa 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 **qbel** ‘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**, **aḡ^wemmat** have nominal characteristics. Two of these consistently mark state on the prefix when preceded by a preposition. The three elements **tterf**, **aḡ^wemmat**, **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 **iḡ-**), 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>i</i> ~ <i>iḡ</i>	<i>iḡ-</i>	EA	comitative
<i>s</i>	<i>iḡ-</i>	EA	instrumental
<i>dar</i> ~ <i>da</i>	<i>dar-</i>	EA	allative
<i>day</i> ~ <i>dayer</i>	<i>dayer-</i>	EA	allative ‘chez’

<i>zeg</i>	<i>zga-</i>	EA	ablative
<i>g</i>	<i>ga-</i>	EA	locative
<i>x ~ fex ~ f</i>	<i>xef- ~ fex-</i>	EA	locative
<i>n</i>	<i>nn-</i> (1SG : <i>inu</i>)	EA	genitive
<i>yer ~ y</i>	<i>yer-</i>	EA	possessive / loc.
<i>zdu</i>	<i>zdaw-</i>	EA	locative
<i>sennig</i>	<i>sennig-</i>	EA	locative

It is possible to combine prepositions to a limited extent. The element **z**, probably a shortened form of **zeg**, can precede **yer** and **gum** (see below) to add the meaning ‘from’ (it can be combined with some adverbs as well, cf. III.14.). Prepositions can be combined with the element **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 **qbel** which have EL. The dative preposition **i** ~ **id** can be substituted by the indirect object pronoun (cf. III.11.2.2. for the full IO paradigm).

	State	Function
<i>i ~ id</i>	EA	dative
<i>am</i>	EA	similative
<i>ḥettar</i>	EA	‘until’
<i>qbel</i>	EL	‘before’
<i>bla</i>	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 pronominal 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’, **aḡ^wemmaṭ** ‘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 **aḡ^wemmaṭ** 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	
<i>gum n</i>	---	‘in front of, beside’
<i>ammas n</i>	<i>wammas</i>	‘in the middle of’
<i>af n / afel</i>	<i>waf / wafel</i>	‘on top (of)’
<i>aḡ^wemmat i / n-</i>	<i>uḡ^wemmat</i>	‘on the opposite side of’
<i>tterf n</i>	---	‘beside’
<i>nešt n</i>	---	‘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	
<i>fsi n ~ sfi n</i>	<i>fsir- ~ sfir-</i>	‘behind’

13.1.4. Arabic prepositions

Three prepositions of Arabic origin keep their original morphology; **qbaḷt-** and **byart-** meaning ‘opposite’ and **lil-** ~ **dil-** in **šḥal lil-** ~ **šḥal dil-** (Other borrowed Arabic prepositions, **ela**, **b**, **f**, **l** do not occur independently, but appear in adverbials, collocations or as part of indirect object marking, cf. chapter III.14. for adverbs). The pronominal forms of the prepositions take the Arabic suffixes. When these prepositions are followed by a noun, the noun is in the EL, provided the noun has state distinction.

13.2. Simple prepositions

13.2.1. Comitative preposition **i** ~ **iḍ** at / with

The comitative preposition has the form **i** or **iḍ** before a noun, as shown in examples (1) and (2). The most common form is **i**, while **iḍ** is mainly used by old people. When a pronominal suffix is added only the form **iḍ** 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) *ssbeɛ maʃ a ʃʃ aʃnikef id uḡdi*
 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 id-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 **id**¹²⁰. Compare the following sentences, (4) is an example of the pronominal form while (5) is the pronominal form.

(4) *i-ddez ibawen s usyar*
 3MS-crush:P beans with stick:EA
 ‘He crushed the beans with a stick.’

(5) *i-ddez id-es ibawen*
 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 (1 - **yer** for Figuig, Kossmann, 1997: 224-225, **yer** for Aït Seghrouchen, Bentolila, 1981: 215 **dar** in Tashelḥiyt cf. van den Boogert 1997:235). Ghomara Berber uses a separate preposition **day** ~ **dayer** 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) *nettata h-teffey 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 **sis**-i. In Iṛaḇen a speaker told me that the preposition **sis** is used in Beni Menṣur. Furthermore in Colin’s text (1929) the preposition **s** is used in an ablative sense in the phrase **id ušnekkaf iffey 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’, **aḡwemmaṭ n** ‘opposite’, for example:

- (8) *yallah qerrb = at dar gum n te-sla-t*
 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 ššbeḥ*
 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-ttuṭu εawed da waššin*
 3MS-go:IMP again to stable:EA
 ‘He goes to the stable.’

- (10b) *i-dda dar wayed a tteṣ*
 3MS-go:P to ash:EA AD [3MS]-sleep:A
 ‘He went to sleep in the ash.’

- (11a) *da lemḍina*
 to city
 ‘to the city’

- (11b) *t-elli-t dar lemḍina*
 2S-go up:A-2S to city
 ‘You go to the city.’

13.2.4. Preposition **day** ~ **dayer** ‘chez’

The preposition **day** ~ **dayer** has about the same meaning as the French preposition ‘chez’.¹²¹ The preposition can only be followed by nouns referring to humans¹²². The

¹²¹ In Moroccan Arabic the preposition **leend** exists, which is a combination of allative I ‘to’ and pseudo-verb **eend**. Caubet (1993: 219) translates this verb in French with ‘vers chez’. Moroccan Arabic and Ghomaran Berber are very similar as regards this preposition as **dayer** is a combination of the allative preposition **dar** and the possessive preposition **yer**.

complete form **dayer** 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) *sæa te-dda day urgaz nn-es*
 then 3FS-go:P chez man:EA of-3S
 ‘Then she went to her husband.’

(13) *i-lkem dayer išurkan*
 3MS-arrive:P chez peasants
 ‘He arrived at the peasants.’

The prepositions **dar** ~ **da** and **day** ~ **dayer** can both be used before a noun referring to a human being. However, the meaning is different, as illustrated by the following examples.

(14a) is a statement of somebody going to the location of the *Kaid* (local governor), whereas in (14b) the interpretation is that the person is going to the person (e.g. to resolve a conflict or so).

(14a) *i-dda day lqayed*
 3MS-go:P to Kaid
 ‘He went to the Kaid’s place.’

(14b) *i-dda da lqayed*
 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) *yaṭ 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-syar-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-ffey* *zeg* *uxyam*
3MS-go.out:P from house:EA
‘He got out of his house.’

(18) *sessan* *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 speaker¹²³. 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 Amtiqan 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 ġġ-ay azru fx uzru*
 FUT AD do:A-1S stone:EL on stone:EA
 ‘I will put a rock on a rock.’

(20) *ay akfer dha x lhafa ya-d*
 VOC turtle:EL here on stone S-PRX
 ‘You turtle here on this rock.’

The one occurrence of *f* is in the following sentence. The noun **taṭṭiwan** ‘eyes’ does not have a state difference.

(21) *rry-an as lġeld 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 kerrk-en xf-es*
 children = PL-ANP lie:P-3PL on-3S
 ‘Those children lied to him.’

(24) *i-berreḥ xf-es*
 3MS-call:P on-3S
 ‘He called him.’

(25) *i-tdeṣša x te-myar-t nn-es*
 3MS-laugh:I on woman:EA of-3S
 ‘He laughs about his wife.’

13.2.8. Genitive preposition *n* ‘of’

The main function of the genitive preposition is to link two nouns, typically to form a possessive construction. The first person of the pronominal forms has an irregular form. In the rest of the paradigm the regular prepositional suffix is suffixed to the geminate **nn**.

1:SG	<i>inu</i>
2:M:SG	<i>nn-ek</i>
2:F:SG	<i>nn-em</i>
3:SG	<i>nn-es</i>
1:PL	<i>n-nax</i>
2:PL	<i>nn-un</i>
3:PL	<i>nn-sen</i>

Their use is shown in the following examples:

(26) *afraw n t̄ḡiget*
leaf:EL of tree:EA
‘The leaf of a tree.’

(27) *afraw nn-es*
leaf:EL of-3:SG
‘Its leaf’

13.2.9. Possessive / locative preposition *yer* ~ *y* / *yer-* ‘at’

This preposition has two forms; when suffixed it has the form **yer-**, when pronominal the form has free variation between **yer** and **y**. It is used in possessive and locative constructions as shown in the examples below.

(28) *yer-sen leḥšam g uxyam s warsin*
at-3PL children in house:EA with hunger:EA
‘They have hungry children in the house.’

(29) *i-mmuṭ g martin, y uletma-s*
3MS-die:P in Martil at sister-3S
‘He died in Martil, at his sister’s (place)’

(30) *yer muḥammed leftus nn-ek*

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 **zye(r)** meaning 'from someone/somewhere', for example:

(31) *i-dda d zye 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-kšem 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-ek*
2:F:SG *senniga-m*
3:SG *sennig-es*

1:PL *senniga-nax*
2:PL *senniga-wen*
3:PL *senniga-sen*

Examples:

(34) *aḡtiṭ i-netteḡ 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 lafya*
 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 pronominal form (with possible free variation) and can be followed by an independent pronoun. Nouns that mark a state distinction have the EA when following most of these prepositions, but with **bla** ‘without’ there is free variation between the use of EA and of EL. Nouns are in the EL after the preposition **qbel** ‘before’.

13.3.1. Dative preposition **i** ~ **id** to / for¹²⁴

The dative preposition has two pronominal forms which are in free variation **i** ~ **id**; the variant **id** is more often used by old people. The preposition has the form **id-** 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 **id**.

(37) *i-dda i-fk = as = t i ya tmettuṭ*
 3MS-go:P 3MS-give:P = 3S:IO = 3MS:DO to one:F woman:EA
 ‘He gave it to a woman.’

(38) *i-dda i-fk = aṭ i ya t-mettu-ṭ*
 3MS-go:P 3MS-give:P = 3MS:DO to one:F woman:EA
 ‘He gave it to a woman.’

(39) *t-a ye-nw-an i netta*

¹²⁴ **i** ~ **id** 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 id nmer*
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 = at i ya tmettut*
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 keği*
NEG like you
'Not like you.'

- (44) *am tæbbist, am tagayzūt*
like calf:EA like calf:EA
'A *tæbbist* (calf) is the same as a *tagayzūt* (calf).'

13.3.3. Preposition *ħetta* 'until'

The preposition has the form **ħetta**. 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 **ħetta** followed by the preposition **dar**¹²⁵, as examples (46) and (47) show. The conjunction **ħetta** meaning 'also/until' also functions as a subordinator (cf. chapter IV.4.2.6.).

- (45) *ħetta lextuber*

¹²⁵ It is found in Colin's text (1929:55) as well: **ħetta 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, ya 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 uεeyyal nn-es*
3MS-go:P without child:EA of-3S
'He went without his child.'

(51) *i-dda bla aεeyyal nn-es*
3MS-go:P without child:EL of-3S
'He went without his child.'

13.3.5. Preposition *qbel* 'before' (temporal)

This preposition is only used in a temporal meaning. In combination with *ma* this preposition functions as a conjunction/complementiser (cf. IV.4.2.5. on conjunctions). It does not take a pronominal suffixes and is followed by a noun in the EL.

(52) *qbel leša*
before dinner

‘before dinner’

- (53) *qbel azal*
before midday:EL
‘before midday’

13.4. Prepositional complexes

Prepositional complexes consist of a (noun-like) element + the genitive preposition **n** ‘of’. As a consequence, all Berber morphology nouns that follow these complexes have the EA. The preposition **fsir** ~ **sfir** is an exception, as it does not have the genitive preposition in its pronominal forms, while it is combined with the preposition **n** pronominally. We will present examples of the pronominal and pronominal forms of each prepositional complex.

13.4.1. Prepositional complex **gum n** ‘in front of / beside’

This prepositional complex means both ‘in front of’ and ‘next to/beside’. For example:

- (54) *netta i-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) *yallah qerrb = at dar gum n te-sla-t*
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-ellq = at g af n dduxcan*
 3FS-hang:P = 3FS:DO in above of smoke
 ‘She hung it above the smoke.’
- (58) *dar waf n mni menşur*
 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 tṭşar*
 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 lemđina*
 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 lemđina*
 PR:3MS middle:EL of city
 ‘He is in the middle of town.’

13.4.4. Prepositional complex *aḡ^wemmaṭ (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 *aḡ^wemmaṭ*. *aḡ^wemmaṭ* 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 uḡ^wemmaṭ*
 3MS-go:P to other.side:EA
 ‘He went to the other side.’

- (67) *i nihma twala-n = teṭ aḡ^wemmaṭ, 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 uḡ^wemmaṭ nn-es*
 3MS-go:P to other.side:EA of-3S
 ‘He went to the other side of it.’

- (69) *i-dda dar uḡ^wemmaṭ 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 ṭṭerf n* ‘side of, beside’

This prepositional complex is based on the Arabic noun **ṭṭerf** ‘side’ combined with the preposition **n**. The preposition is preceded by **i** ~ **iḍ**, **dar** and **zeg**. In the following examples the prenominal and the pronominal forms are used.

- (70) *i ṭṭerf 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 kma-s*
he as.big.as of brother-3S
‘He is as big as his brother.’

(73) *netta nešt nn-es*
he as.big.as of-3S
‘He is as big as him.’

13.4.7. Prepositional complex *fsi n ~ sfi n / fsir-* ‘behind’

This element combines features of the prepositional complexes and simple prepositions¹²⁶. 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-tbeybay*
he go:AP:MS behind-3S 3MS-bleat:I
‘He was walking behind him bleating.’

(76) *sfi n yayil = a-d*
behind of mountain:EA = S-PRX
‘Behind this mountain.’

(77) *fsi n lmaqla*
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, **qbalt** ‘opposite’ and **byart** ‘opposite’, which take Arabic suffixes (cf. III.11.5.). The element **lil-** ~ **dil-** follows **šhal** 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:

	qbalt ‘opposite’	byart ‘opposite’	lil ~ dil
1:SG	<i>qbalt-i</i>	<i>byart-i</i>	<i>lil-i</i> ~ <i>dil-i</i>
2:SG	<i>qbalt-ek</i>	<i>byart-ek</i>	<i>lil-ek</i> ~ <i>dil-ek</i>
3:M:SG	<i>qbalt-u</i>	<i>byart-u</i>	<i>lil-u</i> ~ <i>dil-u</i>
3:F:SG	<i>qbalt-a</i>	<i>byart-a</i>	<i>lil-a</i> ~ <i>dil-a</i>
1:PL	<i>qbalt-na</i>	<i>byart-na</i>	<i>lil-na</i> ~ <i>dil-na</i>
2:PL	<i>qbalt-kum</i>	<i>byart-kum</i>	<i>lil-kum</i> ~ <i>dil-kum</i>
3:PL	<i>qbalt-em</i>	<i>byart-em</i>	<i>lil-em</i> ~ <i>dil-em</i>

A noun following one of these prepositions takes the EL, e.g.

(78) *qbalt* *axyam*
 opposite house:EL
 ‘opposite the house’

(79) *byart* *amaras*
 opposite riverbed:EL
 ‘opposite the riverbed’

(80) *šhal* *lil-ek* *ma* *he-ḡr-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

<i>nhar / nhar aḍ / nhar ahen</i>	‘day’ (also: ‘today’, ‘that day’)
<i>amilla ~ amella (wa-)</i>	‘now’
<i>amla eiḍ (wa-)</i>	‘just now’
<i>deydaḵ ~ deydayaḵ</i>	‘earlier today’
<i>assa (wa-)</i>	‘nowadays’
<i>azgaṣneṭ - azg^wasneṭ (u-)</i>	‘last year’
<i>asleṭ (u-)</i>	‘two years ago’
<i>asleṭ n usleṭ</i>	‘three years ago’
<i>alazeṇ (wa-)</i>	‘tomorrow’
<i>nafaḣen ~ lafaḣen</i>	‘the day after tomorrow’
<i>anawiṭin ~ aliwiṭin (wa-)</i>	‘in three days’
<i>~ liwiṭin ~ niwiṭin</i>	
<i>nafaḣnaz</i>	‘in three days’
<i>aṭḡam (wa-)</i>	‘yesterday’
<i>aṣelaṭḡam (u-)</i>	‘the day before yesterday’
<i>asnuṣelaṭḡam (u-)</i>	‘three days ago’
<i>llumayen iḍ</i>	‘the past few days’
<i>daʔimen</i>	‘always’
<i>eaḍ ~ eiḍ</i>	‘still, yet’
<i>saea</i>	‘then, later’
<i>mbeed</i>	‘after’
<i>zegya</i>	‘from the time that’
<i>bihabiha</i>	‘directly’
<i>merṛa</i>	‘time, occasion’
<i>merṛa merṛa</i>	‘sometimes’
<i>meqbeyya</i>	‘almost’
<i>xetṛa</i>	‘time, occasion’

Manner Adverbs

<i>hamka ~ hamkad ~ hamkan</i>	‘in this way, like this’
<i>~ hamkadin ~ hamkadinet</i>	
<i>deyya</i>	‘quickly’
<i>bellati</i>	‘slowly’
<i>mezyan</i>	‘good’
<i>nišan</i>	‘straight on, right’

Locative Adverbs

<i>dha ~ dhad ~ dhadin ~ dhadinet</i>	‘here’
<i>das ~ dan</i>	‘there’
<i>zdas</i>	‘from there’
<i>ssiha ~ ssihad</i>	‘from here, through here’
<i>~ ssihadin ~ ssihadinet</i>	
<i>ssyan ~ ssyas</i>	‘from there, through there’
<i>darha ~ dariha ~ darihad</i>	‘to here’
<i>~ darihadin ~ darihadinet</i>	
<i>daryan ~ daryas</i>	‘to there’
<i>ssihan ~ ssyani</i>	‘from there’
<i>berra ~ berrayan</i>	‘outside’
<i>zberra</i>	‘from outside’
<i>ela berra</i>	‘on the outside’
<i>daxel</i>	‘inside’
<i>z daxel</i>	‘from the inside’
<i>habet</i>	‘the upper side, upwards’
<i>tales</i>	‘the lower side, downwards’
<i>afel (wa-)</i>	‘on the top’

The preposition **dar** is combined with the active participles **tales** ‘above’, **habet** ‘down’ to form locative adverbials.

<i>dar tales</i>	‘upwards’
<i>dar habet</i>	‘downwards’

Quantative Adverbs

The following elements can all be linked to the noun by the preposition **n**. They function as adverbs on their own as well. The element **šhal** is an interrogative as well. **kamel** / **kamla** / **kamlin** is derived from an adjective.

<i>xrebbi</i>	‘quite a lot, quite a while’
<i>bezzaf</i>	‘a lot, many’
<i>merṛa</i>	‘all’
<i>kamel - kamla - kamlin</i>	‘all’
<i>šweyya</i>	‘a little’
<i>šwiwweš</i>	‘very little’
<i>ši haža</i>	‘a bit’
<i>šħal</i>	‘a lot’
<i>kteṛ ~ xteṛ</i>	‘more’

The following element can only be linked to a noun by means of **n** ‘of’.

<i>beɛḍ ~ beɛṭ</i>	‘some (people)’
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Other Adverbs

<i>yyeh</i>	‘yes’
<i>a ~ ah</i>	‘yes’
<i>lla</i>	‘no’
<i>beɛda</i>	‘already’
<i>aq̣a ~ qa</i>	‘wait a moment’
<i>fħal fħal</i>	‘the same’
<i>xyaṛ</i>	‘better’
<i>ħsen</i>	‘better’
<i>bellati</i>	‘wait’
<i>ɛla qedd-</i> (+ 3 person Arabic suffix)	‘bad’
<i>belħeqq</i>	‘in fact’
<i>amexṭa</i>	‘probably’
<i>waqila</i>	‘probably’
<i>aḅeṣṣaḅ</i>	‘it is unlikely that’
<i>ilaxiri-hi / -ha / -him</i>	‘etcetera’
<i>yaḳ</i>	‘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**) **kra**, **ši** ~ **š** and **yan** ~ **ya** / **yaṭ** ~ **yah** and one postnominal modifier **inši** ~ **nši** ~ **iši** (cf. III.11.7. morphology for postnominal deictic clitics). The preposition **n** is always used to link the prenominal indefinite to the head. These modifiers are inextricably linked to definiteness. Another important factor is presence or absence of the article **l** in Arabic-morphology nouns (see 1.1.1. below). We follow Brustadt (2000: 18-31) in defining definiteness as a continuum along two axes; individuation and specificity. The modifier (**ya**) **kra** is used for non-individuated, non-specific. It is relatively rare in texts, and when it occurs it always modifies nouns referring to human beings (example (1)). This is the main difference with the other non-individuated, non-specific modifier, **ši**, which is more frequently attested and is also used for things. Example (2) and (3) show its use. (**ya**) **kra** is only used for plurals. The numeral **yan** ~ **ya** / **yaṭ** ~ **yah** 'one'

is used for specific, individuated entities, as in example (4) (cf. III.12. on numerals). In example (5) the speaker refers to a specific brother to which something happened. Example (6) shows the reduced form of *ši*.

(1) *kra n leḥšam*
 some of children
 ‘some children’

(2) *ši n leflus aḡ lla-n lwext = ahen g tanḡa*
 some of money PST be:P-3PL time = S:ANP in Tangier
 ‘A kind of money that there was in that time in Tangier.’

(3) *dda-n = d ši n irgazen*
 go:P-3PL = DC some of men
 ‘Some men came.’

(4) *nettata yr-es ya n lxeddam id-es das*
 she at-3S one:M of worker with-3S there
 ‘She has a servant with her there.’

(5) *ya n kma nn-ax tweḍḍer ttarix = ahen g tanḡa*
 one:M of brother of-1PL be.lost[3MS:PF] time = S:ANP in Tangier
 ‘One of our brothers went missing that time in Tangier.’

(6) *ye-dda dar š n yayed*
 3S-go:P to some of ash:EA
 ‘He went to some ash.’

The indefinite determiner *inši* ~ *nši* ~ *iši* differs from the preceding determiners in that it is postnominal. The different forms are in free variation. It is used with individuated non-specific referents and can be translated as ‘some’ in English. It is clear what kind of entity is referred to, but it is not clear or relevant which one out of the class of possibilities is referred to. Some examples from texts are:

(7) *mki tleb-t xf-es lḡaḡa inši ma i-tweqqaf = ak 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) *mki te-ll tameyṛa ynši ilaxiri n lea?ila 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 şşulṭan*
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 ibawen*
many of beans
'many beans'

- (11) *ažemmue n leḥšam*
group:EL of children
'A group of children.'

- (12) *žuž n temyaṛan*
two of women:EA
'two women'

The numeral 'one' can be used to indicate approximate 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) *lehyif=id*
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) *lehyif muqqr-et*
 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 elicitation it is therefore best to assume that there is free variation in the contexts given below.

- (16) *ma ssay-en lħaža te-šħa*
 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) *təayan-en l-berrani¹²⁷, a, berrani. berrani kamel*
 look:I-3PL ART-foreigner, yes, foreigner foreigner all
 ‘They look for foreigners, yes, foreigners.’
aḡ lla-n tšebbar-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 **meemel** does not take an article, but the following noun **lqehwa** ‘café’ does. For example:

- (18) *ama g l-ħanut, wella g meemel inši, wella g l-qehwa inši*
 regarding in ART-shop, or in factory some, or in ART-café some
 ‘However in the shop or in a factory or in a café.’

¹²⁷ This is a collective noun.

In the following example of a non-verbal predicate, the article in the noun **ħimaya** ‘protection’ is absent. This use does not refer to any specific protection, but rather to protection in a very general way.

- (19) *amla keġi šwiya id-i ħimaya*
 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 **li** ‘to be’.

- (20) *u te-lli-t ma ga-k yuš*
 and 2S-be:A-2S NEG in-2MS falsehood
 ‘And you are not false.’

Example (21) shows a noun **ezri** ‘young adult’ which is on a very high level of generality as well.

- (21) *aḳ te-lla-t ilaxirih ezri wella w aḳ te-lla-t mezzi*
 PST 2S-be:P-2S etc bachelor or and PST 2S-be:P-2S young:MS
 ‘You were a bachelor and you were young.’

In the following elicited example, the absence of the article seems to indicate lack of identifiability to the listener. The speaker gives information with the idea that the listener does not know which specific garden he/she is referring to.

- (22) *yr-i yaṛšet mezyan-a, yr-i yaṛšet 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-yliṭ-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-qşir-in = ihen*
give:P-3PL = 1S:IO = 3FS:DO ART-short-PL = PL:ANP
‘The short ones gave it to me.’

- (25) **zr-ax* *tamyart = ahen* *l-eyliṭ-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* *εaziz*
room:EL of Aziz
‘Aziz’s house’

- (27) *lqaε* *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) *tažellaḅt* *n* *isyaren*
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) *lfurma* *n* *urgaz*
figure of man:EA
‘the figure of a man’

(30) *lqadiya n tx^wraft*
 case of story:EA
 ‘the case of the story’

(31) *g tmunniṭt n iṣraḃen*
 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: **kma** ‘brother’, **uletma** ‘sister’ and **ayetma** ‘brothers and sisters’. When such a noun is modified by a non-pronominal genitival expression, there is double possessive marking, for example:

(32) *uletma-s n uεeyyal = 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 firεawn*
 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) *irgazen n iṣraḃen 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 uεebbiz 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 mezzī i meqqur*
3S-go:P=DC big:MS and small:MS
'The big one and the little one have come.'
- (37) *idda = d l-mezzī i l-meqqur*
3S-go:P=DC ART-big:MS and ART-small:MS
'The big one and the little one have come.'
- (38) *le-khel i le-ħmer safr-en da ya tmazirt beid-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) *khel i ħmer safr-en da ya tmazirt beid-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 twil n urgaz?*
one:M tall:MS of man:EA
'a tall man'
- (41) *i-dda = d ya uħentwil 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) **tiεyyalan tikeħlawan*

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 morphological forms of the adjective expressing degree (cf. for example Aguadé & Vicente, 1997). The structure of comparatives is NP + adjective + **nešt n** ‘as big as’ / **am** ‘as’. There is no special form for superlatives, the normal NP + adjective suffices. Depending on the context, other means such as adverbs **kteṛ** ‘more’ and preposition phrases with **zeg** ‘of’ and **x ~ fex ~ f** ‘on’ can be used as well. In elicitation the adjective in the superlative construction does not take the article. However, we have encountered an example with the article in a text, which is the adjective **le-qḍim-in** in example (46). In this particular sentence the other forms do not take an article.

Comparative:

(43) *axyam = ahen qḍim nešt n temzgiḍa = yahen*
 house:EL = S:ANP old:MS like of mosque:EA = S:ANP
 ‘That house is as old as that mosque.’

(44) *lbaṛku = an meqqur nešt n yayil*
 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 qḍim-in dhaḍin. tafrawt qḍim-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-hiḍ a k = nna-x kaml-in. tafrawt, leaʔila n lgawt,
 PL:PRX REL 2MS:IO = tell:P-1S all-PL Tafrawt, family of lgawt,
 all the others I have mentioned to you. *Tafrawt*, the family of *lgawt*,
nihma le-qḍim-in x u-hiḍ a k = nna-x kaml-in.
 they ART-old-PL on M-PL:PRX REL 2MS:IO = tell:P-1S all-PL
 they are the oldest of the ones I have mentioned.’

The following examples show the use of adverbs and prepositions to express a superlative. Another option is to use a pronominal head followed by a relative form of the adjective, as in:

- (47) *lebħar = aḏ yareq*
 see = S:PRX deep:MS
 ‘This sea is deep/the deepest.’
- (48) *nihma zhim-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-ḥiḏ kaml-in*
 M-PL:PRX all-PL
 ‘All of these.’
- (53) *u-ḥi muqqr-eṭ ma mezyan-in šī*

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 tlaṭa inši muqqr-et*
 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 uerqub*
 3MS-go=DC one:M from aerqub:EA
 ‘One man came from Aarhob (village)’

(56) *i-dra ssiha yan a y-twil-in i yan a y-qṣir-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) *qetṭe = at mezzi-t mezzi-t*
 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-ella tayilt tayilt*
 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 **ænd-** 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: aḅaw aḅaw 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 irebbḅen bezzaf?* 'Who earns most?' could be:

- (3) *tṭbiḅ maši aḅehri*
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) *tkerfis!*
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) *nettata ṭwil-a*
she tall-FS
'She is tall.'

(9) *ḏderba nn-ek eḏim-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-ek gum n teggurt*
 bag:EL of-2MS front of door:EA
 ‘Your bag is in front of the door.’

In prepositional predicates with **yer** ‘at’ the predicate precedes the subject, for example:

(13) *yr-es ya n ddker*
 at-3S one:M of male
 ‘He has a boy’

(14) *yer muhemmed leflus nn-ek*
 at Mohammed money of-2MS
 ‘Mohammed has your money.’

(15) *nettata yr-es g ya teešuš 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 aziz*
 house:EL = S:ANP of Aziz
 ‘That house is Aziz’s.’

(17) *t-haḍ 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 ššear 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) *tax^wraft = ad x uḡdi id 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* ~ *id*, for example:

- (23) *netta id-i*
he with-1S
‘He is with me’

- (24) *amla keḡi šwiya id-i ḡimaya*
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 similitive predicates:

- (25) *şulđi am lfrank = ahen*
old.coin like franc = S:ANP
‘The *şulđi* (old type of coin) is like that *franc*.’

- (26) *netta nešt n uebbiz*
he like of cow:EA
‘He is (as big) as a cow.’

2.4. The adverbial predicate

Examples (27), (28) and (29) show adverbial predicates with different kinds of subjects, a nominal (27), a pronominal (28) and a demonstrative (29).

- (27) *leart = ađ ssiha*
bull = S:PRX from.here
‘That is a lot/too much/too many.’

- (28) *nuķna ssiha*
we from.here
‘We are from here.’

- (29) *u-hid 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 yađer*
there one:M of meadow:EL
‘There is one field.’

- (31) *das yah lbeļa 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 used¹²⁸. It has the morphological scheme of an active participle, however it only functions as a marker of the existential predicate. It cannot modify a noun, it does not function as a noun nor does it take the relative form. In non-marked phrases the subject follows the element **kayen**. Gender and number agreement with the subject are optional irrespective of the position of the existential predicate (preceding or following the subject). Some examples are:

(32) *kayen tasarka n lǧeld n wiffet, 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 ttuṭu-n*
 EXST stars go:I-3PL
 ‘There exist stars that move.’

There exists an element **ka** which is used in the idiomatic expressions, **ma ka ya** ‘there is only’. This is probably a short variant of **kayen**, for example:

(35) *i netta i-sekr = as s umḡer ma ka ya ha*
 and he 3MS-do:P=3S:IO with sickle:EA NEG EXST only PRES
 ‘And he did like this with the sickle. (lit. there exists only *ha* = presentative ‘here’)

2.6. The pronouns **haw / hay / ham**

The third person pronouns **haw / hay / ham** can be used in non-verbal as well as in verbal constructions. There are no first and second person forms. These pronouns function as present relevance markers, meaning that they indicate that what is said, is applicable to or relevant at the present moment (cf. Mourigh & Kossmann, forthcoming, for the Tarifiyt particle **qa** which has similar semantics). In texts they are often found with locative constructions, which often have present relevance, although they are not obligatory. For other non-verbal predicates the pronouns have the same function. **Haw/hay/ham** is

¹²⁸ In Moroccan Arabic it functions as a locative as well as an existential (cf. Caubet 1993: 34-35).

consistently used in our corpus in sentences with the adverb **baqi** / **baqqa** / **baqin** ‘still’ (examples (39) and (40)). This is no wonder, as **baqi** (etc.) indicates that the event is still relevant in the present. Some examples of the present relevance marker are:

(36) *ikenniwen ham das*
twins PR:3PL there
‘The twins they are there.’

(37) *ana ye-ll a žehha?* *iqqr=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 beṛra.’*
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-haḍ a siḍi*
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-ek*
at-2MS
‘look out’

2.8. Negation of non-verbal predicates

There are two ways in which non-verbal predicates can be negated. Nominal, adjectival, prepositional, adverbial locative and existential predicates can all be negated by the negative particle **maši** which has the free variants **mawši** ~ **mayši**. This negative particle precedes the predicate. This negator is used to extend the scope of the negation to the whole clause. Furthermore, adjectival predicates, pronominalised prepositional predicates and one type of adverbial predicate can be negated by means of the discontinuous negation [**ma** predicate **ši**]. While it is the normal verbal negator, in non-verbal predicates the discontinuous negator is used ‘*dans des situations polémiques, pour répondre à un éconcé antérieur*’ (Caubet, 1996:82) like in Moroccan Arabic. The verb **ll** ‘to be’ can always be placed between [**ma** predicate **ši**] yielding [**ma ll** predicate **ši**]. **ll** always precedes the negated element. In the following examples the negation of each type of predicate is presented.

2.8.1. The nominal predicate

In the following examples some of the variants of the negative particle are illustrated.

- (43) *nihma mayši ieraben*
they NEG Arabs
‘They are not Arabs. (i.e. from the village of Ieraben)’

- (44) *nihma ma lla-n ši ieraben*
they NEG be:P-3PL NEG Arabs
‘They are not Arabs. (i.e. from the village of Ieraben)’

- (45) *t-hađ 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) *tamyart = an maši ylit-a*
 woman:EL = S:DST NEG fat-FS
 'That woman is not fat.'

(47) *netta maši meqqur*
 he NEG big:MS
 'He is not big.'

(48) *ma waseε ši*
 NEG wide:MS NEG
 'It is not wide.'

(49) *ma meqqur ši*
 NEG big:MS NEG
 'It is not big.'

(50) *ma y-ell meqqur 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 similitive predicates.

(51) *ma yr-es ši n tzennit*
 NEG at-3S NEG of tail:EA
 'He does not have a tail.'

(52) *ma ga-m ši n lghuq*
 NEG in-2FS NEG of strength
 'He does not have any strength.'

(53) *ma ga-s ši taqunt*
 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) *şulđi maši am lefrank = ahen*
old.coin NEG like franc = S:ANP
'A *şulđi* (an old type of coin) is not like that franc (money).'

- (59) *netta maši nešt n useyyal = ahen*
he NEG like of boy:EA = S:ANP
'He is not as big as that boy.'

The following examples show that negation of genitive and comitative predicates can use both the negative particle **maši** / **ma yell ši** (or one of the free variants) or the discontinuous negative particle **ma...ši** before the predicate.

- (60) *maši nn-es*
NEG of-3S
'It is not his/hers.'

- (61) *ma nn-es ši*
NEG of-3S NEG
'It is not his/hers.'

- (62) *maši n lkayet*

NEG of paper
'not (made) of paper'

(63) *netta maši id-i*
he NEG with-1S
'He is not with me.'

(64) *netta ma id-i ši*
he NEG with-1S NEG
'He is not with me.'

(65) *netta ma yell kma-s ši*
he NEG with brother-3S NEG
'He is not with his brother.'

2.8.4. The adverbial predicate

The locative adverbial predicate can be negated by means of the continuous and the discontinuous negative marker, for example:

(66) *nuḵna maši ssiha*
we NEG from.here
'We are not from here.'

(67) *nuḵna ma ssiha ši*
we NEG from.here NEG
'We are not from here.'

(68) *nuḵna 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 ssaεa*
NEG EXST NEG clock
'There is no clock.'

(71) *ma he-ll kayn-a ši ssaεa*
NEG 3F-be:P EXT-FS NEG clock
'There is no clock.'

(72) *maši kayen ssaεa*
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 it¹²⁹. 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) *ε̣teš-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) *aḡdi* *i-ffey*
jackal:EL 3MS-go.out
'The jackal went out.'

- (4) *i-dda* *argaz*
3MS-go:P man:EL
'The man left.'

- (5) *aḡdi* *ka-ye-ḥmeq* *ya* *x* *tyaṭen*
jackal:EL IMPP-3MS:IMPF-go.crazy only on goats:EA
'Well, the jackal is just crazy for goats.'

- (6) *ka-ye-ḥmeq* *aḡdi* *ya* *x* *tyaṭen*
IMPP-3MS:IMPF-go.crazy jackal:EL only on goats:EA
'Well, the jackal is just crazy for goats.'

When a lexical subject is followed by two coordinated singular nouns there can be singular and plural agreement. Example (7) shows singular agreement while example (8) shows plural agreement in the same context.

- (7) *i-dda* *ašnikef* *iy* *uḡdi*
3MS-go:P hedgehog:EL and jackal:EA
'The hedgehog and the jackal went'

- (8) *dda-n* *ašnikef* *iy* *uḡdi*
go:P-3PL hedgehog:EL and jackal:EA
'The jackal and the hedgehog went'

The same is true for Arabic-morphology verbs; there is no necessary agreement in number with a post-verbal coordinated singular subject nouns. In (9) the verb shows singular agreement with a plural subject noun.

- (9) *ka-ye-nbaε* *tteffaḥ i lbanan das*
 IMPP-3MS:IMPF-be.sold apple and banana there
 ‘Apples and banana’s are sold there.’

- (10) *ka-ye-nbaε-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) *aḡdi i ušnikef ṣafr-en*
 jackal:EL and hedgehog:EA travel:P-3PL
 ‘The jackal and the hedgehog travelled’

- (12) *tteffaḥ i lbanan ka-ye-nbaε-u* *das*
 apple and banana IMPP-3PL:IMPF-be.sold-3PL:IMPF there
 ‘Apples and banana’s are sold there.’

Just like nouns, independent pronouns appear preceding or following the verb. They can add emphasis (cf. III.11.1. for independent pronouns). For example:

- (13) *netta i-nṭer*
 he 3MS-fly:P
 ‘He flew away.’

- (14) *i-nṭer netta*
 3MS-fly:P he
 ‘He flew away.’

The relative form has one form and does not show agreement with the subject (cf. III.7.4. morphology). Compare the following examples.

- (15) *amaleḥ a ye-nwa-n i netta*
 fish:EL REL RF-be.cooked:P-RF to he

‘the cooked fish is for him’

- (16) *leḥṣam a ye-dda-n dar lmeḍraṣa lekṃ-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) *aḡḍi id ušnikef maḏy-in*
jackal:EL and hedgehog:EA come:AP-PL
‘The jackal and the hedgehog are coming.’

- (18) *maḏy-in aḡḍi 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) *maḏi aḡḍi 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, accompanied by an indirect object pronoun.

- (20) *xeṣṣ = aḵ ilaxirihi myatayn n rryal*
need:P = 2MS:IO etc two.hundred of rial
‘You need moreover two hundred rial.’

- (21) *i nihma xeṣṣ = asen a t = nyu-n*
and they need:P = 3PL:IO AD 3FS:DO = kill:A-3PL
‘And they want to kill her.’

The impersonal verb distinguishes different aspectual forms. The following example shows the Imperfective form. In (22) it is accompanied by a topicalised pronoun and a subject pronoun.

- (22) *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-eṭ = l-u aḡḡi*
 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) *tṭf-en aḡḡi*
 grab:P-3PL jackal:EL
 ‘They caught the jackal.’

- (25) *tṭf-en = t*
 grab:P-3PL = 3MS:DO
 ‘They caught him.’

- (26) *tlaqi-t ḥmed*
 meet-1S:PF Ahmed
 ‘I met Ahmed.’

- (27) *tlaqiṭ = 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) *ayyul umr-en = t ššurkan*
 donkey:EL send:P-3PL = 3MS:DO peasants
 ‘The peasants sent the donkey.’

(29) *tameṭṭut = ahen tlaqa-ha argaz nn-es*
 women:EL = S:ANP meet[:3MS:PF]-3FS:DO man:EL of-3S
 ‘That women, her husband met her.’

A number of transitive verbs like *šš* ‘eat’ and *su* ‘drink’ can occur without an explicit indirect object argument as shown in example (30) and (31).

(30) *i-šš lmaḵla*
 3MS-eat:P food
 ‘He ate food.’

(31) *i-šš*
 3MS-eat:P
 ‘He ate.’

3.1.2. Obliques

Indirect objects, prepositional arguments and secondary predicates fall under this category of obliques. Phrases occurring with verbs which are not idiosyncratically determined by verbal predicates are considered external functions and will not be discussed here.

3.1.2.1. Indirect object

A number of verbs select for an indirect object to express the recipient in a ditransitive construction. When the indirect object is expressed lexically, it is preceded by the preposition *i* ~ *iḍ* ‘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 = aṭ i ya tmeṭṭut*
 3MS-give:P = 3MS:DO to one:F woman:EA
 ‘He gave it to a woman.’

(39) **i-ɾeʒ* *afus* *i* *ħmed*
 3MS-break:P hand:EL to Ahmed
 ‘Ahmed broke his hand.’

(40) *i-ɾɛ = as* *afus* *i* *ħmed*
 3MS-break:P = 3S:IO hand:EL to Ahmed
 ‘Ahmed broke his hand.’

Example (41) is an example of a transitive phrase, where **ṭṭunubir** ‘car’ is the direct object.

(41) *i-ɾɛ = 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 **I** 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) *tteṣṭa-w = l-u* *leflus* *i* *ilyas*
 be.given-3PL:PF = to-3MS money to Elias
 ‘The money was given to Elias.’

(43) *tteṣṭa-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) *mki* *εwaʒ-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) *εreq afus i hmed*
 sweat[3MS:PF] hand:EL to Ahmed
 ‘Ahmed’s hand sweated.’

(46) *εreq = l-u afus i hmed*
 sweat[3MS:PF] = to-3MS hand:EL to Ahmed
 ‘Ahmed’s hand sweated.’

(47) *εreq = l-u afus nn-es i hmed*
 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) *tkerrak-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 qettr-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’, **ğ** ~ **uğ** ‘to let, to leave’, **bdu** ‘begin’, **taḥ** ‘to start and continue’, **qqim** ‘to sit, to remain’ **zr** ‘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. **hamka** ‘like this, in this way’). Verbs in secondary predication take normal inflection and can take the same aspectual form as the main verb. The basic criterion to identify a clause as a secondary predicate is the continuation of the intonation contour and the general meaning of the sentence, which is different when there are two separate sentences. For example the next Ghomara sentence (51) has one single intonation contour. The intonation contour assures the coherence between the two predicates. The meaning is different if there is an intonation break after the first verb (indicated by the comma), as shown in example (52):

(51) *qqim-en tyewwat-en kaml-in*
 stay:P-3PL scream:I-3PL all-PL
 ‘All of them kept on screaming.’

(52) *qqim-en, tyewwat-en kaml-in*
 stay:P-3PL scream:I-3PL all-PL
 ‘They sat down, (while) all of them were screaming.’

In the following examples the difference between a direct object and a secondary predicate is shown. In (53a) **argaz** ‘the/a man’ is not the direct object argument of the verb (cf. 53b), but a non-verbal predicate.¹³⁰ In (53c) the argument is a verbal secondary predicate.

(53a) *i-qqel argaz*
 3MS-become:P man:EL
 ‘He became a man.’

(53b) **i-qqel = at*
 3MS-become:P = 3MS
 ‘*He became it.’

(53c) *i-qqel i-ttitu*
 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 **hamka** in (54b).

(54a) *i-rry = at* *argaz*
 3MS-return:P = 3MS:DO man:EL
 ‘He made him a man.’

(54b) *i-rry = at* *hamka*
 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 = at* *mžebbed*
 3MS-find:I = 3MS:DO stretch:PP:MS
 ‘He finds him lying flat.’

(56) *i-zr = at* *i-ttitu*
 3MS-see:P = 3MS:DO 3MS-go:I
 ‘He saw him walking.’

(57) *i-ttaf = at* *ya* *zzayn*
 3MS-find:I = 3FS:DO only beauty
 ‘He finds that she is a beauty.’

(58) *i-ffey* *mkellex*
 3MS-go.out:P be.backward:PP:MS
 ‘He turned out to be backward.’

(59) *i-qqel* *i-šha*
 3MS-become:P 3MS-heal:P
 ‘He became better.’

(60) *ḥda-n* *rri-n* *iḥawen*
 begin:P-3PL sow:P-3PL beans
 ‘They started to sow beans.’

(61) *he-ḥda* *te-zzeḡ* *tarekkalt*
 3FS-begin:P 3FS-milk:P dog:EL

‘She began milking the dog.’

- (62) *bda-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) *bda-n a kerz-en*
begin:P-3PL AD plough-3PL
‘They began ploughing’

- (64) *dda-n dar urrar, taḥ-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) *εawed εaw taḥ-u ka-y-stεeml-u εawed*
again again begin-3PL:PF IMPP-3PL:IMPF-use-3PL:IMPF again
‘Then they started using...’

- (66) *taḥ maši, i-ttaf ya tmeyra*
begin[:3MS:PF] go:AP:MS 3MS-find:I one:F wedding:EA
‘He went and encountered a wedding.’

- (67) *taḥ i-nn = as: ‘a weddi, a baba, nda daye ttusban’*
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) *sæa taḥ-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 yid-es genna*
 3MS-go:P and he 3MS-stay:P go:AP:MS with-3S sky
 ‘He went, he kept on going with him in the sky.’

The verb **af** ~ **uf** ‘to find’ can take an Imperfective, a Perfective, and passive and active participles as complements, as shown in the following examples:

- (71) *y-ufa lafya mešeuł-a*
 3MS-find:P fire light:PP-FS
 ‘He found that the fire was lit.’

- (72) *tameṭṭuṭ nn-es, t-taf = aṭ mžebbed*
 woman:EL of-3S 3FS-find:I = 3MS:DO stretch:PP:MS
 ‘His wife found him lying.’

- (73) *i lyula = yahren te-ffey beṛra, he-ttaf = ahen gals-in*
 and ogress = S:ANP 3FS-go.out:P outside 3FS-find:I = S:ANP sit:AP-PL
 ‘And the ogress went out and (suddenly) found them sitting.’

- (74) *i-ttaf i-yres haḍik = 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-εaql = at billa tameṭṭuṭ = ahen*
 3MS-recognise:P = 3FS COMP woman:EL = S:ANP
 ‘He recognised her to be that woman.’

- (76) *i-εaql = at tameṭṭuṭ = ahen*
 3MS-recognise:P = 3FS woman:EL = S:ANP
 ‘He recognised her to be that woman.’

(77) *t-han εaq-et illa yr-es lmeşker*
 F-S:ANP be.aware-3FS:PF COMP at-3S intoxicant
 ‘She became aware that he had intoxicant.’

(78) *i nettata nya d εaq-et 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) *ħmed i-ssen illa a sekr-en tteam*
 ahmed 3MS-know:P COMP AD make:A-3PL couscous
 ‘Ahmed knows that they will make couscous.’

(80) *ħmed i-ssen a sekker tteam*
 ahmed 3MS-know:P AD [3MS-]make:A couscous
 ‘Ahmed knows how to make couscous.’

3.2. Verbal valency and derivation

There exist intransitive, transitive, ditransitive and labile verbs in Ghomara Berber. The valency of the verb can be changed by means of formal operations on the verb, including systematic suppletion. Labile verbs have two valencies without formal change of the verb. Valency increase to derive the causative can be achieved by two formal operations: a number of verbs take an **ss ~ s** prefix, while other verbs geminate the second consonant, i.e. take the form of an Arabic stem II verb (see 3.2.1.2. below)¹³¹. Rarely one finds stems with insertion of **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>i-nes</i>	‘it is extinguished’	>	<i>i-s-nes</i>	‘he extinguished’
<i>i-ffuy</i>	‘he went out’	>	<i>i-ss-afey</i>	‘he let/made him go out’
<i>i-kku</i>	‘it dried’	>	<i>i-ss-ku</i>	‘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 onomatopoea¹³².

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	
<i>wḏed</i>	‘be ready’	>	<i>weḡed</i>	‘make ready’
<i>reeš</i>	‘shiver’	>	<i>reεεš</i>	‘cause to shiver’
<i>zem</i>	‘dare’	>	<i>zeεεem</i>	‘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	
<i>freh</i>	‘be happy’	>	<i>ferreh</i>	‘make happy’
<i>šteh</i>	‘dance’	>	<i>šetteh</i>	‘make dance’
<i>dher</i>	‘appear’	>	<i>dehher</i>	‘show, make appear’
<i>freq</i>	‘separate’	>	<i>ferreq</i>	‘make separate’
<i>lseq</i>	‘stick’	>	<i>lesseq</i>	‘make stick, glue’
<i>eqel</i>	‘recognise’	>	<i>εeqqel</i>	‘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 example¹³³:

Berber-morphology			Berber-morphology	
<i>dešš</i>	‘to laugh’	>	<i>tehhək</i>	‘make laugh’
<i>ssen</i>	‘know’	>	<i>εerref</i>	‘make acquaintance’
<i>rwel</i>	‘flee’	>	<i>herreb</i>	‘make flee’
<i>wsir</i>	‘be old’	>	<i>šerref</i>	‘make old’
<i>kšut</i>	‘be afraid’	>	<i>xewwef</i>	‘scare’

Rarely, one finds Arabic stem III verbs which have a causative meaning, for example:

Arabic-morphology			Berber-morphology	
<i>šel</i>	‘be easy’	>	<i>sahel</i> (~ <i>sehhel</i>)	‘to make easy’
<i>šlaqa</i> ¹³⁴	‘to meet’	>	<i>laqi</i>	‘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	
<i>bdeđ</i>	‘stop, stand’	>	<i>ss-ebdeđ</i> ~ <i>weqqef</i>	‘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.

<i>qqim</i>	‘sit’	>	<i>s-qim</i> ~ <i>gelles</i>	‘let/make sit’
<i>dri</i>	‘pass’	>	<i>ss-edri</i> ~ <i>gewwez</i>	‘let/make pass’
<i>εam</i> ~ <i>εum</i>	‘swim’	>	<i>s-εum</i> ~ <i>εewwem</i>	‘let/make swim’
<i>tru</i>	‘to cry’	>	<i>s-etrū</i> ~ <i>bekka</i>	‘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	
<i>šš</i>	‘eat’	>	<i>wekkel</i>	‘feed’
<i>su</i>	‘drink’	>	<i>šerreb</i>	‘make/let drink’
Arabic- morphology			Berber- morphology	
<i>qra</i>	‘study’	>	<i>qerra</i>	‘teach’
<i>fhem</i>	‘understand’	>	<i>fehhem</i>	‘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) *aεeyyal nn-es i-šš ayrum*
 boy:EL of-3S 3MS-eat:P bread:EL
 ‘His child ate bread.’

(82) *farid i-wekkl=as ayrum i useyyal nn-es*
 Farid 3MS-feed:P=3S:IO bread to child:EL of-3S
 ‘Farid fed bread to his child.’

(83) *farid i-wekkel aεeyyal nn-es*

Farid 3MS-feed:P child:EL of-3S
 'Farid fed his child.'

3.2.2. Valency decreasing operation - the passive

The passive construction promotes the original object to subject position. The original subject is omitted. It cannot be expressed in any way in the passive clause. All passives are Arabic-morphology verbs which have a **tt** ~ **t** or an **n** prefix (for non-passive verbs with these prefixes, such as reciprocals, see III.8.3.). Similar to the situation with **cCc** causatives, underived etymologically Berber verbs use suppletive derived Arabic verbs in order to express the passive. In (84) the transitive verb **krez** 'plough' has a subject argument with an agent role and a direct object with a patient role. In (85) the subject is suppressed and the direct object of (84) is the subject. The verb in (84) has been supplanted by its passive suppletive counterpart **tteħret** 'to be ploughed' in (85).

(84) *i-krez aġer nn-es*
 3MS-plough:P meadow:EL of-3S
 'He ploughed his field.'

(85) *aġer nn-es tte-ħret azgaznet*
 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 lħebb n-degg = at g lmeqla = yahen*
 1PL-take:I=DC barley, 1PL-put:I=3MS:DO in frying.pan=S:ANP
ne-qqely = at, 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) *elaħeqq ka-t-t-ħekk, ka-t-t-ħekk, ššuka = yahen*
 because IMPP-3FS:IMPF-PASS-rub, IMPP-3FS:IMPF-PASS-rub, needle=S:ANP
 'because it is rubbed, it is rubbed, that needle'

(88) *ma aġ i-ll ka-y-n-baε zziġ, ma aġ*
 NEG PST 3MS-be:P IMPP-3MS:IMPF-PASS-sell oil, NEG PST
i-ll ka-y-en-baε zzaytun ma aġ i-ll
 3MS-be:P IMPP-3MS:IMPF-PASS-sell olives, NEG PST 3MS-be:P

<i>ka-y-en-bae</i>	<i>imalhen</i>	<i>das</i>
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-rez*
 glass 3MS-break:P
 ‘The glass is broken.’

(92) *argaz = ahen* *i-rez* *lkas*
 man:EL = S:ANP 3MS-break:P glass
 ‘That man broke the glass.’

(93) *i-εeqqed*
 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-εεqqed = at*
 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 verbs¹³⁶. 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 **ḅta** ‘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-ḅta*
 bread:EL 3FS-divide:P
 ‘The bread is divided’

- (96) *i-ḅta* *talqimt*
 3MS-divide:P bread:EL
 ‘He divided the bread’

Instead of the intransitive the younger speaker uses the Arabic passive participle:

- (97) *talqimt* *meq̣sum-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 Tashelhiyt, see Galand, 2010: 294). An example of such a verb is **krez** ‘to plough’. Example (98) can only have a transitive reading.

- (98) *i-krez* *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-zzaḍ*
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 Tashelhiyt).

‘When we grind it.’

- (100) *nya y = zerrī-n*
when 3MS:DO = pound:I-3PL
‘When they pound it.’

The following construction without attraction is possible as well.

- (101) *nya ne-zzād = aṭ*
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-kkaṭ ga-s, ḥetta ṭ = i-ney*
3MS-stay:P 3MS-hit:I in-3S until 3MS:DO = 3MS-kill:P
‘He kept on beating him until he had killed him.’

- (103) *i-qqim i-kkaṭ ga-s, ḥetta ye-ny = aṭ*
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-wwṭ-en.*
capture:P-3PL man:EL REL 3PL:DO = RF-hit:P-RF
‘They caught the man who hit them.’

- (105) *tayatt a s = i-qqer leeqel nn-es*
goat:EL REL 3S:IO = 3MS-say:I mind of-3S
‘The goat that he would like (lit. that his mind told him).’

- (106) *nnšara a d = i-ttiṭu-n dar žžbala ma yer-sen ši leflus*
Europeans REL DC = RF-go:I-RFto Jbala NEG at-3PL NEG money

‘The Europeans who come to the Jbala don’t have any money.’

amk a ‘when’

The conjunction **amk a** is a type of relative construction.

- (107) *amk a hen = i-bb qriɾeɛ = 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 **amk a** ‘when’. This text excerpt is from a young, but confident speaker.

- (108) *amk a bba-n = tet dar ya tfaɾiɾ*
 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-ttuɾu a y = n-zeɖ g rrha*
 1PL-go:I AD 3MS:DO = 1PL-grind:A in mill
 ‘We go and grind it in the mill.’
- (111) *beššita, d a t = t-uf-et g fermašya*
 peseta, CRT AD 3FS:DO = 2S-find:A-2S in pharmacy
 ‘The peseta, you will find it in the pharmacy.’
- (112) *mki ma ar a wen = šša-x ši*
 if NEG FUT AD 2PL:DO = eat:A-1S NEG
 ‘If I am not going to eat you.’

¹³⁹ Different from many Berber languages, which have the negative particle **ur** or a variant thereof the negative particle **ma** in Ghomara Berber does not cause attraction.

The following examples 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 uyižd š a ne-ǵ=at dar dđaw*
 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-ǵ=as hetta smana h-teffey*
 NEG AD FUT 1PL-leave:A=3S:IO until from.where 3FS-go.out:I
 ‘We will not even leave for her an exit.’

3.3.4. Combination of the clitics

In this paragraph we discuss the combination of the verbal clitics in preverbal and postverbal position (cf. III.11. on pronouns). The verbal clitics have a fixed order in postverbal position: *indirect object clitic - direct object clitic - deictic clitic*, for example:

Verb	IO	DO	Deictic
<i>i-ml</i>	<i>am</i>	<i>ten</i>	<i>d</i>
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) *taseyyalt=ahen te-nn=as=t i yemma nn-es*
 girl:EL=S:ANP 3FS-say:P=3S:IO=3FS:DO to mother of-3S
 ‘The girl told it to her mother.’

When a combination of clitics occur in attraction context, the indirect object pronoun is placed in preverbal position. The direct object pronoun is not fronted and retains its postverbal position. Instead of the direct object being fronted, a petrified element *t* takes the position between the indirect object pronoun and the verb. Based on its shape and position (following the indirect object pronoun) this element could be interpreted as a petrified third person feminine singular direct object pronoun. However, synchronically, the element does not express (third) person, number or gender. We therefore consider it simply a preverbal indicator of the presence of a postverbal direct object pronoun. All examples 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 uyižd= 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 aḡdi*
 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 **ymur** ‘to grow’ in examples (123) and (124).

- (120) *aḡdi i-ffey = d*
 jackal:EL 3MS-go.out:P = DC
 ‘The jackal came out.’

In example (121) **d** is preverbal because of the attraction caused by **š a**.

¹⁴⁰ In our corpus there is one instance of the form **d**. This is from a recording of the oldest man in the village. In the Colin texts this form is found as well.

(121) *š a d=y-enn: ‘allahwk̄bar’*
 FUT AD DC=3MS-say:A God.is.greatest
 ‘He then says (hither) ‘God is the greatest.’

(123) *i-xelleq = d g imuras*
 3MS-be.born:I=DC in riverbeds
 ‘It grows (generally) in riverbeds.’

(124) *i-ymur = d mezyan*
 3MS-grow:P=DC good
 ‘He has grown well.’

The following two verbs are obligatorily accompanied by the deictic clitic **d**. In the verb ‘to fetch water’ **d** has become part of the verb stem. In example (125) a **d** follows the conjugational prefix. It is preceded by a deictic clitic **d** which is attracted to preverbal position. In example (126) the form without the **d** in the stem is shown. The deictic clitic **d** is still obligatory. Example (127) shows the verb **us d ~ as d** ‘to land, to be family of’ which also has an obligatory **d**.

(125) *amella ma ra n-uf smana a d = n-daḡem*
 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-aḡem*
 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 raḡε-in = d*
 they AP:return-PL=DC
 ‘They are coming back (hither).’

- (129) *nekki aḡ lla-x g taza i nihma talɛ-in = d dayr-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) *amḳ a d = i-da = d ḳma-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) *amḳ a d = i-da ḳma-s = ahen, inn = as = t*
 when REL DC = 3MS-go:P brother-3S = S:ANP 3MS-say:P = 3S:IO = 3FS:DO
 ‘When that brother of his came, he told it to him.’

- (131) *š a d = i-ffuy = d g bellil*
 FUT AD DC = 3MS-go.out:A = DC in night
 ‘He will come out in the evening.’

- (132) *saeə, ya wi d = i-ttitu-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) *amaleh = 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** ~ **teṭ** (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** ~ **teṭ** + **d**. (135a) presents forms without the deictic clitic and (135b) is an example with **ded**.

(135a) *i-bb = ay = tet ~ ibb = ay = teṭ*
 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	<i>t</i>	<i>did</i>
F	<i>t ~ tet ~ teṭ</i>	<i>ded</i>
PL	<i>ten</i>	<i>den ~ dend</i>

The deictic particle always follows the indirect object pronoun in postverbal position:

(137) *y-umr = aḳ = 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 deictic 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 ḳ = 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 ḳ = 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** ~ **wedqul** ~ **wetqul** ‘nothing’ and **hedd** ~ **hetta yan** / **hetta yat** ‘nobody’. The preverbal element does not cause attraction. The final element follows the entire verbal complex. The [**ma** verbal complex (**ši**)] negation negates the verbal predicate. Another negative element, **maši**, can be used for negation of the complete clause. The negative element **æmmer-** ‘never’ can be combined with **ma** as well. Examples (142), (143) and (144) show examples of the [**ma** verb (**ši**)] negation. The examples show negation of the Imperfective in (142) and (143) and the Perfective in (144). Examples (144) and (145) show negation with some verbal clitics included.

(142) *ma h-reqq ši ga-sen leafya*
 NEG 3FS-light:I NEG in-3PL fire
 ‘Fire does not ignite in them.’

(143) *lla walu, nekki ma txellaf-ax ši*
 no nothing I NEG step:I-1S NEG
 ‘No, I will not take a step.’

(144) *ma i-šš = ah ši æeyyal = ahen*
 NEG 3MS-eat:P = 3MS:DO NEG boy:EL = S:ANP
 ‘The boy has not eaten him.’

(145) *ma i-bb = as = den = d ši*
 NEG 3MS-take:P = 3S:IO = 3PL:DO = DC NEG
 ‘He has not brought them for him.’

The following examples show the use of the elements **walu** ~ **walaw**, **wedqul** ‘nothing’, **hedd** ‘nobody’ and **hetta yan**.

(146) *ama w-in n ssuq, u-hin ma ssn-en walu*
 as.for M-PL:DST of market M-PL:ANP NEG know:P-3PL nothing
 ‘As for the people of the market, they do not know anything.’

(147) *ma twala-x walaw*
 NEG see:I-1S nothing
 ‘I cannot see anything.’

(148) *ma twala-x wedqul*
 NEG see:I-1S nothing
 ‘I cannot see anything.’

(149) *ma ya n-šekšem hedd*
 NEG AD 1PL-make.enter:A nobody
 ‘We are not going take anybody inside.’

(150) *nuḵna, baba i-nn =anax ma yer-nax hetta 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) *keḡi ma he-ssn-et ši a wṭ-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 **ša** 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 **ša** 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 ya siwel, ma ya k̄sut-et ši*
 VOC you just speak:IMP NEG AD [2S-]be.afraid:A-2S NEG
 ‘You (F.) just speak, don’t be afraid.’

(153) *ma ya am = šša-x ši*
 NEG AD 2FS:DO = eat:A-1S NEG
 ‘I will not eat you.’

(154) *ma ya am = ḡḡ-ay wetqul*
 NEG AD 2FS:DO = do:A-1S nothing
 ‘I will not do anything to you.’

(155) *lla, ma ra ḡḡ-ay wedqul*
 no NEG AD do:A-1S nothing
 ‘No, I’m not going to do anything.’

The verb **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** ~ **ak** (see IV.9.5.). In this case the postverbal marker may, but need not, follow the final verb. In example (156) the negation of the verb on its own is shown. In (157) the position of the postverbal marker is after the first verb while in (158) it appears after the final verb.

(156) *ma ye-ll ši mnadem, ma yell ši ssbeε*
 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) *mki ma i-ssenk_r=anax lefqi, šku š a yen=i-ssenk_r?*
if NEG 3MS-wake.up:P=1PL:DO imam, who FUT AD 1PL:DO=3MS-wake.up:A
‘If the imam does not wake us up, who will wake us up?’

- (162) *netta zeema-k i-htaž a fsex šškara baš ma ya*
he kind.of-2MS 3MS-want:P AD [3MS-]open:A bag so.that NEG AD
te-flet tayatt
3FS-escape:A goat:EL
‘He kind of wanted to open the bag so that the goat does not escape.’

In relative clauses and interrogatives, e.g:

- (163) *wa lla ma qari haw maši mdewwex*
PRH:MS be NEG learn:AP:MS PR:3MS go:AP:MS confuse:AP:MS
‘The one who is uneducated goes along being confused.’

- (164) *aḳ i-ll dhaḍin, ma ssn-ax šk a t=i-leqqt-en*
PST 3MS-be:P here NEG know:P-1S who REL 3MS:DO=RF-pick.up:P-RF
‘He was here, I do not know who picked it up.’

The postverbal element does not appear in a secondary predicate (cf. IV.3.1.2.3. for secondary predicates).

- (165) *ma ḥtaž a t=te-wwet 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-saġum 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) *žehha i-tteiš netta i yemma nn-es, netta ma i-mellek,*
 Jeha 3MS-live:I he and mother of-3S he NEG 3MS-marry:I
yemma nn-es ma h-mellek
 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 hadik=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 rez ma ya hadik*
 NEG AD [3MS-]break:A NEG AD thingy
 ‘It will not break and it will not do anything.’

- (170) *i-qqr=as: ‘ma tesla-x=ak, ma tesla-x=ak.’*
 3MS-say:I=3S:IO NEG hear:I-1S=2S:IO NEG hear:I-1S=2S:IO
 He tells him: ‘I can not hear you, I can not hear you.’

In the non-inflected petrified expression **maet** (< **ma eřeft**) ‘I do not know.’ borrowed from Arabic the postverbal element never appears. Some examples are:

- (171) *i-dda řsulřan maet ana ak 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) *maeet amk a g̃ga-n leḥsam = ihen*
 don't.know how REL do:P-3PL children = PL:ANP
 'I do not know how the children did it.'

The element **emmer-** ~ **ummer-** '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 emmr-a de-nqteε, ššelḥa emmr-a ma d-enqteε*
 Berber NEG never-3FS 3FS:IMPF-stop Berber never-3FS NEG 3FS:IMPF-stop
 'Berber will never die, Berber will never die.'

- (174) *emmr-ek ma he-šša-t aylal*
 never-2S NEG 2S-eat:P-2S snail:EL
 'Have you never eaten snails?'

- (175) *ma ya af-et ši beṣṣita ummr-ek t-uf-et = tet*
 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-wwet ši kma-s s rrekla*
 NEG 3MS-hit:P NEG brother-3S with kick
 'He did not kick his brother (lit. hit his brother with a kick).'

- (177) *maši i-wwet kma-s s rrekla*
 NEG 3MS-hit:P brother-3S with kick
 'It is not that he kicked his brother (lit. hit his brother with a kick).'

- (178) *te-nn = as: 'u-hen a baḥa maši š a t = i-bb,*
 3FS-say:P = 3S:IO M-S:ANP VOC father NEG FUT AD 1S:DO = 3MS-take:A
š a t = i-nuy u-henni.'
 FUT AD 1S:DO = 3MS-kill:A M-S:ANP
 She said: 'That one dad, it is not that he is going to marry me, he is going to kill me.'

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-nbaε 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 tēddist*
 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 <i>NP / PP i ~ id / Verb u</i> ‘and’	+	-	-
Disjunctive coordinator wella ~ awella ~ aw ‘or’	+	-	-
Adversative coordinator walakin ‘but’	+	-	-
Causal coordinator liyanna, elaḥeqq elaqibal, elaxaṭer ‘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
fħalli 'as if'	+	-	-

4.1.1. Conjunctive coordinators

The conjunctive coordinators **i** ~ **iḍ** and **u** 'and' are allomorphs. The borrowed conjunction **u** links verbs while non-borrowed **i** ~ **iḍ** only coordinates (pro)nouns and prepositional phrases. The coordinator **i** ~ **iḍ** 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** ~ **iḍ** as a preposition). The form **iḍ** only appears before vowels, never before consonants, where **i** is used. While **i** ~ **iḍ** 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** ~ **iḍ**

Noun phrases and prepositional phrases coordinated by **i** or **i** ~ **iḍ** immediately follow the coordinator. Example (1) shows coordination of a noun phrase. A following Berber-morphology noun gets the EA.

- (1) *legrana i ukfer melk-en*
toad and turtle:EA marry:P-3PL
'The toad and the turtle married.'

Example (2) shows the use of **iḍ** before a noun with an initial vowel and **i** before a noun with an initial consonant.

- (2) *tettan=t ya lebhayem iḍ iyʷyal i tyaten*
eat:I=3MS:DO only mules and donkeys and goats:EA
'Only mules and donkeys and goats eat it.'

In the examples (3) and (4) coordination of prepositional phrases is shown.

- (3) *t-uf-et=tet g fermašya i g ššaka*
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 ššəlħa*
 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 ššultān i-dda ka-y-εiss fx-es, i netta*
 child:EL of Sultan 3MS-go:P IMPP-3MS:IMPF-guard on-3S and he
i-ttaf = at εawed
 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) *ssirid-en = t g waḳal u tmeṛraḥ-en = t g tafukt*
 wash:I-3PL = 3MS:DO in earth:EA and let.dry:I-3PL = 3MS:DO in sun
 ‘They wash it in the soil and they let it dry in the sun.’

In the next example the coordinated clause is non-verbal. The example shows that a noun does not take the EA after following **u**.

- (8) *ne-ttawi = d isyaren dar uḥemmal = ahen u aywel yer-nex*
 1S-take:I = DC sticks to bedstead:EA = S:ANP and at-1PL rack:EL
 ‘We bring sticks to that bedstead, and we have a rack.’

Example (9) shows that multiple verbs can be coordinated consecutively by means of the coordinator **u**.

- (9) *n-εellm = ahen* *u* *n-šəkšm = ahen* *u* *zedq-u* *g* *wilba*
 1PL-teach:P = 3PL:DO and 1PL-make.enter:P = 3PL:DO and end-3PL:PF in Huelva
 ‘We taught them and got them in and the ended up in Huelva.’

u is also used for adverbial and adjectival coordination (the use of **i** ~ **id** is only reluctantly accepted in this context), for example:

- (10) *xεšš = ay* *imalhen* *muqqr-eṭ* *u* *bezzaf*
 need:P = 1S:IO fish big-PL and many
 ‘I want big and many fish.’

- (11) *netta ṭwil* *u* *ylit*
 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 kda** ‘and so forth’, **u šafi** ‘that’s all’, **u ḥleq** ‘whatever’, **xyar u xyar** ‘even better’, **bi xir u ela 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-mmut* *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* *lxuḅza*
 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) *ssemḷaḷ-en = ten* *i* *lemselmin* *wella* *i* *nnšara* *ssemḷaḷ-en = 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 ssay-en ši lḥaža te-šḥa 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 muqqr-et wella mezzi-t?*
 [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) *qallek dḍbaε š a t=i-šš awella aḡdi*
 think:MS:PF hyena FUT AD 1S:DO=3MS-eat:A or jackal:EL
 ‘He thought the hyena will eat me or the jackal.’

(21) *ayerraf n iḥawen aw ayerraf n tazart, fhem-ti?*
 bowl:EL of beans or bowl:EA of figs, understand-2S:PF
 ‘A bowl of beans or a bowl of figs, you understand?’

4.1.3. Adversative coordination

Adversative coordination is always binary, i.e. it consists of maximally two conjoined clauses (cf. Haspelmath, 2007: 2). Other types of coordination allow for more than two conjoined clauses. There is one adversative conjunction namely **walakin** ‘but’. Example (23) show the use of a topicalised noun following the conjunction.

(22) *lʔamana = yaḍ, xebbe = ay = tet, walakin ma ya*
 safeguard = S:PRX hide:IMP = 1S:IO = 3FS:DO but NEG AD
te-ḡḡ-et ši sennig lafya
 2S-do:A-2S NEG above fire

‘This safeguard, hide it for me, but do not put it above the fire.’

- (23) *i-dda argaz = ahen walakin tamyart nn-es ma he-dda ši*
 3MS-go:P man = S:ANP but woman:EL of-3MS NEG 3FS-go:P NEG
 ‘That man went, but his wife did not go.’

4.1.4. Causal coordination *liyanna*, *elaḥeqq*, *elaqibal*, *elaxaṭer* ‘because’

The coordinative conjunction *liyanna* ‘because’ indicates a causal relation between two phrases. *elaḥeqq*, *elaqibal*, *elaxaṭer* 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) *tkeffr-et fx-es, liyanna takna*
 lie-3FS:PF on-3S because co-wife:EL
 ‘She lied to her, because she is a co-wife.’

In example (25) the conjunction is immediately followed by a verb phrase.

- (25) *liyanna he-tyima tmen eyyam n lehwa fx-ennex i-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 fermaṣya he-ttak-at = as ilaxirihi te-rri = d xf-ek*
 because pharmacy 2S-give:I-2S = 3S:IO etc 3FS-return:P = DC on-2MS
 ‘Because you give it to the pharmacy, and she gives (money) back.’

In the following example the use of *elaḥeqq* is illustrated from a text excerpt.

- (27) *i-tšebbar = ahen rremḍan g uḍrar. elaḥeqq qbel zeg u-ḥaḍin*
 3MS-grab:I = 3PL Ramadan in mountain:EA because beforefrom M-PRX:S
aḡ lla-n tēmmaṣ-en ?akṭareyya tēmmaṣ-en g uḍrar
 PST be:P-3PL live:I-3PL mostly live:I-3PL in mountain:EA
 ‘They fasted in the mountains. Because in that time, most people lived in the mountains.’

semmen ~ **semm a** ‘so that’

The conjunction is composed of the instrumental preposition **s** combined with pronominal **men** (it functions as an interrogative as well, cf. IV.6.4.). The interpretation is either ‘with which’ or equivalent to **baš** ‘so that’. The relative marker **a** is optional after **semmen**, (which can result in **semmen + a > semm a**). In the following examples the use of the conjunction is shown. Example (28) shows a topicalised noun directly following the conjunction. Example (29) shows the use of an Imperfective after the conjunction. The relative marker causes attraction of verbal clitics.

- (28) *n-sekr = as* *ši* *ħaja* *n* *lemļaħ semmen taḏemmit = ahen*
 1PL-do:P = 3S:IO some thing of salt so.that fried.wheat:EL = S:ANP
h-till *ħelwa*
 3FS-be:I sweet:FS
 ‘We put a bit of salt in it, so that the baked wheat becomes sweet.’

- (29) *wṭ = ay* *s* *leħzam* *semm* *a* *teqql-ax* *tameṭṭuṭ*
 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) *ḏeyyer* *x* *šškara = yahen* *laba* *tayatt = ahen* *a* *k = te-flet*
 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* *zeema-k* *i-ħtaž* *a* *fsex* *šškara* *bašma*
 he kind.of-2MS 3MS-want:P AD [3MS]open:A bag so.that.not
ya *teflet* *tayatt*
 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) *asjun* *tlewway-en = t* *i* *ḏḏmay* *n* *tša* *bašma*
 rope:EL wrap:I-3PL = 3MS:DO to head of cow:EA so.that.not

azaḡlu = ahen *a* *flet*
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.’

fhalli ‘as if’

The element **fhalli** consists of the Arabic elements **fhal** ‘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* *tažellabt = ahen* *n* *iṣyaren* *fhalli* *t-ɛddel* *lfurma*
3MS-do:P = 3S:IO djellaba:EL = S:ANP of sticks as.if 3FS-make:P form
n *urgaz* *tameṭṭut = 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 **mki** ‘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 **mki** 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
amk 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**.

mki ‘if’	+	+	-	-
ka ‘if’	-	+	-	-
qeḅla ‘before’	-	+	optional	+
ḥetta ‘until’	-	+	optional	+
zegya ‘since’	-	+	+	+
waxxa ‘even though’	+	+	optional	+
baš ‘so that’	-	+	¹⁴⁵	-
bla ma ‘without’ qbel ~ qeḅla ma ‘before’ ana ma ‘where ever’	-	+	-	-

4.2.1. **amḳ a** ‘when’

The subordinating conjunction **amḳ 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 **ammeḳ** ‘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 **II** is used (cf. IV.9. on **II**). 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 **amḳ a** and **nya ~ yya** (see next paragraph) are similar in meaning, although there seems to be a preference to use **amḳ a** by younger people.

(34) *amḳ a bba-n baetiyat-em akfer ye-wt = at*
 when REL take:P-3PL each.other-3PL turtle:EL 3MS-hit:P = 3FS:DO
 ‘When they had married each other, the turtle hit her.’

Example (35) shows an example with an Imperfective in the subordinate clause. The event in the subordinate clause is simultaneous with the event in the main clause.

(35) *amḳ a t-tiṭu dar teggurt te-qqr = asen*
 when REL 3FS-go:I to door:EA 3FS-say:I = 3PL:DO
 ‘Then, when she goes to the door, she says to them...’

A topic noun cannot follow the subordinate conjunction, for example:

¹⁴⁵ The conjunction itself does not cause attraction. However, as it is obligatorily followed by **a** + Aorist there can be attraction in this context.

- (36) **amk a argaz = ahen i-ggez dar ucyam*
 when REL man:EL=S:ANP 3MS-go.down to house:EA
 ‘When the man descended 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) *amk a ar a ddu hmed, š a d = uqql-ay nekkın*
 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 amk a d wežd-et leflaha 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 **amk a** ‘when’ this subordinative conjunction specifies a temporal relationship between the main and the subordinate clause. A number of examples are shown below:

- (39) *nya i-mlek fx-es, qelle-en*
 when 3MS-marry:P on-3S leave:P-3PL
 ‘When he married another, they left’

In example (40) the variant **yya** is used, followed by a verb in the Imperfective.

- (40) *yya teqql-en a rnu-n dar ya tayilt εawed*
 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 meqbeyy-a*
 when FUT AD [3FS]give.birth:A be.almost-FS
 ‘When she will almost give birth.’

After *nya* ~ *yya*, verbal clitics are put in preverbal position, for example:

- (42) *nya t=i-zer hamka mmerrt-a i-rry=as=d*
 when 3FS:DO=3MS-see:P like.that be.sick:PP-FS 3MS-return:P=3S:IO=DC
leḥṣam 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 zḏall, i-teffey 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 zḏall, i-teffey 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 nettata nya d εaq-et 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 *mki* ‘if’

This conjunction is used to indicate a hypothetical 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) *mki 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 **mki**. In example (12) an Arabic-morphology verb is used in the Perfect.

- (47) *mki t-ssebzig-et = t i-qelles*
 if 2S-make.wet:P-2S = 3MS:DO 3MS-leave:P
 'If you make him wet, he is gone.'

- (48) *mki tferreq-na nekki ddaε-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 **mki**, for example:

- (49) *mki š a y = te-ny-em, ġ-awet a y = berrħ-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) *mki he-ttitu-m dar uxyam, bb = awet id-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 **ya** 'just'.

- (51) *ya mki dda-x a žerħ-ay a n-εayen amk 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 **mki**, 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) *m̄ki ll imalḥen inši waer-in, hayhay*
 if be fish some good-PL well.well
 ‘If they are good fish, well well.’

In attributive constructions, the non-verbal predicate can also be used without **ll**, for example:

- (53) *myaṭayn n rryal, m̄ki ssardīn wella ššral wella tayzalt*
 two.hundred of rial, if sardine or jack.mackerel or bogue.fish:EL
 ‘Two hundred rial, if it is sardine or jack mackerel or bogue fish.’

An independent pronoun that immediately follows the conjunction yields the meaning ‘if it were for...’ as in the next example:

- (54) *m̄ki netta ilaxirih i-tett l̄eṭṭa = yahren i-tetteṣ*
 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 ~ ak** + **ll** is used following **ka**. In the apodosis **ka** is facultative. In the apodosis, if there is a verbal predicate, the borrowed element **kun ~ ikun** ‘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 **ikun**.

- (55) *ka i-qqim maši id izref, ka i-lkem amilla*
 CF 3MS-stay:P go:AP:MS with road:EA CF 3MS-arrive:P now
 ‘If he had kept going on the road, he would have arrived by now.’

- (56) *ka i-qqim maši id izref, ka i-kun 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-šebbr = aḵ argaz = ahen, ka iqetṭε = aḵ s tuzzalt = aḵ*
 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-ay mtebbeε lxiḍma 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-kun šī aḵemmiš n isennanēn*
 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
mseyyeb g tezga
 throw:PP:MS in forest:EA
 in the forest.’

In example (60) **ka** is only used in the protasis. In the apodosis there is no further marking.

- (60) *ma nekki ka dda-x amella refs-ax = t, šeel-ay = am,*
 as.for I CF go:P-1S now:EL knead:P-1S = 3MS:DO lite.oven:P-1S = 2FS:IO
ḡḡ-ay = am
 do:P-1S = 2FS:IO
 ‘As for me, if I had gone, I would have kneaded, lit the oven and done (something)
 for you by now.’

4.2.5. **qeb̄l a** ‘before’

The conjunction **qeb̄l a** indicates that the event in the subordinate clause follows the event in the main clause. This conjunction consists of the preposition **qeb̄l** ‘before’ followed by the element **a** (cf. IV.5.). The subordinate clause can follow the main clause.

- (61) *qeb̄l 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) *qebl a t=ye-wwet, i-dda = d dayr-i*
 before REL 3MS:DO = 3MS-hit:P 3MS-go:P = DC to-1S
 ‘Before he hit him, he came to me.’

(63) *qebl a ye-wwet = at, idda = d dayr-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) *qebl a d stæml-u ttunubirat aḡ lla-n*
 before REL AREL use-3PL:PF cars PST be-3PL
ka-y-stæml-u ya lekyader
 IMPF-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-kkat ga-s ḥetta t = i-ney*
 3MS-stay:P 3MS-hit:I in-3S until 3MS:DO = 3MS:kill:P
 ‘He kept on beating him until he killed him.’

(66) *εawed ka-y-tiḥ fx-es ‘puk’, ḥetta ye-ny = at*
 again IMPF-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 come 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 nekkīn meḍdum*
 since CD=go:P-1S I sick:PP:MS
 ‘Since I have arrived, I have been ill.’

(69) *te-ḥda ka-t-ḍeḥf zegya h-su lbaṣṭeyya = 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 xṭarḥ-u ṭṭunubirat 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 ḥmed 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-zṛ = at atḡam, 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 t = i-zṛer atḡam, 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 ṣṣaḍ-tum nnhar = aḍ ma he-bba-m = d wedqul*
 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-ay leša
 do:A-1S supper
 ‘I said to him, make your children dissappear so that I can make supper.’

(76) **ššwešk leḥšam nn-eḵ baš leša a ḡḡ-ay*
 make.dissappear:IMP children of-2MS so.that supper AD do:A-1S
 ‘Make your children dissappear so that I can make supper.’

4.2.10. Constructions with **ma**

The preposition **bla**, the conjunction **qeḅl 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 **qeḅla**, **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-sen 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) *qeḅl a ma ye-qqur lebšel, i-nn = as: hala*
 before REL MA 3MS-dry:P onions 3MS-say:P = 3S:IO come:IMP
 ‘Before the onions were dry, he said: ‘come’

(79) *ana ma ufa-n tala i-qqr = as: ‘a weddi*
 where MA find:P-3PL source 3MS-say:I = 3S:IO o boy
nekki kemṭ-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 yzizel = ahen, i-εaql = at billa tamettut = ahen*
 and *yzizel = S:ANP 3MS-recognise:P = 3FS:DO COMP woman:EL = S:ANP*
 ‘And that *yzizel*, he recognised that she was that woman.’

(81) *ku nnhar i-zzar = at das, billa i-thadiq*
 every day 3MS-see:I = 3FS:DO there COMP 3MS-do.thingy:I
 ‘He sees him here doing thingy.’

(82) *t-han εaq-et illa yr-es lmeşker*
 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-εiq-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 hamka*
 tapes = PL:ANP REL RF-turn:I-RF like.this
 ‘The tapes that go around like this.’

The next example has attraction of the direct object pronoun.

- (2) *lmueḥlim = ahen a k = ye-wt-en*
 teacher = S:ANP REL 2MS = RF-hit:P-RF
 ‘That teacher that hit you.’

The Aorist aspectual form (in relatives always preceded by **ar**) does not have the relative form in the subject relative clause, e.g.

- (3) *t-ṣerreḍ dar-i irgazen a ar a yt = ny^w-en¹⁴⁷*
 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 tamyart a ar a xdem*
 3FS-send:P = 3S:IO wife:EL REL FUT AD [3MS]work:A
 ‘She sent a woman who will work.’

In (5) an Arabic-morphology adjective is shown. In (6) and (7) both variants of the relative forms on Berber-morphology verbs are illustrated using the same adjective.

¹⁴⁷ This is the only example in the corpus that has the first singular direct object **yt** instead of **t** in this position (cf. III.11.2.1.).

(5) *argaz a y-ṭwil-in*
 man:EL REL RF-tall-RF
 ‘The tall man.’

(6) *iḥḥriyen a y-muqqr-in ga-sen taḍunt bezzaf*
 sheep REL RF-big-RF in-3PL fat a.lot
 ‘Big sheep contain a lot of fat.’

(7) *wa y-muqqr-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) *tamyart 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) *mnaḍem a y-mestans-in i tafukt ma ya*
 person REL RF-be.used:PP-RF with sun NEG AD
hlek ši deyya
 [3MS]be.sick:A NEG quickly
 ‘A person who is used to the sun will not get sick quickly.’

(10) *g ṭṭšer=ad ga-s ya ueyyal 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) *tamyart a lla naes-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 ḥsel s leḥšiš i-mmuṭ*
 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 ḥsel s leḥšiš i-mmuṭ*
 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 ṭtarix = ahen u-hen,*
 Sousis REL AREL leave-3PL:PF period = S:ANP M-S:ANP
ḍebbṛ-en x ḍḍmay 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 ḍḍmay 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-sekr-u* *das*,
 men REL IMPP-3PL:IMPF-get.drunk-3PL:IMPF there
bba-n = ten *da* *leħbes*
 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-sekr-u* *das*,
 men REL AREL IMPP-3PL:IMPF-get.drunk-3PL:IMPF there
bba-n = ten *da* *leħbes*
 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-t* *i-rebb = at*
 PRES F-S:RL REL DC = 3FS-go:P = DC little:DIM-PL 3MS-raise:P = 3FS:DO
ššulṭan, *i-mleḳ* *iḍ-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) *šškara* *a* *y-uḳer* *aεeyyal = aḍ*
 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) *ibawen a d fleh-t azgaznet mezyan-in*
 beans REL AREL cultivate-1S:PF last.year good-PL
 ‘The beans I sowed last year are good.’

- (23) *ibawen a fleh-t azgaznet 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) *ibawen a d ka-ne-fleh kul εam mezyan-in*
 beans REL AREL IMPP-1S:IMPF-cultivate every year good-PL
 ‘The beans that I sow every year are good.’

- (25) *ibawen a d ka-n-felh = em kul εam 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) *lgarru a d tkeyyef-t nekki mezyan*
 cigarette REL AREL smoke-1S:PF I good:MS
 ‘The cigarette that I smoked was good.’

- (27) *lgarru a d tkeyyef = u nekki mezyan*
 cigarette REL AREL smoke-1S:PF = 3MS:DO I good:MS
 ‘The cigarette that I smoked was good.’

In relative clauses of transitive active participles the gapping strategy is used and the conjugated form of the verb **II** ‘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) *tabayšart 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) *tabayšart a lla-x wakt-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) *tabayšart a ne-ll wakt-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 = yahren, i-dda fhal-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 = yahren, dda-n fhal-em*
 men REL 3PL:IO = say:P-1S word = S:PRX go:P-3PL way-3PL
 ‘The men to whom I said something went away.’

(33) *argaz = ahen a d tleb-t = l-u imalhen,*
 man:EL = S:ANP REL AREL ask.for-1S:PF = IO-3MS fish
ma i-bb = ahen = d ši
 NEG 3MS-take:P = 3PL:DO = DC NEG
 ‘The man from who I ordered fish did not bring them.’

(34) *irgazen = ihen a d tleb-t = l-em imalhen,*
 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-mmut = as* *tæyyalt = ahen* *i* *tmettut = ahen*
 3FS-die:P = 3S:IO girl:EL = S:PRX to woman:EA = S:PRX
 ‘That girl died to that woman’s detriment.’

(36) *tamettut = ahen* *a* *s = ye-mmut-en* *tæyyalt = 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) *timyaṛan* *a* *sen = ye-mmut-en* *tasa = yahren*
 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* *εiss-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 construction resembles the benefactive/malefactive relative in that the relative form of the verb is utilised. There is an obligatory resumptive possessive pronoun filling the position in the relative clause from which the head noun has been extracted. An indirect object which agrees with the head can follow the relativiser, but is not obligatory present. The obligatory possessive pronoun already refers to the head noun. The relative constructions in (40) and (41) are derived from the sentence in example (39). The difference between (40) and (41) is the use of the indirect object pronoun. In (42) plural agreement with the head is shown.

(39) *i-ttitu kma-s n ueyyal=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) *aeyyal=ahen a i-ttitu-n kma-s da lxariž*
 boy=S:ANP REL RF-go:I-RF brother-3S to abroad
 ‘That boy whose brother lives abroad.’

(41) *aeyyal=ahen a s=i-ttitu-n kma-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-ttitu-n kma 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-ay lberrad x ššiniya*
 put:P-1S teapot on tray
 ‘I put the teapot on the tray.’

(44) *ššiniya a sers-ax fx-es lberrad*
 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) *ssstilu a ye-ttara iq-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 **II** ‘to be’ is used in the relative clause the preposition can either immediately follow the verb or be in final position (see IV.9. for **II** ‘to be’). The pronominalised preposition can appear before or after the participle or verb as the next examples show (This behaviour of the prepositions is not restricted only to this kind of phrase).

(50) *saken g uxyam = ahen*
 live:AP:MS in house:EA = S:ANP
 ‘I live in that house.’

(51) *axyam a lla-x ga-s saken*
 house:EL REL be:P-1S in-3S live:AS:MS
 ‘The house that I live in.’

(52) *axyam a lla-x saken 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 fhal-u*
 INDEF REL 3S:IO = RF-happen:P-RF 3MS-go:P way-3MS
 ‘Whatever happened to him, he left.’

(56) *ay a ssn-ax, nn-ay = ak = t*
 INDEF REL know:P-1S say:P-1S = 2MS:IO = 3FS:DO
 ‘All that I know, I have told you.’

In the next examples an Arabic-morphology verb is shown preceded by the pronoun. Examples (57) and (58) show that it can occur with and without a direct object pronoun which functions as a resumptive pronoun. Example (59) shows that the Arabic relativiser *d* can be present in this context.

(57) *fk = ay ay a tleb-t*
 give:IMP = 1S:IO INDEF REL ask.for-1S:PF
 ‘Give me what I demanded from you.’

(58) *ay a tleb-ti-ha mužad-a*
 INDEF REL ask.for-2S:PF = 3FS present-FS
 ‘Whatever you demanded, it is here.’

(59) *ay a d tleb-ti-ha, mužad-a*
 INDEF REL AREL ask.for-2S:PF = 3FS present-FS
 ‘Whatever you demanded, it is here.’

The indefinite pronoun can be used in the following idiomatic expression.

- (60) *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-muqqr-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-muqqr-in*
 M-PRH:PL RF-big-RF
 ‘The big one’

- (64) *wi d = i-ttiṭu-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) *ṭṭuεm w-a s = fk-ax, haw baqi yr-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) *llubya t-a ye-bb, i-šš=at atġam*
 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-ffy-en, baqi ma qql-en=d šī*
 boats PRH:PL RF-go.out:P-RF still NEG return:P-3PL=DC NEG
 ‘The boats that went out have still not returned.’

5.8. The element ‘a’ as head

The element **a** on its own can be the head of a relative clause. Some examples are:

(68) *yr-i a sskar-ax*
 at-1S REL do:I-1S
 ‘I have something to do.’

(69) *yr-i a ss-ax*
 at-1S REL drink:I-1S
 ‘I have something to drink.’

The relativiser **a** can be used after the existential **kayen** ‘there is/are’. In a few cases in the text corpus the use of the relativiser instead of the pronominal head may indicate a difference between an unspecific reading when the relativiser **a** is used and a specific reading when a pronominal head is used. In example (69) there is no referent mentioned before in the previous discourse, contrary to example (70) where the speaker addresses the listener in the second person before using **kayen** followed by a pronominal head.

(70) *kayen a y-ttawi-n aqellawes n lħebb, kayen a y-ttawi-n*
 EXST REL RF-take:I-RF jug:EL of wheat EXST REL RF-take:I-RF
ila?axirihi ay^wleyyel, kayen a y-ttawi-n taḳint, kayen
 etc clay.pot:DIM:EL EXST REL RF-take:I-RF clay.bowel:EL EXST
a y-ttawi-n šškara
 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 id-es, kayen w-a*
 even.though NEG AD [2S]speak:A-2S with-3S EXST M-PRH:S
y-tsawal-en id-es
 RF-speak:I-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* / *ya* / *d* are not allowed. Instead, the element *ar* is obligatory (cf. IV.8.1.1.3.3. for its use in non-relative context). The non-real element *a* follows *ar* before a Berber-morphology verb. Before an Arabic-morphology verb the *a* does not appear (cf. IV.8.2.4. for other preverbal particles). Example (72) shows a Berber-morphology verb, whereas (73) shows an Arabic-morphology verb.

(72) *i-šš=as* *leyda=yahen* *a* *ar* *a* *bb* *iđ* *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) *lbehriyya* *a* *ar* *i-ššad-u* *alazen,* *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* *lmucellim=ahen* *a* *lla* *ma* *i-wt=ak* *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* *lmucellim=ahen* *a* *ma* *k=i-wt-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 lmuɛllimin = ihen a lla ma wɫ-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 lmuɛllima = ahen a lla ma te-wɫ = 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) *leḡmula a lla ma eiwar ši fferd-en*
 camels Rel be:P NEG blind:PL NEG eat:I-3PL
 ‘The camels that are not blind eat.’

(79) *bba-n = d ya iḃeṛṛeyyen a lla ma muqqr-et 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) *zr-ay 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 ḥreg 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 position (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 affirmative relative strategy, e.g:

direct object

- (82) *te-qqim yah šškara a lla ma y-ukr=at ši amakar=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) *ibawen=ihen a lla ma fleḥ-t=em ši azgaznet,*
 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) *ibawen a lla ma ka-ne-fleḥ ši kul*
 beans=PL:ANP REL be NEG IMPP-1S:IMPF-cultivate=3PL:DO NEG every
εam tyim-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-ay=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) *tamettut=ahen a lla ma he-mmut=as ši taεeyyalt=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 *kma-s* is in postverbal position. This is the only negative relative construction where attraction occurs.

- (87) *zr-ay aeyyal=ahen a lla kma-s ma i-ttuṭu=(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) *zr-ax aeyyal=ahen a lla ma (s)=i-ttuṭu kma-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=eḱ 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 naes-in ši*
 call:IMP=DC on children REL be:P NEG sleep:AP-PL NEG
 ‘Call the children who are not asleep.’

- (91) *mnaḍem a lla ma mestanes ši i tafuḱt š a*
 person REL be NEG used.to:PP:MS NEG with sun FUT AD
hleḱ deyya
 [3MS]be.sick:A quickly
 ‘A person who is not used to the sun will get sick quickly.’

5.11. Adjoined relative clauses

An adjoined relative clause is a combination of a matrix clause and a paratactic relative without any relative marking. Each of the clauses ‘could stand by themselves as independent sentences with approximately the same meaning’ (Noonan, 2007: 65). The two clauses are linked to each other by an uninterrupted intonation contour. In texts this type of relative prevails with indefinite head nouns, whereas other relative clauses predominantly have definite head nouns. Indefinite head nouns are however not excluded in other relative clauses. The elicited examples (92) and (93) are both accepted. Example (93) is a ‘normal’ relative which makes use of the relative particle **a**. The examples of adjoined constructions below show the use of a verbal predicate (94), a non-verbal predicate (95) and a participle (96).

(92) *š a k=ml-ay ya urgaz i-ttiṭu=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 k=ml-ay ya urgaz a d=i-ttiṭu-n daʔimen*
 FUT AD 2S:IO=show:A-1S one:M man:EA REL DC=RF-go:I-RF always
da lqehwa
 to café
 ‘I will show you a man who always comes to the café’

(94) *u baqi d a k=laqi-x i ya n xeyyna*
 and still FUT AD 2MS:IO=make.meet:A-1S to one:M of guy
i-ttiṭu=d a qqim das
 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 yr-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) *yer-sen ya n lefqi mšareṭ yer-sen g tmezgida*
 have-3PL one:M of imam employed:PP:MS at-3PL in mosque:EA
 ‘They have an imam 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) *yr-ek 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 = tet?*
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) *ška d xtare-u tisarkiwān?*
 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-sey?*
 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
<i>šenni</i> ~ <i>šennu</i> ~ <i>šnu</i>	<i>šu</i> ~ <i>ma</i>	<i>šn-</i> + pr.	‘what’
<i>šku(n)</i> (+ pronoun) ~	<i>škun</i> ~ <i>šk</i>	<i>škun-</i> + pr.	‘who’
<i>šḥal</i>	<i>šḥal</i>	-	‘how much/many’
<i>leyyaš</i> ~ <i>leyya</i>	<i>leyyaš</i> ~ <i>leyya</i>	-	‘why’
<i>ammek</i>	<i>amk</i>	-	‘how’
<i>faywex</i> ~ <i>fax</i>	<i>faywex</i> ~ <i>fax</i>	-	‘when’
<i>ana</i>	<i>ana</i>	-	‘where’
<i>smana</i>	<i>smana</i>	-	‘where from’
<i>layn</i>	<i>layn</i>	-	‘whither’
<i>kifaš</i> ~ <i>kif</i> ~ <i>ki</i>	<i>kifaš</i>	-	‘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 εawed?*
 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 **wqεε**. 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 wqεε = 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 yer-sen?*
 what REL be at-3PL
 ‘What do they have?’

An alternative interrogative pronoun, **ma** ‘what’, is restricted to a few idioms. In the following attestations from my corpus, **ma** once takes the subject role (16) and once has the direct object role (17). It is impossible to decide whether the relativiser **a** is present in these constructions, as it would be assimilated to preceding **ma**. However, as it has all properties of a relative clause it is assumed to be present.

(16) *ma a k=y-uyu-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 eibadellah?*
 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 **II** is not used.

(18) *šenni?*
 what
 ‘What?’

(19) *šenni lkar?*
 what bus
 ‘What is a bus?’

(20) *šnu baqi l-ek?*
 what left to-2MS
 ‘What is left (for you)?’

The following example shows the interrogative followed by a suffix pronoun.

(21) *šn = ahum iġġen = id?*
 what = PL trees = PL:PRX
 ‘What are these trees?’

6.2.2. **šku(n)** (+ pronoun) / **šk** ‘who’

This interrogative has two forms, **šk** and **šku(n)**. When followed by a relative clause, the interrogative pronoun is **šk** or **škun**, for example:

(22) *šk a i-tqerqab-en das?*
 who REL RF-knock:I-RF there

‘Who is knocking there?’

- (23) *škun a y-tqerqab-en dha g laṭṭa=yad?*
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-ek?*
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) *εemmi nn-em ašnikef u-haḍinet, te-nn = as: škun = ahu?*
uncle of-2FS hedgehog:EL M-PRX:S 3FS-say:P = 3S:IO who = 3MS
‘This is your uncle the hedgehog. She said: Who is that?’

- (27) *škun = ahi t-ha?*
who = 3FS F-PRX:S
‘Who is this (F.)?’

- (28) *škun = ahum u-hi?*
who = PL M-PRX:PL
‘Who are they (these ones)?’

- (29) *šku š a ddu a daḡum?*
who FUT AD [3MS-]go:A AD [3MS-]fetch.water:A
‘Who is going to fetch water?’

6.2.3. *šhal* ‘how much/many’

The interrogative *šhal* occurs both in relative clause constructions and independently. Furthermore it has several adverbial functions (cf. III.14. on adverbs).

(30) *šhal a k=i-xešš-en?*
how.much REL 2MS:IO = RF-need:P-RF
‘How much do you need?’

(31) *šhal a h-ttqima mmerḥ-a?*
how.much REL 3FS-stay:I dry:PP-FS
‘How long does it stay drying?’

In independent usage, *šhal* is not followed by the relativiser *a*. The next example shows a non-verbal predicate immediately preceded by *šhal*, for example:

(32) *šhal yr-ek n lḥilat?*
how.many at-2MS of tricks
‘How many tricks do you have?’

šhal occurs independently in final position as well, e.g.

(33) *amella leqništa te-ssn-et šhal?*
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 tašeyyalt?*
why REL 2S-cry:I-2S o girl:EL
‘Why are you crying girl?’

(35) *leyya h-zzenz-at = tet?*
why 2S-sell:P-2S = 3FS:DO
‘Why did you sell it?’

- (36) *leyya a t=tezzenz-at?*
 why REL 3FS:DO = 2S-sell:P-2:S
 ‘Why did you sell it?’

In example (37) the interrogative is used independently.

- (37) *te-nn = as: u leyya?*
 3FS-say:P = 3S:IO and why
 ‘She said: And why?’

6.2.5. *ammek* / *amk* ‘how’

In the relative clause construction, the form of the interrogative is *amk*. The independent form is *ammek* as shown in example (40).

- (38) *amk a he-ll-at?*
 how REL 2S-be:P-2S
 ‘How are you?’

- (39) *amk a h-kečm-et?*
 how REL 2S-enter:I-2S
 ‘How do you enter?’

- (40) *ammek?*
 how
 how?

6.2.6. *faywex* ~ *fax* ‘when’

The two forms are in free variation. Example (41) shows the relative clause construction. It is preceded by a topic noun.

- (41) *aserreyyul, fax a y-tnewwar?*
 plant:EL when REL 3MS-bloom:I
 ‘the *aserreyyul* plant, when does it bloom?’

The following examples show the independent usage of the interrogative.

- (42) *fax š a ṭts-et a henna yula?*
 when FUT AD [2S-]sleep:A-2S o lady ogress

‘When are you going to sleep, lady ogress?’

- (43) *faywex leša?*
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-seyyeb 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 naes-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 (§) *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 *hetta* in (53).

- (52) *εawed ttiṭu-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 ɥetta 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-haɗin?*
 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) *taslat nn-un xeşş 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 indefinite pronouns is used. In (59) the *g lwext* ‘in the time’ is used.

- (58) *i-sskar ay a qqr-en medden*
 3MS-do:I INDEF REL say:I-3PL people
 ‘He does what people tell him.’

(59) *lekm-ay 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 yr-es layn i-ttiṭu*
 NEG at-3S whither 3MS-go:I
 ‘He does not have anywhere to go.’

(62) *kul waḥed smana d=i-ttiṭu*
 every one whence DC=3MS-go:I
 ‘Each one from whence he comes.’

(63) *i-sskar=as kifaš a s=i-sskar kma-s*
 3MS-do:I=3S:IO how REL 3S:IO=3MS-do:I brother-3S
 ‘He does to him how his brother does (to him).’

6.4. Prepositional interrogatives

Prepositional interrogatives consist of the preposition followed by the borrowed Arabic element **men** or **mnen** ‘what/who’. Both simple and composite prepositions can be combined with **men** or **mnen**. After prepositions that consist of a single consonant as well as **zeg** ‘from’, **mnen** 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 **mnen** is followed by **a**, the final part **n** can be clipped, e.g. **gemmen a** > **gemm a** ‘in what’. The interrogatives **nemmen** and **yemmen** are the only ones that are obligatorily followed by a non-verbal predicate. They can take Arabic suffix pronouns: **ahu** for masculine singular, **ahi** for feminine singular and **ahem** ~ **ahum** for plural (cf. III.11.5.2.). As composite interrogatives all include the element **nemmen**, they all can take suffix pronouns. Only **fsi** ~ **sfi nemmen** ‘behind whom/what’ cannot take a suffix pronoun. The simple prepositions **bla** ‘without’, **am** ‘like’, **ḥetta** ‘until’, and the composite preposition **aḡ^wemmaṭ 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. + <i>men</i>	Interrogative	Meaning
<i>i + men</i>	<i>imen</i>	‘to whom, with whom’
<i>n + men</i>	<i>nemmen</i>	‘whose, of what’
<i>g + men</i>	<i>gemmen</i>	‘in what, in which, in whom’
<i>s + men</i>	<i>semmen</i>	‘with what’
<i>x + men</i>	<i>xemmen</i>	‘for what, for what reason, about whom’
<i>dayer + men</i>	<i>dayermen</i>	‘to whom’
<i>dar + men</i>	<i>darmen</i>	‘for what, for whom’
<i>zeg + men</i>	<i>zgemmen</i>	‘for which reason’
<i>yar + men</i>	<i>yemmen</i>	‘where (at whom)’
<i>zdu + men</i>	<i>zdumen</i>	‘under what/whom’
<i>sennig + men</i>	<i>sennigmen</i>	‘above what/whom’
<i>qbel + men</i>	<i>qbelmen</i>	‘before what/whom’

Composite Prepositions + men

Prep. + <i>men</i>	Interrogative	Meaning
<i>gum + n</i>	<i>gum nemmen</i>	‘in front of, beside of whom/what’
<i>ammas + n</i>	<i>g wammas nemmen</i>	‘in the middle of whom/what’
<i>af + n</i>	<i>g waf nemmen</i>	‘on top of whom/what’
<i>nešt + n</i>	<i>(ne)št nemmen</i>	‘as big as whom/what’
<i>fsi + n ~ sfi + n</i>	<i>fsi nemmen</i>	‘after whom/what’
<i>tterf n</i>	<i>tterf nemmen</i>	‘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) *ye-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 zge-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 ak te-lla-t t-zumm-et keḡin?*
 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 lmaḡla = yaḡ?*
 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 keḡin aēyyal?*
 of-who you:M boy:EL
 ‘Whose child are you?’ (lit. ‘of whom are you a child’)

(73) *ne-mn = ahu lektab = ad*
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 haža zeg leflaha = yahren se-mmen a*
decrease:IMP some thing from crops = S:ANP with-what REL
h-teffy-et fhal-ek
2S-go.out:I-2S way-2MS
‘Decrease some of those crops so you can go out.’

(76) *kull waḥid ge-mmen š a debber*
every one in-what FUT AD [3MS-]arrange:A
‘Everyone is going to arrange something.’

6.5. Free interrogative pronouns for ‘which’

There exist a special interrogative pronoun meaning ‘which one(s)’. This pronoun has three forms: a masculine singular, a feminine singular and a plural form. They consist of two parts: a masculine pronominal element **w** or a feminine element **t**. Number is expressed by **aytum** for the singular and **itum** for the plural. They can be followed by a verbal as well as a non-verbal predicate, as shown in examples (77) and (78).

MS	<i>w-aytum</i>	‘which one’
FS	<i>t-aytum</i>	‘which one’
PL	<i>w-itum</i>	‘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) *saea te-dda dar yan hadik n igdan. 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 hadik x aškayqululu = ahen,*
 PR:3FS 3FS-search:I on thing on whatchamacallit = S:ANP
x udideg
 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) *llah llah, nya y = te-dda tamyart šmen hbiba*
 God God, when 1S:IO-3FS-go:P woman:EL what.kind love
t = ye-qqim-an i nekkinet
 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 amek ma k = i-nn leeqel nn-ek*
 work:IMP = 3PL:DO how ever 2S:IO = 3MS-say:P mind of-2MS
 ‘Make them however you want.’
- (83) *ana ma ufa-n tala i-qqr = as: ‘a weddi nekki kemt-ax.’*
 where ever find:P-3PL source 3MS-say:I = 3S:IO o boy I burn:P-1S
 ‘Wherever they found a source he said: ‘I am thirsty.’
- (84) *baḅa nn-ek 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 addressed, essentially the syntactic expression of topicalisation and focalisation. Other markers which correlate to topicalisation or focalisation, such as prosody, will be touched upon only in passing in the discussion on topicalisation and not be considered in the discussion on focalisation (cf. 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) *ayīžd = ahen(,) i-kker i-xebbee*
billy.goat:EL = S:ANP 3MS-get.up:P 3MS-hide:P
'The billy goat, (he) got up and hid.'

- (2) *nihma(,) ẓra-n = tet hamka*
 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) *taseyyalt = ahen(,) te-bda ka-t-dεaf*
 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 tmeyra mağ-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) *ayyul(,) umr-en = t ššurkan*
 donkey:EL send:P-3PL = 3MS peasants
 ‘The donkey, the peasants have sent it.’

- (7) *tayatt nn-em(,) i-bb = am = tet ağdi*
 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 aēeyyal = ahen n şşulṭan*
 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-tēemmar 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 nukna(,) aḡ i-ll ka-y-tḥæ ga-s*
 market of-1PL we PST 3MS-be:P IMPP-3MS:IMPF-be.sold in-3S
bufettiḥa = yahren
 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-tēemmar ga-s leflaḥa*
 in storage.cellar:EA = S:ANP 1PL-fill:I in-3S crops
 ‘In the storage cellar, we put the crops in it.’

7.1.1.5. Topicalisation using i

Topicalised elements can be preceded by the nominal / prepositional coordinator **i** ~ **id** ‘and’ (cf. IV.4.1.1.1.). Nouns get the EA after this preposition. The function of the topic thus introduced can be interpreted in different ways, but it always implies a continuation from the previous event. Examples (12) and (13) show two examples which have topicalised pronouns preceded by **i**. The second sentence begins with the preposition **i** before a topicalised noun. This type of topic, when the topic switches, can be interpreted as contrastive, e.g.

- (12) *kunna(,) t-yelli-m ya tayilt. i nettaha(,) t-yellay*
 you:PL 2PL-climb:I-2PL one:F mountain and she 3FS-climb:I
arḥea n tayilan
 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-qedded,* *i-weğed,*
 [3MS-]sit:A etc AD [3MS-]skin:A 3MS-salt:A 3MS-prepare:A
i *uğdi(,)* *i-dda* *a* *dağum*
 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* *lħebb,* *i* *t-ayet(,)*
 one:F garden:EA 3MS-cultivate:I = 3FS with wheat and F-other:S
i-kkerz *ga-s* *žuž* *aw* *tlaṭa* *n* *lextuṭ* *n* *iḃawen*
 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-qqI = as = d* *s* *ššulṭan*
 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 fħal-em a ħmun, amušš i uḅerrey*
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 leišra, amušš i ẉberrey*
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 = aṭ, aġer = ahen*
he 3MS-plough:I = 3MS:DO field:EL = S:ANP
'He ploughs it, the field.'

Indirect Object

- (19) *fk-an = as = teṭ, 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-ṭemmar ga-s leflaħa, g lmaħal 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-ṭemmar ga-s leflaħa, 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 ɛarbbiyya, 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) *muɛllim nekkin*
teacher I
'I am a teacher.'

The Adjectival Predicate

- (24) *twil-a nettata*
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 ayyul = ahen*
my donkey:EL = S:ANP
'It is mine, that donkey.'

(28) *iḍ-i netta*
with-1S he
'He is with me.'

(29) *x uḡḍi iḍ ušnikef, tawxraft = aḍ*
on jackal:EA and hedgehog:EL story:EL = S:PRX
'It is about the jackal and the hedgehog, this story.'

(30) *nešt n uebbiz 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) 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-umer* *ḥmed* *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) *ḥmed* *a* *y-umr-en* *leflus* *i* *urgaz = ahen* *aṭḡam*
Ahmed REL RF-send:P-RF money to man:EA = S:ANP yesterday:EL
‘It is Ahmed who sent the money to that man yesterday.’

Direct object focus

- (34) *leflus* *a* *y-umer* *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-umer 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-umer 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) *aḡam a y-umer ḥmed 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 **II** '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 **ḡ** 'to be', Aspinion, 1953: 128, cf. chapter IV.9. for **II** '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) *keği a t=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 t=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-had 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) *lmeyreb mayši u-hen a t=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 twil-in*
 you:PL REL 3PL:DO = RC-be:P-RC tall-PL
 ‘You are the ones who are tall.’

(44) *nettata a t=i-ḡa-n twil-a*
 you:PL REL 3FS:DO = RC-be:P-RC tall-FS
 ‘She is the one who is tall.’

7.2.2.2. Cleft sentences with **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 twil*
 man:EL = S:ANP REL RF_be:P-RF tall:MS
 ‘It is that man who is tall.’

(48) *twil-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 wæyyal a lla yr-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 εaziz*
 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 ḥmed*
like he REL 3MS-be:P Ahmed
‘Ahmed is like him.’

(56) *x uḡḏi iḏ ušnikef a he-ll tawxraft = 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) *taeeyalt a ye-lla-n meḏrub-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 aεbbiz 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-leqqet abaw = ahen, i-gg̃ = at g lḡim nn-es, i-ddu.*
 3MS-pick.up:P bean:EL = S:ANP 3MS-do:P = 3MS:DO in pocket of-3S 3MS-go:A
 'He picked up the bean, put it in his pocket and went away.'

- (3) *i-šš aferruž = ahen, i-leww = as aḡan nn-es iy*
 3MS-eat:P rooster:EL = S:ANP 3MS-wrap:P = 3S:IO intestines of-3S to
isekkawen n uyīžd, a yyīh, i-ddu fḡal-u
 horns of billy.goat:EA VOC yes 3MS-go:A way-3MS
 'He ate the rooster, wrapped his intestines around the horns of the billy-goat and went away.'

Bare Aorist forms are usually the final part of a sequence. However, one can find examples, though rare, of Aorists which are not in the final position. The next example shows this clearly. In this story the story-teller, using the consecutive Aorist, jumps immediately to the part where the jackal returns to get his deposition in the morning. The speaker then adds information which belongs to the previous event again using an Aorist form, namely **iffuy** 'he went away' (the Perfective is **iffey**).

- (4) *i-leww = as = ten* *i wq̄bay* *a y-muqqr-in,*
 3MS-wind:P = 3S:IO = 3PL:DO to billy.goat:EA REL RF-big-RF
i-ddu = d *g* *ṣṣbaḥ.* *i-ffuy* *fḥal-u,* *g*
 3MS-go:A = DC in morning 3MS-go.out:A way-3MS in
ṣṣbeḥ *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-ṣebbr = ak* *abaw = ahen,* *i-ḡḡ = at* *g* *lḡim*
 3MS-grab:P = 2MS:IO bean:EL = S:ANP 3MS-do:P = 3MS:DO in pocket
nn-es, *i-dda,* *aḡḡi.*
 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-k̄šem* *i-wetṭer* *ilaxrihi,* *g* *lyar* *g* *uḥfar.* *i-bdu*
 3MS-enter:P 3MS-stretch:P etc in cave in hole:EA 3MS-begin:A
i-qqr = as: *ffuy = d* *a emmi* *aḡḡi.*
 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-ffuy*
 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* *uεbbiz = ahen*, *g* *isekkawen*, *i-ddu* *fħal-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 = at*, *i-ddu* *fħal-u* *fsi* *n* *ššyul* *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* *zerriεa zεg* *ssuq*, *εawed* *bb-en = d* *εawed*, *εawed* *g̃g-en*
 take:I-3PL = DC seeds from market again take:A = DC again, again make:A-3PL
εawed *tağursa*, *g̃g-en* *εawed* *aħettaš*, *ww-en* *εawed* *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* *baba* *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) *šeṭṭeb* *axyam* *t-εelli-t* *dar* *tuğnaṭ*
 wipe:IMP house:EL 2S-go.up:A-2S to *tuğnaṭ*
 ‘Wipe the house and go up to *tuğnaṭ* (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* *fħal-u*, *ya* *εayša*

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 elicitation where the Aorist follows an initial (Berber and Arabic-morphology) Perfect(ive) and an Imperfective.

(14) *ma ya t̥t̥s-ay ɣetta ya settn-en iṭan g t̥ɛddist inu,*
 NEG AD sleep:A-1S until AD bark:A-3PL dogs in belly:EA of:1S
berr̥h-en ifulusen g t̥ɛddist inu, yewwt-en medden g t̥ɛddist
 call:A-3PL chickens in belly:EA of:1S scream:A-3PL people in belly:EA
inu, i-nehq-u iy^wyal g t̥ɛddist 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-k̥šem dar uxyam, i-ɣmu i tyeryart,*
 3MS-enter:P to house:EA 3MS-warm.up:A to hearth:EA
i-siwel i leḥšam nn-es, i-ffuy 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) *ššaḍ-u imalḥen, siwl-en i baeṭ-em, ddu-n fḥal-em*
 fish-3PL:PF fish talk:A-3PL with each.other-3PL go:A-3PL way-3PL
 ‘They fished, talked to each other and went.’

(17) *i-teqqen aebbiz 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) *tretṭal-en = t s leqseḅ. taqseḅt hamka,*
 cover.roof:I-3PL = 3MS:DO with reed. reed:EL like.this
i ta-yeṭ hamka, i ta-yeṭ hamka, i

¹⁵³The 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 hamka, i ta-yeṭ hamka, i ta-yeṭ
 F-S:other like.this and F-S:other like.this and F-S:other
hamka, i ta-yeṭ hamka, ḡḡ-en fx-es akal.
 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, 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 **amk a** as in examples (19) and (20). It is not obligatory in these cases.

(19) *netta i-tteymur ḥetta i-qqul meqqur*
 he 3MS-grow:I until 3MS-become:A big:MS
 ‘He grew until he became big.’

(20) *amk a t=i-nuy, saea i-dda = d*
 when REL 3MS:DO = 3MS-kill:A then 3MS-go:P = DC
 ‘When he had killed him, he came.’

It is also used following the presentative particle **ha** and means something like ‘so what if?’ Examples (21) and (22) show such a use.

(21) *ha šš-en = t*
 PRES eat:A-3PL = 3MS:DO
 ‘So what if they eat it?’

(22) *ha ddu-n*
 PRES go:A-3PL
 ‘So what if they go.’

8.1.1.3. The Aorist with non-real marker

The Aorist aspect with a pre-verbal element expresses a non-realised happening or event. This is different from the other aspectual stems which describe a concrete, real event. It often expresses the value future, possibility, probability and wish (cf. Bentolila 1981: 146). The preverbal non-real marker is **a**, which immediately precedes the verb. The non-real marker causes attraction of verbal clitics (cf. IV.3.3. on clitic position).

8.1.1.3.1. š and a

Examples of the use of **a** + Aorist to express possibility, probability and wish are given in the next examples:

possibility

- (23) *wella a d=i-bb 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-nuy, a y=ny-en s rrekla inši*
so.that.not 3PL:DO=3MS-kill:A AD 3MS:DO=kill:A-3PL with kick some
'So that he will not kill them, they will kill him with a kick or so.'

wish

- (25) *a xalti, a šebbr-et aqbay=ađ, a y=ğ-et*
o aunt, AD [2S-]grab-2S billy.goat=S:PRX AD 3MS:DO=[2S-]leave:A-2S
dha yr-em
here at-2FS
'O aunt, take this billy goat and leave it here with you.'

Very often the non-real marker **a** is preceded by the borrowed preverbal element **š** which adds a degree of certainty or desire to the meaning¹⁵⁴ (cf. 8.2.4. below on preverbal **š** in Arabic loans). It is the default way to refer to the future. This difference is quite subtle, as will be shown by a number of text excerpts. The first example is about a partridge in a sealed-off room, and the use of **š** indicates the certainty that the partridge will get out.

- (61) *te-nn=as: mki t-kešm-et, š a perper,*
3FS-say:P=3S:IO if 2S-enter:P-2S FUT AD [3MS-]fly:A
š a ffey fhal-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**.

is used in initial position, whereas example (31) is one of the few examples where **maš** does not occur initially.

- (30) *ssbeɛ 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 ḳ = 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 hamka maš a qetteɛ 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-ay 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 Ait Seghrouchen Berber (cf. Bentolila, 1981:173). The following examples illustrate the use of the preverbal marker.

- (33) *leqništa = yahen d a rfee, d a rfee, d*
 box = S:ANP CRT AD [3MS-]lift:A CRT AD [3MS-]lift:A CRT
a rfee eišrin kilu

¹⁵⁵ The fact that **ar** is a separate element from **a** is shown by its use with Arabic-morphology verbs where it has the form **ar**. The non-real particle **a** can only occur before Berber-morphology verbs (cf. IV.8.1.1.3.1.).

AD [3MS-]lift:A twenty kilo

‘The box wil certainly carry twenty kilograms.’

- (34) *iwa amella, keḡ ma ar a ḡḡ-et, š a*
well now:EL, you:MS what FUT AD [2S-]do:A-2S FUT AD
ttru-t εawed? a i-nn = as: nekki d a
[2S-]cry:A-2S again well 3MS-say:P = 3S:IO I CRT AD
ttrux ḥetta ya rḡ-ay 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 interpreted as a result, is on the same level as the adjective **x_ɛder** ‘be green’ which is a state.

- (35) *i* *leafya* *ne-ssrui = at* *s* *isyaren,* *asyar* *n* *tezga,*
 and fire 1PL-lite:I = 3FS:DO with sticks stick:ELof forest:EA
asyar *i-qqur,* *maši* *x_ɛder*
 stick:EL 3MS-dry:P NEG green:MS
 ‘And we lite the fire with sticks, sticks from the forest, dry sticks, not green ones’

A resultative interpretation is possible as well. If the adverb **deyya** is used the interpretation is that of ‘becoming dry’. The interpretation is that of a resultant state.

- (36) *asyar = ahen* *i-qqur* *deyya*
 stick:EL = S:ANP 3MS-dry:P quickly
 ‘The stick has become dry quickly’

Another example of a resultative verb is **lluz** ‘to be hungry’. For this verb we have a corresponding adjective. The difference between the verb and the adjective can be shown by using the adverb **deyya** ‘quickly’. If ‘being hungry’ is the outcome of a process then the use of the adverb should result in a grammatical expression, which is indeed the case. As resultatives imply a process, the expression can therefore be interpreted as ‘becoming hungry’ as well, in other words, as a resultant state. Compare examples (37) and (38).

- (37) *lluz-ax*
 be.hungry-1S
 ‘I’m hungry.’

- (38) *lluz-ay* *deyya*
 be.hungry-1S quickly

‘I’ve quickly become hungry.’

The corresponding adjective is a pure state. It cannot be accompanied by the adverb **deyya** ‘quickly’, e.g.:

- (39) **nekki* *ğičan* *deyya*
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 **meɖum** ‘sick’. The verb allows for the adverb **deyya** whereas the stative passive participle does not. This means that example (40a) and (40b) are best considered resultatives, implying a preceding process, whereas (41) is a pure state.

- (40a) *aɛɛyyal nn-es i-hleḵ*
boy:EL of-3S 3MS-be.sick:P
‘His child is sick.’

- (40b) *aɛɛyyal nn-es i-hleḵ deyya*
boy:EL of-3S 3MS-be.sick:P quickly
‘His child has become sick quickly.’

- (41) **aɛɛyyal nn-es meɖum deyya*
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 meɖum amilla*
I be.sick:PP:MS now:EL
‘I’m sick now.’

- (43) **nekki helḵ-ay amilla*
I be.sick:P-1S now:EL
‘I’m sick now.’

The stative verb ‘to know’, which does not have an Imperfective form, shows the same behaviour. In the Perfective it can be combined with **deyya** implying a process resulting in a

state, whereas the active participle does not allow such an interpretation. In the latter case it can only be interpreted as a pure state. Compare examples (44) and (45).

(44) *i-ssen* *medden = ihen* *deyya*
 3MS-know:P people = PL:ANP quickly
 ‘He knows those people quickly.’

(45) **netta earef* *medden = ihen* *deyya*
 he know:AP:MS people = PL:ANP quickly
 ‘He knows those people quickly.’

However, there are a few contexts where the difference between the Perfective and the passive participle is not maintained and where the resultative meaning of the Perfective is less conspicuous. This is the case of the following examples (both accepted in elicitation), in which the sketched situation cannot be viewed as the result of a process.

(46) *iɛraβen* *ɖewwɾ-en = tet* *iyallen*
 Iraben surround-3PL = 3FS:DO mountains
 ‘Iraben is surrounded by mountains.’ (lit. ‘Iraben, mountains surround it’)

(47) *iɛraβen* *mɖewwɾ-a* *s* *iyallen*
 Iraben surround:PP-FS with mountains
 ‘Iraben is surrounded by mountains.’

One could say that the Perfective has a dynamic value, which can be interpreted as a resultative. Examples of transitive and labile verbs are shown here:

(48) *ye-wṭ = aṭ* *i-ny = at*
 3MS-hit:P = 3MS:DO 3MS-kill:P = 3MS:DO
 ‘He hit him, he (has) killed him...’

(49) *lkas* *i-ɾez*
 glass 3MS-break:P
 ‘The glass is broken.’

(50) *argaz = ahen* *i-ɾez* *lkas*
 man:EL = S:ANP 3MS-break:P glass
 ‘That man broke the glass.’

8.1.3. The Imperfective

The Imperfective expresses habitual, iterative, durative and progressive meanings. A particular use of the Imperfective is the sequential. The habitual refers to a process that occurs habitually or regularly. In example (51) such a habitual is used. A closely linked use of the Imperfective is the iterative in example (52). Example (53) shows the use of the durative.

(51) *i-nn = as: i-ttiṭu dar-i yan lǧmel.*
 3MS-say:P = 3S:IO 3MS-go:I to-1S one:M camel
 ‘He said: ‘A camel comes to me.’

(52) *ku nnhaṛ i-ttuṭu = d w-ayeṭ dar lbir = aḍ*
 every day 3MS-go:I = DC M-other:S to well = S:PRX
 ‘Every day the other one came to this well.’

(53) *žehḥa i-tteiš 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) *asyaṛ = ahen xḍer, i-sskar dduxxan*
 stick:EL = S:ANP green:MS 3MS-do:I smoke
 ‘Fresh sticks produce a lot of smoke.’

A minor use of the habitual Imperfective is similar to the use of the bare Imperfect in Moroccan Arabic for describing an inevitable situation (cf. Caubet, 1993: 167 - 168). In the following example the Imperfective follows two instances of direct speech.

(55) *ne-qqr = asen :* ‘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 *lmeelumat ana he-lla-t xeddam.*
 2S-give:I-2S = 3S:IO information where 2S-be:P-2S work:AP:MS
i-qqr = ak: *aṛa lkaḡiṭ. ttaka-t = as lkaḡiṭ,*
 3MS-say:I = 2S:IO give:IMP paper [2S-]give:I-2S = 3S:IO paper
i-teayan ga-s lḷah i-εawen.
 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) *saea i-berreh x ya urgaz, u-hen a s=i-qqers-en.*
 then 3MS-call:P on one:M man:EAM-S:ANP REL 3S:IO = RF-slaughter:I-RF
ka-t-semma i-tmeḍḍay tuzzalt š a
 IMPF-3FS:IMPF-be.called 3MS-sharpen:I knife FUT AD
t = i-yreš.
 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 lmaqabir,*
 he 3MS-see:I corpse some people some in graveyard
g lemqaber ttemr-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 uletma-s a ddu ya hamka ši haža,*
 3MS-let:P sister-3S AD [3FS-]go:A only like.this some thing
lmasafa ynši hamka. 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-šebber* *zga-s* *aqḥay = ahen,* *te-qqn = aṭ* *i* *lefḥula.*
 3FS-grab:P from-3S billy.goat = S:ANP 3FS-tie.up:P = 3MS:DO with cattle.
g bellil i-teqqel *dar-es, i-tett* *ayīžd = ahen,* *i-šebbr*
 at night 3MS-return:I to-3MS 3MS-eat:I billy.goat = S:ANP 3MS-grab:P
aḍan = ahen *i-tlewwa = as = ten* *εawed*
 intestines = S:PRX 3MS-wrap:I = 3S:IO = 3PL:DO again
i *uebbiz* *a* *y-muqqr-in.*
 with bull:EA REL RC-big-RC.

‘She took the billy goat from me, tied him together with the bulls. At night he went back to it, ate that billy goat, took the intestines and wrapped them around the biggest bull.’

The most frequently occurring verb in our text corpus used in this way is *af* ‘to find’. The next example illustrates such a use.

- (60) *i* *lyula = yahen* *te-ffey* *berra,* *he-ttaf = ahen* *gals-in*
 and ogress = S:ANP 3FS-go.out:P outside 3FS-find:I = S:ANP sit:AP-PL
 ‘And the ogress went out and (suddenly) found them sitting.’

The use of the sequential Imperfective is a matter of choice. Other aspectual stems can be used in the same context, as the examples (61) and (62) show. In this recurring sentence in a fairy tale, example (61) has a Perfective which is followed by a sequential Imperfective, while example (62) has two Perfectives.

- (61) *a mni, kkr-ay* *g* *ššbaḥ* *ttaf-ay* *ya* *yadan* *nn-es*
 o son, get.up:P-1S in morning find:I-1S only intestines:EL of-3S
mleww-in *iḍ* *isekkawen* *n* *uyīžd*
 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-ay g ššbah uf-ay ya yađan nn-es*
 o son, get.up:P-1S in morning find:P-1S only intestines:EL of-3S
mleww-in i iđaren 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-wqee ilaxirihi lehrawa, i tmeđđut t-ruggl = as.*
 IMP-3FS:IMPF-happen etc. stick and wife:EA 3FS-flee:I = 3S:IO
 ‘Then fighting happens and the wife flees (I).’

- (64) *maši id izref i netta i-tett tay^wlalt = 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 qleđ hamkađinet 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 wmmas 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) *w_t = ay s leđzam semm a teqql-ax tametđut.*
 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 haža zeg leflađa = yahen semmen a*
 reduce:IMP some thing from crops = S:ANP so.that REL
h-teffy-et fđal-ek
 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 hetta xwa-w sswasa*
 NEG go:P-3PL=DC to.here until leave-3PL:PF Soussis
 ‘They only came here after the Soussis left.’

(69) *ššaḍ-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 **wžed** ‘to be ready’ presents the situation as a result of a previous event that has implications for the contextual situation described. It implies a preceding process. This can be contrasted with the corresponding active participle shown in (71a) which presents a pure state. The adverb **deyya** ‘quickly’ only combines with the Perfect as shown in (70b) and not with the active participle (71b).

(70a) *kerz-en ibawen, wežd-u ibawen, wežd-u ibawen,*
 cultivate:P-3PL beans be.ready-3PL:PF beans be.ready-3PL:PF beans
gga-n tixerṛuban.
 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) *wežd-u* *ibzaġen* *deyya*
 be.ready-3PL:PF beans quickly
 ‘The beans have been quickly cooked.’

(71a) *ibzaġen = ihen* *wažd-in*
 beans = PL:ANP be.ready:AP-PL
 ‘The beans are cooked.’

(71b) **ibzaġen* *wažd-in* *deyya*
 beans be.ready:AP-PL quickly
 ‘The beans are cooked quickly.’

In the case of verbs expressing a mental state such as **fhem** ‘to understand’ the same difference between the Perfect and the active participle is found. For example in (72) **deyya** can be combined with the Perfect while the active participle in example (73) does not allow this adverb.

(72) *nekki* *deyya* *fhem-t* *lhedra* *nn-es*
 I quickly understand-1S:PF speech of-3S
 ‘I quickly understood his speech.’

(73) **nekki* *deyya* *fahem* *lhedra* *nn-es*
 I quickly understand:AP:MS speech of-3S
 ‘I quickly understood his speech.’

8.2.2. The Imperfect with ka-

The Arabic form **ka-** + Imperfect basically covers the same aspectual distinctions as the Berber Imperfect: the habitual, the iterative, the durative and the progressive. The sequential Imperfect is expressed by the Arabic Imperfect as well. In a few contexts the preverbal marker does not occur, only the bare Imperfect is used. The preverbal markers **š**, **maš**, **ya**, **d** and **ar** can precede the Imperfect stem. Each of these is discussed below. The Arabic Imperfect preceded by the **ka-** prefix expresses the habitual in the following example. The Arabic Imperfect with a habitual meaning follows the Berber Imperfective.

(74) *yemma* *nn-es* *he-tzalla,* *ka-de-εbed* *llah,* *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 = at g lmeqla = yahren,*
 1PL-take:I=DC barley 1PL-put:I=3MS:DO in frying.pan-S:PRX
 ‘We take barley, we put it in that frying pan,
ne-qqely = at 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) *leḡmula = ihen, ma n = y-uyu-n ka-y-ḡεaf-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 msaken, qqim-en das msaken ttakṣaṭ-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 hamka. ka-y-reεš-u msaken
 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-šebber id-es azref.*
 3MS-put:P = 3FS:DO on mule of-3S 3MS-grab:P with-3S road:EL
netta ka-y-tlaqa yah tmeṣra maḡ-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-zeḍq-u*
 AD 3MS:DO = 3FS-pick.up:A chicken:EL some 1PL:IMPF-end.up-1PL:IMPF
nekki i keḡin g tḥešuman
 I and you:MS in embarrassment
 ‘A chicken will pick it up and we will end up being embarrassed.’

- (80) *d a k = bb-en is-sen dar uxyam*
 CRT AD 2MS:DO = take:A-3PL with-3PL to house:EA
w i-?amn-u ga-k
 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) *yallah ne-ššad-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 xešš = aḱ ši a qqim-et dhaḍi ḥetta*
 NEG need:P = 2MS:IO NEG AD [2S-]-stay:A-2S here until
y-fuṭ = l-eḱ ḥetta i-fuṭ lpašpur 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 t̥s-ay ɣetta ya settn-en iṭan g t̥eddist inu,*
 NEG AD sleep:A-1S until AD bark:A-3PL dogs in belly:EA of:1S
berrɣ-en ifulusen g t̥eddist inu, yewwt-en medden g t̥eddist
 call:A-3PL chickens in belly:EA of:1S scream:A-3PL people in belly:EA
inu, i-nehq-u iy^wyal g t̥eddist 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*, *ya*, *d*, *ar*

The non-real element **a** does not occur before Arabic-morphology verbs¹⁵⁷. 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 **ya** is encountered as well. The latter variant occurs only with one single younger speaker. In the following examples the use of *š* is illustrated. In example (84) it is used in a sequence of verbs which includes Berber Aorist forms and Arabic Imperfects preceded by *š*, all stressing the certainty of the occurrence of the non-realised event.

- (84) *š i-ɛiq-u id-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 b̥zed, š a qettr-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) *m̥ki ne-dda ɣetta tferreq-na, š i-ɛiss-u = l-i*
 if 1PL-go:P until split-1PL:PF FUT 3PL:IMPF-guard-3PL:IMPF = IO-1S
aḡdi ulla nnmer
 jackal:EL or leopard
 ‘If we go until we split up, the jackal or the leopard will watch me.’

¹⁵⁷ On the basis of Berber-morphology verbs only it would be impossible to decide whether the elements are *ša* / *š a*, *maš* / *maša*, *da* / *d a* or *ara* / *ar a*.

¹⁵⁸ In the neighbouring dialect of Amṭiqan the variant **baš** is used in Berber as well as in Arabic. The speakers from this village living in Bou Ahmed use this variant.

The next example shows the use of **maš** preceding an Arabic Imperfect. As pointed out before, **maš** may stress the certainty of a non-real event (cf. 8.1.1.3.2. above).

- (86) *maš n-teašr-u*
 FUT 1PL:IMPF-accompany-1PL:IMPF
 ‘We are going to accompany each other.’

The Arabic koinè form **ya** occurs only in the Berber speech of a young person (16 years old) who uses it interchangeably with **š**. The full variant of the particle, **yadi**, is considered unacceptable. In the following example the use of **ya** is illustrated.

- (87) *saea, i-dda argaz = ahen maεat ya y-ššad*
 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 tezga maεat 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-ššad-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) *alazen ar i-ššad-u bekri*
 tomorrow:EL FUT 3PL:IMPF-fish-3PL:IMPF early
 ‘Tomorrow they will fish early.’

8.3. The active participle

In Moroccan Arabic the active participle is a widely used form. It has a special place in the verbal system in that it covers a broad range of aspectual and modal functions. Caubet (1993: 221-248) discusses its use extensively. According to her analysis the active participle is essentially a concomitant. Depending on the verb it can express different values such as

progressive, prospective and resultative Perfect. It has some modal uses as well. Caubet (1993) distinguishes three verb classes based on their semantic composition, two of which make use of the active participle. The first class of verbs contains movement verbs, verbs of mental and body activities and quality verbs (cf. Caubet, 1993: 228). This situation is also found in Ghomara Berber where the Arabic active participle expresses the progressive (or: *actuel* in Caubet's words) with the verbs belonging to this class. For this particular group of verbs, this has resulted in a split between the progressives, for which the active participle is used, and the habitual (and related) aspect, for which the Imperfective / Imperfect are used. For all other verbs which have an active participle (Caubet's class 2), the active participle in Ghomara expresses a non-resultative state. At this point Ghomara Berber is different from Moroccan Arabic as described by Caubet, where the active participle in these classes is rather a resultative (*parfait*). In addition, it is possible to use the active participle to express a prospective by adding an adverb, but it is not possible to situate it in the past.

The following examples show class I verbs which express the progressive.

- (90) *nekki maši dar uxyam*
 I go:AP:MS to house:EA
 'I am going home.'

In the following example the past time marker **aḡ** / **aḵ** + **ll** precedes the verb.

- (91) *nuḵna aḡ ne-ll mašy-in dayr-ek a yen = te-ḥtu-t*
 we PST 1PL-be:P go:AP-PL at-2MS AD 1PL:DO = 2S-divide:A-2S
leḥšam nn-ax
 children of-1PL
 'We were heading towards you for you to select our children.'

Contrary to other participles, the progressive use of the active participle is dynamic in nature. This can be shown by a phrase that contains the adverb **deyya** 'quickly', for example:

- (92) *nettata mažž-a fsir-sen deyya*
 she come:AP-FS behind-3PL quickly
 'She quickly came after them.'

The active participle can be used to express the prospective, for example:

(93) *alazen nekki talec*
 tomorrow:EL I go.up:AP:MS
 ‘Tomorrow I will go up.’

(94) *alazen nekki hareb zeg lmuṭeε = aḍ*
 tomorrow:EL I flee:AP:MS from place = S:PRX
 ‘Tomorrow I will flee from this place.’

Other active participles indicate a state without the implication of a preceding stage. Contrary to the active participle used as a progressive, the adverb **deyya** can not be combined with these active participles. In examples (95) and (96) there simply is a state without any implication of a preceding process. In example (95) the suppletive active participle of the movement verb **bded** ‘to stand up’ is used. Example (96) is an example of the use of the active participle of the verb **qqim** ‘sit’.¹⁵⁹

(95) *netta waqef argaz = ahen g teggurt*
 he stand:AP:MS man:EL = S:ANP in door:EA
 ‘That man was standing in the doorway’

(96) *zeg waṭgam nuḵna gals-in dha*
 from yesterday:EA we sit:AP-PL here
 ‘We have been sitting here since yesterday.’

The following example illustrates the stative value of the active participle. In example (97) the active participle cannot combine with adverbs indicating a time span. A Perfect/resultative interpretation is not possible. Instead, as example (98) shows, in such cases the Perfective (or: Perfect) has to be used.

(97) **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 waṭgam nuḵna galsin dha** ‘We have been sitting here since yesterday.’ One speaker suggested that this was not ‘real’ Berber because the active participle **gales** is used. He proposed an alternative with the Imperfective: **zeg waṭgam nuḵna ntyima dha** ‘We have been sitting here since yesterday.’. None of the other speakers accepted this and eventually the speaker who proposed this agreed with them.

- (98) *nukna n-šam telt eyyam*
 we 1PL-fast:P three days
 ‘We have fasted / been fasting three days.’

The active participle of verbs such as **qra** ‘to learn’ also presents a state. Even though example (99) could be interpreted as a resultant state (or Perfect), example (100) shows that the active participle cannot be followed by the adverb **deyya**, implying a state and not a process (**deyya** does combine with the Perfective **qra**).

- (99) *tabrat = aḍ, nekki qari = ha*
 letter:EL = S:PRX I read:AP:MS = 3FS:DO
 ‘This letter, I have read it.’

- (100) **netta qari tabrat = ahen deyya*
 he read:AP:MS letter:EL = S:ANP quickly
 ‘He has read the letter quickly.’

The active participle can be repeated several times to indicate an ongoing event. In the following example it is preceded by the auxiliary verb **qqim** ‘to stay, sit, keep on’ (cf. 3.1.2.3. on secondary predicates).

- (101) *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, iḃawen, lḥummis mmelḥ-a,*
 PST be:P-3PL sell:I-3PL peanuts beans chickpeas be.salted:PP-FS
iḃawen mmelḥ-in
 beans be.salted:PP-PL
 ‘They sold peanuts, beans, salted chick peas, salted beans.’

(103) *lla, netta mestanes id iyežden u kda*
 no he be.used.to:PP:MS with billy.goats and thing
 ‘No, he is used to billy-goats and so forth.’

(104) *tsemmay-en = tet tamezgida awzeqqur,*
 call:I-3PL = 3FS:DO mosque:EL awzeqqur:EL
mebniyy-a g ya n yađer mseddeq x tmezgida.
 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 leħbib inu, mħeššm-a zga-k*
 well dear of:1S be.embarrassed:PP-FS from-2MS
 ‘My dear, I am embarrassed.’

The following example shows the same stative usage of active and passive participles.

(106) *ma kayen la g uṭar, la g tṭhar,*
 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 tæddist. kušši mferreṭ, kušši ḍayec
 NEG in belly:EA everything be.depraved:PP:MS everything be.wasted:AP:MS
 is deprived, 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, wishes and injunctions
active participle stative	progressive (only some verbs), prospective, stative
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 **mki** ‘if’.

9.1. The past marker **aḡ ~ aḵ** + **ll**

To refer explicitly to the past, the element **aḡ ~ aḵ** followed by a Perfective form of **ll** is put before the predicate. The conjugated verb **ll** agrees with the subject. The allomorph **aḵ** only appears before the conjugational prefix **t-** (2S, 3FS, 2PL). Before other verbal prefixes both **aḡ** and **aḵ** occur, although the former is much more frequent. The past marker can accompany any type of predicate, be it verbal or non-verbal. It places the event in the past, or, if the event is already in the past, it expresses a pluperfect. In combination with **a** + Aorist it refers to an anterior non-realised event. If it is not followed by a predicate it can be translated as ‘there was’. Some examples of its use are:

- (1) *aḵ i-ll ya wrgaz i ya tmeṭṭuṭ ma yer-sen*
PST 3MS-be:P one:M man:EA and one:F woman:EA NEG at-3PL
ši n leḥšam
NEG of children

‘There were a man and a woman who had no children.’

- (2) *tameṭṭuṭ aḵ te-ll h-tett iḅzaḡen*
woman:EL PST 3FS-be:P 3FS-eat:I beans

‘A woman used to eat beans.’

- (3) *sšpanyuḷ aḡ i-ll yr-es leflus nn-es*
Spaniards PST 3MS-be:P at-3S money of-3S

‘The Spaniards used to have their own money.’

- (4) *nuḵna aḡ ne-ll mašy-in dayr-ek*
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 lek-m-ay dayr-es ak i-ll i-krez*
 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) *saea ak 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 muħemmed a ye-ll ħmed*
 as.big.as of Mohamed REL 3MS-be:P Ahmed
 ‘Ahmed is as big as Mohamed.’
- (8) *imalħen a ne-ll wakt-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) *išyaren = iħen a lla xuḍeḗ 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) *amk a lla yr-es seḅea 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) *zeema t-a ye-nwa-n i netta, i tḅurgayezt,*
 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 ḥaḍḍ-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 taeeyyalt 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 siḍi i-ttill mabayen, mabayen leḗrt i leḗrt,*
 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 muḥammed i-tḏewwar netta i tmeṭṭut, netta i*
and Mohamed 3MS-go.round:I he and wife:EA he and
leḥṣam nn-es gum nn-ek, gum nn-ek, baqi š a ll
children of-3S in.front of-2MS in.front of-2MS still FUT AD [3MS-]be:A
mxebbeε?
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 **mki** 'if' is optional. An example is:

- (21) *mki te-lli-t qrib da lmeṣa, š a k=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) *tæeyyalt=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 tyatt / Story about the goat

ak te-ll ya tyatt g ya tezga yak. yr-es tlaṭa 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

leḥṣam nettata yr-es tlaṭa n leḥṣam, saea ttitu a
 children she at-3S three of children, then [3FS-]go:I AD
 children, she had three children. She brought

azen = d = te-bb haḍik ay a tett-an. saea, amk a
 3PL:IO = DC = 3FS-take:A thingy INDEF REL eat:I-3PL then, when REL
 them food to eat. Then when she goes

ttitu dar teggurt te-qqr = asen: 'a wlaḍ-i, a wlaḍ-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

feth-u = ni biban-i, u tteleq fi tehr-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 qrun-i, w lma fi duqmi.' saea tatth-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, εawed teqqel εawed. amk 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 εeqqul-en = tet ya s
 [3FS-]return:I AD DC = 3FS-return:A = DC recognise:I-3PL = 3FS:DO only with
 she returns. They recognise her

lhedra nn-es. εawed teqqel = d, εawed te-qqr = asen: 'a wlaḍ-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 wlad-i, fetḥ-u=ni biban-i, w tteεleq fi tṭahr-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 qrun-i, w leḥlib fi tra-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.’

tatṭh-an=as taggurt. saεa 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 aḡdi, i-refε=as lhedra=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.

saεa i-dda=d i-nna=asen lhedra=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. ayiḏd=ahen i-qqr=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=iḥen 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 little goats said to him: ‘This is out mother.’

ayiḏd=ahen i-kker i-xebbeε i timyanan=iḥen amk 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

fetḥ-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

uyižd = a-hen ye-εqel aḡḡi = yahren. saεa te-dda...
 billy.goat:EA = S-ENP 3MS-recognise:P billy.goat = S:ANP then 3FS-go
 and the billy goat recognised the jackal. Then she went...

tayatt = ahen t-zer taggurt = ahen mehlul-a zeg lbued.
 goat = S:ANP 3FS-see:P door:EL = S:ANP open:PP-FS from far
 ...the goat saw that the door was open from a distance.

amk a t = t-zer mehlul-a zeg lbued 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. saεa 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 tayatt = ahen. i-dda dayr-es ayižd = ahen.
 3FS-cry:I goat = S:ANP 3MS-go:P to-3S billy.goat = S:ANP
 kept on crying. The billy goat went to her.

te-nna = as tayatt = ahen: 'ana lla-n ayetma-k?' i-nna = as:
 3FS-say:P = 3S:IO goat-S:ANP where be:P-3PL siblings 3MS-say:P = 3S:IO
 The goat said to him: 'Where are your siblings?' He said:

'i-šš = ahen aḡḡi.' te-nna = as: 'd a εeql-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

aḡḡi = yahren?' i-nna = as: 'd a y = εeql-ax'. saεa
 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 haḡik n iḡḡan. i-nna = as: 'waytun?'
 3FS-go:P to one:M thing of jackals 3MS-say:P = 3S:IO which.one
 she went to a thing of jackals.

i-nn = as: 'ha haw!' saεa te-dda day rraʔis 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

muraqib *nn-sen. dda* *te-nna = as:* *'u-haḍ* *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.'* *saea* *i-nna = as:* *'ndhu* *ha* *layn*
 children my then 3MS-say:P = 3S:IO go:IMP:PL PRES whither
 children.' He said to her: 'Go over there

dar *umraḥ = ani,* *w-a* *y-yelb-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.' *saea* *dda-n* *dar* *ya* *wmraḥ,* *saea,* *tayatt*
 M-S:other then go:P-3PL to one:M open.place:EA then goat
 eats the other.' They went to that open place,

yr-es *isekkawen* *iy* *uḡḍi* *ma* *yr-es* *ši.*
 at-3S horns and jackal:EA NEG at-3S NEG
 the goat has horns and the jackal does not.

saea *dda-n.* *i-deḡḡ,* *zeema-k,* *aḡḍi* *i-deḡḡ* *isekkawen* *n*
 then go:P-3PL 3MS-do:I kind.of-2MS jackal 3MS-do:I horns of
 They went. He made, the jackal made horns out of

lyays. *i-tkewwar* *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* *tayatt 'pīiii'. he-tfertat = ahen* *netta* *i*
 3MS-tamp:I = 3PL:DO 3FS-give:I = 3S:IO goat:E: ONM 3FS-crumble:I = 3PL:DO he and
 them down here (on his head). The goat hit him 'bam'. She crumbled him and

lyays *nn-es.* *εawed* *i-qqr = as:* *'aq* *a xalti lmezza* *a* *ḡḡ-ax* *isekkawen.'*
 clay of-3S again 3MS-say:I = 3S:IO wait VOC aunt goat AD do:A-1Shorns
 his clay (horns). Then he said again: 'Wait aunt goat I will make horns.'

εawed *i-thadaḵ* *w-iyet* *i-rekkz = a-hen* *εawed* *g* *ḍḍmay nn-es.* *εawed*
 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-qqr = as: *'hala a emmi inu, hala.'* *ttakk = as* *'piix' 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-hšel fx-essen asalles. zra-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

đdaw beid. ka-ħsab = la kma-s n tyatt = 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 đdaw = 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

teffy-en = d əwəđ dar yan ssabε n iğdan, dar yan ssabε
 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 iğdan. saεa amk a h-tellel hamka ttaf
 of jackals then when REL 3FS-peek:P like.this [3FS-]find:P
 jackals. When she peeked like this, she found

yer-sen iğdan ssabε. nna-n = as: 'kšem = d a xalti lmeza,
 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,

kšem = d, kšem = d, kšem = d.' saεa ak 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. saεa, šetth-en i nihma tyennay-en.
 3FS:DO = eat:A-3PL then dance:I-3PL and they sing:I-3PL
 eat her. They were dancing and singing.

qqr-en: 'ddaw, ddaw, men lmeiza mnin bda-w iy uyižd 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-ğ=at dar dđaw'. katsemma tayatt š a
 AD 1PL-leave:A=3S:DO to light like goat FUT AD
 morning. Meaning that they wanted

t=n-ešš amilla i uyışd 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

şşbeh. te-nna=asen: 'ha nekki š a ffy-ax s
 morning 3FS-say:P=3PL:DO PRES I FUT AD go.out:A-1S with
 morning. She said: 'I will go out.'

dđmay inu.' saea te-dda t-berrh=as i kma-s. i kma-s
 head my then 3FS-go:P 3FS-call:P=3S:IO to brother-3S and brother-3S
 She went and called her brother. Her brother

yr-es ssluqiyyat, yr-es ssluqiyyat. saea amk a i-dda i-tleq
 at-3S greyhounds at-3S greyhounds then when REL 3MS-go:P 3MS-release:P
 had greyhounds. So he went and released

i ssluqiyyat=ihen. i-nna=as: 'kšem 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

aeyyal nn-em zyer-sen. te-kšem, te-bb=d aeyyal 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.

saea ye-nn=asen, ssluqiyyat=ihen te-nn=asen: 'waħit, waħit, waħit.'
 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.'

saea šebbr-en iğdan=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 yr-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.

ssluqiyyaṭ = ihen. i w-a lla yr-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 zerdæen = d. saæa i-qqr = 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

aḡdi i-qqr = as i umdakkul nn-es, i-qqr = 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 = lek a saḥbi, t-geṛt-et taẓenniṭ = ahen elabekri.’
 o better = 2S:IO VOC friend 2S-cut-2S tail:EL = S:ANP early
 ‘You are lucky that you cut your tail before.’

iwa šafi, xelli-t = ha temma u ži-t fḥal-i.
 well ready leave-1S:PF = 3FS:DO there and come-1S:PF way-1S.
 That’s it. I left it there and came back.

Text 2 ssebta - Ceuta

ħetta zeg xemsinaṭ talee, settinaṭ seḅeinaṭ ead a d
 until from fifties upwards sixties seventies yet REL AREL
 Only from the fifties onwards, sixties, seventies, the Moroccans

ktar-u lemyarba das. bda-n maḅy-in lemyarba 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 lemyarba. saea kkr-en nnṣara ḅeyyṛ-en, g ddiwanaṭ
 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 lemḍina. deḡḡ-an laṛafaṭ, in
 and ... and riot.police inside in city do:I-3PL apprehensions
 there, and the riot police was in town. They apprehended people,

təayan-en lberrani, a, berrani. berrani kamel aḡ lla-n
 look:I-3PL outsiders yes outsiders outsiders all PST be:P-3PL
 they looked for outsiders. They used to

tšebbar-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 lemḍina. berrani kamel. liyanna w-a lla das yer-s
 in city. outsiders all because MS-PRH be:P there at-3S
 All outsiders. Because the ones who were there

yer-s lkaḡiṭ. yer-s lpaši. nuḳna ya yan nnhaṛ nuḳna t-šebbr = 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 lēšra n llil, g tnaš n llil. ne-ttill xarǧ-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

ssinimaṭ. n-ttill g leqhawi, elaberra, 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. mki amella g bellil nya d = ne-ttutu
 café's INTJ. if now in night when DC = 1PL-go:I
 café's. When we went home at night.

fhan-na. nya d = ne-ttutu fhan-na dar... ne-ttutu fhan-na dar lbarḳu 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 lwehda, g lēšra, g leḥdaš,
 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-qqr = ak: 'ara lekwayeṭ, keḡi, 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

ssaεa = yaḍ dhadin? ma h-deḡḡ-at?' ne-qqr = 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,

nuḳna lbeḥriyya g lbarḳu flani, he-ttak-at = as lmeelumaṭ
 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 xeddām.' i-qqr = ak: 'ara 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-təayan* *ga-s, llahiəawen.* *i-qqr=ak:* ‘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-qqr=ak, *i-qqr=ak:* ‘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, *mḡi* *i-zr=ak* *msexxen,* *t-ḡessl-et* *bweḡd-eḡ.*
 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-qqr=ak: ‘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.’

k=i-bb *netta byedd-u.* *mḡi* *te-lli-t* *qrib* *da* *lmeṛša,*
 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* *k=i-bb* *ḡettar lbaṛku.*
 FUT AD 2MS:DO=3MS-take:A until ship.
 he would take you to the ship.

Text 3 Description of living in Iṛāben

yer-nax *axyam,* *axyam* *n* *lgayza,* *elaberṛa* *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 *ssukna,* *n* *nneas,* *ayeffeṭ* *yer-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* *adles,* *n-ḥetš = asen* *ṛṛbiē* *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-ttawy = ah = d *ne-fk = asen = t* *tett-an = t.* *nukna* *gals-in*
 1PL-take:I = 3S:DO = DC1PL-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 *tyeryert,* *ne-ssruy* *leafya,* *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 *tismet,* *i* *uebbiz nn-es* *daryan gum* *n* *uḥemmal* *dar* *ṭalee,*
 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,* *tiyaṭṭen* *tett-an* *εawed* *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* *leafya,* *i* *leafya* *ne-ssruy = 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

isyāren, *asyar* *n* *težga,* *asyar* *i-qqur,* *maši* *xḍer,*
 sticks stick:ELof wood:EA stick:EL3MS-dry:P NEG green:MS
 sticks, sticks from the woods. Dry sticks, not wet ones,

asyar = *ahen* *x₂der* *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* *ya* *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* *tişmet*,
 in rain when 3MS-be:I rain when 3MS-be:I cold
 When it rains and when it is cold,

isyaren = *ihin* *tazzg̃-en* *s* *lehwa, ma* *h-reqq* *şī* *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

laafya, ne-ttawi = *d* *isyaren* *dar* *uħemmal* = *ahen*, *u* *yer-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 *hamkaḍin* *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,

isyaren, *ne-sskar* *ga-s* *hadik* *işettuħen*, *ne-sskar*
 sticks 1PL-do:I in-3S thingy sticks 1PL-do:I
 we put sticks there, we put.

işettuħen = *ihen* *ttkaw-en*, *liyanna* *t-tyima* *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-ħeşşel*, *fhem-ti*, *iwa* *nukna* *ne-ssruy*
 on-1S 3MS-fall:I understand-2S:PF well we 1PL-light:I
 keeps falling. Understand? Well, we light

laafya = yahren, n-hemmu, aškayqululu, ne-skar tazemmit,
 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 lħebb, n-degg = at g lmeqla = yahren,
 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 = at, 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-ttuṭu a y = n-zeḏ g rrħa, rrħa n ufus,
 1PL-go:I AD 3MS:DO = 1PL-grind:A in mill mill of hand:EA
 grind it in a mill, a handmill,

hamka, ne-zzaḏ = at, n-sekr = as ši ħaža n lemlaħ
 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 tazemmit = ahen he-till ħelw-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-zzaḏ, əawed ne-ttawi = d dḏra, ne-zzaḏ = 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

rrħa = yahren n ufus. nya t = ne-zzaḏ. yemma te-skar
 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 dḏra, te-gg̃ = anax aħelħul n dḏra,
 bread bread of corn 3FS-do:A = 1PL:DO porridge:EL of corn
 bread, corn bread. She makes corn porridge

te-ḡḡ =anax, *aškayqululu,* *ayrum* *n* *ḏḏra =yahen, iwa*
 3FS-do:A = 1PL:DO whatchamacallit bread:EL of corn = S:ANP well
 and she makes bread from the corn. Well,

nuḵna ka-n-sir-u *n-tett* *εawed.*
 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 morphology, C = combination (e.g. Berber-morphology singular, Arabic-morphology plural), S = Spanish morphology or A/S = Arabic and Spanish morphology. The alphabetic order is:

b ċ d đ ε f g ġ ħ h k l m n p q r ř s š t ț w x y z ž ʔ

b

- b** *bb / bb / ttawi* 'to take' (trans) B
bb *baḥa* 'father' B
bd *lbidu - lbiduwaț* Dim. *abdidu - ibdidwen* 'bucket' C
bd *lebdu* F. *lbidaya* 'beginning' A
bd *ḥdu / ḥda / ttaddu* 'to begin' (trans) B VN *lebdu*
bdd *bdeḍ / bdeḍ / ttadedḍ* 'to stand up, remain, cease' (intr) B cf. *wqf* 'to stand' Caus. *ssebdeḍ / sseḥdeḍ / sseḥdaḍ* 'to let, make stand up' (trans) B
bde *lbedea n uṭar - lebḍasi n uṭar* 'calf of the leg' A
bdk *aḥeddik - iḥeddaḍ* Dim. *aḥdideḍ - iḥdidken* 'almost mature rooster' B
bdl *beddel / beddel / tbeddal* 'to put on, trade, exchange' (lab) B Pass *tbeddel* PP *mbeddel / mbeddla / mbeddlin*
bdn *buḍen* 'long strings of cooked dough' A
bdrhm *budrihem - budrihmaț* 'small bird' A
bdyn *budyun - budyunis* 'grey wrasse' S
bε Pass *tḥaεεț ~ nbaεεț* PP *mebyaε / mebyaεa / mebyaεin* cf. **znz**
bebš *abeεbuš - lebeabeš* Dim. *abeibeš - ibeibšen* F. *tabeεbušt* Dim. *tabeibešt - tibeibšan* 'dung beetle' C
bεd *beεεḍ / beεεḍ / tbeεεaḍ* 'to go away' (trans) B
bεd *beid / beid-a / ḥeid-in* 'far' A

bed	<i>lbued</i> ‘farness’ A
ber	<i>beεεar / beεεar / tbeεεar</i> ‘to shit’ (intr) B VN <i>tabεart</i>
beš	<i>aβεεεiš - iβεεεaš</i> Dim. <i>aβεεεēš</i> F. <i>tabεεεiš - tiβεεεašan</i> ‘lamb’ B
beṭ	<i>beṭ</i> ‘some’ E.g. <i>beṭ n medden</i> ‘some people’ A
bf	<i>lbuf - lbufat</i> ‘intestine’ A
by	<i>bya / ibyi</i> ‘to love’ (trans) A E.g. <i>ka-ibyi-ha</i> ‘He loves her.’
byḍ	<i>byeḍ / ibyeḍ</i> ‘to be jealous’ (intr) A PP <i>mebyuḍ ~ mebyaḍ / mebyuḍa ~ mebyaḍa / mebyuḍin ~ mebyaḍin</i>
byl	<i>bubyel</i> ‘locust’ A
byl	<i>lbeyli</i> ‘mortar’ A
bgr	<i>lbuḡira - lbuḡirat</i> ‘fishnet for catching bogue fish’ A
bhdl	<i>behdel / behdel / tbehdal</i> ‘to humiliate’ (trans) B
bhm	<i>lebhima - lebhayem</i> ‘female mule’ A
bhw	<i>abhaw</i> ‘type of plant’ B
bḥ	<i>beḥḥa - beḥḥat</i> ‘kiss’ A
bḥr	<i>abeḥḥur - ibeḥḥuren</i> ‘big wave’ B
bḥr	<i>abeḥri - lbeḥriyya</i> F. <i>tabeḥrit</i> ‘fisherman’ C
bḥr	<i>lebḥar - lebḥura ~ lebḥur</i> ‘sea’ A
bḥṭ	<i>mbḥeṭ / imbḥeṭ</i> ‘to astonished’ (intr) A Pass <i>tebḥeṭ</i> PP <i>mebḥuṭ / mebḥuṭa / mebḥuṭin</i>
bk	Caus <i>bekki / bekka / tbekkay</i> ‘to make cry’ (trans) B PP <i>mbekki / mbekkya / mbekkin</i> See tr for non-derived verb.
bk	<i>bbuk / bbuk / tbakka</i> ‘to explode’ (intr) B Caus <i>ssbuk / ssbak / ssbakka</i> ‘to make explode’ (trans) B
bkk	<i>abakik - ibakiken</i> F. <i>tabakikt - tibakikan</i> ‘vagina’ B
bkr	<i>bekri - bekriyyin</i> F. <i>bekriyya</i> ‘early’ A
bkr	<i>lbaḡur</i> Unity F. <i>tabaḡurt - tibaḡura</i> Augm. <i>abaḡur</i> ‘early fig’ (These are the first figs in the tree, they are ripe in May/June.) C
bkr	<i>bekker / bekker / tbekkar</i> ‘to leave early’ (intr) B PP <i>mbekker / mbekkra / mbekkrin</i>
kw	<i>tabekkiwt - tibekkiwan</i> ‘worm’ Augm. <i>abekkiw</i> B
bl	<i>lbal</i> ‘mind’ E.g. <i>rri lbal nnek</i> ‘concentrate’ A
blbl	<i>beḷbeḷ / beḷbeḷ / tbeḷbaḷ</i> ‘to have sex (animals)’ (lab) B PP <i>mbelbeḷ / mbelbḷa / mbelbḷin</i>
blḡ	<i>lbelḡ - leḷlaḡ</i> ‘lock’ A
ble	<i>yah lbeleā</i> ‘many’ E.g. <i>yah lbeleā n temyaṛan</i> ‘many women’ A
bleš	<i>abeleuš - ibeleušen</i> ‘kind of coucou’ B
bly	<i>lbelya - leḷlayi</i> ‘Moroccan leather shoe’ A

blym	<i>lbelyem - leblayem</i> ‘gums’ A
blrž	<i>lbellarež</i> ‘heron’ A
blt	<i>abelluṭ - leblalet</i> Coll. <i>lbelluṭ</i> F. <i>tabelluṭ - tibelluṭan</i> ‘chestnut’ There are two types: <i>abelluṭ n yalef</i> which is bitter and <i>abelluṭ n tasaft</i> which is sweet. B
blw	<i>lbelwa - lbelwat</i> ‘pride’ A
bmb	<i>lbumba - lbumbat</i> ‘pump’ E.g. <i>lbumba n waman</i> ‘waterpump’ A
bmn	<i>lbimen</i> Unity F. <i>tabiment</i> ‘type of tree’ Used for making tools and sticks. C
bn	<i>lbinu</i> ‘wine’ A
bn	<i>lebni ~ lbina</i> ‘building’ A
bn	<i>ban / iban</i> ‘to appear, seem’ (intr) A Pass <i>tbanet</i> AP <i>bayen / bayna / baynin</i>
bn	<i>beyyen / beyyen / tbeyyan</i> ‘to show’ (trans) B PP <i>mbeyyen / mbeyyna / mbeyyin</i>
bn	<i>bnu / bna / bennu</i> ‘to build’ (trans) B Pass <i>ttebna</i> PP <i>mebni / mebneyya / mebniyyin</i>
bnk	<i>lbanka - lbankat</i> ‘bank’ A
bnks	<i>tabnaksa - tibnaksiwan</i> ‘The top of the root of the dwarf fan palm’ B
bnn	<i>lbanan</i> Unity F. <i>tabanant - tibananan</i> ‘banana’ C
bnt	<i>bunitu</i> ‘bonito (fish)’
bny	<i>lbennay - lbennaya</i> ‘mason’ A
bnydr	<i>benyaḍur - benyaḍurat</i> ‘swim pants’ A
bqeş	<i>buqeş ~ ibuqeşen</i> Unity F. <i>tabuqeş - tibuqeşan</i> Augm. <i>abuqeş</i> ‘unripe fig’ B
bqq	<i>lebqiqa - lebqiqat</i> ‘moralla (fish)’
br	<i>lburi - lbureyyat</i> ‘mullet (fish)’
br	<i>lber</i> ‘mainland’ A
br	<i>lbir - lebyur</i> ‘well’ A
br	<i>tabrat - tibratan</i> ‘letter’ B
br	<i>berri / herra / therray</i> ‘to exculpate’ (trans) B
br	<i>therra / itherra</i> ‘to find innocent, to clear’ (intr) A
brbntṛ	<i>aburi abunettar - aburi ibunettaren</i> ‘type of flying fish’
brd	<i>berred / berred / therrad</i> ‘to make cold’ (trans) B Pass <i>therrdet</i> PP <i>mberred / mberrda / mberrdin</i>
brd	<i>bred / ibred</i> ‘to become cold’ (intr) A AP <i>bareḍ / barda / bardin</i>
brddw	<i>aḥerdaddiw - iḥerdaddiwan</i> F. <i>taberdaddiwt - tiberdaddiwan</i> ‘frogspawn’ B
brde	<i>lberdae - lebradee</i> ‘saddle’ A
brdzz	<i>aburdezizz - iburdezizzen</i> ‘beetle’ B
brgg	<i>lbergag - lbergaga</i> ‘traitor’ A
bryz	<i>beryez / beryez / tberyez</i> ‘to swap’ (trans) B Pass <i>tberyez</i> PP <i>mberyez / mberya / mberyzin</i> VN <i>tberyiz</i> E.g. <i>tasa y ad tberyez s tayet</i> ‘This cow has been

swapped with the other.'

brk	<i>lbaṛku - lebrakus</i> Dim. <i>lebṛiku - lebṛikuwaṭ</i> 'big ship' A
brq	<i>aberruq - iberruqen</i> 'big eye' B
brq	<i>berreq / berreq / tberraq</i> 'to stare' (intr) B E.g. <i>iberreq gas</i> 'He stared at him.'
brq	<i>breq / ibreq</i> 'to shine' (intr) A
brr	<i>aberrar - iberraren</i> 'rope to tie a bunch of wood on the back' B
brr	<i>aberru - iberriwen</i> 'grasshopper' B
brr	<i>abrir</i> 'road' E.g. <i>šebber abrir</i> 'hit the road' B
brteyš	<i>berreteyša</i> 'kind of fig' A
brč	<i>burraču - burračus</i> 'drunk' S
bry	<i>lbriya - lberyat</i> 'corn on the foot' A
brzx	<i>lberzax</i> 'honeycomb' A
brn	<i>lberrani</i> 'outsiders' A
brğ	<i>lbuṛğ - lbuṛğat</i> Dim. <i>lbṛeyyež - lebṛižat</i> 'fortress' A
brk	<i>lbaraqa - lbaraqat</i> 'blessing' A
brk	<i>lbuṛka - lebrak</i> 'duck, pond' A
brk	<i>taberrekt - tiberrektan</i> 'ewe' B
brm	<i>berrem / berrem / tberram</i> 'to spin' (trans) B Pass <i>tberremt</i> PP <i>mberrem / mberrema / mbermin</i> E.g. idiomatic <i>mberrem i lwext</i> 'to be smart'
brn	<i>lberrani - lberraniyyin</i> F. <i>lberraniyya</i> 'stranger' A
brn	<i>lberrani</i> Dim. <i>lebrini</i> 'strong wind from the sea' The diminutive is a small storm A
brn	<i>taberrant - tiberanan</i> Dim. <i>tabrirent - tibriṛnan</i> 'kind of fig (tree)' B
brq	<i>lebraq</i> Unity F. <i>lberqa</i> 'lightning' A
brh	<i>berreh / berreh / tberrah</i> 'to call' (intr) B Followed by indirect object pronoun.
brqqn	<i>lberquq</i> Unity F. <i>taberquqt - tiberquqan</i> Augm. <i>aberquq</i> 'prune' C
brṛ	<i>berra</i> 'outside' A
brš	<i>lebruši - lebrušiyat</i> 'fine' A
brwṭ	<i>lberwiṭa - lebrawet</i> 'wheelbarrow' A
brȳ	<i>aberrey - iberreyen</i> 'ram' B
brʔ	<i>baraʔa - lbaraʔat</i> 'innocent (person)' A
bs	<i>bussa - bussat</i> 'kiss' E.g. <i>išebbe as bussat</i> 'He gave her a lot of kisses.' A
bs	<i>bas / ibus</i> 'to kiss' (trans) A
bs	<i>bus / bus ~ bas / tbus</i> 'to kiss' (trans) B
bss	<i>lbasus</i> Unity F. <i>tabasust - tibasusan</i> 'unripe fig' B
bstm	<i>lbestem - lebsatem</i> 'women's wallet' A
bšl	<i>lebšel</i> Unity F. <i>tabšelt - tibšlan</i> Augm. <i>abšlun ~ abšel</i> 'onion' C
bšl	<i>ttebšil - ttebašel</i> Dim. <i>ttebišel - ttebišlat</i> 'dish' A

bṣt	<i>tabṣatt</i> - <i>tibṣatan</i> Dim. <i>tabṣeyyet</i> - <i>tibṣitan</i> ‘mat’ B
bsnn	<i>lbusnan</i> Unity F. <i>tabusnant</i> ‘type of fish’
bṣyd	<i>abuṣeyyad</i> - <i>ibuṣeyyaden</i> F. <i>tabuṣeyyatt</i> - <i>tibuṣeyyadan</i> ‘type of snake’ B
bṣyḥ	<i>abuṣayḥa</i> - <i>ibuṣayḥen</i> ‘type of (venomous) spider’ B
bšr	<i>lbašar</i> ‘people’ A
bšr	<i>lebšara</i> ‘reward (for finding something)’ A
bš	<i>lbašš</i> ‘sail’ A
bšbl	<i>bušbel</i> Unity F. <i>tabušbelt</i> Augm. <i>abušbel</i> ‘mushroom’ B
bškr	<i>abušakir</i> - <i>ibušakiren</i> ‘white caterpillar’ (lives in dung) B
bt	<i>lbit</i> - <i>lebyut</i> ‘room’ A
btll	<i>abuṭlal</i> - <i>ibuṭlalen</i> ‘hump’ B
btlm	<i>bitelma</i> - <i>bitelmat</i> ‘toilet’ A
btr	<i>lbatarīyya</i> - <i>lbatarīyyat</i> ‘battery of a phone’ A
btr	<i>lbatri</i> - <i>lbatriyyat</i> ‘battery (of a car)’ A
btrl	<i>lbitrul</i> ‘petroleum’ A
btx	<i>lbettix</i> Unity F. <i>tabettixt</i> - <i>tibettixan</i> Augm. <i>abettix</i> ‘mellon’ C
bṭ	<i>lbuṭa</i> - <i>lbuṭat</i> ‘boot’ A
bṭ	<i>lbuṭa</i> - <i>lebwaṭ</i> ‘butagas cylinder’ A
bṭ	<i>bṭu</i> / <i>bṭa</i> / <i>tattu</i> ‘to share’ (lab/trans.) B (For older people this verb is labile, for young people it is transitive.) E.g. <i>talqimt tebṭa</i> ‘The bread is divided.’ <i>nebṭa i baṣṭiyatna</i> ‘We have divided it among each other.’
bṭḥ	<i>tabuṭaḥt</i> - <i>tibuṭaḥan</i> ‘vertical wooden lock’ B
bṭl	<i>batel</i> ‘free’ A
bṭl	<i>lbaṭil</i> - <i>lebwaṭel</i> ‘boat’ This noun has feminine agreement, e.g. <i>lbaṭil mezzit</i> ‘The small boat.’ A
bṭn	<i>lbitun</i> ‘concrete’ A
bṭn	<i>tabettant</i> - <i>tibettanan</i> ‘sheepskin’ B
bṭṭ	<i>lebṭata</i> Unity F. <i>tabaṭat</i> - <i>tibaṭatan</i> Augm. <i>abaṭat</i> ‘potato’ C
bṭy	<i>lbuṭṭeyya</i> - <i>lbuṭṭeyyat</i> ‘barrel’ A
bw	<i>aḥaw</i> - <i>iḥawen</i> F. <i>tabawt</i> - <i>tibawtan</i> ‘bean’ B
bwl	<i>tabewwalt</i> - <i>tibewwalan</i> ‘bladder’ B
bxl	<i>bxil</i> / <i>bxil-a</i> / <i>bxil-in</i> ‘stingy’ A
bxms	<i>buxemsa</i> ‘type of fish (Mullus argentinae)’ A
bxn	<i>bexxannu</i> F. <i>tabexxannut</i> - <i>tibexxannutan</i> ‘type of plant’ B
byešry	<i>lbeyyaēšerrya</i> - <i>lbeyyaēinušerryayin</i> F. <i>lbeyyaēaušerryaya</i> ‘merchant’ A
byṭ	<i>abeyyut</i> - <i>ibeyyuten</i> Dim. <i>abwiḃet</i> - <i>ibwiḃten</i> F. <i>tabeyyut</i> - <i>tibeyyutan</i> Dim. F. <i>tabwiḃet</i> - <i>tibwiḃtan</i> ‘white one’ B

byt	<i>beyyēt / beyyēt / tbeyyat</i> ‘to whitewash’ (trans) B Pass <i>tbeyytēt</i> PP <i>mbeyyēt / mbeyyā / mbeyyīn</i>
byt	<i>byēt / beyt-a / buyēt</i> ‘white’ Dim. <i>bwibēt / bwibēt-a / bwibēt-in</i> ‘somewhat white’
byx	<i>lbyixa - lbyixat</i> ‘old woman’ A
byx	<i>lbyixu - lebyixus</i> ‘old man’ A/S
bz	<i>lbaz - lbizan</i> ‘hawk’ A
bzd	<i>bzed / bzed / ttazzed</i> ‘to urinate’ (intr) B
bzf	<i>bezzaf</i> ‘many’ A
bzg	<i>ibzaġen</i> ‘cooked beans’ B
bzg	<i>bzeġ / bzeġ / tazzeġ</i> ‘to swell, become wet’ (intr) B Caus. <i>ssebzeġ / ssebzeġ / ssebzaġ</i> ‘to make wet’ (trans) B E.g. <i>ibezg as aṭebban</i> ‘His trousers became wet.’ cf. fzg for Pass. and AP.
bzw	<i>abziw - ibziwen</i> F. <i>tabziwt - tibziwan</i> ‘piece of meat’ B
bzm	<i>lebzim - lebzayem</i> Dim. <i>lebzeyyem - lebzimat</i> ‘buckle’ A
bzn	<i>lbezzuna - lebzazen</i> Dim. <i>lebzizna - lebziznat</i> Augm. <i>abezzun</i> ‘human breast’ A
bzr	<i>libzar</i> ‘pepper’ A
bžyt	<i>bežyēt / bežyēt / tbežyat</i> ‘to mumble’ (Deaf people and young children talk) (intr) B VN <i>tbežyit</i> E.g. <i>itbežyat, baqi ma iṣerrah lhedra</i> ‘He mumbles, he still does not speak correctly.’
bžq	<i>lebžuq</i> Dim. <i>lebžeyyeq</i> ‘red seabream’
bžw	<i>abžaw - ibžawen</i> ‘small bird, chicken’ B
č	
čkdṛ	<i>čikaḍur</i> ‘bottle part for pouring water out of the boat’ B
čkt	<i>čakita - čwaket</i> ‘coat’ A
čmn	<i>čimineyya - čimineyyat</i> ‘chimney’ A
čp	<i>čappu - čappuwat</i> ‘hat’ A
čpy	<i>čapeyya - čapeyyat</i> ‘squid’ A
črg	<i>čerreg / čerreg / tčerrag</i> ‘to tear’ (lab) B Pass <i>tčerrget</i> PP <i>mčerreg / mčerrga / mčerrgin</i>
čry	<i>čarṟu - čarṟus</i> Dim. <i>čriyu</i> ‘sparidae / sea bream’ A/S
črqn	<i>čerqun - čraqen</i> ‘dirt on the skin’ A
ččr	<i>čičarṟu</i> ‘green pea’
čwčw	<i>ačawčaw a ykeḥlin - ičawčawen a ykeḥlin</i> ‘nightingale’ B
čwčw	<i>ačawčaw - ičawčawen</i> ‘(small) bird’ B
d	
d	Imp. <i>nda / ddu / dda / ttutu ~ titu</i> ‘to walk’ (intr) B The Imperative is irregular. see mšy and mžy for AP.
ddđ	<i>dedđ / idedđ</i> ‘to oppose’ (trans) A

dbbn	<i>ddbiben</i> F. <i>ddbibna</i> ‘small fly’ A
dbȳ	<i>debbey</i> / <i>debbey</i> / <i>tdebbay</i> ‘to weed’ (trans) B Pass <i>tdebbȳet</i> PP <i>mdebbey</i> / <i>mdebbȳa</i> / <i>mdebbȳin</i> VN <i>ttedbiȳ</i> B
dbḥ	<i>ddbiḥa</i> - <i>ddbiḥat</i> ‘sacrifice’ A
dbz	<i>ddebza</i> - <i>ddebzat</i> Augm. <i>adebbiz</i> ‘punch’ A
dbz	<i>lemdabza</i> - <i>lemdabzat</i> ‘fight’ A
dbz	<i>debbez</i> / <i>debbez</i> / <i>tdebbaz</i> ‘to hit’ (trans) B
dbz	<i>tdabez</i> / <i>itdabez</i> ‘to fight’ (intr) A PP <i>metdabez</i> / <i>metdabza</i> / <i>metdabzin</i> E.g. <i>ka-ytdabzu i baetiyatem</i> ‘They fight each other.’
ddg	<i>adideg</i> - <i>idegdgen</i> ‘(wooden) pounder’ B
de	<i>lmudaei</i> - <i>lmudaeyin</i> ‘plaintiff’ A
dfd	<i>difidi</i> - <i>difidis</i> ‘DVD’ S
dfe	<i>lmedfeε</i> - <i>lemdafεε</i> Dim. <i>lemdifeε</i> - <i>lemdifeε</i> - <i>lemdifeat</i> ‘canon’ A
dfe	<i>dafeε</i> / <i>dafeε</i> / <i>tdafεε</i> ‘to defend’ (intr) B E.g. <i>idafeε xfeε</i> ‘He defended him.’
dfe	<i>dfeε</i> / <i>dfeε</i> / <i>ddfεε</i> ‘to push’ (trans) B Pass <i>ndefeεt</i> PP <i>medfueε</i> / <i>medfuea</i> / <i>medfuein</i>
dfl	<i>adfel</i> ‘snow’ B
dfl	<i>tadafalt</i> ~ <i>tadafalt</i> ‘kind of ivy’ B
dfn	<i>lemdafna</i> - <i>lemdafnat</i> ‘fight’ A
dfn	<i>tdafen</i> / <i>itdafen</i> ‘to fight’ (intr) A PP <i>metdafen</i> / <i>metdafna</i> / <i>metdafnin</i>
dfṛ	<i>ddfara</i> - <i>ddfara</i> ‘back rope of a saddle’ A
dfṛ	<i>ddefṛar</i> - <i>ddfaraṛ</i> ‘notebook’ A
dy	<i>ideȳ</i> - <i>ideȳen</i> ‘heap of grain’ B
dgdg	<i>degdēg</i> / <i>degdēg</i> / <i>tdegdag</i> ‘to crush’ (trans) B
dyṣ	<i>adyeṣṣ</i> ‘colostrum’ B
dhb	<i>ddheb</i> - <i>dduhban</i> Dim. <i>dheyyeb</i> ‘gold’ A
dhq	Pass <i>ndehqet</i> PP <i>medhuq</i> / <i>medhuqa</i> / <i>medhuqin</i> ‘to pound’
dhš	<i>ddheyyeš</i> - <i>ddhišaṭ</i> F. <i>ddhiša</i> ‘foal’ A
dhš	<i>deḥḥes</i> / <i>deḥḥes</i> / <i>tdeḥḥas</i> ‘to be crowded’ (trans) B Pass <i>tdeḥḥset</i> PP <i>mdeḥḥes</i> / <i>mdeḥḥsa</i> / <i>mdeḥḥsin</i>
dk	<i>tadekt</i> ‘type of plant’ B
dkl	<i>amdakkul</i> - <i>imdukkal</i> ~ <i>imdakkulen</i> F. <i>tamdakkult</i> - <i>timdukkalan</i> ‘friend’ B
dkṛ	<i>ddikuṛ</i> - <i>ddikuṛat</i> ‘decoration’ A
dkr	<i>ddker</i> - <i>ddkura</i> Dim. <i>ddkeyyer</i> - <i>ddkirat</i> ‘male’ A
dlg	<i>dleg</i> / <i>dleg</i> / <i>ddleg</i> ‘to rub’ (trans) B PP <i>medluḡ</i> / <i>medluḡa</i> / <i>medluḡin</i> VN <i>ddliḡ</i>
dlḥ	<i>ddellaḥ</i> Unity F. <i>tadellaḥt</i> - <i>tidellaḥan</i> Augm. <i>adellaḥ</i> ‘watermelon’ C
dlim	<i>ddlem</i> - <i>ddluma</i> F. <i>tadlemt</i> ‘type of tree’ C
dls	<i>adles</i> ‘plant - kind of’ B

dm	<i>aḍem - iḍammen</i> ‘blood’ B
dm	<i>lǧḍam</i> ‘elephantiasis’ A
dm	<i>liḍam</i> ‘ransid butter’ A
dm	<i>dam / idum</i> ‘to last’ (intr) A
dml	<i>demmala - ddmamel</i> Dim. <i>ddmimla - ddmimlat</i> ‘hump’ A
dmlž	<i>ddemliž - ddmalež</i> Dim. <i>ddmilež</i> ‘bracelet’ A
dmm	<i>aḍmam - iḍmamen</i> Unity F. <i>taḍmamt - tiḍmaman</i> Dim. <i>taḍmeyyemt</i> ‘cherry’ B
dmn	<i>d-demna - d-dmani</i> Dim. <i>ddmina</i> ‘big field’ A
dmnḍ	<i>dumandā / idumandī</i> ‘to command or order’ (intr) A PP <i>mdumandī / mdumandya / mdumandīn</i>
dn	<i>aḍan - iḍannen (wa-)</i> F. <i>taḍant - tiḍanan (ta-)</i> ‘intestines, guts’ B
dn	<i>ddin - ddyun</i> ‘debt’ A
dn	<i>ddin - lʔadyan</i> ‘religion’ A
dn	<i>lʔiden</i> ‘permission’ A
dn	<i>taḍunt - tiḍunan</i> ‘fat’ B
dn	<i>dden / idden</i> ‘to call for prayer’ (trans) A
dn	<i>denni / denni / tdennay</i> ‘to blow the fire’ (trans) B
dnfr	<i>ddenfir - ddnafer</i> ‘dolphin’ A
dny	<i>ddenya ~ ddunya</i> ‘world’ A
dr	<i>tidert - tiḍran (ti-)</i> ‘ear’ B
dr	<i>dder / dder / tedder</i> ‘to live, be alive’ (intr) B See hy for AP.
dr	<i>ḍri / ḍra ~ ḍri / ddray</i> ‘to pass’ (intr) B
drb	<i>aḍerrab - iḍerraben</i> ‘small stone’ B
drbl	<i>ddrabel</i> ‘clothes’ A
drdb	<i>dderdib - ddrdeb</i> ‘pounding (with feet)’ A
drdb	<i>derdeb / derdeb / tderdab</i> ‘to stamp with feet, to be used’ (intr) B PP <i>mderdeb / mderdba / mderdbin</i> VN <i>dderdib</i> E.g. <i>laṭṭa y ahen mderdba</i> ‘That bottle has been used.’
dre	<i>ddreε - ddruεa</i> Dim. <i>ddreyyεε - ddriεaṭ</i> ‘arm’ A
dre	<i>derreε / derreε / tderrae</i> ‘to embrace’ (trans) B Pass <i>tderrreεṭ</i> PP <i>mderreε / mderreεa / mderreεin</i> VN <i>tedriεa - tedriεaṭ</i> E.g. <i>ma nessen šk a t iderrreεn</i> ‘We do not know who embraced her.’
drgl	<i>dergel / dergel / tdergel</i> ‘to roll’ (lab) B Pass <i>tdergleṭ</i> PP <i>mdergel / mdergla / mderglin</i>
drq	<i>derreq / derreq / tderraq</i> ‘to hide’ (trans) B PP <i>mderreq / mderrqa / mderrqin</i>
drs	<i>ladris - ladrisaṭ</i> ‘address’ A
drs	VN <i>ddras</i> Augm. <i>aderrus</i> ‘big wheat heap’
drč	<i>driču - dričus</i> ‘sea border between Morocco and Spain’ A

drwš	<i>ddriweš - ddraweš ~ ddriwšin</i> F. <i>ddriwša</i> ‘poor person’ A
dry	<i>ddurriya - durriyat</i> ‘descendants’ A
ds	<i>aḍas - iḍasen</i> ‘support beam’ B
dsk	<i>ddisku - ddiskus</i> ‘song’ A/S
dšr	<i>ddšer - ddšura</i> Dim. <i>ddšeyyer - ddširat</i> ‘village’ A
dw	<i>ddwa</i> ‘medicine’ A
dwr	<i>tadewwart</i> ‘small intestine of goats’ B
dwss	<i>ddawses - ddawsasa</i> F. <i>ddawseyya</i> ‘squeaker’ A
dwss	<i>dawses / dawses / tdawsas</i> ‘to reveal, to blab’ (intr) B <i>idawses fxes</i> ‘He blabbed about him/her.’
dxl	<i>daxel</i> ‘inside’ A
dxl	<i>ddexla ~ dduxla - dduxlat</i> ‘entrance’ A
dxl	AP <i>daxel / daxla / daxlin</i> ‘to enter’ cf. kšm
dxl	Pass of Caus <i>ddexxlet</i> PP <i>mdexxel / mdexxla / mdexclin</i> ‘to enter’ cf. kšm
dxn	<i>aduxxan - iduxxanen</i> F. <i>taduxxant - tiduxxanan</i> ‘chimney’ B
dxn	<i>dduxxan - ddxaxen</i> ‘smoke’ A
dyr	<i>ddayr</i> ‘front rope of a saddle’ A
dz	<i>ddez / ddez / teddez</i> ‘to pound (beans)’ (trans) B see <i>dhq</i> for Pass and PP
dzr	<i>adezzar - ddzazer</i> Dim. <i>adzizer - idzizren</i> F. <i>tadezzart - tidezzaran</i> Dim. <i>tadzizert - tidzizran</i> ‘a striped red and white cloth which women wear around their middle’ B
d	
ḍb	<i>ḍḍubb - ḍḍubbat</i> F. <i>ḍḍubba</i> ‘bear’ A
ḍb	<i>ḍubb-u / ḍubb-a / ḍubb-us / ḍubb-at</i> ‘fat’ A/S
ḍbb	<i>ḍḍaba</i> ‘fog’ A
ḍbe	<i>ḍḍbae</i> ‘hyene’ A
ḍe	<i>ḍie / ḍae / ḍḍae</i> ‘to loose’ (intr) B
ḍef	<i>ḍeif / ḍeif-a / ḍeif-in</i> ‘thin’ Dim. <i>ḍeief / ḍeief-a / ḍeief-in</i> ‘somewhat thin’ A
ḍfr	<i>ḍfer / ḍfer / ḍfer</i> ‘to tie hair’ (trans) B Pass <i>nḍefret</i> PP <i>medfur / medfura / medfurin</i> B
ḍftr	<i>ḍḍeftar - ḍḍfaṭer</i> Dim. <i>ḍḍfiter - ḍḍfitrat</i> ‘work-book’ A
ḍyr	<i>ḍuyri - ḍuyriyy-a - ḍuyriyy-in</i> ‘simple, honest’ A
ḍḥ	<i>ḍehhi / ḍehha / ḍehha</i> ‘to sacrifice’ (trans) B
ḍhr	<i>ḍher / ḍher / ttutur ~ ttitur</i> ‘to appear, seem’ (intr) B Caus. <i>ḍehher / ḍehher / ḍehhar</i> ‘to show, make appear’ (trans) B Pass <i>tḍehhret</i> PP <i>mḍehher / mḍehhra / mḍehhrin</i>
ḍl	<i>ḍḍell - ḍḍlula</i> Dim. <i>ḍliwla - ḍliwat</i> ‘shadow’ A
ḍmy	<i>ḍḍmay - ḍḍmuya</i> Dim. <i>ḍḍmeyyey - leḍmiya</i> ‘head’ A

ḍr	<i>ḍḍra</i> ‘corn’ There are two types: <i>ḍḍra lhemra</i> ‘red corn’ and <i>ḍḍra turkiyya</i> ‘Turkish corn’ A
ḍrb	<i>ḍḍariba</i> - <i>ḍḍaraʔib</i> ~ <i>ḍḍaribat</i> ‘tax’ A
ḍrb	Pass <i>nderbet</i> PP <i>medrub</i> / <i>medruba</i> / <i>medrubin</i> E.g. <i>argaz ahen haw dan medrub</i> ‘That man is there, he has been hit.’
ḍrf	<i>ḍḍrafat</i> ‘good’ A
ḍrṣ	<i>lmedraša</i> ~ <i>lmedraša</i> - <i>lmedraṣat</i> ‘school’ A
ḍṣ	<i>deṣṣ</i> / <i>deṣṣ</i> / <i>tdeṣša</i> ‘to laugh’ (intr) B E.g. <i>ideṣṣ ides</i> ‘He laughed together with him.’ See ṭhk for Caus, Pass and PP.
ḍt	<i>taḍutt</i> ‘wool’ B
ḍw	<i>ḍḍaw</i> - <i>ḍḍiwan</i> ~ <i>ḍḍwawi</i> Dim. <i>ḍḍwiwi</i> - <i>ḍḍwiwat</i> ‘electricity, light’ A
ḍwṛ	<i>ḍḍawra</i> - <i>ḍḍawrat</i> Dim. <i>ḍḍwira</i> - <i>ḍḍwirat</i> ‘circle’ A
ḍwṛ	<i>ḍewwer</i> / <i>ḍewwer</i> / <i>tḍewwar</i> ‘to surround, turn around’ (lab) B Pass <i>tḍewwret</i> PP <i>mḍewwer</i> / <i>mḍewwra</i> / <i>mḍewwrin</i>
ḍyf	<i>ḍḍayf</i> - <i>ḍḍyuf</i> ‘guest’ A
ḍyf	<i>tadeyyaft</i> - <i>tideyyafan</i> ‘present when visiting’ B
ḍyf	<i>ḍeyyef</i> / <i>ḍeyyef</i> / <i>tḍeyyaf</i> ‘to host’ (trans) B Pass <i>tḍeyyfet</i> PP <i>mḍeyyef</i> / <i>mḍeyyfa</i> / <i>mḍeyyfin</i>
ḍyq	<i>ḍeyyeq</i> / <i>ḍeyyeq</i> / <i>tḍeyyaq</i> ‘to narrow’ (trans) B Pass <i>tḍeyyqet</i> PP <i>mḍeyyeq</i> / <i>mḍeyyqa</i> / <i>mḍeyyqin</i>
ḍyε	<i>ḍeyyeε</i> / <i>ḍeyyeε</i> / <i>tḍeyyaε</i> ‘to loose (tr.)’ (trans) B
ε	
εbd	<i>lebbad</i> - <i>lebbada</i> ‘worshipper’ A
εbd	<i>leḥbid</i> - <i>leḥbidat</i> ‘slave’ A
εbd	<i>εbed</i> / <i>iεbed</i> ‘to worship’ (trans) A
εbr	<i>εber</i> / <i>εber</i> / <i>εber</i> ‘to measure’ (trans) B Pass <i>tεbret</i> PP <i>mεbur</i> / <i>mεbura</i> / <i>mεburin</i>
εbt	<i>taεebbutt</i> - <i>tiεebbuṭan</i> Dim. <i>taεibet</i> - <i>tiεibṭan</i> Augm. <i>aεebbuṭ</i> - <i>iεebbuṭen</i> ‘navel’ B
εbz	<i>aεebbiz</i> - <i>iεebbaz</i> Dim. <i>aεibez</i> - <i>iεibzen</i> F. <i>taεebbist</i> Dim. <i>taεibest</i> - <i>tiεibizan</i> ‘calf’ B
εbz	<i>aεebbiz</i> - <i>iεebbaz</i> ‘bull’ F. <i>taεebbist</i> - <i>tiεebbizan</i> ‘cow’ B
εd	<i>leada</i> - <i>leadat</i> ‘custom’ A
εd	<i>leadu</i> - <i>leaduwwat</i> ~ <i>leuḍyan</i> F. <i>leḍuwwa</i> ‘enemy’ A
εdb	<i>εeddeḥ</i> / <i>εeddeḥ</i> / <i>tεeddab</i> ‘to make suffer’ (trans) B E.g. <i>ša ṭ iεeddeḥ</i> ‘He is going to make him suffer.’ PP <i>mεeddeḥ</i> / <i>mεeddḥa</i> / <i>mεeddḥin</i>
εdl	<i>tiεdal</i> ‘women’ No SG. B
εds	<i>taεeddist</i> - <i>tiεeddisan</i> Augm. <i>aεeddis</i> - <i>iεeddisen</i> ‘belly’ B

εεb	<i>λεαεεb</i> ‘slobber’ No SG. A
εfr	<i>εαfer / εαfer / τεαfar</i> ‘to try’ (trans) B PP <i>μεαfer / μεαfra / μεαfrin</i>
εfrt	<i>λεεfrīt - λεεfaređ</i> ‘demon, clever person’ A
εfy	<i>λεαfyα - λεεwafi</i> ‘hell, fire’ A
εgz	<i>εgez / ιεgez</i> ‘to be lazy’ (intr) A AP <i>εegzan / εegzana / εegzanin</i>
εkr	<i>εekker / εekker / τεekkar</i> ‘to make brakish’ (trans) B Pass <i>τεekker</i> PP <i>μεekker / μεekkra / μεekkrin</i>
εkz	<i>αεukkaz - ιεukkiza</i> Dim. <i>αεkikez - ιεkikzen</i> F. <i>ταεukkazt - τιεukkazan</i> Dim. <i>ταεkikezt - τιεkikzan</i> ‘walking stick’ B
ελ	<i>εelli / εella / τεellay</i> ‘to rise, to go up’ (lab) B E.g. <i>ayil ahen ιεella t</i> ‘He ascended that mountain.’ Caus <i>sseeli / sseela / sseelay</i> ‘to make ascend’ (trans) B Some people use the metathesized form <i>sselei</i> .
εlf	<i>λεelf</i> ‘granules for animals’ A
εlf	<i>εellef / εellef / τεellaf</i> ‘to feed animals’ (trans) B Pass <i>τεellfet</i> PP <i>μεellef / μεellfa / μεellfin</i> B
εlf	<i>εlef / εlef / εellef</i> ‘to feed animals’ (trans) B PP <i>μεεluf / μεεlufa / μεεlufin</i>
εlm	<i>λεalem - λεulama</i> ‘islamic scholar’ A
εlm	<i>λεμεellem - λεμεellmin</i> F. <i>λεμεellma</i> ‘master’ A
εlm	<i>λεμεtellem - λεμεtelmin</i> F. <i>λεμεtelma</i> ‘assistant’ A
εlm	<i>λεμεεallim - λεμεεellimin</i> F. <i>λεμεεallima - λεμεεallimat</i> ‘teacher’ A
εlm	<i>εellem / εellem / τεellam</i> ‘to teach’ (trans) B
εlm	<i>εelem / ιεelem</i> ‘to warn, inform’ (trans) A
εlm	<i>τεellem / ιτεellem</i> ‘to learn’ (intr) A
εlq	<i>ταμεileqt - τιμεilqan</i> Dim. <i>λεμεilqa - λεμεilqat</i> ‘spoon’ B
εlq	<i>εelleq / εelleq / τεellaq</i> ‘to hang up’ (trans) B Pass <i>τεellqet</i> PP <i>μεelleq / μεellqa / μεellqin</i> E.g. <i>λhaža y ahen τεellqet</i> ‘That thing has been hung up.’
εlwn	<i>λεilwan - λεilwanat</i> ‘address’ A
εly	<i>εelli / εella / τεellay</i> ‘to go up’ (trans) B
εlž	<i>λεμεεalaža</i> ‘the healing’ A
εm	<i>εam - snin</i> ‘year’ A
εm	<i>εemmi - εemmiwat</i> ‘paternal uncle’ A
εm	<i>εum / εam ~ εum / τεεum</i> ‘to swim’ (intr) B There are two possible causatives The first one is Caus <i>sseum / sseam / sseum</i> ‘to let, make swim’ (trans) B The second causative is <i>εewwem / εewwem / τεewwam</i> ‘to let, make swim’ (trans) see εwm
εml	<i>λεemel - λεemula</i> Dim. <i>λεεmeyyel - λεεmilat</i> ‘fishnet’ (only the net without lead, rope and other material) A
εml	<i>μl λεumla</i> ‘the guilty one’ A

emr	<i>emmer</i> / <i>emmer</i> / <i>temma</i> ‘to be full, to fill’ (trans) B Pass <i>temmret</i> PP <i>memmer</i> / <i>memma</i> / <i>memma</i>
emr	AP <i>amer</i> / <i>amra</i> / <i>amrin</i> ‘to be full’
emr	<i>lema</i> - <i>lemayer</i> ‘cave’ A
emt	<i>emti</i> - <i>emmtiwat</i> ‘father’s sister’ A
emt	<i>emti</i> - <i>emmtiwat</i> ‘paternal aunt’ A
enkb	<i>taenkbut</i> - <i>tienkbutan</i> ‘spider web’ B
enqš	<i>aenquš</i> - <i>ienquš</i> ~ <i>leenaqes</i> F. <i>taenqušt</i> Dim. <i>taeniqešt</i> ‘angry head’ B
enš	<i>taennušt</i> - <i>tiennužan</i> ‘part of the dwarf fan palm’ B
enšr	<i>leuŋar</i> - <i>leenaŋar</i> Dim. <i>leeniŋer</i> ‘water spring’ A
eq	<i>eiq</i> / <i>iei</i> q ‘to become aware of’ (intr) A AP <i>eyeq</i> / <i>eyqa</i> / <i>eyyin</i>
eqb	<i>leuqba</i> - <i>leuqbat</i> ‘penalty or punishment’ A
eqb	<i>eqeb</i> / <i>eqeb</i> / <i>taeqab</i> ‘to punish’ (trans) B Pass <i>taeqbet</i> PP <i>meaqeb</i> / <i>meaqba</i> / <i>meaqbin</i> E.g. <i>taeqbet xfes</i> ‘She was punished for that.’
eqd	<i>aeuqqad</i> - <i>ieuqqad</i> F. <i>taeuqqatt</i> ~ <i>taeuqqadt</i> - <i>tieuqqadan</i> ‘knot’ B
eqd	<i>eeqqed</i> / <i>eeqqed</i> / <i>teeqqad</i> ‘to tie’ (lab) B Pass <i>teeqqdet</i> PP <i>meeqqed</i> / <i>meeqqda</i> / <i>meeqqdin</i>
eqd	<i>eqed</i> / <i>ieqed</i> ‘to freeze’ (trans) A PP <i>meequd</i> / <i>meequda</i> / <i>meequdin</i> E.g. <i>adem meequd</i> ‘Frozen blood.’
eql	<i>leeqel</i> - <i>leequla</i> ‘mind’ A
eql	<i>eqel</i> / <i>eqel</i> / <i>eequl</i> ‘to recognize’ (trans) B Pass <i>neeqlet</i> ~ <i>teeqlet</i> PP <i>meequl</i> / <i>meequla</i> / <i>meequlin</i> Caus <i>eeqqel</i> / <i>eeqqel</i> / <i>teeqqal</i> ‘to let, make recognize’ (trans) B PP <i>meeqqel</i> / <i>meeqqala</i> / <i>meeqqalin</i>
eqq	<i>taequqt</i> - <i>tieq^waq</i> ‘bone of the wrist and armpit’ B
eqš	<i>leaqiŋa</i> - <i>leaqiŋat</i> ‘sorcerer or witch’ A
erf	<i>erref</i> / <i>erref</i> / <i>terraf</i> ‘to authenticate, to make acquaintance’ (trans) B Pass <i>terrfet</i> PP <i>merref</i> / <i>merrefa</i> / <i>merrefin</i> VN <i>terrif</i>
erkl	<i>erkel</i> / <i>erkel</i> / <i>terkal</i> ‘to limp’ (intr) B PP <i>merkel</i> / <i>merkla</i> / <i>merklin</i>
ernn	<i>ernen</i> / <i>ernen</i> / <i>ternan</i> ‘to growl’ B
err	<i>taerurt</i> - <i>tieruran</i> ‘ass’ B
ery	AP <i>eryan</i> ~ <i>eryan</i> / <i>eryan-a</i> ~ <i>eryan-a</i> / <i>eryan-in</i> ~ <i>eryan-in</i> ‘naked’ A
erđ	<i>lemeařda</i> - <i>lemeařdin</i> ‘invitee’ A
erđ	<i>eařed</i> / <i>eařed</i> / <i>taařad</i> ‘to invite’ (trans) B PP <i>meařed</i> ~ <i>meařud</i> / <i>meařda</i> ~ <i>meařud</i> / <i>meařdin</i> ~ <i>meařud</i>
erf	<i>erref</i> / <i>erref</i> / <i>terraf</i> ‘to invite’ (trans) B Pass <i>terrfet</i> PP <i>merref</i> / <i>merrefa</i> / <i>merrefin</i> VN <i>terrif</i>
erf	PP <i>terfet</i> PP <i>meruf</i> / <i>merufa</i> / <i>merufin</i>

erm	<i>errem / errem / terram</i> ‘to pile up’ (trans) B PP <i>merrrem / merrma / merrmin</i>
erq	<i>leraq</i> ‘sweat’ A
erq	<i>ereq / ireq</i> ‘to perspire’ (intr) A
ert	<i>areṭ - iarten</i> ‘mortar’ B
ert	<i>learṭ</i> ‘invitation, bull’ A
ert	<i>earṭ / eareṭ / tearaṭ</i> ‘to memorize’ (trans) B Pass <i>teartṭet</i>
ert	<i>erret / erret / terrat</i> ‘to walk in a certain way’ (intr) B
ert	<i>taaratt - tiaratan</i> ‘horizontal wooden lock’ B
erž	<i>ameeraž - imeeražen</i> F. <i>tameerašt - timeeražan</i> ‘lame person’ B
erž	<i>errež / errež / terrerž</i> ‘to limp’ (lab) B Pass <i>terrežet</i> PP <i>merrež / merrža / merržin</i>
ess	<i>leessas - leessasa</i> ‘guard’ A
ess	<i>ess / iess</i> ‘to guard’ (intr) A E.g. <i>netta atgam a d ess das</i> ‘Yesterday he guarded there.’
eš	<i>leša - lešawat</i> ‘dinner’ A
eš	<i>leušš - leewaš</i> Dim. <i>leweyyeš</i> ‘nest’ A
eš	<i>eiš / eaš / teiš</i> ‘to live’ (intr) B AP <i>eyeš / eyša / eyšin</i>
ešb	<i>eeššeb / eeššeb / teššab</i> ‘to prune’ (trans) B Pass <i>teššbet</i> PP <i>meeššeb / meeššeba / meeššebin</i>
ešr	<i>leašir</i> ‘juice’ (also: <i>aman n tlečint</i> ‘water of a an orange apple) A
ešr	<i>leušra</i> ‘pregnant one’ A
ešr	<i>eeššer / eeššer / teššer</i> ‘to beget’ (trans) B PP <i>meeššra / meeššrin</i>
ešr	<i>ešar / dešar</i> ‘to be pregnant’ (intr) A <i>eušra / eušer</i>
ešš	<i>aešuš - iwešas</i> F. <i>taešušt - tiwešaš</i> ‘pen’ B
eškr	<i>aeškri - lešker</i> F. <i>taeškriṭ</i> ‘soldier’ B
etb	<i>leaṭba - leaṭbat</i> Augm. <i>aeṭbun</i> ‘sill’ A
etq	<i>aettuq - iettuqen</i> F. <i>taettuqt - tiettuqan</i> Dim. <i>tastiteqt - tietitqan</i> ‘chicken’
eṭ	Pass <i>neṭaṭ</i> PP <i>meṭi / meṭeyya / meṭiyyin</i> cf. fk
eṭ	<i>eṭṭ / eṭṭ / teṭṭa</i> ‘to bite’ (trans) B
eṭl	<i>eṭṭel / eṭṭel / teṭṭal</i> ‘to be late’ (lab) B Pass <i>teṭṭlet</i> PP <i>mēṭṭel / mēṭṭila / mēṭṭlin</i>
eṭl	<i>teṭṭel / iteṭṭel</i> ‘to be late’ (intr) A Pass <i>teṭṭlet</i> PP <i>mēṭṭel / mēṭṭila / mēṭṭlin</i> does not give birth’ B
eṭq	<i>eṭeq / iṭeq</i> ‘to help, aid’ (trans) A Pass <i>teṭeq</i> PP <i>meṭuq / meṭuqa / meṭuqin</i>
eṭr	<i>leṭur</i> ‘chili pepper’ A
eṭrf	<i>eṭaref / iṭaref</i> ‘to admit’ (intr) A PP <i>meṭaref / meṭarfa / meṭarfin</i>
eṭš	<i>eṭteš / eṭteš / teṭṭaš</i> ‘to make thirsty’ (trans) B

εῖς	<i>εἶς / ἰεῖς</i> ‘to be thirsty’ (intr) A <i>εἶσαν / εἶσανα / εἶσανιν</i>
εῖς	<i>εἶς / ἰεῖς</i> ‘to sneeze’ (intr) A
εἶ	<i>λεῖτα - λεῖται</i> Augm. <i>αεῖται</i> Dim. <i>λεῖτα - λεῖται</i> ‘bite’ A
εῦδ	<i>αμῆαυδ - ἰμῆαυδ</i> F. <i>ταμῆαυδ - τιμῆαυδ</i> ‘second goat in a year’ B
εῦδ	<i>λεῦδα - λεῦδατ ~ λεῦδ</i> ‘mare’ A
εῦδ	<i>εᾶυδ / εᾶυδ / τᾶυδ</i> ‘to tell’ (trans) B Pass <i>τεᾶυδ</i> PP <i>μεᾶυδ / μεᾶυδα / μεᾶυδιν</i>
εῦδ	<i>λεῦδ - λεῦιδ</i> ‘stallion’ F. <i>λεῦδα - λεῦδατ</i> ‘mare’ A
εῦμ	<i>εῦμωμ / εῦμωμ / τῆμωμ</i> ‘to let, make swim’ (trans) B Pass <i>τεῦμωμ</i> PP <i>μεῦμωμ / μεῦμωμα / μεῦμωμιν</i>
εῦν	<i>αμῆαυεν - ἰμῆαυεν</i> F. <i>ταμῆαυεν</i> ‘a help’ C
εῦν	<i>λεῦαν</i> ‘wind, a cold (disease)’ A
εῦν	<i>ἰμῆαυανα</i> ‘help’ A
εῦν	<i>εᾶυεν / εᾶυεν / τᾶυαν</i> ‘to help’ (trans) B E.g. <i>ῥα γὰρ εᾶυεν</i> ‘I am going to help him.’
εῦν	<i>εῦμων / εῦμων / τῆμων</i> ‘to winnow’ (trans) B Pass <i>τεῦμων</i> E.g. <i>ἰεῦμων λεῖλα</i> ‘He winnowed the crops.’
εῦω	<i>εῦμωω / εῦμωω / τῆμωω</i> ‘to howl’ (intr) B
εῦρ	<i>λεῦρ - ἰεῦρ</i> F. <i>λεῦρα</i> ‘blind person’ A
εῦρ	<i>εῦρ / εῦρ-α / εῦρ</i> ‘blind’ A
εῦζ	<i>εῦμωζ / εῦμωζ / τῆμωζ</i> ‘to bend’ (trans) B Pass <i>τεῦμωζ</i> PP <i>μεῦμωζ / μεῦμωζα / μεῦμωζιν</i>
εῦζ	<i>εῦμωζ / εῦμωζ-α / εῦμωζ</i> ‘crooked’ A
εῦ	<i>εῦα / ἰεῦα</i> ‘to be tired’ (intr) A AP <i>εῦμωμω / εῦμωμω / εῦμωμων</i>
εῦβ	<i>εῦμωμωβ / εῦμωμωβ / τῆμωμωβ</i> ‘to criticize’ (trans) B PP <i>μεῦμωμωβ / μεῦμωμωβα / μεῦμωμωβιν</i> AP <i>εῦμωμωβ / εῦμωμωβα / εῦμωμωβιν</i>
εῦε	<i>αεῦμωμωε - ἰεῦμωμωε ~ ἰεῦμωμωε</i> ‘traditional singing’ B
εῦε	<i>εῦμωμωε / εῦμωμωε / τῆμωμωε</i> ‘to sing (traditionally)’ (intr) B
εῦλ	<i>αεῦμωμωλ - ἰεῦμωμωλ</i> Dim. <i>αεῦμωμωλ - ἰεῦμωμωλ</i> ‘boy, son’ C
εῦλ	<i>ταεῦμωμωλ - τιεῦμωμωλ</i> Dim. <i>ταεῦμωμωλ - τιεῦμωμωλ</i> ‘girl, daughter’ B
εῦν	<i>αμῆαυεν</i> ‘the fact of watching’ E.g. <i>τακκαξ αμῆαυεν</i> ‘I’m watching’ B
εῦν	<i>εᾶυεν / εᾶυεν / τᾶυαν</i> ‘to look, to look for, to search, to research’ (trans) B E.g. <i>ἰεᾶυεν ατ</i> ‘He researched or checked something.’ E.g. <i>εᾶυεν αμ ατ γυγυ</i> ‘Look at him what is wrong with him.’ <i>ἰεᾶυεν γα</i> ‘He looked at him.’ <i>ἰεᾶυεν φξε</i> ‘He searched for him.’ <i>ἰεᾶυεν γα</i> ‘He looked at him.’
εῦρ	<i>εῦμωμωρ / εῦμωμωρ / τῆμωμωρ</i> ‘to play’ (intr) B VN <i>λεῦμωμω - λεῦμωμω</i>
εῦλ	<i>εῦλ / εῦλ / εῦλ</i> ‘to filter, separate’ (trans) B Pass <i>νεῦμωμωλ</i> PP <i>μεῦμωμωλ / μεῦμωμωλα</i>

	/ <i>mezzulin</i> VN <i>leezla</i> , <i>leezlat</i> E.g. <i>neezzlet tayat ad zeg yayetma-s</i> ‘This goat has been separated from its siblings.’
ezr	<i>leezri</i> - <i>leezara</i> ‘bachelor’ A
ezz	<i>leeziza</i> - <i>leezizat</i> ~ <i>leezizawat</i> ‘grandmother’ A
ez	<i>eezzi</i> ‘older brother’ A
ežb	<i>ežeb</i> / <i>ežeb</i> / <i>eežeb</i> ‘to want’ (comines with the indirect object) (intr) B
ežn	<i>aežin</i> - <i>iežinen</i> ‘dough’ B
ežn	<i>leužna</i> - <i>leežani</i> ‘soil for building houses’ A
ežn	<i>lmeežun</i> ‘cookie (drugs)’ (A mix of honey, hemp etc.) A
ežn	Pass <i>neežnet</i> PP <i>meežun</i> / <i>meežuna</i> / <i>meežunin</i> ‘to knead’ cf. rfs ‘to knead’
eʔl	<i>leaʔila</i> ‘family’ A
f	
f	<i>af</i> ~ <i>uf</i> / <i>uf</i> / <i>ttaf</i> ‘to find’ (trans) B cf. žbr for Pass and PP.
fbr	<i>fabur</i> ‘free’ A
fd	<i>afud</i> - <i>ifadden</i> ‘knee’ B
fd	<i>lfidda</i> ‘silver’ A
fdđ	<i>fedđi</i> / <i>fedđa</i> / <i>tfedđay</i> ‘to finish’ (trans) B PP <i>mfedđi</i> / <i>mfedđya</i> / <i>mfedđin</i>
fdn	<i>tafdent</i> - <i>tifednan</i> ‘toe’ B
fel	<i>fæl</i> / <i>ifæl</i> ‘to rape’ (trans) A PP <i>mefeul</i> / <i>mefeula</i> / <i>mefeulin</i>
fet	<i>llefæt</i> - <i>llfue</i> Dim. <i>llfiæa</i> Augm. <i>alefeun</i> ‘snake’ A
ff	<i>afaff</i> - <i>ifaffen</i> ‘nipple’ B
fy	<i>afuy</i> - <i>ifuyen</i> ‘hump’ B
fy	<i>ffuy</i> / <i>ffey</i> / <i>teffey</i> ‘to go out’ (intr) B AP cf. xrž for AP and VN Caus <i>ssufuy</i> / <i>ssafey</i> / <i>ssufuy</i> ‘to make go out’ (trans) B cf. xrž for Pass. and PP
fge	<i>feggeε</i> / <i>feggeε</i> / <i>tfeggae</i> ‘to stretch’ (lab) B PP <i>mfeggeε</i> / <i>mfeggea</i> / <i>mfeggein</i>
fhm	<i>fhem</i> / <i>ifhem</i> ‘to understand, to boast’ (intr) A PP <i>mefhum</i> / <i>mefhuma</i> / <i>mefhumin</i> E.g. <i>ka-yfhem gas</i> ‘He understands it very well.’ <i>ka-yfhem fxi</i> ‘He is showing of to me.’ Caus. <i>fehhem</i> / <i>fehhem</i> / <i>tfehhem</i> ‘to make understand, explain’ (trans) B Pass <i>tfehhmet</i> PP <i>mfehhem</i> / <i>mfehhma</i> / <i>mfehhamin</i> E.g. <i>fehham at spanyuleyya</i> ‘Teach Spanish to him.’
fh1	<i>lefhel</i> - <i>lefhula</i> Dim. <i>afheyyel</i> - <i>ifheyyelen</i> ‘bull’ C
fhm	<i>lefhem</i> Unity F. <i>tafhemt</i> Dim. <i>tafheyyemt</i> ‘charcoal’ C
fk	<i>tafukt</i> - <i>tafuƙan</i> (<i>ta-</i>) ‘sun’ <i>iğun tafuƙan</i> ‘He has had enough of sun.’ B
fk	<i>fekk</i> / <i>ifukk</i> ‘to rescue’ (trans) A Pass <i>tfakk</i> PP <i>mefkuk</i> / <i>mefkuƙa</i> / <i>mefkuƙin</i>
fk	<i>fk</i> / <i>fk</i> / <i>ttak</i> ‘to give’ (trans) B cf. eƧ for Pass and PP
fkr	<i>lfikra</i> - <i>lfikrat</i> ‘idea’ A
fkr	<i>fekker</i> / <i>fekker</i> / <i>tfekkar</i> ‘to think, to make think’ (lab) B Pass <i>tfekkrū</i> PP <i>mfekker</i> / <i>mfekkra</i> / <i>mfekkrin</i> E.g. <i>ifekkr at</i> ‘He reminded him.’ E.g. <i>ifekker gas</i>

‘He thought of him.’ E.g. *nya idda dar ssuq ifekkr at, ibb as d ssuxra* ‘When he went to the market he thought of him, he brought the groceries for him.’

fl	<i>afel</i> ‘top’ B
fl	<i>fil</i> ‘elephant’ A
fld	<i>lfalda</i> - <i>lefladi</i> Dim. <i>leflida</i> ‘dress’ A
flf	<i>lfelfel</i> F. <i>tafelfelt</i> - <i>tifelflan</i> ‘paprika’ C
flh	<i>leflaha</i> ‘crops’ A
flh	<i>lfellah</i> - <i>lfellaha</i> ‘farmer’ A
flh	<i>felleh</i> / <i>felleh</i> / <i>tfellah</i> ‘to burst, to plough, to dispose of something without profit’ (lab) B PP <i>mfelleh</i> / <i>mfellha</i> / <i>mfellhin</i> VN <i>tfefliha</i> , <i>tfeflihat</i>
flh	<i>fleh</i> / <i>ifleh</i> ‘to cultivate’ (trans) A Pass <i>tefleh</i>
flm	<i>lfilm</i> - <i>lʔaflam</i> Dim. <i>lefleeyem</i> ‘film’ A
fln	<i>tafellunt</i> - <i>tifellunan</i> Dim. <i>taflilent</i> - <i>tifilnan</i> ‘earthenware frying pan’ B
flq	<i>felleq</i> / <i>felleq</i> / <i>tfellaq</i> ‘to cut up in two pieces’ (trans) B Pass <i>tfellqet</i> PP <i>mfelleq</i> / <i>mfellqa</i> / <i>mfellqin</i> VN <i>tfefliqa</i> E.g. <i>tfellqet lʔayza yahren</i> ‘The stick has been cut up in two pieces.’
fls	<i>afulus</i> - <i>ifulusen</i> Dim. <i>afliles</i> ‘cock, rooster’ B
fls	<i>leflus</i> - Dim. <i>leflisat</i> ‘money’ A
fls	<i>taflilest</i> - <i>tiflilsan</i> ‘swallow’ B
fls	<i>tafulest</i> ~ <i>tafulust</i> - <i>tifulusan</i> ‘chicken’ B
flt	<i>lfalta</i> - <i>lfaltat</i> ‘fault’ A
flt	<i>falta</i> / <i>falta</i> / <i>tfaltay</i> ‘to make a mistake’ (intr) B
flt	<i>flet</i> / <i>flet</i> / <i>fflet</i> ‘to escape’ (intr) B <i>fellet</i> / <i>fellet</i> / <i>tfellat</i> ‘to make escape’ B PP <i>mfellet</i> / <i>mfellta</i> / <i>mfelltin</i>
fltw	<i>tafaltiwt</i> - <i>tifaltiwan</i> ‘wart’ B
flwh	<i>afalwah</i> - <i>ifalwahren</i> ‘branch of a cactus bush’ B
fmly	<i>famileyya</i> ‘family’ A
fnd	<i>lfundu</i> - <i>lfundus</i> ‘bottom’ A/S
fnk	<i>fanika</i> - <i>fanikat</i> ‘pouting, pout whiting’ A
fntt	<i>afentut</i> - <i>ifentat</i> F. <i>tafentut</i> ‘lip’ B
fq	<i>lefqi</i> - <i>lfuqa</i> ‘imam’ A
fq	<i>fiq</i> / <i>faq</i> / <i>tfiq</i> ‘to wake up’ (intr) B AP <i>fayeq</i> / <i>fayqa</i> / <i>fayqin</i>
fqy	<i>lfuqiyya</i> - <i>lfuqiyyat</i> ‘kind of djellaba’ A
fr	<i>affar</i> - <i>iffaren</i> ‘type of plant’ B
fr	<i>tafrut</i> - <i>tifrutan</i> ‘type of plant’ B
frd	<i>lferda</i> - <i>lferdat</i> ‘pair’ A
frd	<i>lferdi</i> - <i>lefrada</i> Dim. <i>lefridi</i> - <i>lefridiyyat</i> ‘gun’ A
frd	<i>fred</i> / <i>fred</i> / <i>ffred</i> ‘to eat (animal)’ (trans) B

frg	<i>afraġ</i> - <i>ifraġen</i> ‘fence’ B
frg	<i>lferg</i> Dim. <i>lefreyyeg</i> ‘swarm (of birds)’ A
frγ	<i>ferrey</i> / <i>ferrey</i> / <i>tferray</i> ‘to pour’ (trans) B Pass <i>tferryet</i> PP <i>mferrey</i> / <i>mferrya</i> / <i>mferryin</i>
frgl	<i>tifergallan</i> ‘type of plant’ B
frgnt	<i>furguniṭa</i> - <i>furguniṭat</i> ‘van’ A
frkw	<i>taferkiwt</i> - <i>tiferkiwtan</i> ‘small farmland’ B
fr̄mž	<i>lfurmaž</i> ‘cheese’ A
frn	<i>afernu</i> - <i>iferna</i> ~ <i>ifurna</i> ‘big fire’ B
frnq	<i>afernaq</i> - <i>ifernaqen</i> Dim. <i>afrineq</i> F. <i>tafernaqt</i> ‘bulging on a stick’ B
frnz	<i>frinzi</i> ‘high hair’ A
frq	<i>lferq</i> ‘difference’ A
frqš	<i>aferquš</i> - <i>iferqaš</i> ‘claw’ B
frr	<i>tafrert</i> ‘whey’ B
frš	<i>lefraš</i> ‘bed’ A
frs	<i>lfiras</i> Unity F. <i>tafirast</i> - <i>tifirasan</i> ‘pear’ C
frs	<i>fres</i> / <i>fres</i> / <i>ffres</i> ‘to prune’ (trans) B
frsw	<i>afersiw</i> ‘type of plant’ B
frtt	<i>aferṭattiw</i> - <i>iferṭattiw</i> ‘butterfly’ B
frtt	<i>fertet</i> / <i>fertet</i> / <i>tfertat</i> ‘to crumble’ (lab) B Pass <i>tferttet</i> PP <i>mfertet</i> / <i>mfertta</i> / <i>mferttin</i>
frw	<i>ifrawen</i> ‘money’ B
frw	<i>tafrawt</i> Augm. <i>afraw</i> - <i>ifrawen</i> ‘leaf’ B
frw	<i>tafriwet</i> - <i>tifriwtan</i> ‘wing, fin’ B
frx	<i>afrux</i> - <i>iferxan</i> Dim. <i>afreyyex</i> - <i>ifreyyexen</i> F. <i>tafruxt</i> - <i>tiferxatan</i> Dim. <i>tafreyyext</i> - <i>tifrixtan</i> ‘small chicken, boy, girl’ B
frε	<i>fɾε</i> / <i>fɾε</i> / <i>ferɾε</i> ‘to damage, hit painfully’ (trans) B Pass <i>ttefɾε</i> PP <i>mefɾue</i> / <i>mefɾuea</i> / <i>mefɾuein</i>
fr̄fr	<i>ferfer</i> / <i>ferfer</i> / <i>tferfar</i> ‘to clean, sort’ (trans) B Pass <i>tferfret</i> PP <i>mferfer</i> / <i>mferfra</i> / <i>mferfrin</i>
fr̄h	<i>fɾeh</i> / <i>fɾeh</i> / <i>ffɾeh</i> ‘to happy’ (intr) B AP <i>ferhan</i> / <i>ferhana</i> / <i>ferhanin</i> E.g. <i>tefɾeh s rrigalu</i> ‘She is happy with her gift.’ Caus <i>ferɾeh</i> / <i>ferɾeh</i> / <i>tferrah</i> ‘to make happy’ (trans) B Pass <i>tferrhet</i> PP <i>mferreh</i> / <i>mferrha</i> / <i>mferrhin</i>
fr̄kt	<i>aferkut</i> - <i>iferkat</i> F. <i>taferkutt</i> ‘piglet’ B
fr̄n	<i>lfern</i> - <i>lefraren</i> Dim. <i>afriren</i> - <i>ifriren</i> ‘oven’ C
fr̄q	<i>fɾeq</i> / <i>fɾeq</i> / <i>ffruq</i> ‘to separate’ (lab) B Pass <i>nferqet</i> PP <i>mefruq</i> / <i>mefruqa</i> / <i>mefruqin</i> Caus. <i>ferɾeq</i> / <i>ferɾeq</i> / <i>tferraq</i> ‘to separate, to divide, to share’ (trans) B Pass <i>tferrqet</i> PP <i>mferreq</i> / <i>mferrqa</i> / <i>mferrqin</i> E.g. <i>tferrqet ṣṣadaqa g zzenqa</i>

'The alms were given out in the street.'

frš	<i>ferreš / ferreš / tferraš</i> 'to spread out (a cloth for sleeping)' (trans) B Pass <i>tferršet</i> PP <i>mferreš / mferraša / mferršin</i>
fršt	<i>lferšita - lferšitat</i> 'fork' A
frt	<i>afraṭ - ifeṭten</i> Dim. <i>afreyyēt - ifreyyeten</i> F. <i>tafarit - tifaritan ~ tifritan</i> 'pool' B
frtt	<i>ferṭet / ferṭet / tferṭat</i> 'to flounder' (intr) B
frtxyl	<i>fartelxayl</i> 'falcon' A
frž	<i>aferruž - iferraž</i> Dim. <i>afriṛež - ifriṛžen</i> 'cock, rooster' B
frz	<i>afrež - ifeṛžen</i> 'yolk' B
frž	<i>lfaražeyya - lfaražeyyat</i> 'kind of djellaba' A
fs	<i>afus - ifassen</i> Dim. <i>afweyyes</i> 'hand' <i>afweyyes</i> is also a small plot of land. E.g. <i>afus n uḡellu</i> 'handle of the plough' B
fsd	<i>fsed / ifsed</i> 'to rape' (trans) A Pass <i>tfesdet</i> PP <i>mefsud / mefsuda / mefsudin</i> E.g. <i>fesda yan iši</i> 'Somebody raped her'.
fsr	<i>fesser / fesser / tfessar</i> 'to explain (religiously)' (trans) B Pass <i>tfessret</i> PP <i>mfesser / mfessra / mfessrin</i> E.g. <i>lkelma y ahen ifessr at mezyan</i> 'He explained that word clearly.'
fsx	<i>fsex / fsex / tassex</i> 'to untie' (lab) B Pass <i>tfesxet</i> PP <i>mefsux / mefsuxa / mefsuxin</i>
fšd	<i>afšed</i> 'type of plant' B
fšqr	<i>afešqar - leššaqr</i> Dim. <i>afšiqar - ifšiqren</i> F. <i>tafešqart</i> Dim. <i>tafšiqert - tifšiqran</i> 'bale' B
fšt	<i>lfušta - lfuštat</i> 'party' A
ft	<i>afatt - ifatten</i> F. <i>tafattiwṭ - tiffattiwan</i> 'branch' B
ft	<i>lfuṭa - lefwet / lfuṭat</i> Dim. <i>lefwiṭa - lefwīṭat</i> 'towel' A
ft	<i>tafattiwṭ - tiffattiwan</i> 'bud out of which figs grow' B
ftḥ	<i>afettiḥ - ifettiḥen</i> Dim. <i>aftiteḥ - iftiṭḥen</i> F. <i>tafettiḥt - tiffettiḥan</i> Dim. <i>taftiteḥt - tiftiṭḥan</i> 'hole' B
ftḥ	<i>tafuttiḥt - tiffuttiḥan</i> 'ass' Augm. <i>afuttiḥ - ifuttiḥen</i> B
ftḥ	<i>fteḥ / fteḥ / tattah</i> 'to open' (lab) B Pass <i>tfetheṭ</i> PP <i>meftuḥ / meftuḥa / meftuḥin</i> E.g. <i>taggurt ahen meftuḥa</i> 'the door is open.' The PP also means 'light'.
ftl	<i>taftilt - tiftilan</i> 'fuse' B
ftl	<i>ftel / ftel / tattel</i> 'to spin, to roll (couscous)' (trans) B Pass <i>tfetlet</i> PP <i>meftul / meftula / meftulin</i> B
fč	<i>lfiča - lfičat</i> 'arrow' A
ftt	<i>aftuṭ ~ afettat - iftat</i> Dim. <i>aftiwet - iftiwṭan</i> Dim. <i>taftiwet - tiftiwṭan</i> 'small piece of bread' B
ftt	<i>fettet / fettet / tfettat</i> 'to crumble' (lab) B Pass <i>tfettet</i> PP <i>mfettet / mfettta / mfettin</i> E.g. <i>tfettet talqimt aḡ g tazuxt</i> 'This bread is crumbled in the milk.'

fṭn	<i>fṭen / ifṭen</i> ‘to become aware of’ (intr) A AP <i>faṭen / faṭna / faṭnin</i> PP <i>meṭṭun / meṭṭuna / meṭṭunin</i>
fṭr	<i>aṭṭir - ifṭiren</i> ‘back side, ass’ B
fṭr	<i>taṭṭirt - tiṭṭiran</i> ‘bread without yeast’ B
fṭṭ	<i>aṭṭit - ifṭat</i> ‘kind of teak’ B
fw	<i>faw d / faw d / ṭṭfaw d</i> ‘to be in the morning’ (intr) B The deictic clitic is obligatory. Caus. <i>ṣṣfaw d / ṣṣfaw d / ṣṣfaw d</i> ‘to make be in the morning’ (trans) B
fwḍ	<i>lefwaḍ - lefwadaṭ</i> Unity F. <i>tafewwatt - tifewwadaṅ</i> ‘viscera’ C
fwḥ	<i>fewweḥ / fewweḥ / fewwaḥ</i> ‘to smell’ (intr) B VN <i>lfiḥa</i> E.g. <i>lfiḥa mezyana</i> ‘A good smell.’
fwkf	<i>lfawakih</i> ‘fruit’ A
fwq	<i>lfewwaqa - lfewwaqat</i> ‘hiccough’ A
fwṛ	<i>lefwar - lefwarat</i> ‘steam’ A
fwṛ	<i>lefwira - lefwirat</i> ‘deep sea’ A
fx	<i>lfexx - lfixan ~ lefxux</i> Dim. <i>lefxeyyex - lefxeyyat</i> ‘trap for birds’ A
fxm	<i>ṭfexxem / itfexxem</i> ‘to boast’ (intr) A PP <i>meṭfexxem / meṭfexxma / meṭfexxmin</i>
fxṛ	<i>lfaxir - lfexxara</i> ‘potter’ A
fxṛ	<i>tafexxart - tifexxaran</i> ‘treasure’ B
fxt	<i>tafxett - tifextan</i> ‘calf of the leg’ B
fyṭ	<i>afayet</i> ‘moonless night’
fz	<i>afazz - ifazzen</i> ‘edible part of douma leave’ B
fzg	AP <i>fazeg / fazga / fazgin</i> Pass <i>ṭfezzget</i> PP <i>mfezzeg / mfezzga / mfezzgin</i> see bzg
fžr	<i>lefžer</i> ‘daybreak’ A
fzr	<i>tafuzart - tifuzaran</i> ‘big ant’ B
fzz	<i>afazzaz - ifazzazen</i> ‘type of plant’ B
g	
g	<i>gḡ / gḡ / deḡḡ</i> ‘to do’ (trans) B
gbl	<i>gabel / gabel / tgabel</i> ‘to manage’ (trans) B
gd	<i>aḡḡdi - iḡḡdan</i> F. <i>taḡḡdi</i> ‘jackal’ B
gd	<i>gaded / gaded / tgadad</i> ‘to flatten’ (trans) B Pass <i>tgaddet</i> PP <i>mgaded / mgadda / mgaddin</i>
gḡf	<i>aḡeḡuf - aḡeḡfan</i> ‘bush’ B
gf	<i>lgaffat</i> ‘glasses’ A
gg	<i>taḡiḡet - tiḡiḡtan ~ iḡiḡen</i> ‘tree’ B
ggwz	<i>leggʷaz</i> ‘food (eaten with bread)’ A
gl	<i>aḡellu ~ awellu - iḡelliwa</i> ‘plough’ B
gl	<i>tiḡelt</i> ‘woods’ B

gl	<i>aḡel ~ uḡel ~ aḡul / uḡel / ttaḡel</i> ‘to hang up food for animals’ (trans) B
gl	<i>ggull / ggall / tgalla</i> ‘to swear’ (intr) B See ḥlf for Pass and PP. E.g. <i>iggall as</i> ‘He swore to him.’ Caus <i>sgull ~ sgall / sgull ~ isgall / sgall</i> ‘to make swear’ (trans) B
glf	<i>aḡ^wlaf - iḡ^wlafen</i> ‘swarm of bees’ B
gll	<i>aḡlul - iḡ^wlal</i> F. <i>taḡlult - tiḡ^wlal ~ tiḡlulan</i> ‘sea horn’ B
glmm	<i>aḡulmam - iḡulmam</i> F. <i>taḡulmamt</i> ‘pool of rain water’ B
gls	AP <i>gales / galsa / galsin</i> ‘to sit’ cf. qm for other causative sqim Caus. <i>gelles / gelles / tgellass</i> ‘to make sit’ (trans) B PP <i>mgelles / mgellsa / mgellsin</i>
glzm	<i>aḡelzim - iḡelzam</i> Dim. <i>aḡlizem - iḡlizmen</i> F. <i>taḡelzimt - tiḡelzam</i> ‘pickaxe’ B
gm	<i>aḡ^wem / yuḡem / -</i> ‘to deserve more punishment’ (intr) B It is followed by an indirect object.
gm	<i>daḡem ~ daḡum ~ aḡem d ~ aḡum d / daḡem ~ yuḡem d / tdaḡam, ittaḡam d</i> ‘to draw water’ (trans) B Pass <i>tesqaṭ</i> PP <i>mdaḡem ~ mesqi / mdaḡma ~ mesqeyya / mdaḡmin ~ mesqeyyin</i> See sqy for Pass and other PP. The d optionally follows <i>itdaḡam</i> e.g. <i>daʔimen itdaḡam d</i> ‘He always draws water.’, while it is obligatory in <i>itdaḡam d</i> . The PP can be formed on the basis of the Berber-morphology verb of Berber origin, e.g. <i>aman ihen mdaḡmin</i> ‘That water has been drawn.’
gmb	<i>gamba</i> ‘shrimp’ A
gmrw	<i>aḡemraw ~ aḡumraw - iḡemrawen</i> ‘separation in a field’ B
gn	<i>gana</i> ‘interest’ A
gn	<i>taḡant - tiḡanan</i> ‘douma plant, bush’ B
gn	<i>genna ~ agenna</i> ‘sky’ B
gndl	<i>lgendil - legnadel</i> ‘big rock’ Augm. <i>agendallu</i> A
gns	<i>lgins - legnusa</i> ‘bad people’ A
gnṭ	<i>aḡnaṭ - iḡnaṭen</i> ‘edible soft white part of the root of the dwarf fan palm’ B
gnč	<i>lganču - lgančuwwaṭ ~ lgančus</i> ‘kind of rake’ A/S
gnw	<i>taḡnawt - tiḡnawan</i> Dim. <i>taḡniwekt</i> Augm. <i>aḡnaw</i> ‘pumpkin’ B
gnz	<i>legnaza - legnazat</i> ‘funeral’ A
gr	<i>aḡer - iḡran (ya-)</i> ‘farmland (medium size)’ B
gr	<i>lgarru - lgrarus ~ lgarrus</i> ‘cigarette’ A/S
gr	<i>lgirra - lgirrat</i> ‘war’ A
gr	<i>taḡra - tiḡriwan</i> ‘(hand-made) bowl’ B
gr	<i>uḡer / uger / ttaḡer</i> ‘to put bread in the oven’ (trans) B E.g. <i>tuḡer ayrum</i> ‘She put bread in the oven.’
gr	<i>taggurt - tiḡura ~ tiggura</i> ‘door’ E.g. <i>taggurt n edḏmay - tiggura n ḏḏmay</i> ‘temples’ B
grd	<i>gurd-u / gurd-a / gurd-us / gurd-at</i> ‘fat’ A/S

grf	<i>lgrifu - lgrifus</i> ‘(water) tap’ A/S
grn	<i>ag^wren - legrayen</i> F. <i>legrana</i> ‘frog’ C
grr	<i>legrura - legruraṭ</i> ‘bay’ A
grs	<i>tağursa - tiğarsiwan</i> ‘ploughshare’ B
grw	<i>ağraw - iğrawen</i> ‘group of people’ B
gryž	<i>lgreyyaž - lgreyyažaṭ</i> ‘iron fence’ A
grz	<i>agraz - igrazen</i> F. <i>tagrazt - tigrazan</i> Dim. <i>tagreyyezt</i> ‘kind of cherry’ B
grž	<i>gerrež / gerrež / tgerraž</i> ‘to cut hair’ (trans) B
gržm	<i>tağeržumt - tiğeržuman</i> ‘adam’s apple’ B
grđ	<i>lgerrađ - legraređ</i> Dim. <i>legriređ - legriřđat</i> ‘small saw’ A
grm	<i>legram - legruma</i> ‘gram’ A
grṭ	<i>ağerṭ ~ ayğerṭ - iğerṭawen</i> ‘neck’ E.g. <i>ağerṭ n lqmiğa</i> ‘collar’ B
grž	<i>lğaraž - lğaražaṭ</i> ‘garage’ A
gsln	<i>lğasulina - lğasulinaṭ</i> ‘fuel’ A
gsr	<i>agussar - igussaren</i> F. <i>tagussart - tiğussaran</i> Dim. <i>tag^wsisert - tig^wsisran</i> ‘descending hill’ B
gş	<i>lgeşş</i> ‘big floor’ A
gtr	<i>lgatri - legtara</i> ‘bed’ A
gṭṭ	<i>ağṭit - iğṭat</i> Dim. <i>ağṭeyyeṭ - iğṭeyyṭen</i> ‘bird’ B
gwd	<i>gewwed / gewwed / tgewwad</i> ‘to lead, to guide’ (trans) B Pass <i>ttgewwed</i> PP <i>mgewwed / mgewwda / mgewwdin</i> E.g. <i>argaz ahen ttgewwed</i> ‘That man has been guided.’
gwl	<i>aguwwal - iguwwila</i> Dim. <i>agwiwel - igwiwlen</i> ‘kind of fish’ B
gwz	<i>gewwez / gewwez / tgewwaz</i> ‘to make pass’ (trans) B
gyṛ	<i>tageyyart (n waṭil)</i> ‘vine’ B
gyṭ	<i>lğayyṭa - lğayyṭaṭ</i> ‘cookie’ A
gyz	<i>lğayza - legyuz</i> Dim. <i>legwiza - legwizaṭ</i> Augm. <i>ageyyuz</i> ‘stick, wood, pole’ A
gyz	<i>tağayzuṭ - tiğayzutan ~ tiğuyaz</i> Dim. <i>tağweyyezt - tiğwizan</i> ‘cow that has not given birth’ B
gz	<i>amuggaz - imuggiza</i> Dim. <i>amgigez - imgigzen</i> F. <i>tamuggazt - timuggiza</i> Dim. <i>tamgigezt - timgigzan</i> ‘stick to hit/pin animals’ B
gz	<i>lgezza ~ agezzuz ~ legzawez</i> ‘pubic hair’ C
gz	<i>gguz / ggez / teggez</i> ‘to descend’ (intr) B It is possible to have a transitive reading with a locative direct object. Caus <i>ssaguz / ssagez / ssagaz</i> ‘to let, make descend’ (trans) B
gzb	<i>lgezba - lgezbaṭ</i> Augm. <i>agezziḅ</i> ‘horn or trumpet’ A
gzt	<i>legzira - legziraṭ</i> ‘island’ A
gzt	<i>lgezzer - lgezzer</i> ‘butcher’ A

gʒl	<i>taḡẓelt - tiḡeẓlan</i> ‘kidney (of goats and sheep)’ B
gʒdr	<i>ageẓdir - iḡeẓdren</i> Dim. <i>agʒider - igʒidren</i> ‘big blue/green lizard’ B
ḡ	
ḡbn	<i>lḡben</i> ‘cheese’ A
ḡdd	<i>lḡdud</i> ‘ancestors’ A
ḡdrm	<i>lḡadarmi - lḡadarmiyā</i> ‘government police’ A
ḡḡt	<i>lḡuḡet</i> F. <i>taẓuẓet - tiẓuẓtan</i> ‘walnut’ A
ḡed	<i>lḡeda</i> Dim. <i>lḡeida</i> ‘carrot’ A
ḡh	<i>lḡiha - lḡihat</i> ‘side’ A
ḡhd	<i>lḡuhd</i> ‘strength’ A
ḡhd	<i>ḡuhdi / ḡuhdiyy-a / ḡuhdiyy-in</i> ‘strong’ A
ḡhḡh	<i>aḡeḡḡuh - iḡeḡḡuhen</i> ‘big fire’ B
ḡhl	<i>lḡahel - lḡahlin</i> F. <i>lḡahla</i> ‘infidel’ A
ḡhnm	<i>lḡahennam</i> ‘hell’ A
ḡlb	<i>aẓellab - lḡlaleb</i> F. <i>taẓellabt - tiẓelliba</i> Dim. <i>taẓlilebt - tiẓlilban</i> ‘djellaba’ B
ḡld	<i>lḡeld - lḡlud</i> Dim. <i>lḡleyyed</i> Augm. <i>aẓellud</i> ‘skin’ A
ḡm	<i>lḡim - leẓyam</i> Dim. <i>lḡweyyem - lḡwimat</i> ‘pocket’ A
ḡme	<i>lḡumēa</i> ‘friday’ A
ḡml	<i>lḡmel - lḡmula</i> Dim. <i>lḡmeyyel - lḡmilat</i> F. <i>lḡemla</i> Dim. <i>lḡmeyyla</i> ‘camel’ A
ḡn	<i>lḡen - lḡnawen</i> Dim. <i>lḡniwen</i> F. <i>lḡenneyya</i> Dim. <i>lḡniwna - lḡniwnat</i> ‘spirits’ A
ḡn	<i>lḡenna - lḡennat</i> ‘heaven’ A
ḡn	<i>ḡun / ḡun / tẓawan</i> ‘to be full (food)’ (intr) B
ḡnb	<i>lḡumb - leẓnab</i> ‘side’ A
ḡrd	<i>lḡarida - lḡaridat</i> ‘newspaper’ A
ḡrd	<i>lḡarda - lḡardat</i> ‘yard’ A
ḡrm	<i>lḡarima - lḡarimat</i> ~ <i>lḡaraʔim</i> ‘crime’ A
ḡrr	<i>ḡerḡer / ḡerḡer / tḡerḡar</i> ‘to slide’ (lab) B Pass <i>nḡerret</i> PP <i>mḡerḡer / mḡerḡra / mḡerḡrin</i>
ḡw	<i>ḡewwi / ḡewwa / tḡewway</i> ‘to put the weed-pipe back in the leather bag’ (trans) B PP <i>mḡewwi / mḡewwya / mḡewwin</i> E.g. <i>iḡewwa sseḡsi nnes</i> ‘He put his weed-pipe back in the bag.’
ḡw	<i>lḡaw ~ lẓaw</i> ‘weather’ A
ḡwb	<i>lḡawab</i> ‘answer’ A
ḡwf	<i>lḡawf</i> ‘west’ A
ḡwhr	<i>lḡawhar</i> Unity F. <i>lḡawhara</i> ‘jewel’ A

ğyş	lğayş ‘army’ A
γ	
γ	ayu (wa-) ‘butter mlik’ B
γb	yib / yab / ttiyb ‘to vanish’ (intr) B
γbr	ayebbir Dim. aybiber F. tayebbirt Dim. taybibert ‘small amount of powder’ B
γbr	lyebra ~ lyubra - leybari ‘dust’ A
γbr	yber / γber / γber ‘to disappear’ (intr) B Caus yebber / yebber / tyebbar ‘to make disappear’ (trans) B Pass tyebbreṭ PP myebber / myebbra / myebbrin
γby	lyabeyya ~ leywabi ‘seagull’ A
γd	ayed (wa- ~ ya-) ‘ash’ B
γd	leyda - leydawāt ‘lunch’ A
γdn	ayuddani ~ ayeddani Dim. aydiden - iydidnen ‘kind of black fig’ B
γdr	lyeddar - lyeddarin F. lyeddarā ‘betrayer’ A
γdr	yder / iyder ‘to betray’ (trans) A Pass nyedreṭ PP meyḍur / meyḍura / meyḍurin E.g. nettata nyedreṭ ma eat šku yeḍra, taēyyalt ahen ‘She has been betrayed, I do not know who betrayed her, that girl.’
γdb	lyadab - lyadabat ‘anger’ A
γdb	yeddeb / yeddeb / tyeddab ‘to make angry’ (trans) B AP yedban / yedbana / yedbanin PP myeddeb / myeddba / myeddbin
γl	ayil (ya-) - iyallen F. tayilt - tayiltan ~ tayillan ‘mountain/hill’ B
γl	leyla ‘expensiveness’ A
γl	lyilla - lyillat ‘harvest, profit’ A
γl	yli / yli / yelli ‘to set, to descend, to be swallowed’ (intr) B Caus. sseyli / sseyli / sseylay ‘to swallow’ (trans) B
γlb	yelleb / yelleb / tyellab ‘to let, make win’ (trans) B AP yellab / yellaba / yellabin PP myelleb / myellba / myellbin E.g. yellb ay xfes ‘Let me win from him.’
γlb	yleb / yleb / yelleb ‘to defeat, to beat, to overcome’ (trans) B Pass teyleb PP meylub / meyluba / meylubin
γld	yelled / yelled / tyellaḍ ‘to thicken’ (trans) B
γld	yled / iyled ‘to be wrong’ (intr) A AP yaled ~ yalet / yalḍa ~ yalṭa / yalḍin ~ yalṭin
γll	aylal - iy ^w lalen ‘sea snail’ B
γll	aylel (i-) ‘stalk’ B
γln	lyellini ‘calm sea’
γlq	yleq / yleq / γyluq ‘to cover, dark’ (trans) B Pass teyleq PP meyluq / meyluqa / meyluqin
γlq	leylaq - leylaqat ‘lid’ A

ylt	<i>lyalat</i> ~ <i>lyalaḡ</i> - <i>lyalaḡat</i> ~ <i>lyalataḡ</i> ‘fault’ A
ylt	<i>ylit</i> / <i>ylit-a</i> / <i>ylit-in</i> ‘fat’ Dim. <i>ylilet</i> / <i>ylilt-a</i> / <i>ylilt-in</i> ‘somewhat fat’ A
ylw	<i>yla</i> / <i>iyli</i> ‘to boil’ (trans) A This verb is used interchangeably with the Berber-morphology verb <i>sis</i> ‘to boil’. E.g. <i>ylaw aman</i> ‘The water is boiled.’
ymr	<i>taymert</i> ‘kind of rush’ B
ymr	<i>ayumri</i> - <i>iyumriyyen</i> ~ <i>iyumra</i> ‘corner’ The feminine is only used in <i>taymert n ufus</i> which means ‘elbow’ B
ymr	<i>ymur</i> / <i>ymur</i> / <i>tteymur</i> ‘to grow (generic)’ (intr) B Caus. <i>sseymur</i> / <i>sseymur</i> / <i>sseymur</i> ‘to make/let grow’ (trans) B
yms	<i>yems</i> / <i>yems</i> / <i>qqems</i> ~ <i>yemmes</i> ~ <i>yems</i> ‘to cover’ (trans) B (Used by older generations. Young people use <i>yetti</i>) B
yn	<i>leyna</i> - <i>leynawi</i> ‘song’ A
yn	<i>yenni</i> / <i>yenna</i> / <i>tyennay</i> ‘to sing’ (trans) B Pass <i>tyenna</i> PP <i>myenni</i> / <i>myennya</i> / <i>myennin</i> E.g. <i>ddyasek ihen tyennaw</i> ‘Thos songs have been sung.’
ynn	<i>ayennan</i> - <i>iyunnan</i> ‘stalk’ B
yns	<i>aseynes</i> - <i>iseynas</i> ‘big needle’ B
yrbl	Pass <i>tyerbleḡ</i> PP <i>myerbel</i> / <i>myerbla</i> / <i>myerblin</i> ‘to sieve’ cf. sf for ‘to sieve’ B
yrđ	<i>lyaraḡ</i> - <i>lyaraḡat</i> ‘intention’ A
yrđm	<i>tayerdemt</i> - <i>tiyerdman</i> ~ <i>tiyerdmaḡan</i> ‘scorpion’ B
yrnz	<i>tayrimezt</i> - <i>tiyermizan</i> ‘baby head louse’ B
yrng	<i>leyrang</i> ‘type of fish (safillo)’ A
yrs	<i>yres</i> / <i>yres</i> / <i>qqers</i> ‘to slaughter’ (trans) B
yr	<i>ya</i> ~ <i>yar</i> ‘only’ B
yrȳr	<i>tayeryart</i> - <i>tiyeryaran</i> Dim. <i>tayriyert</i> - <i>tiyriyran</i> ‘fire place’ B
yrb	<i>lyerb</i> ‘south’ A
yrb	<i>lyerbi</i> Dim. <i>leyriḡi</i> ‘wind from the west’ A
yrb	<i>lmeyreb</i> ‘evening prayer’ A
yrđy	<i>ayerḡday</i> - <i>iyerḡdayen</i> F. <i>tayerḡdayt</i> - <i>tiyerḡdayan</i> ‘mouse’ B
yrf	<i>ayerraf</i> - <i>iyerrifa</i> Dim. <i>ayriref</i> - <i>iyriḡfen</i> ‘loam plate’ B
yrf	<i>lyerraf</i> - <i>leyraref</i> Dim. <i>leyriref</i> ‘cup’ A
yrm	<i>ayrum</i> ‘bread from the oven’ B
yrq	<i>leyraq</i> - <i>leyruqa</i> ‘bottom’ A
yrq	<i>yreq</i> / <i>iyreq</i> ‘to drown’ (intr) A AP <i>yareq</i> / <i>yarqa</i> / <i>yarqin</i> Caus. <i>yerrreq</i> / <i>yerrreq</i> / <i>tyerrraq</i> ‘to drown, deepen’ (trans) B PP <i>myerrreq</i> / <i>myerrqa</i> / <i>myerrqin</i>
yrş	<i>lyarşet</i> - <i>leyreş</i> ~ <i>leyruş</i> Dim. <i>leyrişa</i> - <i>leyrişat</i> ‘vegetable garden’ A
yrş	<i>lyerş</i> ‘plant’ A
yrş	<i>tay^wraşt</i> - <i>tiy^wraşan</i> ‘beehive’ B
ysy	<i>taysayt</i> - <i>tiysayan</i> ‘gourd’ B

ysl	<i>meysul / meysula / meysulin</i> cf. srd
yšmr̥	<i>tayuşmart - tiyuşmaran</i> ‘jaw’ B
yšş	<i>ayeşş - iyeşşan</i> Dim. <i>ayşeyyeş - iyşeyyşen</i> ‘bone’ B
yš	<i>lyāši</i> ‘outsiders’ A
yš	<i>lyušš</i> ‘deceit’ A
yš	<i>yešš ~ yušš / iyušš</i> ‘to deceive’ (intr) A
yštl	<i>lyeštul ~ leyšatel</i> ‘partridge male’ A
yšš	<i>lyeššaš - lyeššaša ~ lyeššašin</i> ‘traitor’ A
yt̥	<i>leyta - leytawat</i> ‘blanket’ A
yt̥	<i>tayatt̥ - tiyaten</i> Dim. <i>taytiwet̥ - tiytiwtan</i> ‘goat’ B
	There exist many types of goats, some of the names used for them based on appearance are: <i>hezzama</i> = half white, half black <i>qerqaşuniyya</i> = different colors, <i>qelduniyya</i> = two nipples in the neck, <i>sebbuħa</i> = white forehead <i>zerrugiyya</i> = greyish, <i>beyyuħa</i> = white <i>hemra</i> = red, <i>zegzaweyya / zegzuga</i> = greenish, <i>merruša</i> = hair to the side, long hair. Furthermore there are different age types based on the number of teeth the goats have: after one year <i>ttniya</i> = gets two new teeth after two years, <i>r̥rbaeeyya</i> = gets four new teeth after three years, <i>lexmasiyya</i> = gets five new teeth after four years, <i>zsdasiyya / žžamea</i> = gets new teeth <i>zzeenta</i> = goat that can not bare children. <i>tayatt mebtula</i> = the udder does not give milk
yt̥	<i>t̥t̥eytiyya - t̥t̥yati</i> ‘lid’ A
yt̥	<i>yetti / yetti / tyettay</i> ‘to cover’ (trans) B Pass <i>tyettat̥</i> PP <i>myetti / myettya / myettin</i> This verb takes the IO pronoun. E.g. <i>iyetty as</i> ‘He has covered him/her’ A remembered verb with the same meaning is yms ‘to cover’, cf. yms .
yt̥ş	<i>yetteş / yetteş / tyettaş</i> ‘to drown, deepen’ (trans) B PP <i>myetteş / myettša / myettšin</i>
ywr̥	<i>ayewwar - iyewwira</i> ‘hole’ B
ywt	<i>yewwet̥ / yewwet̥ / tyewwat̥</i> ‘to shout’ (intr) B
yyl	<i>ayyul - iy̥yal</i> Dim. <i>ayweyyel - iy̥eyylen</i> F. <i>tayyult</i> Dim. <i>tay̥eyyelt - tay̥iltan</i> ‘donkey’ B
yylf	<i>ayayluf - iyaylufen</i> ‘anger’ B
yylf	<i>yaylef / yaylef / tyaylef</i> ‘to become angry’ (intr) B Pass <i>tyaylfeť</i> PP <i>myaylef / myaylfa / myaylfin</i>
yys	<i>lyays - leyyusat̥</i> ‘mud’ A
yyt̥	<i>lyayta - lyaytat̥ ~ leyyut̥</i> Augm. <i>ayeyyut̥</i> ‘flute’ A

yz	<i>ayez</i> ‘fruit inside the dwarf fan palm’ B
yz	<i>yezzi / yezza / tyezzay</i> ‘to add punishment’ (intr) B E.g. <i>yezzu gas</i> ‘Add punishment to him.’
yzds	<i>tayezdist - tiyezdisan</i> ‘rib’ Augm. <i>ayezdis - iyezdas</i> B
yzl	<i>leyzala - leyzalat</i> ‘gazelle, nice lady’ A
yzl	<i>tay^wzalt - tiy^wzalan</i> Dim. <i>tay^wzeyyelt - tiy^wzilan</i> ‘bogue fish’ B
yzz	<i>yezzeḡ / yeḡzeḡ / tyeḡzaḡ</i> ‘to chew’ (trans) B Pass <i>tyeḡzeḡet</i> PP <i>myeḡzeḡ / myeḡza</i> / <i>myeḡzin</i>
yḡd	<i>ayḡḡd - iyeḡden</i> Dim. <i>ayḡeyyeḡ - iyeḡeyyeḡ</i> ‘he-kid’ B
yḡdmyn	<i>ayḡḡdamyan - iyeḡdenimyanen</i> ‘billy goat that does not have a penis’ B
h	
hbs	<i>lḡebs - leḡbasat</i> ‘prison’ A
hd	<i>lhedda</i> ‘threat’ A
hd	<i>lihuḡdi - lihuḡd</i> F. <i>lihuḡdiyya</i> ‘jew’ A
hdd	<i>heddeḡ / heddeḡ / theddad</i> ‘to threaten’ (trans) B Pass <i>theddeḡet</i> PP <i>mheddeḡ / mheddeḡa / mheddeḡin</i> VN <i>tthedid</i> E.g. <i>aḡgam ihedd fxi</i> ‘Yesterday he threatened me.’
hdm	<i>heddem / heddem / theddam</i> ‘to demolish’ (trans) B Pass <i>theddem</i> PP <i>mheddem / mheddema / mheddemin</i>
hḡr	<i>lhedra - lhedrat</i> ‘speech’ A
hḡl	<i>aheḡal - lehḡaḡel</i> F. <i>taheḡalt - tiheḡila</i> ‘widow’ C
hḡm	<i>heḡem / heḡem / theḡam</i> ‘to let, make attack’ (trans) B PP <i>mheḡem / mheḡma / mheḡmin</i>
hl	<i>hala</i> / - ‘to come’ A This has only the Imperative form.
hlk	<i>hleḡ / hleḡ / helleḡ</i> ‘to sick, to be ill’ (trans) B PP <i>mehluḡ ~ meḡdum / mehluḡa ~ meḡduma / mehluḡin ~ meḡdumin</i> B
hll	<i>lhilal</i> ‘new moon’ A
hm	<i>lhemm - lehmum</i> ‘anxiety’ A
hm	<i>hemmem / hemmem / themmam</i> ‘to worry’ (trans) B AP <i>mehmum / mehmuma / mehmumin</i>
hmk	<i>hemmeḡ / hemmeḡ / themmaḡ</i> ‘to hit’ (trans) B Pass <i>themmeḡet</i> PP <i>mhemmeḡ / mhemmeḡa / mhemmeḡin</i> VN <i>tthemik - tthemikat</i>
hrḡr	<i>lherḡar - lehrḡar</i> ‘type of tree’ A
hrḡb	<i>herḡeb / herḡeb / therḡab</i> ‘to make flee’ (trans) B cf. rwl ‘to flee’
hrw	<i>buhrawa - buhrawat</i> ‘black bird’ (It dives into the water) A
hrw	<i>lehrawa - lehrawat</i> Augm. <i>ahraw</i> ‘club, stick’ A
hrz	<i>lmehraz - lemharez</i> ‘mortar, insect that damages crops.’ A

hw	<i>lehwa</i> ‘rain’ A
hwd	<i>lemhawda</i> ‘conversation’ A
hwd	<i>tthawed</i> / <i>itthawed</i> ‘to speak or talk’ (intr) A
hwl	<i>hewwel</i> / <i>hewwel</i> / <i>thewwal</i> ‘to make loud noise, disturb’ (trans) B Pass <i>thewwet</i> PP <i>mhewwel</i> / <i>mhewwla</i> / <i>mhewwlin</i> VN <i>lhawl</i> ‘loud noise, disturbance’
hydr	<i>tahaydurt</i> - <i>tihayduran</i> ‘sheepskin’ B
hyš	<i>lhayša n lebhar</i> - <i>lhayšaṭ n lebhar</i> ‘whale’ A
hz	<i>hezz</i> / <i>hezz</i> / <i>thezza</i> ‘to shake, move’ (lab) B Pass <i>thezzet</i> ~ <i>nhezzet</i> PP <i>mehzuz</i> / <i>mehzuza</i> / <i>mehzuzin</i>
hžm	<i>lhuzum</i> ‘attack’ A
hžm	<i>hžem</i> / <i>ihžem</i> ‘to attack’ (intr) A E.g. <i>hžem x tmeṭṭut nnes</i> ‘He attacked his wife.’
hžr	<i>hažer</i> / <i>hažer</i> / <i>thažar</i> ‘to migrate’ (intr) B
ḥ	
ḥ	<i>aḥu</i> / <i>aḥu</i> / - ‘to deserve more punishment’ (intr) B It is followed by the preposition <i>g</i> ‘in’.
ḥb	<i>lḥebb</i> ‘barley’ A
ḥb	<i>taḥebbet</i> - <i>tiḥebba</i> Dim. <i>taḥbibet</i> - <i>tiḥbibtan</i> ‘granule, pimple’ B
ḥb	<i>ḥibb</i> / <i>iḥibb</i> ‘to love’ (trans) A
ḥbb	<i>ḥbibi</i> - <i>ḥbibiwat</i> ‘maternal uncle’ A
ḥbl	<i>buhbel</i> ‘life’ A
ḥblq	<i>lḥblaqa</i> ‘kind of white fig’ A
ḥbšbb	<i>ḥebbešbab</i> ‘freckles’ A
ḥbsw	<i>ḥebbessaw</i> - <i>ḥebbessawat</i> ‘little pimple’ A
ḥd	<i>lḥedd</i> - <i>lḥudud</i> ‘border’ A
ḥd	<i>lḥedd</i> ‘sunday’ A
ḥd	<i>ḥadi</i> / <i>ḥada</i> / <i>ḥada</i> ‘to touch’ (trans) B PP <i>mḥadi</i> / <i>mḥadya</i> / <i>mḥadin</i>
ḥd	<i>ḥdi</i> / <i>ḥdi</i> / <i>ḥeddi</i> ~ <i>ḥeddi</i> ‘to keep an eye on’ (trans) B
ḥdd	<i>leḥdada</i> - <i>lḥudud</i> ~ <i>leḥdadaṭ</i> ‘boundary’ A
ḥdd	<i>leḥdid</i> Dim. <i>leḥdeyyed</i> - <i>leḥdidat</i> F. <i>leḥdida</i> - <i>leḥdayed</i> ‘iron to cut woods with.’ A
ḥdd	<i>lḥeddaḍ</i> - <i>lḥeddada</i> F. <i>taḥeddatt</i> ~ <i>taḥeddatt</i> ‘blacksmith’ (The feminine also refers to the job.) E.g. <i>lemellem n ḥeddatt</i> ‘the blacksmith’ (Lit. ‘the knower of blacksmithing’) A
ḥdd	<i>ḥedded</i> / <i>ḥedded</i> / <i>ḥeddad</i> ‘to press’ (trans) B Pass <i>nḥeddet</i> ~ <i>ḥeddet</i> PP <i>mḥedded</i> / <i>mḥeddada</i> / <i>mḥeddadin</i>
ḥdr	<i>amḥadri</i> - <i>lemḥadra</i> ‘pupil’ C

ħdr	<i>ħder / ħder / ħedder</i> ‘to attend’ (trans) B E.g. <i>iħedr tameyra yahren</i> ‘He attended that wedding.’
ħğ	<i>ħğağ - ħuğağ</i> F. <i>ħğağ</i> ‘haji’ A
ħğ	<i>ħhiğ</i> ‘pilgrimage to mekka’ A
ħğr	<i>ameħğur - lemħažer</i> Dim. <i>amħižer</i> F. <i>tameħğurt</i> Dim. <i>tamħižert</i> ‘orphan’ C
ħf	<i>ħfa / iħfa</i> ‘to be blunt’ (intr) A Caus. <i>ħeffi / ħeffa / ħeffi</i> ‘to make blunt’ (trans) B
ħfr	<i>ħhafer - leħwafer</i> Augm. <i>aħawfer ~ aħefrun</i> ‘footprint’ A
ħfr	<i>aħfar - iħfaren</i> Dim. <i>aħfeyyer - iħfıren</i> F. <i>tahfart - tiħfaran</i> Dim. <i>tahfeyyert - tiħfıran</i> ‘hole’ <i>tahfart n taytwan - tiħfaran n taytwan</i> ‘armpit’ lit. ‘hole of the shoulders’ B
ħfr	<i>ħfer / ħfer / ħeffar ~ ħħfur</i> ‘to dig’ (trans) B Pass <i>tteħfer</i> B
ħft	<i>ħfet / iħfet</i> ‘to memorize’ A AP <i>ħafet / ħafta / ħaftin</i> PP <i>mehfut / mehfuṭa / mehfuṭin</i>
ħk	<i>ħikka - ħikkat</i> ‘scratching disease’ A
ħk	<i>ħukk - leħkak</i> ‘ankle, wrist’ A
ħk	<i>ħekk / ħekk / thekka</i> ‘to scratch’ (trans) B
ħk	<i>ħka / iħki</i> ‘to tell’ (trans) A Pass <i>teħkat</i> PP <i>mehki / mehkiyya / mehkiyyin</i>
ħkm	<i>lmehkama - lmaħakim</i> ‘court’ A
ħkm	<i>ħkem / iħkem</i> ‘to adjudicate, to govern’ (intr) A Pass <i>thekmet</i> PP <i>mehkum / mehkuma / mehkumin</i>
ħkşl	<i>ħekkayşla - ħekkayşlat</i> ‘grey lizard without spots’ A
ħl	<i>ħlu / ħluw-a / ħluw-in</i> ‘sweet’ A
ħlbt	<i>aħelbut - iħelbat</i> ‘spout’
ħlf	Pass <i>thellfet</i> PP <i>mħellef / mħellfa / mħellfin</i> see g1
ħlhł	<i>aħelħul</i> ‘couscous with milk’ B
ħlhł	<i>aħelħal</i> ‘kind of plant’ B
ħll	<i>aħlallu - iħlulla</i> F. <i>tahłallut - tiħlulla</i> ‘bees gauze’ B
ħlm	<i>ħhellama</i> ‘type of fish’
ħlq	<i>ħelleq / helleq / thellaq</i> ‘to fish’ (trans) B Pass <i>thellqet</i> PP <i>mħelleq / mħellqa / mħellqin</i> VN <i>teħliqa</i>
ħlw	<i>ħhelwa - ħhelwat / leħlawi</i> Dim. <i>leħliwa - leħliwat</i> ‘candy’ A
ħm	<i>aħeğam - iħeğamen</i> ‘person who circumcises’ B
ħm	<i>ħmu / ħma / ħemmu</i> ‘to heat’ (intr) B Caus <i>sseħmu / sseħma / sseħmaw</i> ‘to make hot’ (trans) B
ħml	<i>aħemmal - iħemmila</i> F. <i>tahemmalt - tiħemmila</i> ‘high place in traditional houses’ B
ħml	<i>ħhemla - ħhemlat</i> ‘flood’ A

ħml	<i>ħmel / deħmel</i> ‘to be pregnant, to flood’ (intr) A AP <i>ħamel / ħamla / ħamlin</i>
ħmm	<i>aħmam - iħmamen</i> Dim. <i>aħmeyyem - iħmiyyem</i> F. <i>taħmamt - tiħmaman</i> Dim. <i>taħmeyyemt - tiħmiman</i> ‘pigeon’ B
ħmq	<i>ħemmeq / ħemmeq / tħemmaq</i> ‘to make mad, crazy’ (trans) B PP <i>mħemmeq / mħemmqa / mħemmqin</i>
ħmq	<i>ħmeq / iħmeq</i> ‘to become crazy’ (intr) A AP <i>ħmaq / ħamqa / ħumeq</i>
ħmr	<i>aħemraw - iħemrawen</i> Dim. <i>aħmimer - iħmimren</i> F. <i>taħemrawt - tiħemrawan</i> Dim. <i>taħmimert - tiħmimran</i> ‘red person/thing’ B
ħmr	<i>lħumra - lħumrat</i> ‘school of fish during the day’ A
ħmr	<i>ħemmer / ħemmer / tħemmar</i> ‘to ask and answer in a game’ (intr) B
ħmr	<i>ħmar / iħmar</i> ‘to tan’ (intr) A
ħmr	<i>ħmer / ħemr-a / ħumer</i> ‘red’ Dim. <i>ħmimer / ħmimr-a / ħmimr-in</i> ‘somewhat red’ A
ħmr	<i>tteħmira</i> ‘red pepper’ A
ħmš	<i>lħummiš</i> Unity F. <i>taħummišt - tiħummišan</i> ‘chick pea’ C
ħn	<i>lħinna</i> ‘henna’ A
ħn	<i>ħni / ħni / ħenni</i> ‘to bend over’ (intr) B
ħnğr	<i>mħenğer</i> ‘type of disease’ A
ħnk	<i>lħinka - lħinkat</i> ‘chin’ A
ħnn	<i>ħenni / ħenna / tħennay</i> ‘to rub in henna’ (trans) B PP <i>mħenni / mħennya / mħennin</i>
ħnn	<i>ħnin / ħnin-a / ħnin-in</i> ‘benevolent, mild’ A
ħnš	<i>lħinš - leħnuša</i> Dim. <i>leħneyyeš</i> Dim.F. <i>leħniša - leħnišat</i> ‘kind of snake’ A
ħnšš	<i>tħenšiš</i> ‘fuss’ A
ħnt	<i>lħanut - leħwanet</i> F. <i>leħwintā - leħwintat</i> ‘shop, store’ A
ħqq	<i>lħaqiqa</i> ‘truth’ A
ħqq	<i>lħeqq - lħuquq</i> ‘right’ A
ħqq	<i>ħeqqeq / ħeqqeq / tħeqqeq</i> ‘to check’ (trans) B Pass <i>tħeqqet</i> PP <i>mħeqqeq / mħeqqa / mħeqqin</i>
ħqq	<i>ħqiqi / ħqiqiyy-a / ħqiqiyy-in</i> ‘real’ A
ħrb	<i>taħrabbayt</i> ‘crushed barley with water’ (for children.) B
ħrr	<i>aħrir - iħriren</i> ‘trouble’ B
ħrr	<i>leħrir</i> ‘silk’ C
ħrr	<i>taħrirt - tiħriran</i> Dim.F. <i>taħreyyert - tiħriran</i> Augm. <i>aħrir</i> ‘harira’ (The augmentative has thick meal and winter pumpkin. The diminutives contain very thin meal.) B
ħrr	<i>ħruru / ħruru / tteħruru(t)</i> ‘to crawl’ (intr) B
ħry	<i>lħurreyya - lħurreyyat</i> ‘freedom’ A

ħr	<i>lħara</i> ‘land, place’ A
ħrb	<i>lħarb</i> - <i>lħurub</i> ‘war’ A
ħrb	<i>ħareb</i> / <i>ħareb</i> / <i>tharab</i> ‘to wage war’ (intr) B PP <i>mħareb</i> / <i>mħarba</i> / <i>mħarbin</i>
ħrb	<i>ħerreb</i> / <i>ħerreb</i> / <i>therrab</i> ‘to make war, fight against’ (trans) B Pass <i>therrbet</i> PP <i>mħerreb</i> / <i>mħerrba</i> / <i>mħerrbin</i>
ħrb	<i>thareb</i> / <i>ithareb</i> ‘to wage war’ (trans) A
ħrbt	<i>ħerbet</i> / <i>ħerbet</i> / <i>therbat</i> ‘to slave away’ (lab) B Pass <i>therbte</i> PP <i>mħerbet</i> / <i>mħerbta</i> / <i>mħerbtin</i>
ħrk	<i>ħerrek</i> / <i>ħerrek</i> / <i>therrak</i> ‘to stir or mix’ (trans) B Pass <i>therrket</i> PP <i>mħerrek</i> / <i>mħerrka</i> / <i>mħerrkin</i>
ħrk	<i>therrek</i> / <i>itherrek</i> ‘to move’ (intr) A
ħrm	<i>ħrem</i> / <i>ħrem</i> / <i>therram</i> ‘to forbid’ (trans) B PP <i>mħrum</i> / <i>mħruma</i> / <i>mħrumin</i> š a t <i>iħrem zgak</i> ‘He will forbid her from you.’
ħrq	<i>leħraq</i> ‘pain’ A
ħrq	<i>leħriq</i> ‘burn mark’ A
ħrq	<i>ħerq</i> / <i>ħerq</i> / <i>ħerq</i> ‘to feel pain’ (intr) B VN <i>teħriq</i> Caus. <i>ħerreq</i> / <i>ħerreq</i> / <i>therraq</i> ‘to hurt’ (trans) B
ħrr	<i>ħerrer</i> / <i>ħerrer</i> / <i>therrar</i> ‘to liberate’ (trans) B Pass <i>therrret</i> PP <i>mħerrer</i> / <i>mħerra</i> / <i>mħerrin</i> E.g. <i>iħerr ahen</i> ‘He liberated them.’
ħrš	<i>lħerrašiyya</i> - <i>lħerrašiyyat</i> ‘grouper (fish)’ A
ħrš	<i>taherrušt</i> - <i>tiherrušan</i> Dim. <i>tahrirešt</i> - <i>tihriřšan</i> ‘chestnut tree’ B
ħrš	<i>ħerreš</i> / <i>ħerreš</i> / <i>therrāš</i> ‘to roughen’ (trans) B
ħrš	<i>ħreš</i> / <i>ħerš-a</i> / <i>ħureš</i> ‘rough’ A
ħrt	<i>lħerrat</i> - <i>leħrirat</i> ‘kind of worm’ (It eats fruit and vegetables.) A
ħrt	Pass. <i>tteħret</i> PP <i>mħrut</i> / <i>mħruta</i> / <i>mħrutin</i> ‘to plough’ cf. krz ‘to plough’
ħs	<i>ħas</i> / <i>iħis</i> ‘to feel’ (intr) A AP <i>ħayes</i> / <i>ħaysa</i> / <i>ħaysin</i>
ħsb	<i>leħsab</i> - <i>leħsabat</i> ‘bill, calculation’ A
ħsb	<i>ħseb</i> / <i>ħseb</i> / <i>ħesseb</i> ~ <i>ħħsub</i> ‘to count’ (trans) B Pass <i>thessbet</i> PP <i>mħsub</i> / <i>mħsuba</i> / <i>mħsubin</i>
ħsd	<i>leħsed</i> ‘jealousy’ A
ħsd	<i>ħsed</i> / <i>ħsed</i> / <i>ħessed</i> ‘to envy’ (trans) B AP <i>ħased</i> / <i>ħasda</i> / <i>ħasdin</i> E.g. <i>uha ħased uha</i> ‘The one envied the other.’
ħshs	<i>ħešes</i> / <i>ħešes</i> / <i>theshas</i> ‘to whisper’ (intr) B VN <i>theshis</i>
ħsn	<i>ħessen</i> / <i>ħessen</i> / <i>thessan</i> ‘to cut hair’ (trans) B
ħss	<i>lħessas</i> - <i>leħsawes</i> Dim. <i>leħsiwes</i> - <i>leħsiwsat</i> ‘the receiving partner in a homosexual relationship’ A
ħss	<i>tahessast</i> ‘homosexuality’ B
ħsd	<i>leħsađ</i> ‘harvest’ A

ħsd	Pass <i>tteħsed</i> PP <i>meħsud</i> / <i>meħsuda</i> / <i>meħsudin</i> ‘be ploughed’ B cf. mgr ‘to plough’
ħsl	<i>ħsel</i> / <i>ħšel</i> / <i>ħeşsel</i> ‘to fall’ (intr.) E.g. <i>ša ħsel lehwa</i> ‘Rain is going to fall.’ Caus. <i>sehşel</i> / <i>sehşel</i> / <i>ssehşal</i> ~ <i>itsehşal</i> ‘to drop’ (trans) B
ħşl	<i>ħşel</i> / <i>iħşel</i> ‘to be trapped’ (intr) A <i>ħeşşel</i> / <i>ħeşşel</i> / <i>theşşal</i> ‘to catch’ (trans) B Pass <i>theşşlet</i> PP <i>mħeşşel</i> / <i>mħeşşla</i> / <i>mħeşşlin</i>
ħsr	<i>ħeşşer</i> / <i>ħeşşer</i> / <i>theşşar</i> ‘to have pity’ (trans) B Pass <i>theşşret</i> PP <i>mħeşşer</i> / <i>mħeşşra</i> / <i>mħeşşrin</i>
ħşr	<i>ħşer</i> / <i>iħşer</i> ‘to prevent’ (trans) A PP <i>meħşur</i> / <i>meħşura</i> / <i>meħşurin</i>
ħşm	<i>leħşam</i> - <i>iħşişmen</i> ‘children’ C
ħşm	<i>leħşuma</i> - <i>leħşumat</i> ‘shame’ A
ħşm	<i>ħšem</i> / <i>iħšem</i> ‘to be ashamed’ (intr) A E.g. <i>uha ħšem zeg uha</i> ‘This one is ashamed of this one.’ <i>nekki ħšemt zgaḳ</i> ‘I am ashamed of you.’ Caus. <i>ħeşšem</i> / <i>ħeşšem</i> / <i>theşşam</i> ‘to embarrass’ (trans) B Pass <i>theşşmet</i> PP <i>mħeşšem</i> / <i>mħeşşma</i> / <i>mħeşşmin</i> E.g. <i>keḡi ša yen theşşmet</i> ‘You are going to embarrass us.’
ħşr	<i>lħaşara</i> ‘insect’ A
ħtš	<i>aħettaš</i> - <i>iħettiša</i> Dim. <i>aħtiteš</i> - <i>iħtitšen</i> F. <i>taħettašt</i> - <i>tiħettiša</i> Dim. <i>taħtitešt</i> - <i>tiħtitšan</i> ‘slash’ B
ħtš	<i>ħteš</i> / <i>ħteš</i> / <i>ħetteš</i> ‘to mow, to collect bush’ (trans) B Pass <i>tteħteš</i> PP <i>meħtuš</i> / <i>meħtuša</i> / <i>meħtušin</i> VN <i>leħteš</i>
ħčn	<i>aħečun</i> - <i>iħučan</i> Dim. <i>aħčičen</i> - <i>iħčičnen</i> F. <i>taħečunt</i> - <i>tiħečunan</i> Dim. <i>taħčičent</i> - <i>tiħčičnan</i> ‘vagina’ B
ħtž	<i>ħtaž</i> / <i>ħtaž</i> / <i>tteħtiž</i> ‘to want, to love’ (trans) B
ħtž	<i>ħtaž</i> / <i>iħtaž</i> ‘to need, to want’ (trans) B PP <i>meħtaž</i> / <i>meħtaža</i> / <i>meħtažin</i>
ħw	<i>ħewwi</i> / <i>ħewwa</i> / <i>thewway</i> ‘to have sex (people)’ (trans) B Pass <i>thewwat</i> PP <i>mħewwi</i> / <i>mħewwya</i> / <i>mħewwin</i>
ħwl	<i>ħewwel</i> / <i>ħewwel</i> / <i>thewwal</i> ‘to bend’ (trans) B Pass <i>thewwlet</i> PP <i>mħewwel</i> / <i>mħewwla</i> / <i>mħewwlin</i> B
ħwl	<i>ħawel</i> / <i>ħawel</i> / <i>thawal</i> ‘to try’ (trans) B
ħwl	<i>ħwel</i> / <i>ħewl-a</i> / <i>ħiwel</i> ‘crooked’ A
ħwl	<i>lmuħawala</i> - <i>lmuħawalat</i> ‘attempt’ A
ħwṭ	<i>lħawṭ</i> - <i>leħwaṭ</i> Dim. <i>aħweyyet</i> - <i>iħweyyten</i> ‘earth within vegetable garden’ C
ħwyž	<i>leħwayež</i> Dim. <i>leħwiža</i> - <i>leħwižaṭ</i> ‘clothes’ A
ħwym	<i>ħewwayma</i> - <i>ħewwaymat</i> ‘dragonfly’ A
ħy	<i>leħya</i> ‘shame’ A
ħy	<i>lmaħeyya</i> ‘fermented drink made from dried figs’ A
ħy	AP <i>ħayy</i> / <i>ħayya</i> / <i>ħayyin</i> ‘be alive’ cf. dr ‘to live’
ħyk	<i>aħayek</i> - <i>iħuyak</i> ‘wool cloth’ B

ḥyt	<i>lḥayat</i> ‘life’ A
ḥyt	<i>lḥayṭ</i> - <i>leḥyuṭ</i> Dim. <i>leḥweyyeṭ</i> Augm. <i>aheyyuṭ</i> ‘wall’ A
ḥyw	<i>lḥayawan</i> ‘animal’ A
ḥzm	<i>ahezzum</i> - <i>ihezmen</i> F. <i>tahezzumt</i> Dim. <i>taḥzizemt</i> - <i>tiḥzizman</i> ‘a bunch of wood’ B
ḥzm	<i>leḥzam</i> - <i>leḥzuma</i> Dim. <i>leḥzeyyem</i> ‘wool belt’ A
ḥzn	<i>hezzen</i> / <i>hezzen</i> / <i>thezzan</i> ‘to grief’ (trans) B AP <i>heznan</i> / <i>heznanana</i> / <i>heznanin</i> VN <i>lḥuzen</i>
ḥzq	<i>leḥzeq</i> - <i>leḥzuq</i> ‘fart’ A
ḥzq	<i>hezzeq</i> / <i>hezzeq</i> / <i>thezzaq</i> ‘to fart’ (intr) B
ḥzqxms	<i>hezzaqlexmamsa</i> ‘kind of plant’ A
ḥž	<i>lhaža</i> - <i>leḥwayež</i> ‘thing’ E.g. <i>ši haža</i> ‘few, a little bit’ A
ḥžb	<i>lhažeb</i> - <i>leḥwažeb</i> ~ <i>lhižban</i> ‘eyebrow’ A
ḥzt	<i>aheẓzuṭ</i> - <i>iheẓzuten</i> Dim. <i>aḥzizeṭ</i> - <i>iheẓiẓten</i> F. <i>taheẓzutṭ</i> - <i>tiḥeẓzutan</i> Dim. <i>taḥziẓetṭ</i> - <i>tiḥziẓtan</i> ‘naked person’ B
ḥzt	<i>heẓzuti</i> / <i>heẓzutiya</i> - <i>heẓzutiyyin</i> ‘naked’ A <i>iqtel kukku</i> ‘thumb’ (kukku are lice) A
k	
k	<i>uḳi</i> / <i>uḳa</i> / <i>ttaḳi</i> ‘to cross a river’ (trans) B
k	<i>kku</i> / <i>kku</i> / <i>ttkaw</i> ‘to dry up’ (intr) B <i>ssku</i> / <i>ssku</i> / <i>sskaw</i> ‘to dry’ (trans) B See šṭf for Pass and PP.
kb	<i>kebb</i> ~ <i>kubb</i> / <i>kebb</i> / <i>tkebba</i> ‘to pour’ (trans) B Pass <i>tkabbeṭ</i> PP <i>mekbub</i> / <i>mekbuba</i> / <i>mekbubin</i>
kbd	<i>lkebda</i> - <i>lekbada</i> Dim. <i>lekbida</i> ‘liver’ A
kbl	<i>taḳ^wbalt</i> - <i>tiḳ^wbalan</i> ‘corn cob’ B
kbr	<i>taḳbert</i> - <i>tikebratan</i> ‘woolen djellaba’ B
kbṛ	<i>takebburt</i> - <i>tikebburan</i> ‘pride’ B
kbṛ	<i>tkebber</i> / <i>itkebber</i> ‘to boast’ (intr) A
kdb	<i>lkeddab</i> - <i>lkeddabin</i> Dim. <i>leḳdideb</i> - <i>leḳdidbin</i> F. <i>lkeddaba</i> Dim. <i>leḳdidba</i> ‘liar’ A
kdb	<i>lkuḍba</i> - <i>leḳdub</i> ~ <i>lemkaḍeb</i> Dim. <i>leḳdiba</i> ‘lie’ A
kdr	<i>aḳaydar</i> - <i>lekyader</i> Dim. <i>aḳwidar</i> - <i>iḳwidren</i> ‘horse’ C
kebl	<i>kueballa</i> - <i>kueballaṭ</i> ‘female jackal’ A
kf	<i>lkaf</i> - <i>lkifan</i> ‘cave’ A
kf	<i>lkaffa</i> - <i>lkaffaṭ</i> ‘palm of the hand’ A
kfr	<i>akfer</i> - <i>ikefran</i> Dim. <i>akfeyyer</i> - <i>ikfiren</i> F. <i>takfert</i> Dim. <i>takfeyyert</i> - <i>tikfiran</i> ‘turtle’ B
kft	<i>lkefta</i> ‘minced meat’ A
kfṛ	<i>lkafatira</i> - <i>lekfater</i> Dim. <i>lekfitra</i> - <i>lekfitraṭ</i> ‘coffee kettle’ A

kyt	<i>lkayit</i> - <i>lekwayet</i> Dim. <i>lekwiyet</i> - <i>lekwiyat</i> ‘paper’ A
khl	<i>akehlaw</i> - <i>ikehlawen</i> Dim. <i>akhihel</i> - <i>ikhihlen</i> F. <i>takehlawt</i> - <i>tikehlawan</i> Dim. <i>takhihelt</i> - <i>tikhihlan</i> ‘black person/thing’ B
khl	<i>kehhel</i> / <i>kehhel</i> / <i>tkehhal</i> ‘to make darken’ (trans) B Pass <i>tkehhet</i> PP <i>mkehhel</i> / <i>mkehha</i> / <i>mkehlin</i>
khl	<i>khel</i> / <i>ikhel</i> ‘to tan, darken’ (intr) A
khl	<i>khel</i> / <i>kehla</i> / <i>kuhel</i> ‘black’ <i>khihel</i> / <i>khihl-a</i> / <i>khihl-in</i> ‘somewhat black’ A
kk	<i>tikkuk</i> ‘type of bird’ A
kl	<i>akal</i> ‘soil’ Types of soil are: <i>akal ahemri</i> is red soil, <i>akal buyrib</i> is black soil, <i>akal amlil</i> resembles sand, <i>akal milkeyya</i> is good farmland. B
kl	<i>akkil</i> (wa-) ‘curdled milk’ B
kl	<i>lmaqla</i> ‘food’ A
kl	<i>akel</i> ~ <i>akul</i> / <i>ukel</i> / <i>ttakel</i> ‘to step on’ (intr) B
kl	<i>tkel</i> / <i>itkel</i> ‘to rely’ (trans) A E.g. <i>ka-ytkel fxes a s d ibb ssuxra inši</i> ‘He relies on him to bring him some groceries.’
klm	<i>lkelma</i> - <i>lkelmat</i> / <i>leklam</i> ‘word, speech’ A
klw	<i>lkelwa</i> - <i>leklawi</i> ‘kidney’ A
km	<i>kma</i> - <i>ayetma</i> ‘brother’ B
km	<i>lkama</i> - <i>lkamat</i> ‘bed’ A
km	<i>lkumm</i> - <i>lukmam</i> ‘sleeve’ A
km	<i>kma</i> / <i>ikmi</i> ‘to smoke’ (trans) A
kml	<i>kmel</i> / <i>kmel</i> / <i>kemmel</i> ‘to finish’ (trans) B Pass <i>tkemmet</i> AP <i>kamel</i> / <i>kamla</i> / <i>kamlin</i> PP <i>mkemmel</i> / <i>mkemmla</i> / <i>mkemmlin</i>
kmm	<i>tak^wmamt</i> - <i>tik^wmaman</i> ‘muzzle’ B
kmr	<i>akemmar</i> - <i>ikemmira</i> Dim. <i>akmimer</i> - <i>ikmimren</i> F. <i>takemmart</i> - <i>tikemmira</i> Dim. <i>takmimert</i> - <i>tikmimran</i> ‘face’ B
kmš	<i>akemmiš</i> - <i>ikemmišen</i> Dim. <i>akmimeš</i> - <i>ikmimšen</i> F. <i>takemmišt</i> - <i>tikemmišan</i> Dim. <i>takmimešt</i> - <i>tikmimšan</i> ‘fistful’ B
kmš	<i>kemmeš</i> / <i>kemmeš</i> / <i>tkemmas</i> ‘to fold’ (lab) B Pass <i>tkemmet</i> PP <i>mkemmeš</i> / <i>mkemmša</i> / <i>mkemmšin</i> VN <i>tekmiša</i> ‘a fold’
kms	<i>kemmes</i> / <i>kemmes</i> / <i>tkemmas</i> ‘to pack’ (trans) B Pass <i>tkemmet</i> PP <i>mkemmes</i> / <i>mkemmsa</i> / <i>mkemmsin</i>
kmṭ	<i>kmṭ</i> / <i>kmṭ</i> / <i>kemmet</i> ‘to burn’ (intr) B
kmṭ	<i>ssekmet</i> / <i>ssekmet</i> / <i>ssekmat</i> ‘to burn’ (trans) B
kmy	<i>lekmaya</i> - <i>lekmayat</i> ‘smoking’ A
kmyⁿ	<i>lkamyun</i> - <i>lkamyunat</i> ~ <i>lkamyunis</i> ‘truck’ C
kmz	<i>akmez</i> - <i>ikemzan</i> ‘nail’ B
kn	<i>takint</i> - <i>tikinan</i> ‘big plate’ (The harvest is collected in it.) B

kn	<i>takna</i> (ta-) - <i>takniwan</i> (ta-) ‘co-wife’ B
knk	<i>lkanki</i> - <i>leknaka</i> Dim. <i>lekniki</i> - <i>leknikeyyat</i> ‘gas lamp’ A
kns	<i>knes</i> / <i>knes</i> / <i>kknes</i> ‘to fight, to argue’ (intr) B cf. <i>šrr</i> for PP
kntr	<i>lkuntru</i> - <i>lkuntrus</i> ‘square’ A/S
knw	<i>aķenniw</i> - <i>ikenniwen</i> F. <i>takenniwt</i> - <i>tikenniwan</i> ‘twins’ B
knz	<i>lkinz</i> - <i>leknuz</i> ‘treasure’ A
kpt	<i>akeppuṭ</i> - <i>ikeppaṭ</i> ~ <i>lekpapeṭ</i> Dim. <i>akpipet</i> - <i>ikipten</i> ‘coat’ C
kr	<i>aķur</i> / <i>yuker</i> / <i>ttaker</i> ‘to steal’ (trans) B See <i>šrq</i> for Pass and PP.
kr	<i>kkur</i> / <i>kker</i> / <i>tekker</i> ‘to wake up’ (intr) B
kr	<i>kra</i> / <i>ikri</i> ‘to hire’ (trans) A Pass <i>tekra</i> AP <i>kari</i> / <i>karya</i> / <i>karin</i> PP <i>mekri</i> / <i>mekriyya</i> / <i>mekriyyin</i>
krbš	<i>akarbaš</i> - <i>lekrabeš</i> Dim. <i>akribaš</i> - <i>ikribšen</i> F. <i>takarbašt</i> - <i>tikarbašan</i> ‘claw’ C
krd	<i>lekridi</i> - <i>lekridiyyat</i> ‘debt’ A
krf	<i>aķurfa</i> ‘chaff’ B
krk	<i>ķerreķ</i> / <i>kerreķ</i> / <i>tķerrak</i> ‘to lie’ (intr) B E.g. <i>ikerreķ fxeš</i> ‘He lied to him.’
krkb	<i>kerkeb</i> / <i>kerkeb</i> / <i>tkerkab</i> ‘to roll’ (lab) B Pass <i>tkerkbeṭ</i> PP <i>mkerkeb</i> / <i>mkerkba</i> / <i>mkerkbīn</i>
krm	<i>lekrima</i> - <i>lekrimaṭ</i> ‘ointment’ A
krs	<i>lkursi</i> - <i>lekrasa</i> Dim. <i>lekrisi</i> - <i>lekrisiyyat</i> ‘chair’ A
krš	<i>takeršišt</i> - <i>tikeršišan</i> ‘belly of a sheep’ B
krš	<i>kerreš</i> / <i>kerreš</i> / <i>tterraš</i> ‘to remove skin of fish, make a hole’ (trans) B Pass <i>tkerrešet</i> PP <i>mkerreš</i> / <i>mkerrša</i> / <i>mkerršin</i>
krsn	<i>kersanna</i> ‘bitter vetch’ A
kršš	<i>takeršišt</i> - <i>tikeršišan</i> Dim. <i>takrišešt</i> ‘animal stomach’ B
krtl	<i>amkertel</i> - <i>imkertlen</i> ‘big rock’ B
krčn	<i>lkurčun</i> - <i>lkurčus</i> ‘mattress’ A/S
kry	<i>lkari</i> - <i>lkurray</i> F. <i>lkarya</i> ‘renter’ A
kry	<i>lkreyya</i> - <i>lkreyyat</i> ‘small octopus’ A
krz	<i>lkurzeyya</i> - <i>lkurzeyyat</i> ‘wool belt’ A
krz	<i>ķrez</i> / <i>ķrez</i> / <i>kkrez</i> ‘to plough’ (trans) B cf. for hrt for Pass and PP
krṭr	<i>lkarṭera</i> - <i>lkarṭeraṭ</i> ‘men’s wallet’ A
knṭr	<i>kanatīru</i> - <i>kanatīrus</i> ‘type of fish’ S
kr	<i>lkar</i> - <i>lkiṭan</i> ‘intercity bus’ A
kr	<i>lkuṛa</i> - <i>lkuṛaṭ</i> ~ <i>lekwaṛi</i> ‘ball’ A
krfz	<i>lekrafez</i> ‘celery’ A
krh	<i>lkiṛaha</i> - <i>lkiṛahaṭ</i> ‘hatred’ A
krh	<i>ķreh</i> / <i>ikreh</i> ‘to hate’ (trans) A AP <i>kaṛeh</i> / <i>kaṛha</i> / <i>kaṛhin</i> PP <i>mekruh</i> / <i>mekruha</i> / <i>mekruhin</i> E.g. <i>nekki kaṛeh ddenya</i> ‘I hate the world.’

kṛny	<i>kuṛuneyya - kuṛuneyyat</i> ‘fragant’ A
kṛṣ	<i>lkerruṣa - lekṛareṣ ~ lkerruṣat</i> Augm. <i>akerrus</i> ‘cart or wagon’ A
kṛt	<i>lkerrat - lekṛareṭ</i> ‘type of ship’ (It has a net that scrapes the sea floor to catch fish.) A
kṛt	<i>lkerrita - lkerritat</i> ‘spindle’ A
kṛt	<i>timekṛat</i> ‘scissors’ B
kṛt	<i>kerreṭ / kerreṭ / tkerrat</i> ‘to scrape’ (trans) B Pass <i>tkerrtet</i> PP <i>mkerreṭ / mkerrta / mkerṛtin</i>
ks	<i>kes / kes / ttkes ~ ikessa</i> ‘to tend (goats, sheep)’ (trans) B
ks	<i>kkus / kkes / tekkes</i> ‘to remove’ (trans) B
ksb	<i>leksiba</i> ‘livestock’ A
ksb	<i>kseb / ikseb</i> ‘to own and raise animals’ (trans) A
ksb	<i>kseb / kseb / kesseb</i> ‘to own animals and raise them’ (trans) B Pass <i>nkesbet</i> PP <i>meksub / meksuba / meksubin</i> E.g. <i>tasa yahen nkesbet yer yan iši</i> ‘That cow was raised by someone.’
ksk	<i>kseksu</i> ‘couscous’ A
ksk	<i>lkašk - lkaṣkat</i> ‘helmet’ A
ksks	<i>akeskes - ikesksa ~ ikeskas</i> Dim. <i>aksikes - iksiksen</i> F. <i>takeskast - tikskisan</i> Dim. <i>taksikest</i> ‘couscous pan’ B
ksl	<i>kessel / kessel / tkessal</i> ‘to massage’ (trans) B E.g. <i>š a s ikessel</i> ‘He is going to massage him.’
ksṛ	<i>kesser / kesser / tkessar</i> ‘to harrow’ (trans) B
ksr	<i>taḳ^wsert - tiḳ^wsaran</i> Dim. <i>taḳ^wseyyert - tiḳ^wsiran</i> Augm. <i>aḳ^wser - iḳ^wsaren</i> ‘piece of bread’ B
kss	<i>kesses / kesses / tkessas</i> ‘to fart softly’ (intr) B
ksṭ	<i>ḳsuṭ / ḳsuṭ / ttaḳsaṭ</i> ‘to be afraid’ (intr) B
kšm	<i>ḳšem / ḳšem / kečem</i> ‘to enter’ (intr) B cf. dxl for AP, Pass and PP. Caus. <i>ššekšem / ššekšem / tšekšam</i> ‘to make enter’ (trans) B
kšṭ	<i>keššet / keššet / tkeššaṭ</i> ‘to rob’ (trans) B
kṣṭ	<i>lkaṣita - lkaṣitat ~ lekwaṣeṭ</i> ‘casette’ A
ktb	<i>lektab - lektuba</i> Dim. <i>lekteyyeb</i> ‘book’ A
ktb	<i>lektaba - lektayeb</i> ‘writing’ A
ktb	<i>kteb ~ kteb / kteb ~ kteb / kktub</i> ‘to write’ (trans) B Pass <i>tketbet ~ nketbet</i> PP <i>mektub ~ mektub / mektuba ~ mektuba / mektubin ~ mektubin</i>
ktn	<i>lkettana - lkettanaṭ</i> ‘linen’ A
ktṛ	<i>ḳter ~ xter</i> ‘more’ A
ktšf	<i>ktašef / iktašef</i> ‘to guess’ (intr) A Pass <i>tektašfet</i> PP <i>mektašef / mektašfa / mektašfin</i> E.g. <i>ktašef fxes</i> ‘He guessed it.’

kčr	<i>lkučarra - lkučarraṭ</i> ‘spoon’ A
kčy	<i>lkučeyya ~ lčukeyya - lkučeyyaṭ ~ lčukeyyaṭ</i> ‘razor’ A
kwdr	<i>lkwadru - lkwadrus</i> ‘door frame, window’ A/S
kwṛ	<i>aḳewwar - iḳewwira</i> F. <i>taḳewwart - tiḳewwira</i> Dim. <i>taḳwiwert - tiḳwiwran</i> ‘ball, circle’ B
kwz	<i>lkawza</i> ‘pride’ A
kwz	<i>kewwez / kewwez / tkewwaz</i> ‘to boast, to duck’ (intr) B PP <i>mkewwez / mkewwza / mkewwzin</i>
kyf	<i>tkeyyef / itkeyyef</i> ‘to smoke’ (trans) A PP <i>mkeyyef / mkeyyfa / mkeyyfin</i>
kyl	<i>keyyel / keyyel / tkeyyal</i> ‘to weigh’ (trans) B Pass <i>tkeyyleṭ</i> PP <i>mkeyyel / mkeyyla / mkeyylin</i> E.g. <i>tkeyyleṭ taferkiwt ahen</i> ‘The (fruits of the) plot of land has been weighed.’
kzn	<i>lkuzina - lkuzinaṭ</i> ‘cookhouse’ A
l	
l	<i>alu / ulu / ttalu</i> ‘to pick, pluck’ (trans) B
l	<i>ll / ll / ttill</i> ‘to be’ (intr) B
l	<i>tala (ta-) - taliwan</i> ‘spring’ B
l	<i>ul - leqluba</i> ‘heart’ C
lbb	<i>lababu - lababus</i> ‘sink’ S
lblb	<i>lleblab</i> ‘type of plant’ A
lbq	<i>lebbeq / lebbeq / tlebbaq</i> ‘to become fat’ (lab) B PP <i>mlebbeq / mlebbqa / mlebbqin</i> E.g. <i>aḳeyyal nnes ilebbeq</i> ‘His child has become fat.’ <i>ilebbq aṭ</i> ‘He has made him fat.’
lbč	<i>llbač</i> ‘hot rain’ A
lby	<i>llubeyya</i> ‘beans’ A
lbyṭ	<i>llbayṭ</i> Dim. <i>llbeyyeṭ</i> Dim.F. <i>llbiṭa</i> ‘great-grandchildren’ A
lbnt	<i>libanti</i> ‘eastern wind and waves in the sea’
lbz	<i>alabbaz ~ arabbaz - ilabbazen ~ irabbazen</i> Dim. <i>albibež</i> ‘bread chunk’ B
lbz	<i>lebbez / lebbez / tlebbaž</i> ‘to form a bread chunk’ (trans) B
lbee	<i>lbeluea - lbelueaṭ</i> ‘big snail’ A
lf	<i>alef (ya-) - ilfan</i> ‘boar’ B
lft	<i>lleft</i> Unity F. <i>taleftunt - tileftunan</i> Augm. <i>aleftun</i> ‘sweet potato’ B
lft	<i>taleffitt - tileffitan</i> Dim. <i>taliffett - tiliffitan</i> ‘blister’ B
ly	<i>llya - llyat</i> ‘sound (from a distance)’ A
ly	<i>lluya - lluyat</i> ‘language’ A
lhm	<i>llhem</i> F. <i>llehma</i> Dim. <i>llhima</i> ‘flesh’ (The feminine refers to a tasty piece of meat.) A
lḥs	<i>lḥes / lḥes / leḥḥes</i> ‘to lick’ (trans) B

lk	<i>tilket - tilkan ~ tirkan</i> ‘head louse’ B
lkm	<i>lkem ~ lkum / lkem / lekkem</i> ‘to arrive’ (trans) B E.g. <i>ilekm at</i> ‘he reached it.’ <i>Caus sselkem ~ sselkum / sselkem / sselkam</i> ‘to make arrive’ (trans) B
lkm	<i>tilkaman ~ tirkaman</i> ‘kind of spinach’ B
lkp̣tr	<i>ilikupter ~ alikupter</i> ‘helicopter’ A
lkš	<i>likuš</i> ‘pampers’ A
ll	<i>alili</i> ‘oleander (laurus nobilis)’ B
ll	<i>llil - llyali</i> ‘night’ <i>bellil</i> Adv ‘at night’ A
ll	<i>lluli - lluleyyin</i> F. <i>lluleyya</i> ‘first’ A
llf	<i>talelluft</i> ‘white earth’ (Used to be used to paint the house.) B
lm	<i>alum (wa-)</i> ‘hay’ B
lm	<i>lam / ilum</i> ‘to blame’ (intr) A E.g. <i>lam fxi</i> ‘He blamed me.’
lmn	<i>llimin</i> ‘right’ E.g. <i>afus n llimin</i> ‘the right hand’ A
lmny	<i>alumunyu</i> ‘aluminium’ A
lngd	<i>lingwadū - lingwadus</i> ‘tongue (fish)’ S
lngş	<i>llingaş</i> Unity F. <i>talingaş - tilingaşan</i> ‘pear’ C
lps	<i>lappis - lpapes</i> ‘pen’ A
lq	<i>laqi / laqa / tlaqay</i> ‘to let, make meet’ (trans) B
lq	<i>tlaqa / itlaqa</i> ‘to join, meet’ (trans) A
lqh	<i>llqih</i> ‘sprout’ A
lqh	<i>lqeh / lqeh / leqqeh</i> ‘to graft’ (intr) B PP <i>melqah / melqaħa / melqaħin</i>
lqm	<i>leqqem / leqqem / tleqqem</i> ‘to cast’ (trans) B Pass <i>tleqqmet</i> PP <i>mleqqem / mleqqma / mleqqmin</i>
lqm	<i>luqma - luqmat</i> ‘mould’ A
lqm	<i>talqimt - tilqiman</i> ‘bread’ cf. xbz B
lqt	<i>leqqet / leqqet / tleqqat</i> ‘to pick up’ (trans) B Pass <i>tleqqtet</i> PP <i>mleqqet / mleqqta / mleqqtin</i>
lr	<i>tellirt - telliran</i> ‘type of plant’ B
lr	<i>llira - llirat</i> ‘ass’ A
lṛt	<i>lluṛti</i> ‘sea has northern wind and waves’
lṛd	<i>llaṛda - llaṛdat</i> ‘school of fish at night’ A
ls	<i>alus - ilusan</i> F. <i>talust - tilustan</i> ‘husband’s brother/sister’ C
ls	<i>iles - ilsan</i> ‘tongue’ (The plural is not accepted by everybody.) B
lsq	<i>lseq / lseq / lesseq</i> ‘to stick, to glue’ (intr) B Pass <i>tlessqet</i> PP <i>mlesseq / mlessqa / mlessqin</i>
ltm	<i>lltam - lltamat</i> Dim. <i>llteyyem</i> ‘veil to cover the face’ A
ltm	<i>uletma - ayetma</i> ‘sister’ (The plural refers to brothers as well as sisters.) B
lčn	<i>lečin</i> F. <i>talečint - tilečinan</i> ‘orange’ C

ltx	<i>ltex / ltex / lettex</i> ‘to fling, throw’ (trans) B Pass <i>tletxet</i> PP <i>meltux / meltuxa / meltuxin</i>
lṭ	<i>llatta - llītan</i> Dim. <i>llīta - llītat</i> ‘bottle’ A
lṭ	<i>luṭa - luṭat</i> Dim. <i>lwīta - lwītat</i> ‘plain’ A
lw	<i>lewwi / lewwi / tlewway</i> ‘to spin, to roll a cigarette or joint’ (lab) B Pass <i>tlewwat</i> PP <i>mlewwi / mlewwya / mlewwin</i>
lw	<i>lmełwi</i> ‘pan cake made out of meal baked in oil’ A
lwgr	<i>talawgart - tilawgaran</i> ‘white bird that follows the farmer’ B
lwḥ	<i>lluḥ - llwayeḥ</i> Unity F. <i>talwiḥett - tilwiḥtan</i> ‘shelf’ C
lwn	<i>llawn - lḥalwan</i> Dim. <i>llweyyen - llweyynat</i> ‘colour’ (The diminutive refers to a nice colour.) A
lwn	<i>llwina - llwinat</i> ‘picarel (fish)’ A
lwqd	<i>lewqit</i> Unity F. <i>talewqitt - tilewqitan</i> ‘match’ C
lwṛ	<i>llawṛeyya - llawṛeyyat</i> ‘ass’ A
lwy	<i>llewway</i> ‘kind of ivy’ A
lwz	<i>llawz</i> Unity F. <i>talawzīt - tilawzītan</i> ‘almond’ C
lymn	<i>llaymun</i> Unity F. <i>talaymunt - tilaymunan</i> ‘lemon’ C
lyn	<i>llyan</i> ‘traditional shampoo’ (It is made by boiling ash from the fireplace in a big bowl.) A
lṣ	<i>alazēn (wa-)</i> ‘tomorrow’ B
lṣ	<i>lluṣ / llaz ~ lluz / ttlaz</i> ‘to be hungry’ (intr) B
lṣṛ	<i>llaṣur - llwaṣer</i> Unity F. <i>talaṣurt - tilaṣuran</i> Dim. <i>lwiṣra</i> ‘brick’ C
m	
m	<i>am</i> ‘like’ E.g. <i>am umaleḥ aḍ</i> ‘like this fish’ B
m	<i>yemma</i> ‘mother’ B
mbr	<i>lmembar</i> ‘islamic pulpit’ A
md	<i>medd / medd / tmedda</i> ‘to lie down’ (lab) B PP <i>memduḍ / memduḍa / memduḍin</i>
md	<i>tamḍa - timḍiwan</i> ‘lake’ B
md	<i>tamuḍa - timuḍiwan</i> ‘sow’ B
mdd	<i>tamedda - timeddiwan</i> ‘eagle’ B
mdg	<i>amdaggu - imdugga</i> ‘warble fly’ B
mdn	<i>lemḍina - lemḍun</i> ‘city’ A
mdr	<i>amḍer - imedren</i> Dim. <i>amḍeyyer - imḍeyyren</i> ‘branch’ B
mdwd	<i>lmedweḍ - lemḍaweḍ</i> Dim. <i>lemḍiweḍ - lemḍiwḍat</i> ‘trough’ A
mḍ	<i>medḍi / medḍa / tmedḍay</i> ‘to sharpen’ (trans) B PP <i>mmedḍi / mmedḍya / mmedḍin</i>
mḍy	<i>maḍi / maḍy-a / maḍ(y)-in</i> ‘pointed’
mšy	AP <i>maši / mašš-a / mašy-in ~ maš-in</i> ‘go’ see d for ‘to go’

mžy	AP <i>maži</i> / <i>mağ-a</i> / <i>mažy-in</i> ~ <i>mağ-in</i> ‘come’ see d for ‘to go’
med	<i>lmaeida</i> - <i>lmaeidat</i> ‘stomach’ A
my	<i>myi d</i> / <i>myi d</i> / <i>ttemyi d</i> ‘to grow’ (intr) B Caus <i>issemya d</i> / <i>ssemya d</i> / <i>ssemyay d</i> ‘to (make) grow’ (trans) B (The d is obligatory.) E.g. <i>azgasneṭ a d issemya isanen</i> ‘Last year he grew teeth.’
mgn	<i>lmaḡana</i> - <i>lemwaḡen</i> ~ <i>lmaḡanat</i> ‘watch’ A
mgn	<i>tmeḡgen</i> / <i>itmeḡgen</i> ‘to feel good, be calm’ (intr) A VN <i>ttemgin</i>
mgnn	<i>tamuḡnant</i> - <i>timuḡnanan</i> ‘cooked egg’ B
mgr	<i>mger</i> / <i>mger</i> / <i>megger</i> ‘to harvest’ (trans) B cf. <i>ḡsd</i> for Pass and PP
myṛ	<i>tameyṛa</i> - <i>timeyriwan</i> ‘wedding’ B
myṛ	<i>amyṛa</i> - <i>imyṛen</i> ‘old man’ F. <i>tamyṛt</i> - <i>timyṛan</i> Dim. <i>tamyeyyert</i> ‘old women’ B
myṛ	<i>amyṛa</i> ‘father-in-law of a woman’ B
mgr	<i>amḡer</i> - <i>imeḡran</i> Dim. <i>amḡeyyer</i> - <i>imḡeyyren</i> ‘sickle’ B
myṛ	<i>tamyṛt</i> ‘mother-in-law of a woman’ B
myṛb	<i>ameyṛabi</i> - <i>lemyṛaḡba</i> F. <i>tameyṛabiṭ</i> ‘Moroccan’ C
myṭ	<i>meyyēt</i> / <i>meyyēt</i> / <i>tmeyyaṭ</i> ‘to hit’ (trans) B Pass <i>tmeyyṭet</i> PP <i>mmeyyēt</i> / <i>mmeyyṭa</i> / <i>mmeyyṭin</i>
myz	<i>amyuz</i> - <i>imyaz</i> ‘nit’ B
mgl	<i>amaḡal</i> - <i>imaḡalen</i> ~ <i>imuḡal</i> F. <i>tamaḡalt</i> - <i>timaḡalan</i> ‘piece of bush’ (piece of bush that is hung in the stable for goats to eat.) B
mgyz	<i>ameggayzu</i> ‘type of plant’ B
mḡ	<i>mḡa</i> / <i>mḡi</i> ~ <i>imḡa</i> / <i>mehḡa</i> - <i>imeḡḡi</i> ‘to wipe clean’ (trans) B
mḡ	<i>mih</i> / <i>maḡ</i> / <i>tmiḡ</i> ‘to empty water’ (trans) B Pass <i>tmaḡet</i> PP <i>memyaḡ</i> / <i>memyaḡa</i> / <i>memyaḡin</i> E.g. <i>tmaḡet lbatil</i> ‘The boat has been emptied from the water.’
mḡl	<i>lmaḡal</i> - <i>lemwaḡel</i> ‘room’ A
mḡrb	<i>lmeḡrab</i> - <i>lemḡareḡ</i> Dim. <i>lemḡireḡ</i> ‘place where the imam prays’ A
mhrz	<i>lmehrz</i> - <i>imehrzen</i> ‘type of insect’ It eats wheat. C
mḡsd	<i>lmeḡsad</i> - <i>lmeḡsadin</i> F. <i>lmeḡsada</i> ‘jealous person’ A
mḡṭ	<i>lmuḡiṭ</i> - <i>lmuḡiṭat</i> ‘ocean’ A
mk	<i>lmika</i> - <i>lmikaṭ</i> ‘platic bag’ A
mk	<i>muka</i> - <i>mukaṭ</i> ‘owl’ A
mkl	<i>yemmawaḡal</i> - <i>immawaḡalen</i> ‘kind of worm’ B
mklṭ	<i>meklitta</i> ‘type of fish’ A
mkn	<i>lmaḡina</i> - <i>lmaḡinat</i> ~ <i>lemwaḡen</i> ‘machine’ A
mkr	<i>amaḡar</i> - <i>imuḡar</i> F. <i>tamaḡart</i> - <i>timuḡar</i> ~ <i>timaḡaran</i> ‘thief’ B
mktr	<i>ameḡter</i> - <i>imeḡtaren</i> ~ <i>imeḡtira</i> ‘part of the plough’ B

ml	<i>amalu</i> - <i>imula</i> F. <i>tamaluḵt</i> Dim. <i>tamwileḵt</i> - <i>timwilḵan</i> ‘shadowy hill’ B
ml	<i>lmal</i> ‘capital’ A
ml	<i>mel</i> / <i>mel</i> / <i>mmal</i> ‘to show’ (intr) B PP <i>mwerrri</i> / <i>mwerrya</i> / <i>mwerrin</i> E.g. <i>daʔimen mmalay as imalḥen inu</i> ‘I always show him my fish.’
ml	<i>mul</i> - <i>mwalin</i> F. <i>mula</i> ‘owner’ A E.g. <i>mul axyam</i> - <i>mwalin axyam</i> F. <i>mulat axyam</i> ‘host’
mlḥ	<i>amaleḥ</i> - <i>imalḥen</i> Dim. <i>amwileḥ</i> F. <i>tamaleḥt</i> Dim. <i>tamwileḥt</i> ‘fish’ B
mlḥ	<i>lemlaḥ</i> ‘salt’ A
mlḥ	<i>maleḥ</i> / <i>malḥ-a</i> / <i>malḥ-in</i> ‘salty’
mlk	<i>lmalik</i> - <i>lmuluḵat</i> F. <i>lmalika</i> - <i>lmalikaḵt</i> ‘king’ A
mlk	<i>lmlk</i> ~ <i>lmlk</i> - <i>lamlak</i> ‘property’ A
mlk	<i>lmlkeyya</i> - <i>lmlkeyyat</i> ‘fishing permit’ A
mlk	<i>mleḵ</i> / <i>mleḵ</i> / <i>melleḵ</i> ‘to marry’ (trans) B PP <i>mmelleḵ</i> / <i>mmellka</i> / <i>mmellkin</i> Caus <i>ssemleḵ</i> / <i>ssemleḵ</i> / <i>ssemleḵ</i> ‘to let, make marry’ (trans) B <i>imleḵ ides</i> ‘He married with her.’ <i>imleḵ fxes</i> ‘He married another (additional) wife.’
mll	<i>amellul</i> - <i>imellulen</i> Dim. <i>amliwel</i> - <i>imliwlen</i> F. <i>tamellult</i> - <i>timellulan</i> Dim. <i>tamliwelt</i> - <i>timliwlan</i> ‘white person’ B
mll	<i>mellul</i> <i>mellul-eṭ</i> ‘white’ Dim. <i>mliwel</i> / <i>mliwl-a</i> / <i>mliwl-in</i> ‘somewhat white’ C
mlq	<i>lmlaq</i> - <i>lemwaleq</i> Unity <i>amileq</i> - <i>imilqen</i> Dim. <i>amwileq</i> - <i>imwilqen</i> ‘grit’ C
mls	<i>melles</i> / <i>melles</i> / <i>tmellas</i> ‘to smoothen’ (trans) B AP <i>males</i> / <i>mals-a</i> / <i>mals-in</i> PP <i>mmelles</i> / <i>mmellsa</i> / <i>mmellsin</i>
mlṭ	<i>lmalṭa</i> - <i>lemlaṭi</i> Dim. <i>lemliṭa</i> - <i>lemliṭat</i> ‘blanket’ A
mlṭ	<i>lmuṭṭa</i> - <i>lmuṭṭat</i> ‘fine’ A
mlṣt	<i>tamelṣiṭ</i> - <i>timelṣa</i> ‘type of plant’ B
mm	<i>memmu n ṭiṭṭ</i> ‘apple of the eye’ B
mm	<i>tamemt</i> ~ <i>tamamt</i> (<i>ta-</i>) ‘honey’ B
mn	<i>aman</i> (<i>wa-</i>) ‘water’ B
mn	<i>tmenna</i> / <i>itmenna</i> ‘to hope’ (trans) A
mndln	<i>mandalina</i> Unity F. <i>tamendalint</i> - <i>timendalinan</i> ‘mandarin’ C
mndm	<i>mnaḍem</i> - <i>medden</i> ‘human being’ C
mne	<i>mennes</i> / <i>mennes</i> / <i>tmennas</i> ‘to make hold’ (trans) B
mngž	<i>tamengažt</i> - <i>timengažan</i> Dim. <i>tamnigežt</i> - <i>timnigžan</i> ‘earring’ C
mnm	<i>lemnama</i> - <i>lemnamaṭ</i> VN ‘dream’ A
mnqr	<i>lmenqer</i> - <i>lemnaqer</i> Dim. <i>lemniqer</i> - <i>lemniqrat</i> ‘chisel, sting’ A
mnṭ	<i>tamunniṭ</i> - <i>timunniṭan</i> ‘ass’ B
mntk	<i>mantika</i> ‘margerine’ A
mnṭr	<i>tamentart</i> - <i>timentaran</i> ‘type of insect’ It is yellow, lives between the crops. B
mql	<i>lmuqla</i> ‘The first intestines of the goat that are eaten: liver, heart, kidney’ A

mqr	<i>meqqur / muqqr-et</i> ‘big’ Dim. <i>mqiqr / mqiqr-et</i> ‘somewhat big’ B
mr	<i>lemra - lemrayat ~ lemrawat</i> ‘mirror’ A
mr	<i>lmerra - lmerrat</i> ‘goat intestine’ A
mr	<i>merr / merr-a / merr-in</i> ‘bitter’ A
mr	<i>tammart - timmira ~ tammira</i> Augm. <i>ammar - immira (wa-)</i> ‘beard’ E.g. <i>yres ya wammart nešt n lexla</i> lit. ‘He has a beard as big as the wasteland.’ B
mrn	<i>lmirna - lmirnat</i> ‘type of fish’
mrn	<i>lemrina - lemrinat</i> ‘type of sea snake’
mrs	<i>amaras - imuras</i> F. <i>tamarast - timuras</i> Dim. <i>tamwirest</i> ‘riverbed’ B
mry	<i>lmareyya</i> ‘tide’ E.g. <i>lmareyya n ššerq</i> = east tide <i>lmareyya n ššafi</i> = west tide A
mrnd	<i>mirinda - mirindat</i> ‘afternoon meal’ Small meal at about five o’clock S
mr	<i>umer ~ amer / umer ~ amer / ttamer</i> ‘to send’ (trans) B E.g. <i>amrax imalhen dar uxyam</i> ‘I sent the fish home.’
mr	<i>lmiṛu</i> ‘grouper (fish)’
mrḃt	<i>amerḃut - imṛiḃten</i> Dim. <i>amṛiḃet</i> ‘small piece of rope’ B
mry	<i>tamurya</i> ‘locust’ B
mṛḥ	<i>amṛaḥ - imṛaḥen</i> ‘open place’ B
mṛq	<i>lemṛaq</i> F. <i>lmerqa</i> Dim. <i>lemṛiqa</i> ‘sauce’ A
mṛš	<i>lmarša - lemṛaši</i> Dim. <i>lemṛiša - lemṛiṣat</i> ‘port’ A
mṛt	<i>lmerṫ - lšamṛaḍ</i> ‘sickness’ A
mṛtl	<i>lmurtal - lmurtalis</i> ‘flip in the water’ A/S
mṛtn	<i>mertayn</i> ‘twice, two times’ A
mṛwh	<i>tamerwaḥt - timerwaḥan</i> ‘fan (in the hand)’ B
mṛx	<i>merraxu - merraxuwat</i> ‘mako shark’ S
mṛyṫ	<i>amaryat - imaryaten</i> ‘stick for hitting’ B
mṛyṫ	<i>meryet / meryet / tmeryat</i> ‘to bend repeatedly’ (intr) B
mṛž	<i>lmerža - lemṛuž</i> ‘swamp’ A
ms	<i>amass - imassen</i> ‘block on the head of cattle to tie the yoke to’ B
ms	<i>ammas - immasen</i> ‘waist’ B
ms	<i>lmissa - lemses ~ lmissat</i> Dim. <i>lemsisa - lemsisat</i> ‘table’ A
ms	<i>lmus - lemwas</i> Dim. <i>lemweyyes - lemweyyesen</i> ‘retractable knife’ A
msh	<i>mseh / mseh / messeḥ ~ itasseḥ</i> ‘to wipe’ (trans) B
msh	<i>ttimsaḥ</i> ‘crocodile’ A
msq	<i>lmusiqā - lemwaseq</i> ‘music’ A
mss	<i>messus / messus-et</i> ‘insipid’ Dim. <i>msiwes / msiws-a / msiws-in</i> ‘somewhat insipid’ C
mss	<i>tamessust - timessusan</i> ‘unsalted bread’ B
mslm	<i>ameslem - lemselmin</i> F. <i>tameslemt - timselman</i> ‘muslim’ C

msmn	<i>lemsemmen</i> ‘type of pan cake’ A
msw	<i>amessiw - imessiwen</i> F. <i>tamessiwt - timessiwan</i> ‘old basket’ B
mş	<i>lmaşsa - lmaşşat</i> ‘sledge hammer’ A
mşţ	<i>amşet - imeştan</i> ‘hip’ B
mš	<i>amuš - imuššan</i> Dim. <i>amšišu - imšišwen</i> F. <i>tamuššet - timuštan</i> Dim. <i>tamšišut - timšišwen</i> ‘cat’ B
mšbl	<i>mešbel / mešbel / tmešbal</i> ‘to sift’ (trans) B
mšklt	<i>meškliţ - meškliţat</i> ‘bicycle’ A
mşkpr	<i>tameškeppart - timeškepparan</i> ‘chicken’ B
mšn	<i>lmašina - lmaşinat</i> ‘train’ A
mşţ	<i>amşet - imeşten</i> ‘separation stone between two pieces of land to mark the boundary’ B
mşţ	<i>tamşett - timeşttan</i> ‘comb’ E.g. <i>tamşett n uţar - timeştan n uţar</i> ‘instep (of the foot)’ B
mştt	<i>ameştit - imeştat</i> ‘small piece of rope’ B
mt	<i>mmuţ / mmuţ / tmettat</i> ‘to die’ (intr) B
mte	<i>lemtaε</i> ‘property’ A
mtn	<i>mten / mten / ttamten</i> ‘to ferment’ (trans) B
mtn	<i>tamtunt - timtunan</i> ‘yeast’ B
mtrkl	<i>lmatrikula - lmatrikulat</i> ‘license plate’ A
mtwl	<i>tametwalt</i> ‘type of plant’ B
mţ	<i>mţi / mţi / metţi</i> ‘to lunch’ (intr) B PP <i>myeddi / myeddy / myeddin</i> Used by old people. Arabic <i>tyedda</i> is more used nowadays.
mţ	<i>tamettut - timettutan</i> ‘women’ <i>tamettut n baba nnem</i> ‘stepmother’ B
mţε	<i>lmutaε - lemwaţε</i> Dim. <i>lemwiţε - lemwiţεat</i> ‘place’ A
mţl	<i>mţel / mţel / metţel</i> ‘to bury’ (trans) B
mţr	<i>lmutuř - lemwaţer</i> Dim. <i>lemwiter</i> ‘motorcycle, engine’ A
mţrħ	<i>lmetreħ - lemţareħ ~ lemţareħ</i> Dim. <i>lemţireħ</i> ‘stick to put bread in the oven’ A
mţš	<i>maţiša</i> Unity F. <i>tamaţišţ ~ tumaţišţ - timaţiššan</i> Augm. <i>amaţiš</i> ‘tomato’ C
mţš	<i>metţeš / metţeš / tmetţaş</i> ‘to shake, swing’ (lab) B Pass <i>tmetţšet</i> PP <i>mmetteš / mmetţša / mmetţšin</i>
mţţ	<i>amattat - imattaten</i> ‘grey lizard with no spots’ B
mţţ	<i>amaţuţ - imaţuţen</i> Dim. <i>amţiwet - imţiwţan</i> F. <i>tamaţuţ - timaţuţan</i> Dim. <i>tamţiwet - timţiwţan</i> ‘neglected useless person’ B
mţw	<i>amettaw - imettawen</i> ‘tear’ B
mţyš	<i>lmetţayša - lmetţayşat</i> ‘cradle’ A
mww	<i>lmawża - lemważ</i> ‘wave, surf’ A
mx	<i>lmuxx - lemxax</i> ‘brain’ A

mxđ	<i>amuxxed</i> - <i>imuxden</i> Dim. <i>amxixed</i> - <i>imxixden</i> F. <i>tamuxxett</i> - <i>timuxtan</i> Dim. <i>tamxixett</i> - <i>timxixtan</i> ‘wild cat’ B
mxş	<i>lmexxaş</i> - <i>lemxaxeş</i> ‘poking stick’ A
mxţ	<i>mexxet</i> / <i>mexxet</i> / <i>tmexxaţ</i> ‘to shake’ (lab) B Pass <i>tmexxţet</i> PP <i>memxuţ</i> / <i>memxuţa</i> / <i>memxuţin</i> VN <i>lemxiţ</i>
my	<i>tamya</i> (ta-) - <i>timyiwan</i> ‘throat’ B
myl	<i>meyyel</i> / <i>meyyel</i> / <i>tmeyyal</i> ‘to be crooked, to be stronger’ (lab) B Pass <i>tmeyylet</i> PP <i>mmeyyel</i> / <i>mmeyyla</i> / <i>mmeyylin</i> VN <i>lmayl</i>
myn	<i>tamyant</i> - <i>timyanan</i> Dim. <i>tamweyyent</i> - <i>timwinan</i> ‘she-kid’ B
myt	<i>lmayta</i> - <i>lmaytat</i> ‘corpse’ A
myt	<i>lmeyyet</i> - <i>lmeyyţin</i> F. <i>lmeyyta</i> ‘carcass’ A
mzl	<i>amzal</i> ‘type of plant’ B
mzz	<i>amuzziz</i> - <i>imuzzizen</i> F. <i>tamuzzizt</i> - <i>timuzzizan</i> ‘ass’ B
mzyn	<i>mezyan</i> / <i>mezyana</i> / <i>mezyanin</i> ‘good’ A
mzr	<i>lmizari</i> - <i>lmizareyyin</i> F. <i>lmizariyya</i> ‘stingy person’ A
mzr	<i>tamazirt</i> - <i>timazirtan</i> ‘country’ B
mzgd	<i>tamezgiđa</i> - <i>timezgiđiwan</i> ‘mosque’ E.g. <i>tamezgiđa n nşara</i> ‘church’ B
mz	<i>amez</i> ~ <i>mez</i> / <i>mez</i> ~ <i>umez</i> / <i>ttamez</i> ‘to catch, take, grab, trap’ (trans) B cf. qbt for Pass. and PP.
mz	<i>mezzi</i> / <i>mezzi-t</i> ‘small’ Dim. <i>mzizu</i> / <i>mzizu-t</i> ‘very small’ B
mzg	<i>amezzuġ</i> - <i>imezgan</i> ~ <i>imezqaġ</i> F. <i>tamezzuġt</i> ‘ear’ B
mzłt	<i>amezłut</i> - <i>imezłat</i> F. <i>tamezłutt</i> ‘poor person’ B
mzţ	<i>lmazuţ</i> ‘diesel’ A
mzy	<i>amazay</i> - <i>imazayen</i> F. <i>tamazayt</i> - <i>timazayan</i> ‘canine tooth’ B
mzz	<i>amazuz</i> - <i>imazuzen</i> F. <i>tamazuzt</i> - <i>timazuzan</i> ‘last born’ B
mžt	<i>amežžut</i> - <i>imežžat</i> ‘weak person or animal’ B
mžf	<i>amažuf</i> - <i>imažufen</i> F. <i>tamažuft</i> - <i>timažufan</i> ‘stinky person, type of plant’ B
n	
n	<i>ani</i> ~ <i>uni</i> ~ <i>ni</i> / <i>uni</i> / <i>ttani</i> ‘to ride, mount’ (intr) B cf. rkb for AP E.g. <i>ni g ttunubir</i> ‘Get into the car.’
n	<i>nn</i> / <i>nn</i> ~ <i>nna</i> / <i>qqer</i> ‘to say’ (trans) B
nbd	<i>taneđdut</i> ‘harvesting season’ E.g. <i>nmegger g tneđdut</i> ‘We harvest in the harvesting season.’ B
nbt	<i>nnabaţ</i> - <i>nnabaţat</i> ‘plant’ A
nd	<i>nnda</i> ~ <i>nneđwa</i> Dim. <i>nndiwa</i> ‘dew’ A
ndf	<i>nedđef</i> / <i>nedđef</i> / <i>tneđdaf</i> ‘to clean’ (trans) B

ndh	<i>neddeh / neddeh / tneddah</i> ‘to guide (animals), to escort, to drive’ (trans) B Pass <i>tneddhet</i> PP <i>mneddeh / mneddha / mneddhin</i> E.g. <i>tneddhet lebhima y ahen</i> ‘The mule has been escorted.’
ndm	<i>ndem / indem</i> ‘to regret’ (intr) A Caus. <i>neddem / neddem / tneddam</i> ‘to regret’ (trans) B Pass <i>tneddmet</i> PP <i>mneddem / mneddma / mneddmin</i> VN <i>ttendim</i>
ndr	<i>nedder / nedder / tnedder</i> ‘to shock after crying’ (intr) B Pass <i>tneddret</i> PP <i>mnedder / mneddra / mneddrin</i> VN <i>ttendir</i>
nğr	<i>nğer / nğer / neğar</i> ‘to make furniture’ (trans) B
ndr	<i>lemnader</i> ‘spectacles, glasses’ A
nğr	<i>amengur - lemnažer</i> Dim. <i>amnižer</i> ‘wooden chair’ (This is a traditional chair made out of wood. They scrape of the bark of the <i>ddlem</i> tree to make these kind of chairs or beehives.) C
nğr	<i>nneğar - nneğara</i> ‘carpenter’ A
nes	AP <i>naees / naesa / naesin</i> VN <i>nneas</i> A ‘to sleep’ cf. ts ‘to sleep’
nfs	<i>neffes / neffes / tneffas</i> ‘to breathe’ (intr) (Used by older generation.) B
nfs	<i>nnefs</i> Dim. <i>nnfisa - nnfisat</i> ‘soul, spirit, breath’ A
nfs	<i>tneffes / itneffes</i> ‘to breathe’ (intr) (used by the young generation.) A
nft	<i>nfet / nfet / neffet</i> ‘to shake’ (trans) B PP <i>menfut / menfuṭa / menfuṭin</i>
nft	<i>nnefta - nnfaṭi</i> ‘light rain’ A
nfzn	<i>nafazen ~ lafazzen</i> ‘the day after tomorrow’ E.g. <i>hetta dar nafazen</i> ‘in two days’ B
nfznz	<i>nafaznaz</i> ‘in three days’ B
ng	<i>angi - ingiyyen</i> ‘water under the house’ B
ng	<i>ngi / ngi / neggi</i> ‘to push’ (trans) B PP <i>mengi / mengeyya / mengeyyin</i>
ngr	<i>nigru - nigrus</i> ‘brown dolphin’ S
ny	<i>anayu</i> ‘milk of a fig tree’ B
ny	<i>inay - inayen</i> ‘uvula’ B
ny	<i>ny / nya / neqqa</i> ‘to kill’ (trans) B
nyr	<i>anyur - inyuren</i> F. <i>tanyurt - tinuyṛatan</i> Dim. <i>tanyeyyert</i> ‘stable, stall’ B
nhr	<i>nnhar - nnhura</i> Dim. <i>nnheyyer</i> ‘day’ (The diminutive <i>nnheyyer</i> means ‘a days wage’.) <i>nneş n nnhar</i> ‘noon’ A
nhr	<i>nnhar</i> ‘day’ E.g. <i>nnhar aḏ</i> ‘today’ A
nhr	<i>nnhir - nnhayer</i> Dim. <i>nnheyyer</i> ‘threshold, separation in a field’ A
nhy	<i>nihaya - nihayat</i> ‘end’ A
nhs	<i>nnehhas</i> ‘copper’ A
nkr	<i>nker / nker / nekker</i> ‘to deny’ (trans) B PP <i>menkur / menkura / menkurin</i> VN <i>nnaker</i>
nkt	<i>nukta - nuktaṭ</i> ‘joke’ A

nm	<i>lemnama - lemnamat</i> ‘dream’ A
nmr	<i>nnimiru - nnwamer</i> ‘number’ A
nmr	<i>nnmer - nnmura</i> Dim. <i>nnmeyyer</i> F. <i>nnemra</i> Dim. <i>nnmeyyra</i> ‘panter’ A
nms	<i>nnamus</i> Unity F. <i>tanamust - tinamusan</i> ‘mosquito’ C
nn	<i>anin - ininen</i> ‘fire stones’ (Three stones around the fire place.) B
nn	<i>nanna</i> ‘older sister’ B
nq	<i>neqqi / neqqa / tneqqay</i> ‘to clean’ (trans) B PP <i>mneqqi / mneqqya / mneqqin</i>
nq	<i>nnaqa - nnyaq</i> ‘female camel’ A
nq	<i>nqi / nqiyy-a / nqiyy-in</i> ‘clean’ A
nqb	<i>nneqqaba ~ nneqqabet - nneqqabat</i> ‘woodpecker’ (Old people use <i>neqqabet</i> while young people use <i>neqqaba</i> .) A
nqb	<i>tamenqubt - timenquban</i> ‘gossip’ <i>gas tamenqubt</i> ‘He gossips a lot.’ B
nql	<i>tanqilt - tinqiltan</i> Dim. <i>tanqeyyelt - tinqiltan</i> ‘tobacco seedling’ B
nqr	<i>nnuqra</i> ‘silver’ A
nqš	<i>amenqaš - imenqašen</i> ‘carver’ B
nqš	<i>nqeš / nqeš / neqqeš</i> ‘to carve’ (trans) B PP <i>menquš / menquša / menqušin</i>
nqt	<i>neqqet / neqqet / tneqqat</i> ‘to drip, leak, sow, have spots’ (lab) B Pass <i>tneqqtet</i> PP <i>mneqqet / mneqqta / mneqqtin</i> E.g. <i>tneqqtet talqimt ad</i> ‘This bread has spots on it (it’s rotten).
nqt	<i>taneqqat - tineqqatan</i> ‘drop’ B
nqz	<i>neqqez / neqqez / tneqqaz</i> ‘to jump’ (lab) B PP <i>mneqqez / mneqqza / mneqqzin</i>
ns	<i>anas - inasen</i> ‘sparkles that fly around a fire.’ B
ns	<i>nes / nes / tnus</i> ‘be extinguished’ (intr) Caus <i>snes / snes ~ ssens / ssnus</i> ‘to extinguish’
nsb	<i>nnsib - lensab</i> ‘father-in-law (of a man), brother-in-law’ <i>nnsiba - nnsibat</i> ‘mother-in-law (of a man)’ A
nsm	<i>nessem / nessem / tnessem</i> ‘to smell’ (intr) B VN <i>nnesma</i> E.g. <i>nnesma mezyana</i> ‘A nice smell.’
nsy	AP <i>nasi / nasya / nasyin</i> PP <i>mensi / menseyya / menseyyin</i> Caus <i>nessi / nessa / tnessay</i> ‘to make forget’ (trans) B E.g. <i>inessa at zeg lhem nnes</i> ‘He made him forget his worries.’ cf. t ‘to forget’
nš	<i>nneš ~ nnuš - lenšus</i> Dim. <i>nnšeyyeš</i> ‘half’ E.g. <i>nneš meqqur</i> ‘the majority’ A
nšb	<i>aneššab - ineššaben</i> Dim. <i>aňšišeb - inšišben</i> ‘piece of iron on which bait is put’ B
nšb	<i>nšeb / nšeb / neššeb</i> ‘to trap’ (trans) B VN <i>nňšaba</i>
nšh	<i>nšeh / inšeh</i> ‘to advise’ (trans) A
nšr	<i>anesran - nňšara</i> F. <i>tanesrant</i> ‘Christian, European’ C
nšl	<i>aňšel - inešlen</i> Dim. <i>aňšeyyel - inšeyylen</i> F. <i>tanšelt</i> ‘floor for straw’ B
nš	<i>nniš</i> Unity F. <i>tanišet - tiništan</i> ‘apricot’ C

nšb	<i>nneššab</i> - <i>nnšašeb</i> Dim. <i>nnšišeb</i> - <i>nnšišbat</i> ‘bow, catapult’ A
nšr	<i>lmenšer</i> - <i>lemnašer</i> Dim. <i>lemnišer</i> ‘floor for drying figs’ A
nšř	<i>lmenšer</i> - <i>lemnašer</i> Dim. <i>lemnišer</i> ‘saw’ A
nt	<i>lanta</i> - <i>lantawat</i> ‘female person’ A
ntxb	<i>lintixab</i> - <i>lintixabat</i> ‘election’ A
nř	<i>tanuřt</i> - <i>tinuřan</i> ‘wife of the brother’ B
nře	<i>nřae</i> / <i>inřae</i> ‘to obey’ (intr) A E.g. <i>ka-inřae-lu i řaba nnes</i> ‘He obeys his father.’
nřg	<i>nřeg</i> / <i>nřeg</i> / <i>netřeg</i> ‘to fly’ (intr) B Caus. <i>ssenteřg</i> / <i>ssenteřg</i> / <i>ssentařg</i> ‘make fly’
nřn	<i>anawiřin</i> ~ <i>aliwiřin</i> ~ <i>liwiřin</i> ~ <i>niwiřin</i> ‘in three days’ B
nřr	<i>nřer</i> / <i>nřer</i> / <i>netřar</i> ‘to fly’ (intr) B Caus. <i>ssenteřr</i> / <i>ssenteřr</i> / <i>ssentařr</i> ‘make fly’
nřř	<i>řintišar</i> ‘victory’ A
nřřr	<i>nřařer</i> / <i>inřařer</i> ‘to win over’ (intr) A
nw	<i>nu</i> / <i>nwa</i> / <i>nugg</i> ‘be cooked, be ripe’ (intr) B Caus <i>ssnu</i> / <i>ssnu</i> / <i>ssnaw</i> ‘to cook’ (trans) B
nwl	<i>anewwal</i> - <i>inewwila</i> Dim. <i>anwiwel</i> - <i>inwiwlen</i> F. <i>tanewwalt</i> - <i>tinewwalan</i> Dim. <i>tanwiwelt</i> - <i>tinwiwlan</i> ‘A small hut’ B
nwr	<i>nnwar</i> F. <i>tanewwart</i> - <i>tinewwaran</i> Dim. <i>tanwiwert</i> - <i>tinwiwřan</i> ‘plant’ C
nxl	<i>nnxel</i> Dim. <i>nnxeyyel</i> F. <i>nnexla</i> Dim. <i>nnxila</i> ‘palm tree’ Also called <i>tařigęt n řřmar</i> ‘tree of dates’ A
nyš	<i>neyyeř</i> / <i>neyyeř</i> / <i>tneyyař</i> ‘to aim’ (intr) B PP <i>mneyyeř</i> / <i>mneyyeřa</i> / <i>mneyyřin</i>
nzl	Pass <i>tnezzlet</i> PP <i>mnezzel</i> / <i>mnezzla</i> / <i>mnezzlin</i> ‘to put down’ cf. <i>rs</i> ‘to land, to put down’
nřm	<i>nneřma</i> - <i>nnřum</i> Dim. <i>nnřima</i> - <i>nnřimat</i> ‘star’ A
nřz	<i>neřzeř</i> / <i>neřzeř</i> / <i>tneřzař</i> ‘to be overripe (crops)’ (intr) B
p	
pbr	<i>pubri</i> - <i>pubreyyin</i> F. <i>pubreyya</i> ‘poor man, women’ A
přr	<i>řpeyrir</i> ‘pancake’ A
přy	<i>payeyyu</i> - <i>payeyyuwen</i> ‘parrot’ C
pkl	<i>řpikařa</i> - <i>řpikařat</i> ‘bicycle’ A
pkln	<i>řpuklan</i> - <i>řpuklanat</i> ~ <i>řepwakel</i> ‘excavator’ A
pky	<i>řpakeyya</i> - <i>řpakiyat</i> ~ <i>řepwaket</i> ‘pack’ A
pl	<i>řpařa</i> - <i>řpařat</i> ‘shovel’ A
plm	<i>řlepluma</i> - <i>řleplumat</i> ‘pen’ A
plp	<i>řpulpu</i> - <i>řpulpus</i> ‘octopus’ A/S
plř	<i>řleplařa</i> - <i>řleplařeř</i> Dim. <i>řlepliřa</i> - <i>řlepliřat</i> ‘seat’ A
pls	<i>řpulisi</i> - <i>řpuliseyyat</i> F. <i>řpuliseyya</i> ‘police’ A
plstk	<i>řplastik</i> - <i>řleplastikat</i> ‘plastic’ A
pl	<i>řpulu</i> ‘ice cream’ S

ply	<i>leḷaya - leḷayat</i> ‘beach’ A
pmpys	<i>ḷumpyis</i> ‘pampers’ A/S
pnčr	<i>penčer / penčer / tpenčar</i> ‘to puncture’ (trans) B Pass <i>tpenčreḷ</i> PP <i>mpenčer / mpenčra / mpenčrin</i>
pny	<i>ḷunya - ḷunyat</i> ‘punch’ A
pp	<i>peppa n tyaten</i> ‘plant’ lit. ‘bread of the goats’ B
prknt	<i>ḷprikanti - ḷprikanteyyat</i> F. <i>ḷprikanteyya</i> ‘nurse’ A
prm	<i>ḷperrim - leprarem</i> ‘drill’ A
prm	<i>ḷpirmi - ḷpirmis</i> ‘driver’s licence’ A/S
prm	<i>perrem / perrem / tperram</i> ‘to drill’ (trans) B PP <i>mperrem / mperrma / mperrmin</i>
prpr	<i>iparparen</i> ‘money’ No singular B
prpr	<i>perper / perper / tperper</i> ‘to fly’ (intr) B
prx	<i>ḷparixa - ḷparixat</i> ‘middle-sized boat’ It has a net that scrapes the sea-floor. A
prx	<i>ḷparixu - ḷparixus</i> ‘pulley block’ A/S
przwwz	<i>ḷpurzwwazi - ḷpurzwwazeyyin</i> F. <i>ḷpurzwwazeyya</i> ‘rich’ A
pšt	<i>ḷpašteyya - ḷpašteyyat</i> ‘pill, tablet’ A
pst	<i>ḷpessiṭa - lepsaset</i> ‘peseta’ A
psmn	<i>ḷpasaman</i> ‘type of fish’
pškd	<i>peškadiyya - peškadiyyat</i> ‘hake (fish)’ A/S
pxt	<i>pixuṭa - pixuṭat</i> ‘type of fish’ A
pznzt	<i>ḷpizniz</i> F. <i>ḷpiznizta - lebzanez</i> ‘business man, hash dealer’ A
q	
qbl	<i>ḷqibla</i> ‘east’ A
qbl	<i>qbel / iqbel</i> ‘to accept’ (trans) A PP <i>meqbul / meqbula / meqbulin</i>
qbl	<i>qebbel / qebbel / tqebbal</i> ‘to face towards mekka’ (trans) B Pass <i>tqebbleṭ</i>
qbl	<i>taqbilt - tiq^wbal ~ tiqbal</i> ‘tribe’ B
qbr	<i>lmeqbara - lemqaḷber ~ leqbuṭa</i> Dim. <i>lemqiber</i> ‘cemetery’ A
qbṭ	Pass <i>nqeḷṭet</i> PP <i>meqbuṭ / meqbuṭa / meqbuṭin</i> ‘to grab’ see mz ‘to grab’
qbt	<i>ḷqibṭa - ḷqibṭat</i> Dim. <i>leqbiṭa - leqbiṭat</i> ‘grip’ A
qbṭ	<i>taqebbiṭt - tiqebbiṭan</i> Dim. <i>taqibibett - tiqibibṭan</i> Augm. <i>aqebbiṭ - iqebbiṭen</i> ‘handful of grain’ B
qby	<i>aqḷbay - iqḷbayen</i> Dim. <i>aqḷbeyyeš - iqḷbeyyšen</i> ‘billy goat’ B
qdf	<i>lmuqdaf - lemqaḷdef</i> ‘paddle’ A
qdf	<i>qeddef / qeddef / tqeddaf</i> ‘to row’ (intr) B
qdr	<i>qder / iqder</i> ‘to can’ (intr) A
qds	<i>lmuqdis</i> ‘mekka’ A
qd	<i>ḷqaḷdi - ḷquḷḷat</i> ‘judge’ A

qε	<i>lqaε</i> - <i>lqiean</i> ‘bottom’ A
qed	<i>lqaεda</i> - <i>lqaεdat</i> ‘part of the plough’ A
qed	<i>lqaεida</i> - <i>lqaεidat</i> ~ <i>lqawaeid</i> ‘custom’ A
qf	<i>leqfa</i> - <i>leqfawat</i> ‘nape of the neck’ A
qfl	<i>leqfel</i> - <i>leqfula</i> ‘lock’ A
qfl	<i>leqfla</i> - <i>leqfalat</i> Augm. <i>aqeflun</i> ‘button’ A
qfqf	<i>qefqef</i> / <i>qefqef</i> / <i>tqefqaf</i> ‘to shiver’ (intr) B PP <i>mqefqef</i> / <i>mqefqfa</i> / <i>mqefqfin</i>
qftn	<i>leqftan</i> - <i>leqfaten</i> ‘moroccan dress’ A
qfz	<i>qfez</i> / <i>iqfez</i> ‘to be clever’ (intr) A AP <i>qafez</i> / <i>qafza</i> / <i>qafzin</i> E.g. <i>qfez fxes</i> ‘He is smarter than him.’
qht	<i>taqahat</i> - <i>tiquhat</i> ‘crow, raven’ B
qhw	<i>lqahwa</i> - <i>leqhawi</i> Dim. <i>leqhiwa</i> - <i>leqhiwat</i> ‘coffee’ A
qhḅ	<i>leqḅba</i> - <i>leqḅab</i> Dim. <i>leqḅihḅa</i> - <i>leqḅihḅat</i> ‘prostitute’ A
ql	<i>lmeqla</i> - <i>lemqali</i> Dim. <i>lemqila</i> - <i>lemqilat</i> ‘frying pan’ A
ql	<i>lqulla</i> - <i>lqullat</i> ‘tree trunk’ A
ql	<i>qli</i> / <i>qla</i> / <i>qqli</i> ‘to fry’ (trans) B Pass <i>tteqlat</i> PP <i>meqli</i> / <i>meqliyya</i> / <i>meqliyyin</i>
ql	<i>qqul</i> / <i>qqel</i> / <i>teqqel</i> ‘to return, become’ (intr) B <i>qqlex d syas</i> ‘I have returned from there.’
qlb	<i>lqaleb</i> - <i>leqwaleb</i> Dim. <i>leqwileḅ</i> - <i>leqwilbat</i> ‘mould, suppository’ A
qlb	<i>qelleḅ</i> / <i>qelleḅ</i> / <i>tqellab</i> ‘to taste’ (trans) B PP <i>mqelleḅ</i> / <i>mqellba</i> / <i>mqellbin</i> VN <i>ddawq</i> E.g. <i>atay ad mqelleḅ</i> ‘This tea has been tasted.’
qlb	<i>qleb</i> / <i>qleb</i> / <i>qqlub</i> ‘to roll’ (lab) B Pass <i>nqelbet</i> ~ <i>tqelbet</i> PP <i>meqlub</i> / <i>meqluba</i> / <i>meqlubin</i>
qld	<i>qelled</i> / <i>qelled</i> / <i>tqellad</i> ‘to imitate’ (trans) B Pass <i>tqelldet</i>
qle	<i>leqleε</i> - <i>leqluεa</i> Dim. <i>leqleyyεε</i> ‘mast’ A
qle	<i>leqliε</i> ‘orchard’ A
qle	<i>qelleε</i> / <i>qelleε</i> / <i>tqellae</i> ‘to leave’ (lab) B Pass <i>tqellεet</i> PP <i>mqelleε</i> / <i>mqellea</i> / <i>mqellein</i>
qll	<i>qlallu</i> ‘type of (edible) plant’ B
qll	<i>qlil</i> / <i>qlil-a</i> / <i>qlil-in</i> ‘few’ Dim. <i>qliwel</i> / <i>qliwl-a</i> / <i>qliwl-in</i> ‘somewhat few’ A
qlm	<i>leqlem</i> - <i>leqluma</i> Dim. <i>leqleyyem</i> ‘traditional pencil (with ink)’ A
qlql	<i>aqelqul</i> - <i>leqlaqel</i> ‘testicle’ C
qlws	<i>aqellawes</i> - <i>iqelliwas</i> Dim. <i>aqliles</i> - <i>iqlilsen</i> F. <i>taqellawest</i> - <i>tiqelliwas</i> Dim. <i>taqlilest</i> - <i>tiqlilsan</i> ‘water jug’ B
qm	<i>qqim</i> / <i>qqim</i> / <i>ttyim(a)</i> ‘to sit’ (intr) E.g. <i>iqqim gales</i> ‘He is sitting’ Caus <i>sqim</i> / <i>sqim</i> / <i>ssqim</i> ‘to make sit’ (trans) cf. gls for AP, Caus and PP.
qmğ	<i>leqmiğa</i> - <i>leqmayež</i> ‘blouse’ A

qmm	<i>aqemmum - iqemmumen ~ iqemmam</i> Dim. <i>aqmiqem - iqmiqmen</i> F. <i>taqemmumt - tiqemmam</i> Dim. <i>taqmiqemt - tiqmiqman</i> ‘mouth’ B
qmqm	<i>aqamqam - iqamqamen ~ leqmaqem</i> F. <i>taqamqamt - tiqamqaman</i> ‘big person’ B
qmr	<i>tqemmer / itqemmer</i> ‘to gamble’ (intr) A E.g. <i>nekki tqemmer fxcas</i> ‘I bet on it.’
qn	<i>qqun / qqen / teqqen</i> ‘to tie, close’ (trans) B see šd and rbt for Pass and PP
qnb	<i>lqenbula - lqenbulat ~ leqnabel</i> Augm. <i>aqenbul</i> ‘bom’ A
qndl	<i>lqendil - leqnadel</i> Dim. <i>leqnidel - leqnidlat</i> ‘oil lamp’ A
qnd	<i>qendel / qendel / tqendal</i> ‘to be bright’ (intr) B Pass <i>tqendlet</i> PP <i>mqendel / mqendla / mqendlin</i> E.g. <i>tafukt hetqendal</i> ‘The sun is very bright.’
qnn	<i>aqennin - iqenninen</i> Dim. F. <i>taqennint - tiqenninan</i> ‘ass’ B
qnn	<i>lqanun - lqawanin</i> ‘law’ A
qnqb	<i>aqenqbu - iqenqba</i> Dim. <i>aqniqeb</i> F. <i>taqenqbut - tiqenqba</i> ‘beak, point of a knife’ B
qns	<i>taqnissa - tiqnisiwan</i> ‘contents of the belly of cattle’ B
qnt	<i>lqent - leqnut</i> Dim. <i>leqnita</i> ‘corner’ A
qnt	<i>qennet / qennet / tqennat</i> ‘to lay on its side’ (trans) B Pass <i>tqennetet</i> PP <i>mqennet / mqenneta / mqennetin</i>
qnt	<i>lqentra - leqnater</i> Dim. <i>leqnitra - leqnitrat</i> ‘bridge’ A
qny	<i>leqneyya - leqnayen</i> ‘rabbit’ A
qqw	<i>aqeqqiw</i> ‘hail’ B
qqw	<i>taqeqqiw ~ taquet - tiqeqqiw</i> ‘granule’ B
qrd	<i>amqerred - lemqerrdin</i> F. <i>tamqerrett</i> ‘weak, small person’ C
qrd	<i>lqird - leqrud</i> Dim. <i>leqreyyed</i> F. <i>lqirda</i> Dim. <i>leqreyyda - leqridat</i> ‘monkey’ A
qre	<i>aqurrie - iqurriēn</i> F. <i>taqurriet - tiqurriēan</i> ‘head, bundle’ B
qrb	<i>lqerqubi</i> ‘pill, kind of drugs’ A
qrb	<i>qerqeb / qerqeb / tqerqab</i> ‘to knock’ (intr) B
qrš	<i>aqerqaššun - iqerqaššunen</i> F. <i>taqerqaššunt - tiqerqaššunan</i> ‘multicoloured thing, person’ B
qrš	<i>lqerš</i> ‘shark’
qrt	<i>taqerrutt - tiqerrutan</i> ‘cockroach’ B
qrt	<i>aqurtaṭ - iqrtaṭen</i> ‘penis’ B
qrqšn	<i>qerqašun-i / qerqašuni-ya / qerqašuniy-in</i> ‘multi-colored’ A
qr	<i>qqur / qqur / tyaṛ</i> ‘to dry’ (intr) B Caus. <i>ssqar / ssqar / ssqar ~ ssyar</i> ‘to dry’ (trans) B E.g. <i>amaras iqqur</i> ‘The riverbed has dried.’
qr	<i>qer / iqir</i> ‘to admit’ (intr) A
qr	<i>qra / iqra</i> ‘to study, read’ (trans) A Pass <i>tteqrat</i> AP <i>qari / qarya / qaryin</i> Caus. <i>qerri / qerra / tqerray</i> ‘to teach’ (trans) B PP <i>mqerri / mqerriya / mqerriin</i> E.g. <i>mqerri zye baba nnes</i> ‘He is taught by his father.’

qrb	<i>aqrab</i> - <i>iqraben</i> Dim. <i>aqreyyeb</i> - <i>iqreyyben</i> F. <i>taqrabt</i> - <i>tiqraban</i> Dim. <i>taqreyyebt</i> - <i>tiqribtan</i> 'traditional bag' It is made from a type of plant (<i>tazrint</i>). B
qrb	<i>qerreb</i> / <i>qerreb</i> / <i>tqerrab</i> 'to approach' (lab) B Pass <i>tqerrbet</i> PP <i>mqerreb</i> / <i>mqerrba</i> / <i>mqerrbin</i> E.g. <i>iqerreb dayri</i> 'He came closer to me.' <i>iqerreb lkas</i> 'He moved the glass closer.' <i>tqerrbet lbatil ahen</i> 'The boat came closer.'
qrb	<i>qrib</i> / <i>qrib-a</i> / <i>qrib-in</i> 'near' A
qre	<i>qree</i> / <i>qeræa</i> / <i>quræ</i> A
qre	<i>qerree</i> / <i>qerree</i> / <i>tqerræ</i> 'make/become bald' (trans) B
qrfz	<i>qerfez</i> / <i>qerfez</i> / <i>tqerfaz</i> 'to pinch' (trans) B PP <i>mqerfez</i> / <i>mqerfza</i> / <i>mqerfzin</i> VN <i>tqerfiza</i> - <i>tqerfizat</i>
qrm	<i>qrem</i> / <i>iqrem</i> 'to be silent' (intr) A AP <i>qarem</i> / <i>qarma</i> / <i>qarmin</i>
qrn	<i>aqrin</i> - <i>leqran</i> F. <i>taqrint</i> 'peer' C
qrqr	<i>qerqer</i> / <i>qerqer</i> / <i>tqerqer</i> 'to be quiet after an argument' (intr) B PP <i>mqerqer</i> / <i>mqerqra</i> / <i>mqerqrin</i>
qrs	<i>aqerras</i> - <i>iqerrisa</i> F. <i>taqerrast</i> - <i>tiqerrasan</i> Dim. <i>taqriræst</i> - <i>tiqirisan</i> 'leaf of a cactus, wooden tray to put bread in the oven.' B
qrs	<i>leqres</i> ~ <i>leqris</i> - <i>leqras</i> 'forcefull pull' A
qrs	<i>qres</i> / <i>iqres</i> 'to pull forcefully' (intr) A VN <i>leqris</i> 'strong pulling'
qrt	<i>qret</i> / <i>qret</i> / <i>qqret</i> ~ <i>qqrut</i> 'to break' (lab) B Pass <i>nqret</i> PP <i>meqrut</i> / <i>meqruta</i> / <i>meqrutin</i> VN <i>leqrit</i> E.g. <i>ameşmar ahen tteqret</i> 'That nail has been broken.'
qrtš	<i>aqurtaş</i> - <i>iqurtaş</i> ~ <i>leqrates</i> 'type of plant' C
qrts	<i>lqirtaş</i> - <i>leqrates</i> Dim. <i>leqrites</i> - <i>leqrirtsat</i> Unity F. <i>taqirtaş</i> - <i>tiqirtasan</i> 'bullet' A
qrwt	<i>qerwet</i> / <i>qerwet</i> / <i>tqerwat</i> 'to stutter or stammer' (intr) B PP <i>mqerwet</i> / <i>mqerwta</i> / <i>mqerwtin</i>
qrys	<i>qurrayes</i> 'kind of insect which kills trees' B
qsbt	<i>qesbat</i> 'type of plant' A
qsl	<i>leqsil</i> F. <i>taqsilt</i> Dim. <i>taqseyyelt</i> 'Grain that has not yet grown ears.' C
qş	<i>lmeqqaş</i> - <i>lemqaqes</i> Dim. <i>lemqişes</i> - <i>lemqişat</i> 'scissors' A
qş	<i>qesşes</i> / <i>qesşes</i> / <i>tqesşas</i> 'to cut' (trans) B Pass <i>tqesşes</i> PP <i>mqesşes</i> / <i>mqesşa</i> / <i>mqesşin</i> VN <i>tteqşis</i>
qşb	<i>taqşeb</i> - <i>tiqşban</i> Dim. <i>taqşeyyebt</i> - <i>tiqşeyyban</i> 'bamboo' Augm. <i>aqşeb</i> - <i>iqşben</i> Dim. <i>aqşeyyeb</i> - <i>iqşeyyben</i> B
qşbr	<i>lqşbur</i> 'parsley' A
qşh	<i>qaşeh</i> / <i>qaşh-a</i> / <i>qaşh-in</i> 'hard' Dim. <i>qşişeh</i> / <i>qşişh-a</i> / <i>qşişh-in</i> 'somewhat hard' A
qşh	<i>qesşeh</i> / <i>qesşeh</i> / <i>tqesşah</i> 'to harden, to become stiff' (trans) B Pass <i>tqesşhet</i> PP <i>mqesşeh</i> / <i>mqesşha</i> / <i>mqesşhin</i> E.g. <i>mqesşeh atar nes</i> = 'His leg is stiff.'
qşh	<i>teqşiha</i> - <i>teqşihat</i> 'bruise' A

qşr	<i>qşir / qşir-a / qşir-in</i> ‘short’ <i>qşiser / qşisr-a / qşisr-in</i> ‘somewhat short’ A
qşr	<i>qeşşer / qeşşer / tqeşşar</i> ‘to enjoy the night’ (intr) B
qşr	<i>qeşşer / qeşşer / tqeşşar</i> ‘to shorten’ (trans) B PP <i>mqeşşer / mqeşşra / mqeşşrin</i> E.g. <i>iqeşşr as itaren</i> ‘He has shortened his legs.’
qşm	<i>qşem / qşem / qqşum</i> ‘to share, divide’ (trans) B Pass <i>tqeşmet</i> PP <i>meqşum / meqşuma / meqşumin</i> E.g. <i>qeşm-awet tet merra</i> ‘Divide it between you.’
qş	<i>lqeşş - leqşuş</i> ‘tree bark’ (Used to make beehyves.) A
qşbl	<i>aquşbal</i> ‘type of plant’ B
qşe	<i>lqeşea - leqşue</i> Dim. <i>leqşiea - leqşieat</i> ‘tableware’ A
qşf	<i>taqaşşuft</i> ‘poverty’ B
qşqş	<i>aqeşquş - iquşqaş</i> ‘skull’ B
qşr	<i>aqşur - i^wqşar</i> Dim. <i>aqşeyyer - iqşeyyren</i> F. <i>taqşurt</i> Dim. <i>taqşeyyerṭ - tiqşeyyran</i> ‘shell, bark’ B
qşr	<i>qeşşer / qeşşer / tqeşşer</i> ‘to peel’ (lab) B
qşr	<i>taqşurt - tiq^wşar</i> ‘dandruff’ B
qşr	<i>tteqşira - ttqaşar</i> Dim. <i>ttqişra - ttqişrat</i> ‘sock’ A
qşş	<i>aqşuş - i^wqşaş</i> Dim. <i>aqşiwēš - iqşiwşen</i> F. <i>taqşušt - tiwqşaş</i> Dim. <i>taqşiwēšt - tiqşiwşan</i> ‘snail, shell, skull’ B
qt	<i>lqetta - leqtet</i> Dim. <i>leqtiwta</i> ‘bunch of cane’ A
qtl	<i>leqtila - leqtilat</i> ‘murder’ A
qtl	<i>lqettala - lqettalat</i> ‘cobra’ Augm. <i>aqettalun</i> ‘big cobra’
qt	<i>leqqat</i> Dim. <i>llqiqet - llqiqtat</i> ‘tongs’ E.g. <i>leqqat n ikemzan</i> ‘nail scissors’ A
qte	<i>qettee / qettee / tqettæ</i> ‘to cut (down)’ (lab) B Pass <i>tqettæet</i> PP <i>mqettee / mqettea / mqettein</i> VN <i>tteqtue</i>
qtn	<i>leqten - leqtuna</i> Dim. <i>leqtina - leqtinat</i> ‘cotton’ <i>leqtina</i> also means ‘handcuffs’ A
qtr	<i>qetter / qetter / tqettar</i> ‘to drip, leak’ (lab) B Pass <i>tqettret</i> PP <i>mqetter / mqettra / mqettrin</i> E.g. <i>yan işi iqetter aman id</i> ‘Someone leaked this water.’
qtr	<i>taqettirt - tiqettiran</i> ‘drop (of liquid)’ B
qw	<i>qwi / qwiyy-a / qwiyy-in</i> ‘strong’ A
qwm	<i>lqawm</i> ‘people’ A
qwqş	<i>qawqeş / qawqeş / tqawqeş</i> ‘to tickle’ (trans) B
qwş	<i>lqawş - leqwaş</i> Dim. <i>leqweyyeş - leqweyyşen</i> ‘arch’ A
qwş	<i>qewweş / qewweş / tqewwaş</i> ‘to bend over’ (intr) B <i>mqewweş / mqewwşa / mqewwşin</i>
qy	<i>tqiyya / itqiyya</i> ‘to vomit’ (trans) A
qytn	<i>lqaytun - leqwaṭen</i> ‘tent’ A
qzdr	<i>lqezdar - lqezdarin</i> F. <i>lqezdara</i> ‘tinmaker’ A
qzdr	<i>lqezdir - leqzader</i> ‘tin, can’ A

qzn	<i>aqezzun - iqezzunen</i> Dim. <i>aqzizen - iqiznen</i> F. <i>taqezzunt - tiqezzunan</i> Dim. <i>taqzizent - tiqiznan</i> ‘dog puppy’ B
qzz	<i>aquzzaz - iquzzazen</i> F. <i>taquzzazt - tiquzzazan</i> ‘ass’ B
qzε	<i>aquzzε - iquzzεen</i> ‘squeeze’ B
qzε	<i>qezzeε / qezzeε / tqezzeε</i> ‘to pinch’ (trans) B Pass <i>tqezzeεt</i> PP <i>mqezzeε / mqezzeεa / mqezzeεin</i>
qžž	<i>aqžižu - iqžižwen</i> F. <i>taqžižut - tiqžižwtan</i> ‘toy’ B
qž	<i>aquž - iqužen</i> ‘kind of a blue partridge’ B
r	
r	<i>ara ~ ura / ura / ttara</i> ‘to write’ (trans) B See ktb for alternative, Pass and PP.
r	<i>aru ~ uru / turu / ttaru</i> ‘to give birth’ (trans) E.g. <i>hettaru tafulest ku nnhar tiwfalan</i> ‘The chicken lays eggs every day.’ B
r	<i>rri / rri / rraz</i> ‘to vomit, give back, plant’ (trans) <i>irraz d</i> = ‘He vomits.’ B
r	<i>tara - tariwan</i> ‘earth between meadows’ B
rb	- / <i>rab / ttrib</i> ‘to destroy’ (intr) B E.g. <i>axyam ahen irab</i> ‘That house is destroyed.’ cf. ryb for causative.
rb	<i>rriḅa</i> ‘reef’ A
rb	<i>tarbat - tirbatan</i> Dim. <i>tarbeyyet - tirbitan</i> ‘young woman’ B
rbb	<i>arḅib (wa-) - irḅiben</i> ‘stepson’ B
rbb	<i>tarḅibt (ta-) - tirḅiban ~ tirḅibtan</i> ‘stepdaughter’ B
rbe	<i>larbee</i> ‘wednesday’ A
rbḥ	<i>rbeḥ / rbeḥ / rebbeḥ</i> ‘to earn, to win’ (trans) B Pass <i>trebbḥet</i> PP <i>merbuḥ / merbuḥa / merbuḥin</i> VN <i>rrbeḥ</i>
rby	<i>rrubyu - rrubyus</i> F. <i>rruḅya - rruḅyat</i> ‘blond’ A/S
rby	<i>ruḅy-u / ruḅy-a / ruḅy-us / ruḅy-at</i> ‘blond’ A/S
rdḥ	<i>rdeḥ / rdeḥ / reddeḥ</i> ‘to be aroused’ (intr) B
rdn	<i>irden</i> ‘wheat’ B
rğ	<i>rğa / irğa</i> ‘to hope’ A AP <i>raži / ražya / ražin</i>
rğ	<i>rrğa - rrğawat</i> ‘hope’ A
rdđ	Pass <i>tređdet</i> PP <i>merđud / merđuda / merđudin</i> ‘to give back, to plant, to sow’ cf. <i>tređdet taferkiwt ahen s lḥebb</i> ‘The garden has been planted with wheat.’ cf. r for base verb.
re	<i>rraei - rruεyan</i> F. <i>rraeya</i> ‘shepherd’ A
reb	<i>reeḅ / reeḅ / reεεḅ</i> ‘to scare, to want badly’ (trans) B PP <i>merεuḅ / merεuḅa / merεuḅin</i> VN <i>rrueḅ</i> Caus <i>reεεḅ / reεεḅ / treεεḅ</i> ‘to scare’ E.g. <i>merεuḅ x lḥaža inši</i> ‘He wants something really badly.’ E.g. <i>reεḅax aeeyyal ahen</i> ‘I scared that boy.’
rf	<i>arifi - rrwafa</i> F. <i>tarifit</i> ‘riffian’ C

rfs	<i>rfe</i> / <i>rfe</i> / <i>reffes</i> ‘to knead’ (trans) B cf. ežn for Pass and PP.
rg	<i>targa</i> - <i>tirgiwan</i> ‘canal’ B
rg	<i>tirgett</i> - <i>tirgan</i> ‘embers’ B
rgl	<i>argel</i> ‘type of plant’ B
rgl	<i>rrigalu</i> - <i>rrigalus</i> ‘present’ A/S
rgz	<i>argaz</i> - <i>irgazen</i> ‘man’ B
ry	<i>ssruiy</i> ~ <i>ssrey</i> / <i>ssrey</i> / <i>ssruiy</i> ‘to light’ (trans) B
ryw	<i>rreywa</i> - <i>rrywawi</i> ‘foam’ A
rḥ	<i>rḥa</i> - <i>lerḥi</i> Augm. <i>areḥwin</i> ‘stone mill’ A
rḥ	<i>rriḥa</i> - <i>rriḥat</i> ‘fragrant, smell’ A
rḥ	<i>rriḥeyya</i> - <i>rrwaḥi</i> Dim. <i>rrwiḥeyya</i> - <i>rrwiḥeyyat</i> ‘traditional women’s shoe’ A
rḥb	<i>tarḥeḥt</i> Dim. <i>tarḥeyyeḥt</i> Augm. <i>arḥeb</i> - <i>ireḥḥawen</i> ‘land’ B
rḥl	<i>reḥḥel</i> / <i>reḥḥel</i> / <i>treḥḥal</i> ‘to move house, migrate’ (intr) B
rk	<i>rku</i> / <i>rka</i> / <i>rekku</i> ‘to rot’ (intr) B
rk	<i>tarekt</i> - <i>tirektan</i> ‘newborn calf’ B
rkb	AP <i>rakeb</i> / <i>rakḥa</i> / <i>rakḥin</i> ‘to ride, mount’ cf. n for verb.
rkb	<i>rekkeb</i> / <i>rekkeb</i> / <i>trekkab</i> ‘to make mount, place on top’ (trans) B Pass <i>rtekbet</i> PP <i>mrekkeb</i> / <i>mrekḥa</i> / <i>mrekḥin</i>
rke	<i>rkeε</i> / <i>irkeε</i> ‘to bend through the knees for prayer’ (intr) A AP <i>rakeε</i> / <i>rakea</i> / <i>rakein</i> PP <i>merkuε</i> / <i>merkuεa</i> / <i>merkuεin</i>
rkl	<i>arekkal</i> - <i>irekkila</i> Dim. <i>arkikel</i> - <i>irkiklen</i> F. <i>tarekkalt</i> - <i>tirekkila</i> Dim. <i>tarkikelt</i> - <i>tirkiklan</i> ‘dog’ B
rkl	<i>rkel</i> / <i>rkel</i> / <i>rekkel</i> ‘to kick’ (trans) B VN <i>rrekla</i>
rkl	<i>tarkelt</i> ‘type of plant’ B
rkn	<i>tterkina</i> - <i>tterkinat</i> ‘place where one lies when one is sick’ A
rmk	<i>rrmuka</i> - <i>rrmukat</i> ‘big truck’ A
rn	<i>rnu</i> / <i>rna</i> / <i>rennu</i> ‘to add’ (trans) B
rnb	<i>larneb</i> ‘hare’ A
rng	<i>luring</i> - <i>luringis</i> ‘beacon’ (This is a plastic bottle to recognize where the anchor of the net is)’ A
rqb	<i>rreqba</i> - <i>rreqbat</i> ‘murder’ A
rqe	<i>tarqiet</i> - <i>tirqietan</i> ‘rag’ B
rr	<i>arrar</i> - <i>irraren</i> ‘threshing-floor’ B
rs	<i>res</i> / <i>res</i> / <i>tres</i> ‘to land’ (intr) B
rsn	<i>arsin</i> (wa-) ‘famine, hunger’ E.g. <i>atiyupia gas arsin</i> ‘There is hunger in Ethiopia’ B
rš	<i>buriš</i> - <i>iburišen</i> Dim. <i>abwireš</i> ‘ant with wings’ A

rs	<i>res / res / trus</i> ‘to land, to come down’ Caus <i>sres / sres / ssrus</i> ‘to put down’ (trans) B cf. nzl for Pass and PP.
rš	<i>rriša</i> ‘the blunt part of a pickaxe’ A
ršq	<i>ršeq / ršeq / reššeq</i> ‘to split’ (lab) B PP <i>meršuq / meršuqa / meršuqin</i>
rtēb	<i>rtēb / irtēb</i> ‘to be scared’ (intr) A PP <i>metēub / metēuba / metēubin</i>
rtl	<i>rrīla</i> Dim. <i>tarteyyelt - tirtīlan</i> ‘spider’ C
rtw	<i>tartiwt - tartiwan</i> ‘sleep around the eyes’ B
rte	<i>rrettaea - rrettaeat</i> ‘teat’ A
rwl	<i>rwel / rwel / reggul ~ iruggel ~ ireggel</i> ‘to flee’ (intr) B cf. hrb for causative.
rwn	<i>rrwina</i> ‘chaos’ Can be used as a quantifier, e.g. <i>rrwina n imalhen</i> ‘a lot of fish’ A
rx	<i>rxef / rxef / rexxef</i> ‘to loosen’ (trans) B Pass <i>rtxef</i> PP <i>merxuf / merxufa / merxufin</i>
ry	<i>rreyya - rreyyat</i> ‘lung’ A
ryb	<i>reyyeb / reyyeb / treyyab</i> ‘to destroy’ (trans) B Pass <i>treyyeb</i> PP <i>mreyyeb / mreyyba / mreyybin</i>
ryq	<i>reyyeq / reyyeq / treyyaq</i> ‘to have breakfast’ (intr) B PP <i>mreyyeq / mreyyqa / mreyyqin</i>
ryq	<i>rryaq</i> ‘breakfast’ B
rzm	<i>rezzem / rezzem / trezzam</i> ‘to become worse (sick), to change mood’ (trans) B Pass <i>trezzmet</i> PP <i>mrezzem / mrezzma / mrezzmin</i>
r	
r	<i>ara / -</i> ‘to give’ A This has only the Imperative form.
r	<i>rrī - leryay</i> ‘judgement, will’ A
rb	<i>rebbi / rebba / trebbay</i> ‘to raise’ (trans) B
rbe	<i>rrbie</i> Dim. <i>rrbeyyē - rrbieat</i> F. <i>tarbiet - tirbietan</i> ‘spring, grass’ A
rbt	<i>amerbut - imribten</i> ‘small rope’ B
rbt	Pass <i>trebbtet</i> PP <i>merbut / merbuta / merbutin</i> ‘to close’
rby	<i>tterbeyya - ttrabi</i> ‘baby’ A
rbz	<i>rrabuz</i> ‘wooden fan’ A
rdm	<i>rrduma - rrdaym</i> Dim. <i>rrdima - rrdimat</i> ‘bottle’ A
rdy	<i>rradyun - rradyunat ~ rradyunis</i> ‘radio’ A/S
rge	PP <i>mregeē / mregeēa / mregein</i> ‘be planted’ cf. r ‘to plant’
red	<i>rrēada - rrēadat</i> ‘stingray’ A
red	<i>rrēed</i> ‘thunder’ F. <i>rrēedeyya</i> ‘loud thunder’ A
reš	<i>reēeš / reēeš / treēeāš</i> ‘to let shiver’ (trans) B Pass <i>treēešet</i>
reš	<i>reēš / irēeš</i> ‘to shiver’ (intr) A Pass <i>treēšet</i> PP <i>merēuš / merēuša / merēušin</i>
rey	<i>rraei - rruēyan</i> F. <i>rraēya</i> ‘herdsman/herdswomen’ A

rfe	<i>lmerfēe - lemṛafēe</i> Dim. <i>lemṛifee - lemṛifeat</i> ‘shelf’ A
rfe	<i>rfeē / rfeē / reffeē</i> ‘to carry’ (trans) B Pass <i>treffēet</i>
rh	<i>rruh</i> ‘soul or spirit’ A
rht	<i>lmurhit - lemṛahet</i> Dim. <i>lemṛihet</i> ‘homosexual man’ A
rml	<i>ṛṛmel</i> F. <i>ṛṛemla</i> Augm. <i>aremliw</i> ‘thick sand’ Dim. <i>ṛṛmila</i> ‘sand’ A
rmn	<i>ṛṛumman</i> Unity F. <i>tarummant - tiṛummanan</i> ‘pomegranate’ <i>tarummant n</i> <i>lkemmara</i> ‘cheek’ B
rmš	<i>remmeš / remmeš / tremmaš</i> ‘to blink’ (intr) B
rmy	<i>ṛṛumayet</i> ‘sling’ A
rn	<i>lurni - lurnis</i> ‘wage for one day’ spanish through arabic S
rny	<i>llaraneyya - llaraneyyat</i> ‘type of mackerel’ A
rps	<i>arappaš - irappiša</i> Dim. <i>arpipeš - irpiṣen</i> F. <i>tarappašt - tirappiša</i> Dim. <i>tarpipešt - tirpiṣan</i> ‘straw hat’ B
rqe	<i>reqqeē / reqqeē / treqqaē</i> ‘to repair clothing’ (trans) B Pass <i>treqqeēt</i> PP <i>mreqqeē</i> <i>/ mreqqeā / mreqqein</i> VN <i>terqieā</i>
rqm	<i>ṛṛaqm - lṣarqam</i> ‘number’ A
rqq	<i>reqqeē / reqqeē / treqqaē</i> ‘to make thin’ (trans) B Pass <i>treqqeēt</i> PP <i>mreqqeē / mreqqa / mreqqin</i>
rqq	<i>rqiq / rqiq-a / rqiq-in</i> ‘thin’ Dim. <i>ṛqiwēq / ṛqiwq-a / ṛqiwq-in</i> ‘somewhat thin’ A
rs	<i>ṛṛas - leryus</i> Dim. <i>ṛṛweyyes</i> ‘cape’ A
ršš	<i>ṛṛšaš</i> ‘spreading bullet’ A
ršt	<i>aršet - ireštawen</i> ‘pus’ B
rš	<i>rešš / rešš / trešša</i> ‘to splash’ (trans) B PP <i>meršuš / meršuša / mreššin</i>
rṭb	<i>retteb / retteb / trettāb</i> ‘to soften’ (trans) B Pass <i>trettbet</i> PP <i>mretteb / mrettba / mrettbin</i>
rṭb	<i>rṭeb / rṭeb-a / rṭeb</i> ‘soft’ A
rṭe	PP <i>mretteē / mretteā / mrettein</i> ‘to suckle (breast)’ cf. <i>ṭṭ</i> ‘to suckle’
rṭw	<i>llarwi</i> ‘deer’ (They do not live in the ghomara area.) A
rṭd	<i>ṛṛwida - ṛṛwayed ~ ṛṛwidaṭ</i> ‘tire, wheel’ A
rṭd	<i>ṛṛwiḍu</i> ‘loud noise’ A
rṭh	<i>rewweh / rewweh / trewwah</i> ‘to lift, return smth, carry’ (trans) B Pass <i>trewwhet</i> PP <i>mrewweh / mrewwaha / mrewwhin</i> (<i>mrewweh</i> can also mean ‘to have a cold’).
rṭh	<i>ṛṛwah</i> Dim. <i>ṛṛweyyeh</i> ‘air’ E.g. <i>itsut ṛṛwah</i> ‘The wind is blowing.’ A
rx	<i>ṛṛxa</i> ‘cheapness’ A
rxs	<i>rxis / rxis-a / rxis-in</i> ‘cheap’ A
ryh	<i>reyyeh / reyyeh / treyyah</i> ‘to rest’ (intr) B PP <i>mreyyeh / mreyyaha / mreyyhin</i>
rys	<i>ṛṛays - ṛṛways</i> ‘leader’ A

rz	<i>reḷ / reḷ / ttreḷ</i> ‘to break’ (lab) B E.g. <i>lkaṣ iṛeḷ</i> ‘the glass is broken.’ <i>aḷru ittṛeḷ s lmaṣṣa</i> ‘Stone is (can be) broken with a hammer.’ <i>deyya hettṛeḷ</i> ‘It breaks quickly.’
rz	<i>ṛrawḷ</i> ‘rice’ A
rz	<i>rreḷza - rreḷez</i> Augm. <i>arṛeḷziw</i> ‘turban’ A
rzñ	<i>tarḷint - tirḷinan</i> ‘type of fig tree’ It has a red small fig. B
rzñn	<i>arṛeḷḷan - iṛeḷḷanen</i> Dim. <i>arḷiḷen - iṛiḷiḷnen</i> ‘wasp’ B
s	
s	<i>ssu / ssu / ssu</i> ‘to spread out blanket or carpet etc.’ (trans) B (Used by older people, <i>ferreṣ</i> is used nowadays.) B
s	<i>assa</i> ‘nowadays’ B
s	<i>ssu / ssu / tessa</i> ‘to lay down a cloth for sleeping’ (trans) B + IO (remembered verb.)
s	<i>su / su / sess</i> ‘to drink’ (intr) B
s	<i>tasa - tiseḷtan</i> ‘cow’
s	<i>tusut</i> ‘coughing fit’ B
s	<i>yus d / yus d / ttas d</i> ‘to land, be related to’ (intr) B The deictic clitic d is obligatory. E.g. <i>ittas as d</i> ‘He is related to him.’ <i>ineqqez zeg uṣtiḥ, yus d g terḥeḷt</i> ‘He jumped from the roof and landed on the ground.’
sbb	<i>ssabab - ssababat</i> F. <i>ssababa</i> ‘cause’ A
sbb	<i>ssbab - ssabat</i> ‘magical note written by imam’ A
sbe	<i>ssabeε - sswabeε</i> ‘birth ceremony’ A
sbe	<i>ssbeε - ssbuea</i> Dim. <i>ssbeyyeε</i> F. <i>ssbiea - ssbieat</i> Dim. <i>ssbiea - ssbieat</i> ‘lion’ A
sbekrwš	<i>seḷeakraweš</i> ‘part of the goat stomach’ A
sby	<i>sbey / sbey / ssbey ~ ssbuy</i> ‘to dye, paint’ (trans) B Pass <i>tsebyet</i> PP <i>mesbuy / mesbuya / mesbuyin</i>
sby	<i>ssbiya - ssbiyat</i> ‘paint’ A
sbḥ	<i>ssbeḥ - ssbuḥat</i> ‘morning’ A
sbn	<i>ssebneyya - ssbani</i> Dim. <i>ssbineyya - ssbineyyat</i> ‘headband’ A
sbr	<i>sebber / sebber / tsebbar</i> ‘to support (in grievance)’ (trans) B
sbr	<i>ssubri - ssubris</i> ‘envelope’ A/S
sbs	<i>sseḷsi - ssḷasa</i> ‘weed pipe’ A
sbt	<i>sseḷt</i> ‘saturday’ A
sbṭr	<i>ssbiṭar - ssbiṭarat</i> ‘hospital’ A
sd	<i>lḷussaq - lḷussaqat</i> ‘teacher’ A
sd	<i>ssidi - ssidis</i> ‘CD’ A/S
sḷe	<i>ssḷae - ssḷaeat</i> ‘sound or noise’ A
sdl	<i>tasiddelt - tisiddilan</i> ‘small wall around the house’ B

sdr	<i>ssder</i> - <i>ssdura</i> ‘chest’ A
sġe	<i>seġeε</i> / <i>seġeε</i> / <i>tseġae</i> ‘to encourage’ (trans) B PP <i>mseġeε</i> / <i>mseġea</i> / <i>mseġein</i> VN <i>ttesżie</i>
se	<i>sea</i> / <i>isea</i> ‘to beg’ (intr) A
se	<i>tasaeεat</i> Dim. <i>taswieεet</i> - <i>tiswiεtan</i> ‘a period, a time’ (The diminutive refers to a little while.) B
sed	<i>sseidi a ymellulin</i> - <i>sseayed a ymellulin</i> ‘type of white fig’ <i>sseidi lekħel</i> - <i>sseayed kuħel</i> ‘type of black fig’ A
sey	<i>ameseay</i> - <i>imeseayen</i> F. <i>tameseayt</i> - <i>timeseayan</i> ‘beggar’ B
sf	<i>asafu</i> - <i>isufa</i> F. <i>tasafut</i> - <i>tisufa</i> ‘torch’ B
sf	<i>asif</i> (wa-) - <i>isaffen</i> F. <i>tasift</i> - <i>tasiftan</i> ‘river’ B
sf	<i>ssf</i> / <i>ssfa</i> / <i>ssfay</i> ‘to fester, to overflow’ (lab) B PP <i>messfi</i> / <i>messfiya</i> / <i>messfiyyin</i>
sf	<i>tasaft</i> - <i>tisafan</i> ‘beech’ B
sff	<i>ssifef</i> / <i>ssafef</i> / <i>ssif</i> ‘to sieve’ (trans) B cf. yrbl for Pass and PP.
sfnġ	<i>ssfenġ</i> Unity F. <i>tasfenġekt</i> - <i>tisfenġkan</i> ‘kind of donut’ C
sfr	<i>ssfar</i> ‘kind of copper’ A
sg	<i>asuggay</i> - <i>isuggayen</i> ‘dirty cloth’ (Used to pick up hot material.) B
sg	<i>sag</i> / <i>isug</i> ‘to drive’ (trans) A Pass <i>tsaget</i>
sgl	<i>asaġul</i> - <i>isaġulen</i> F. <i>tasaġult</i> - <i>tisaġulan</i> ‘hook’ B
sgn	<i>aseġnu</i> F. <i>taseġnut</i> - <i>tiseġnutan</i> ‘cloud’ B
sy	<i>suy</i> / <i>sey</i> / <i>ssay</i> ‘to buy’ (trans) B cf. šr for Pass and PP
syn	<i>aseyni</i> - <i>iseyna</i> ‘big needle’ B
syn	<i>asyun</i> - <i>isuynan</i> Dim. <i>asy^weyyen</i> - <i>isy^weyynen</i> F. <i>tasyunt</i> - <i>tisuynan</i> Dim. <i>tasy^weyyent</i> - <i>tisy^winan</i> ‘rope’ B
syř	<i>asyar</i> - <i>isyaren</i> ‘wood, sticks’ B
syř	<i>tasyart</i> - <i>tisyaran</i> Dim. <i>tasyeyyert</i> - <i>tisyeyyan</i> ‘part or piece’ B
shl	<i>shal</i> / <i>ishal</i> ‘to become, be easy’ (intr) A AP <i>sahel</i> / <i>sahla</i> / <i>sahlin</i> Caus. <i>sahel</i> / <i>sahel</i> / <i>tsahel</i> ‘to make easy’ (intr) B also <i>sehhel</i> / <i>sehheh</i> / <i>tsehhal</i> ‘to make easy’ (intr) B
shř	<i>sehħer</i> / <i>sehħer</i> / <i>tsehħar</i> ‘to do magic’ (trans) B PP <i>msehħer</i> / <i>msehħra</i> / <i>msehħrin</i>
shř	<i>ssehħar</i> - <i>ssehħarin</i> F. <i>ssehħara</i> ‘wizard’ A
shř	<i>sshur</i> ‘dawn, breacking of the fast in the ramadan’ A
sḥt	<i>ssuht</i> ‘type of insect’ (It makes the grain sour.) A
sk	<i>amessaqi</i> - <i>imessaqiyen</i> ‘an unploughed field’ B
sk	<i>ssekka</i> - <i>sskak</i> ‘coin’ A
skħ	<i>sskuħ</i> / <i>sskuħ</i> / <i>sskuħu</i> ‘to cough’ (intr) B

skn	<i>asekni - isekna</i> ‘big needle’ B
skn	<i>sken / isken</i> ‘to live’ (intr) A AP <i>saken / sakna / saknin</i>
skn	<i>lmeskin - lemsaken ~ lmusaken</i> Dim. <i>lemsiken - lemsikna</i> F. <i>lmeskina</i> ‘poor person’ A
skr	<i>sker / isker</i> ‘to get drunk’ (intr) A AP <i>sekran / sekrana / sekranin</i>
skr	<i>sker ~ sekker / sker ~ sekker / sskar</i> ‘to do’ (trans) B
skr	<i>tasekkurt - tisukran</i> ‘female partridge’ B
skr	<i>tiskert (ti-)</i> ‘garlic’ B
skr	<i>ssukkar</i> ‘sugar’ A
skt	<i>ssket ~ sskut / sket / sekket</i> ‘to be quiet, silent’ (intr) B AP <i>saket / sakta / saktin</i> Caus. <i>sekket / sekket / tsekkat</i> ‘to silence’ (trans) B Pass <i>tsekket PP msekket / msekkta / msekktin</i>
skw	<i>tasekkawt</i> ‘a fight between young rams’ E.g. <i>tkaṭen tasekkawt</i> ‘They (the goats) are having a fight.’ B
skw	<i>asekkaw - isekkawen</i> ‘horn’
skyr	<i>sskayri</i> F. <i>skayreyya</i> ‘drunk’ A
sl	<i>asla - islan</i> F. <i>taslat - tislata</i> ‘bride(groom)’ Also <i>taslat n lehwa</i> ‘rainbow’ B
sl	<i>sal / isal</i> ‘to owe’ (trans) A E.g. <i>ka-ysallu leflus</i> ‘He owes him money.’ (fr ‘to owe’ is used as well). Both are used.
sl	<i>sell / sella / tesla</i> ‘to hear’ (intr) B E.g. <i>sellay as is</i> ‘I have heard him.’ <i>sellay yres</i> ‘I listened to him (I obeyed him).’
sl	<i>tisila (n uwri)</i> ‘shoe’ No SG B
slf	<i>aslif - islifen</i> F. <i>taslift - tislifan</i> ‘borther/sister of wife’
slf	<i>salluf</i> ‘high hair’ A
slf	<i>sellef / sellef / tsellaf</i> ‘to lend, borrow’ (trans) B Pass <i>tsellefet PP msellef / msellfa / msellfin</i> E.g. <i>isellf ahen</i> ‘He has lent them.’ E.g. <i>isellf as</i> ‘He lent him (money).’ <i>isellef zgas</i> ‘He borrowed it from him.’ <i>ša t isellef leflus</i> ‘He is going to lend me money.’
slf	<i>taselluft - tselfa</i> ‘tick’ B
slḥ	<i>ṣaleḥ / ṣaleḥ / ṭṣalaḥ</i> ‘to reconcile’ (trans) B
slk	<i>sselk - ssluka</i> Dim. <i>ssleyyek - ssslikaṭ</i> ‘iron wire’ A
slm	<i>sellem / sellem / tsellam</i> ‘to greet’ (trans) B Combines with the preposition fx . E.g. <i>isellem fxes</i> ‘He greeted him.’
slm	<i>sellem / sellem / tsellam</i> ‘to permit’ (intr) B VN <i>tteslim</i> It takes the indirect object. E.g. <i>isellm as</i> ‘He gave him permission.’
slm	<i>sellem / sellem / tsellam</i> ‘to surrender’ (trans) B Pass <i>tsellmet PP msellem / msellma / msellmin</i> E.g. <i>isellem ḏḏmay nnes</i> ‘He surrendered himself.’
slm	<i>ssellum - sslalem</i> ‘ladder’ A

slm	<i>ssilm</i> ‘peace’ A
sls	<i>asalles</i> Dim. <i>asliwes</i> Dim. <i>tasliwest</i> ‘darkness’ (The diminutives refer to darkness in different degrees, e.g. <i>tasliwest n ssbah</i> = between light and darkness. Also: <i>asalles xendris</i> = extreme darkness). B
sls1	<i>lmsalsal - lmsalsalat</i> ‘soap’ A
sls1	<i>selsel / selsel / tsalsal</i> ‘to bake grain’ (trans) B Pass <i>tselslet</i> PP <i>mselsel / mselsela / mselselin</i>
slt	<i>aslet</i> ‘two years ago’ E.g. <i>tayaṭ n uslet</i> ‘the goat of two years ago’ <i>aslet n uslet</i> ‘three years ago’ B
slt	<i>slet / slet / sslut</i> ‘to remove’ (trans) B Pass <i>tseltet</i> PP <i>meslut / mesluta / meslutin</i>
slx	<i>slex / slex / sslux</i> ‘to skin’ (lab) B Pass <i>tselxet</i> PP <i>meslux / mesluxa / mesluxin</i>
sm	<i>lisem - lismuwat</i> ‘name’ A
sm	<i>ssem</i> ‘poison’ A
sme	<i>semmeε / semmeε / tsemmaε</i> ‘to sound, listen to’ (trans) B
smḥ	<i>sameḥ / sameḥ / tsamah</i> ‘to forgive’ (intr) B Pass <i>tsamḥet</i> PP <i>msameḥ / msamḥa / msamḥin</i> E.g. <i>ismeh gas</i> ‘He abandoned it.’
smḥ	<i>smeḥ / smeḥ / ssmuḥ</i> ‘to forgive, to abandon’ (intr) B PP <i>mesmuḥ / mesmuḥa / mesmuḥin</i>
smḥ	<i>tsameḥ / itsameḥ</i> ‘to make up’ (intr) A E.g. <i>tsameḥ ides</i> ‘He made up with him.’
smm	<i>ssumm / ssamem / ssumum</i> ‘to suck’ (trans) B
smn	<i>ssimana - ssimanaṭ</i> ‘week’ A
smr	<i>asammer - isammiren ~ isummar</i> F. <i>tasammert - tisammiran</i> Dim. <i>tasmimert - tasmimertan</i> ‘open sunny land on a hill’ B
sn	<i>asan - isanen</i> ‘tooth’ B
sn	<i>asun - isunen</i> ‘cooked barley’ The plant <i>tifergallan</i> is added to it. B
sn	<i>sna - snin</i> ‘age’ A
sn	<i>ssen / ssen / ssen</i> ‘to know (something/someone)’ (trans) B See erf for Pass and
snb	<i>lṣaṣnaḥ</i> ‘idol’ A
snd	<i>ssendu / ssenda / ssendaw</i> ‘to churn’ (trans) B VN <i>lemxiṭ</i>
snd	<i>tasenduṭ</i> ‘traditional butter’ B
snḥ	<i>ssnaḥ ~ sslaḥ</i> ‘weapons’ A
sns1	<i>asenslu - isensluwen</i> ‘spine’ B
sns1	<i>ssensla - ssnasel</i> Dim. <i>ssnisla - ssnislaṭ</i> ‘necklace, chain’ A
snt	<i>ssinta - ssintaṭ</i> ‘casette’ A
sntf	<i>ssentef / ssentef / ssentaf</i> ‘to wound’ (lab) B PP <i>msentef / msentfa / msentfin</i>
sny	<i>ssiniya - sswani</i> ‘tray’ A

sq	<i>ssuq - leswaq</i> Dim. <i>sswiqa - sswiqat</i> ‘market’ (The <i>sswiqa</i> is an alternative market that is held on another day if there is no market held on the normal day.) A
sqd	<i>seqqed / seqqed / tseqqad</i> ‘to tend (goats)’ (trans) B
sqf	<i>ssqef - ssquf ~ ssqufat</i> Dim. <i>ssqifa - ssqifat</i> ‘roof’ A
sqwqw	<i>tasqawqawt - tisqawqawan</i> ‘cone’ B
sr	<i>assar (wa-)</i> ‘the time in the afternoon when the goats go back into the field’ B
sr	<i>sar / isir</i> ‘to continue’ (intr) A
sr	<i>tasarut - tisura</i> ‘key’ B
sr	<i>tassart - tissaran</i> ‘part of the plough’ B
srbs	<i>sserbisa - sserbisat</i> ‘beer’ A
srd	<i>ssired / ssared / ssired</i> ‘to wash’ (trans) B cf. ysl for PP
srdn	<i>aserdun ~ asardun - iserdunen</i> Dim. <i>asriden - isridnen</i> ‘male mule’ B
srdn	<i>ssardin - ssraden</i> Dim. <i>ssriden</i> Augm. <i>asardin - isardinen</i> ‘sardine’
srf	<i>ssref / ssref / ssruf</i> ‘to comb’ (trans) B
srf	<i>tasraft - tisrafan</i> ‘grain storage, whirlpool’ B
sryyl	<i>aserrayyul</i> ‘kind of plant’ B
srk	<i>tasarka - tisarkiwan</i> Augm. <i>asarkiw</i> ‘a rubber shoe’ (Used before the use of modern shoes.)
srn	<i>serrem / serrem / tserrem</i> ‘to comb’ (trans) B PP <i>mserrem / mserrma / mserrmin</i>
srqzt	<i>serraqzzit</i> ‘cockroach’ A
srr	<i>ssrir - ssrayer</i> ‘hand made bed’ A
srsr	<i>ssersar - ssraser</i> Dim. <i>ssriser - ssrisreyyat</i> ‘alarmclock’ A
srwt	<i>serwet / serwet / tserwat</i> ‘to thresh’ (lab) B cf. drs for VN
srx	<i>aserrix</i> ‘cold’ B
sry	<i>ssarya - ssaryat ~ sswari</i> ‘pile’ A
sržm	<i>sseržem - ssražem</i> Dim. <i>ssrižem</i> ‘window’ A
ss	<i>sis / sas / ssyas</i> ‘to boil’ (intr) B
ssm	<i>susem / sasem ~ isusem / tsusum</i> ‘to listen’ (intr) B E.g. <i>isasem as i weeyal ahen</i> ‘He listened to that boy.’ <i>isasem fxes</i> ‘He listens to him’
ssm	<i>tasisma - tisismiwan</i> ‘needle’ B
ssn	<i>sisen / sasen ~ isisen / tsisen</i> ‘to dab bread with gravy’ (intr) B
ssn	<i>tasusna - tisisniwan</i> ‘wasp’s nest’ B
stežb	<i>steežeb / isteežeb</i> ‘to astonished’ (intr) A PP <i>mesteežeb / mesteežba / mesteežbin</i> E.g. <i>mesteežeb gas</i> ‘He is astonished by him.’
stf	<i>asettuf - isettufen</i> ‘type of plant’ B
stl	<i>stilu - stiluwat ~ stilus</i> ‘pen’ A/S

stns	<i>stanes / istanes</i> ‘to get used’ (trans) A PP <i>mestanes / mestansa / mestansin</i>
stnydr	<i>sstenyaḍur - sstenyaḍuris</i> ‘screwdriver’ A/S
str	<i>asaṭur - isuṭar</i> Dim. <i>aswiṭer - iswiṭren</i> F. <i>tasaturt - tisuṭar</i> Dim. <i>taswiṭert - tiswiṭran</i> ‘beam’ (It supports the roof of a traditional house.) B
stry	<i>lastreyya - lastreyyaṭ</i> ‘rake’ A
stḥ	<i>asetṭuḥ - isetṭuḥen</i> ‘firewood’ B
sw	<i>iswa</i> ‘to cost’ (intr) A (Only imperfective)
swl	<i>siwel / sawel / tsawal</i> ‘to speak or talk’ (intr) B The verb can be followed by the indirect object and/or the preposition i ~ id . E.g. <i>uhaḍ isawl as id uēyyal aḍ</i> or <i>uhaḍ isawel id uēyyal aḍ</i> ‘This person has spoken to this boy.’
swn	<i>asawen</i> F. <i>tasawent</i> ‘upwards hill’ B
swq	<i>sewweq / sewweq / tsewwaq</i> ‘to shop, go to the market’ (intr) B PP <i>msewweq / msewwqa / msewwqin</i>
sxn	<i>ssxana</i> ‘fever, summer’ A
sy	<i>seyya</i> ‘moving backwards in a boat’ A
sy	<i>sseyyu - sseyyus</i> ‘postage stamp’ A/S
syb	<i>seyyeb / seygeb / tseyyab</i> ‘to throw’ (trans) B Pass <i>tseyybet</i> PP <i>mseyyeb / mseyyba / mseyybin</i>
syd	<i>sseyyed - sseyydat</i> ‘marabout’ A
syf	<i>ssayf - ssyufa</i> Dim. <i>sseyyef - sswifat</i> ‘sword’ A
syl	<i>seyyel / seygel / tseyyal</i> ‘to flow’ (intr) B Pass <i>tseyylet</i> PP <i>mseyyal / mseyyla / mseyylin</i>
sžd	<i>sžed / isžed</i> ‘to bend on the forehead for prayer’ (intr) A AP <i>sažed / sažda / saždin</i> PP <i>mesžud / mesžuda / mesžudin</i>
sže	<i>ssžiea - ssžieat</i> ‘bravery’ A
sžn	<i>lmesžun - lemsažen</i> ‘captive or prisoner’ A
sžn	<i>ssižn</i> ‘prison’ A
sžn	<i>sžen / sžen / sežžen</i> ‘to detain’ (trans) B Pass <i>tsežneṭ</i> PP <i>mesžun / mežžuna / mesžunin</i>
sfl	<i>ssuḥal - ssuḥalaṭ</i> ‘question’ A
š	
ššf	<i>šuṣef / šuṣef / tšuṣuf</i> ‘to spit’ (intr) B
ššf	<i>tišuṣaf</i> ‘saliva’ B
šštl	<i>šštel - šštula</i> Dim. F. <i>tašṭeyyelt - tišṭilan</i> ‘bucket’ C
šb	<i>ššaba - ššyeb</i> ‘harvest’ A
šbn	<i>šebben / šebben / tšebban</i> ‘to wash clothes’ (trans) B Pass <i>tšebbneṭ</i> PP <i>mšebben / mšebbna / mšebbnin</i> E.g. <i>dažimen ka-tšebben g lḥedd</i> ‘It is always washed on Sunday.’

şbn	<i>şşabun</i> Unity F. <i>şşabuna</i> ‘soap’ A
şbt	<i>şşebbat</i> - <i>şşabat</i> Dim. <i>şbibta</i> - <i>şbibta</i> Unity F. <i>taşebbatt</i> Dim. <i>taşibett</i> - <i>tişibitan</i> Augm. <i>aşebbat</i> Dim. <i>aşibet</i> - <i>işibiten</i> ‘shoe’ B
şđ	<i>şşad</i> / <i>işşad</i> ‘to hunt, to fish’ (trans) A E.g. <i>ağam a d şşad</i> ‘He fished yesterday.’
şde	<i>şeddeε</i> / <i>şeddeε</i> / <i>tşeddae</i> ‘to make loud noise, disturb’ (trans) B Pass <i>tşeddeet</i> PP <i>mşeddeε</i> / <i>mşeddeεa</i> / <i>mşeddein</i> VN <i>ssdae</i> ‘noise’ E.g. <i>lmuteε an müşeddeε</i> ‘That place is noisy.’
şf	<i>şeffi</i> / <i>şeffi</i> / <i>tşeffay</i> ‘to clear, filter’ (trans) B PP <i>mşeffi</i> / <i>mşeffya</i> / <i>mşeffin</i>
şf	AP <i>şafi</i> / <i>şafya</i> / <i>şafin</i> ‘filtered, cleaned’
şf	<i>şeff</i> / <i>şeff</i> / <i>tşeffa</i> ‘to empty, dispose’ (lab) B E.g. <i>lkas ad işeff</i> ‘This glass has been emptied.’
şşf	<i>şşefşaf</i> Unity F. <i>taşefşaft</i> - <i>tişefşafan</i> ‘type of tree’ C
şfh	<i>şşfiha</i> - <i>şşfayeh</i> ‘hoof’
şfr	<i>aşefraw</i> - <i>işefrawen</i> Dim. <i>aşifer</i> - <i>işifren</i> F. <i>taşefrawt</i> - <i>tişefrawtan</i> Dim. <i>taşfifert</i> - <i>tişifran</i> ‘yellow person/thing’ B
şfr	<i>şeffe</i> / <i>şeffe</i> / <i>tşeffar</i> ‘to whistle’ (intr) B VN <i>ttesfir</i>
şfr	<i>şfer</i> / <i>şfer-a</i> / <i>şufer</i> ‘yellow’ Dim. <i>şfifer</i> / <i>şfifr-a</i> / <i>şfifr-in</i> ‘somewhat yellow’ A
şft	<i>aşfet</i> - <i>işeften</i> ‘torch’ B
şhd	<i>şşehd</i> ‘warmth’ A
şh	<i>şhu</i> / <i>şha</i> / <i>şehhu</i> ‘to get well’ (intr) B
şh	<i>şhu</i> / <i>şha</i> / <i>şehhu</i> ‘to be strong, to be cured, to be correct’ (intr) B
şl	<i>laşel</i> ‘origins’ A
şl	<i>şşala</i> ~ <i>şşla</i> ‘prayer’ A
şlb	<i>şşalaba</i> - <i>şşalabaris</i> ‘type of fyke’ A/S
şle	<i>aşellie</i> - <i>işellieen</i> ‘forehead’ Arabic <i>selliea</i> is used as well in texts. B
şlt	<i>şaltu</i> - <i>şlatu</i> ‘jump (in the water)’ A/S
şlt	<i>tşalta</i> / <i>itşalta</i> ‘to dive’ (intr) A
şltgm	<i>aşelatgam</i> ‘day before yesterday’ B
şm	<i>şum</i> / <i>şam</i> ~ <i>işum</i> / <i>tşum</i> ‘to fast’ (intr) B AP <i>şayem</i> / <i>şayma</i> / <i>şaymin</i> tr. only in <i>işam rremdan</i> ‘He fasted the ramadan.’
şmk	<i>şmek</i> / <i>şemk-a</i> / <i>şumek</i> ‘deaf’ A
şmr	<i>ameşmar</i> ~ <i>lmeşmar</i> - <i>lemşumar</i> Dim. <i>amşimer</i> - <i>imşimren</i> ‘nail’ C
şmt	<i>şemmet</i> / <i>şemmet</i> / <i>tşemmat</i> ‘to wrap something, to bring animals (goats) back home’ (trans) B
şmt	<i>şşemta</i> - <i>şşmați</i> Dim. <i>şşmița</i> - <i>şşmița</i> ‘leather belt’ A
şmt	<i>tişmet</i> (ti-) ‘cold’ B

šnbr	<i>aşnub̄er - işnub̄ren</i> Dim. <i>aşnib̄er - işnib̄ren</i> F. <i>taşnub̄ert - şşnaber</i> Dim. <i>taşnib̄ert - tişnib̄ran</i> ‘pine tree’ B
şnd̄l	<i>aşend̄il - işend̄ilen</i> F. <i>taşend̄ilt</i> ‘forehead’ B
şnr	<i>şşennara - şşnayer</i> Augm. <i>aşennarun</i> Dim. <i>şşniw̄ra - şşniw̄rat</i> ‘fishhook’ A
šnşltgm	<i>asnüşelatgam</i> ‘three days ago’ B
şnž	<i>aşennaž - işenniža</i> ‘type of basket’ B
şp	<i>şşappa - şşappat</i> ‘slash with two teeth’ A
şqş	<i>şeq̄şi / şeq̄şa / tşeq̄şay</i> ‘to ask’ (trans) B PP <i>mşeq̄şi / mşeq̄şya / mşeq̄şin</i>
şr	<i>şşur - leşwar</i> Dim. <i>şşweyyer</i> ‘wall without roof’ A
şrb	<i>şşrab</i> ‘alcoholic drink’ A
şrh	<i>lmeşraḥeyya - lmeşraḥeyyat</i> ‘theater’ A
şrnd	<i>şşaranda - şşarandat</i> ‘big fyke’ A
şrmnt	<i>şarmuniti - şarmunitis</i> ‘red mullet’ S
şrq	Pass <i>tşerqet</i> PP <i>meşruq / meşruqa / meşruqin</i> ‘to steal’ see kr ‘to steal’
şrwl	<i>şerwel / şerwel / tşerwal</i> ‘to put on trousers’ (trans) B Pass <i>tşrewlet</i> PP <i>mşerwel / mşerwela / mşerwelin tşrewlet taḫeyyalt ahen</i> ‘That girl has got trousers.’
şryr	<i>şşrir - şşrayer</i> ‘secret’ E.g. <i>ma itḫawad ši şşrayer nnes</i> ‘He does not tell his secrets.’ A
şṭ	<i>şuṭ / şat / tşuṭ</i> ‘to blow’ (intr) B E.g. <i>rrwah itşuṭ</i> ‘the wind is blowing’
şṭ	<i>tamşett - timeştan</i> augm. <i>amşet - imeşten</i> ‘thigh’ B
ştb	<i>aşettib - işettiben</i> Dim. <i>aşṭiteb - işṭitben</i> F. <i>taşettibt - tişettiban</i> Dim. <i>taşṭitebt - tişṭitban</i> ‘bush’ B
şth	<i>aşettuh - işettuhen</i> ‘stick’ B
şṭh	<i>aşṭih - işṭihen</i> Dim. <i>aşṭeyyeh - işṭeyyhen</i> Dim. F. <i>taşṭeyyehṭ</i> ‘roof’ B
şwt	<i>şewwet / şewwet / tşewwat</i> ‘to be emaciated, to vote’ (intr) B Pass <i>tşewwet</i> PP <i>mşewwet / mşewwta / mşewwtin</i>
şwt	<i>şşawṭ</i> ‘voice’ A
şyd	<i>şeyyed / şeyyed / tşeyyad</i> ‘to seduce’ (trans) B Pass <i>tşeyydet</i> PP <i>mşeyyed / mşeyyda / mşeyyḏin</i>
şym	AP <i>şayem / şayma / şaymin</i> ‘to fast’ see zm and şm ‘to fast’
şyt	<i>aşyat - işyaten</i> Dim. <i>aşweyyet - işweyyeten</i> ‘border in a meadow’ B
š	
š	<i>ši</i> E.g. <i>ši n medden</i> ‘some people’ A
š	<i>šš / šš / tett</i> ‘to eat’ (trans) B cf. wkl for AP
ššk	<i>tašašeḳt - tišušaḳ</i> ~ <i>ššwaši</i> Dim. <i>tašwišeḳt - tišwiškan</i> ‘hat’ B
ššy	<i>tašašayt n uṭar - tišašayan n uṭar</i> ‘instep (of the foot)’ B
šbh	- / - / <i>tšabah</i> ‘to look like’ (trans) B E.g. <i>itšabah g yan iši</i> ‘He looks like someone.’ Always combined with the preposition g .

šbk	<i>ššebka - ššebkat ~ ššbuk</i> Dim. <i>ššbika - ššbikat</i> ‘fine long net’ (It is used for catching fish like sardines, used on the beach.) A
šbr	<i>šebber / šebber / tšebber</i> ‘to catch, hold’ (trans) B Pass <i>tšebbreṭ</i> PP <i>mšebber / mšebbra / mšebbrin</i> VN <i>ttešbira - ttešbirat</i>
šbt	<i>šebbet / šebbet / tšebbat</i> ‘to climb’ (intr) B PP <i>mšebbet / mšebbta / mšebbtin</i>
šby	<i>ašbayyu</i> ‘rope to tie the plough to’ B
šd	<i>šedd / šedd / tšedda</i> ‘to tie’ (trans) B Pass <i>tšeddeṭ</i> PP <i>mešdud / mešduda / mešdudin</i> ‘to close’
šeb	<i>tašēebt - tišēaban</i> Dim. <i>tašēeyyebt - tišēiban</i> ‘big earring’ B
šel	<i>šeel / šeel / ššeel</i> ‘to smell’ (trans) B
šel	<i>šeel / šeel / ššeel</i> ‘to bake bread’ (lab) B PP <i>mešeuł / mešeuła / mešeułin</i> E.g. <i>nettata tešeel aṛrum</i> ‘She baked bread.’
šel	<i>šhal</i> ‘how many’ A
šel	<i>tašeułt - tišeułan</i> ‘peaces of wood for lighting the oven’ B
šer	<i>ššaeir - ššueara</i> ‘poet’ A
šer	<i>ššear - ššueran</i> ‘hair’ Unity <i>ašeerun - išeerunen</i> Dim. <i>ašeiren - išeeyren</i> ‘one hair’ B
šer	<i>ššeera - ššeerat</i> Dim. <i>ššeiwra - ššeiwrat</i> ‘fishing line’ A
šf	<i>ššeffa - ššfayef</i> ‘lip’ A
šfr	<i>ššeffar - ššeffara</i> Dim. <i>ššfifer - ššfifrin</i> Dim. <i>ššfifra</i> ‘thief’ A
šfr	<i>ššfer - ššefrin ~ lešfar</i> ‘eyelid’ A
šhd	<i>šahed - ššhud ~ ššuhud</i> ‘witness, martyr’ A
šhd	<i>šhed - išhed</i> ‘to testify’ (trans) A AP
šhd	<i>lmešhed - lemšahed</i> Dim. <i>lemšihed</i> ‘tombstone’ A
šhr	<i>ššher - ššhura</i> Dual <i>šehrayn</i> . Dim. <i>ššheyyer</i> ‘month’ (The diminutive means that the month went by quickly.) A
šk	<i>bušuk</i> ‘nailed fence’ A
šk	<i>šekk ~ šukk / išekk ~ išukk</i> ‘to doubt’ (intr) A PP <i>meškak / meškaka / meškakin</i> E.g. <i>šekku gas</i> ‘They doubted him.’
šk	<i>ška / iški</i> ‘to complain about’ (trans) A E.g. <i>ška xfi</i> ‘He complained about me.’
šk	<i>ššekk ~ ššukk</i> ‘doubt’ A
škl	<i>šškal - leškula</i> ‘rope to tie a donkey’
škm	<i>leškama - leškamaṭ</i> ‘fish scale’ A
škm	<i>šekkem / šekkem / tšekkam</i> ‘to squeal’ (trans) B Pass <i>tšekkmēt</i> PP <i>mšekkem / mšekkma / mšekkmin</i> VN <i>tteškim</i> It can take the preposition <i>g</i> or a Direct Object pronoun.
škm	<i>ššekkam - ššekkama</i> Dim. <i>šškikem - šškikmaṭ</i> Dim. <i>šškikma</i> ‘traitor’ A

škr	<i>šekker / šekker / tšekker</i> ‘to lift’ (trans) B Pass <i>tšekret</i> PP <i>mšekker / mšekkra / mšekkrin</i>
škr	<i>šker / išker</i> ‘to praise’ (trans) A Pass <i>tšekret</i> PP <i>meškur / meškura / meškurin</i>
škr	<i>šškara</i> Dim. <i>taškeyyert</i> ~ <i>šškiwra</i> - <i>tiškiran</i> Augm. <i>ašekrun</i> ‘bag’ C
šlgm	<i>ašelgum - išelgumen</i> ~ <i>ššlagem</i> Dim. <i>ašligem - išligmen</i> F. <i>tašelgumt - tišelguman</i> Dim. <i>tašligemt - tišligman</i> ‘lip’ B
šlym	<i>ššlayem</i> ‘moustache’ E.g. <i>bušlayem</i> ‘man with a moustache’ A
šll	<i>šellel / šellel / tšellel</i> ‘to rinse’ (trans) B
šll	<i>tašellilt</i> ‘diarrhoea’ B
šlq	<i>ašelquq - išelqaq</i> ~ <i>ššlaqeq</i> ‘old clothes’
šlq	<i>ššluq</i> ‘circling water’
šlx	<i>ašallax - išallaxen</i> F. <i>tašallaxt - tišallaxan</i> ‘big variant of something’ B
šm	<i>lušam - lušamaṭ</i> ‘tattoo’ A
šm	<i>šumm / šumm</i> ~ <i>išem</i> / <i>tšemma</i> ‘to smell’ (trans) B
šme	<i>ššme</i> F. <i>ššmea</i> - <i>ššmeayaṭ</i> Dim. <i>ššmiea - ššmieyyaṭ</i> Augm. <i>ašmeun</i> ‘candle’ A
šml	<i>ššmal</i> ‘north’ A
šmm	<i>ššemmam</i> F. <i>tašemmamṭ - tišemmaman</i> ‘small ant’ A
šmndr	<i>ššmender</i> Dim. <i>ššminḍer</i> ‘sugar beet’ A
šmṛ	<i>lmešmar - lemšamer</i> Dim. <i>lemšimer</i> ‘threads that women tie around their middle and sticks out as a tail on the back side’ A
šmṛ	<i>ššmurra</i> Unity F. <i>tašmurrekt - tišmurṛkan</i> ‘barbary fig’ C
šnd	<i>ššend - lešnaṭ</i> ‘plough tie’ A
šnq	<i>ašennaq - išennaqen</i> Dim. <i>ašnineq - išninqen</i> ‘bundle of grass’ B
špr	<i>tašepṛirt - tišepṛiran</i> Dim. <i>tašpṛipert - tišpṛipran</i> ‘bump’ (E.g. from insect bite) B
šq	<i>ššeqqa - ššeqqaṭ</i> ‘cut’ A
šq	<i>tšaḡ ~ nšaḡ - itšaḡ ~ inšaḡ</i> ‘to split’ (intr) A
šqf	<i>ašeqquf - išeqqifen</i> Dim. <i>ašqiqef - išqiqfen</i> ‘shard of earthenware’ B
šqf	<i>ašqef - išeqfen</i> ‘snail shell’ B
šqf	<i>ššqef - ššqufa</i> Dim. <i>ššqeyyef</i> ‘pipe’ A
šqr	<i>ašaqr - ššwaqer</i> ~ <i>išuqqaṛ</i> Dim. <i>ašwiqer - išwiqren</i> F. <i>tašaqrṭ - tišaqrṛan</i> Dim. <i>tašwiqerṭ - tišwiqrṛan</i> ‘axe’ B
šqr	<i>šeqqer / šeqqer / tšeqqaṛ</i> ‘to chop’ (trans) B Pass <i>tšeqqret</i> PP <i>mšeqqer / mšeqqra / mšeqqrin</i>
šr	Pass <i>tešraṭ</i> PP <i>mešri / mešreyya / mešreyyin</i> ‘to buy’ cf. <i>sy</i> ‘to buy’
šrk	<i>tašrikt - tišrikan</i> ‘stepmother’ B
šrl	<i>ššral</i> ‘jack fish’
šrq	<i>šreq / išreq</i> ‘to come from the east’ (trans) A E.g. <i>šerqaṭ tafukt</i> ‘The sun came up from the east.’

šrb	<i>mešrubā - mešrubat</i> ‘drink’ A
šrb	<i>šerreb / šerreb / tšerrab</i> ‘to give water’ (trans) B
šrb	<i>ššurba</i> Dim. <i>ššriba</i> ‘soup’ A
šrf	<i>šerref / šerref / tšerraf</i> ‘to make old’ (trans) B See wsr for non-causative.
šrh	<i>šreh / išreh</i> ‘to explain’ (trans) A PP <i>mešruh / mešruha / mešruhin</i>
šrq	<i>ššerq</i> ‘east’ A
šrq	<i>ššerqi</i> ‘hard wind, high waves from the east’ A
šrř	PP <i>mešrar / mešrara / mešrarin</i> ‘to fight, to argue’ B cf. kns
šrt	<i>ašerriř ~ ašerriřut - išerriřen ~ išerriřuten</i> Dim. <i>ašriřet - išriřten</i> F. <i>tašerriř - tišerriřtan</i> Dim. <i>tašriřet - tišriřtan</i> ‘line’ B
šrwř	<i>ašerwiř - išerwař ~ išerwiřen</i> ‘piece of string’ B
št	<i>ššita - ššitař</i> ‘brush’ A
štf	Pass <i>tšettfet</i> PP <i>mšettef / mšettfa / mšettfin</i> ‘to dry’ see k ‘to dry’ for base verb
štw	<i>ššetwa</i> ‘winter’ A
šty	<i>ašattay - išattayen</i> F. <i>tašattayt - tišattayan</i> ‘big bundle of hair’ B
štb	<i>šetteb / šetteb / tšettab</i> ‘to sweep’ (trans) B Pass <i>tšetteb</i> PP <i>mšetteb / mšettaba / mšettabin</i> E.g. <i>axyam ahen mšetteb</i> ‘That room is wiped.’
štb	<i>tašettabt - tišettaban</i> ‘broom’ B
šth	<i>šteh / šteh / šetteh</i> ‘to dance’ (intr) B VN <i>ššith</i> Caus <i>šetteh / šetteh / tšetthah</i> ‘to make dance’ (trans) B <i>šetthax t byeddi</i> ‘I made him dance myself.’
štn	<i>ššitan - ššwařen ~ ššayařin</i> ‘satan’ A
štr	<i>štar / ištar</i> ‘to ruminate’ (trans) A E.g. <i>lhaža a ma ka-tštar ši ħrama</i> ‘The thing that does not ruminate is haram.’
štyř	<i>štayři - štayreyyin</i> F. <i>štayriya</i> ‘stingy’ A
šwl	<i>ašewwal - išewwila</i> ‘penis’ B
šwř	<i>šewweř / šewweř / tšewwař</i> ‘to grill’ (trans) B
šwř	<i>šewweř / šewweř / tšewwař</i> ‘to roast, fry’ (trans) B Pass <i>tšewweř</i> PP <i>mšewweř / mšewwřta / mšewwřin</i> B
šxr	<i>šxer / išxer</i> ‘to snore’ (intr) A
šy	<i>tašyiř</i> ‘small handmill’ B
štn	<i>ššřun</i> ‘anchovy’
t	
tbe	<i>tbeř / itbeř</i> ‘to follow’ (trans) A
tbe	<i>ttabeř</i> ‘part of the plough’ A
tbl	<i>ttabla - ttbali</i> Dim. <i>ttbila - ttbileyyař</i> ‘table’ A
tbn	<i>ařebban - itebbina</i> Dim. <i>ařiben - itibnen</i> Dim. <i>tařibent - titibnan</i> ‘trousers’ B

tbt	<i>tebbet</i> / <i>tebbet</i> / <i>ttebbat</i> ‘to recognize, to focus, to be aware’ (trans) B Pass <i>ttebbtet</i> PP <i>mtebbet</i> / <i>mtebbta</i> / <i>mtebbtin</i> E.g. <i>immuṭ mtebbet</i> ‘He died being aware of what happened.’
tbrn	<i>tiburun</i> ‘shark’ S
tđ	<i>tiđda</i> (ti-) - <i>tiđdiwan</i> (ti-) ‘leech’ B
telm	<i>tteelem</i> - <i>ttealem</i> Dim. <i>tteilem</i> F. <i>tteelma</i> Dim. <i>tteilma</i> ‘fox’ A
tf	<i>tfa</i> / <i>itfa</i> ‘to yawn’ (intr) A
tfh	<i>tteffaḥ</i> Unity F. <i>tateffaḥt</i> - <i>titeffaḥan</i> Augm. <i>ateffaḥ</i> ‘apple’ C
thm	<i>lmutahim</i> - <i>lmutahimin</i> ‘defendant’ A
thm	<i>them</i> / <i>ithem</i> ‘to suspect’ (trans) A PP <i>methum</i> / <i>methuma</i> / <i>methumin</i> VN <i>ttuhma</i>
thr	<i>tehher</i> / <i>tehher</i> / <i>ttehhar</i> ‘to circumcise’ (trans) B Pass <i>ttehher</i> PP <i>mtehher</i> / <i>mtehh̄rin</i>
thr	<i>tthur</i> / <i>tthur</i> / <i>tthur</i> ‘to crawl’ (intr) B E.g. <i>aḡ ill itthur</i> ‘He was crawling.’
tk	<i>tekki</i> / <i>tekki</i> ~ <i>tekka</i> / <i>tekkay</i> ‘to press on’ (intr) B
tk	<i>tukka</i> - <i>tukkaṭ</i> ‘zipper’ A
tlbzyn	<i>tilibizyun</i> - <i>tilibizyunat</i> ‘television’ A
tlf	PP <i>metluf</i> / <i>metlufa</i> / <i>metlufin</i> ‘to be lost’ cf. wšk ‘to be lost’
tlfz	<i>ttelfaza</i> - <i>ttelfazaṭ</i> ‘television’ A
tls	<i>atellis</i> - <i>itellisen</i> ‘thick wool cloth’ B
tlt	<i>talet</i> - <i>taltin</i> F. <i>talta</i> ‘third’ A
tlt	<i>ttaḷa</i> ‘tuesday’ A
tmn	<i>ttaman</i> - <i>lṣatmina</i> ‘price’ A
tmn	<i>aṭmun</i> - <i>iṭmunen</i> Dim. <i>aṭmweyyen</i> Dim. <i>taṭmweyyent</i> ‘haystack’ B
tn	<i>ttani</i> - <i>ttanin</i> F. <i>ttanya</i> ‘second’ A
tnbr	<i>tunub̄ir</i> ~ <i>tunub̄il</i> - <i>tunub̄iraṭ</i> ‘car’ A
tneš	<i>iteneāšen</i> ‘money’ (Based on rifian <i>tineāšin</i> ‘money’. Only locally used in the village.) B
tnn	<i>letnin</i> ‘monday’ A
tntr̄r	<i>tuntur̄ira</i> ‘blue shark’
tq	<i>taq</i> / <i>itiq</i> ‘to trust’ (trans) A E.g. <i>ka-ytiq iḍes</i> ‘He trusts him.’
tqb	<i>lmetqeb</i> - <i>lemtaqeb</i> Dim. <i>lemtiqeb</i> - <i>lemtiqbat</i> ‘awl’ A
tqb	<i>tqeb</i> / <i>tqeb</i> / <i>ttqub</i> ‘to pierce, make a hole’ (trans) B Pass <i>tteqbet</i> PP <i>metqub</i> / <i>metquba</i> / <i>metqubin</i>
tql	<i>tqil</i> / <i>tqil-a</i> / <i>tqil-in</i> ‘heavy’ A
tr	<i>aṭar</i> - <i>iṭaren</i> ‘type of bird’ (resembles a pigeon) B
tr	<i>ttru</i> / <i>ttru</i> / <i>ttru</i> ‘to cry’ (intr) B Caus <i>ssetru</i> / <i>ssetra</i> ~ <i>ssetru</i> / <i>ssetraw</i> ‘to make cry’ (trans) B See bk for alternative Caus and PP E.g. <i>haw ittru</i> ‘He is crying.’

aɛɛyyal ahen mbekki, ma ɛat ʃk a t̪ issetran / t̪ ibekkan ‘That boy is crying, I do not know who made him cry.’

trn	<i>ttran - ttranat̪</i> ‘train’ A
tr̪nčl	<i>ttrančilu - ttrančilus</i> ‘katapult’ A/S
tr̪ny	<i>tturneyyu - tturneyyus</i> ‘screw’ A/S
trs	<i>ttris - ttursan</i> Dim. <i>ttreyyes - ttrisaṭ</i> ‘big fishnet for big fish’ A
trsyn	<i>ttrisyān - ttrisyānat̪</i> F. <i>ttrisyāna</i> ‘electrician’ (Also used: <i>lmælləm n d̪daw</i> = ‘specialist of electricity’) A
try	<i>ttreyyat̪</i> ‘moving cluster of stars’ A
tr̪ynb	<i>ttrayenbu - ttrayenbuṭ</i> ‘spintop’ A
tt	<i>ttaṭ - ttaṭat̪</i> ‘chameleon’ A
tt	<i>ttu / ttu / tettū</i> ‘to forget’ (trans) B See nsy for AP, PP and Caus
twb	<i>ttawḅ</i> Dim. <i>ttweyyeb</i> ‘cloth’ (The diminutive is a beautiful cloth.) A
ty	<i>atay (wa-)</i> ‘tea’ B
tžr	<i>ttažir - ttuğar</i> ‘rich man’ A
t̪	
t̪	<i>lğati - lğatis ~ ldžatt̪iyyat̪</i> ‘sailing boat’ A
t̪	<i>ttu / ttu / ttu</i> ‘to roll up’ (trans) B Pass <i>nṭwat̪</i> PP <i>met̪wi / met̪weyya / met̪weyyin</i>
t̪	<i>titt̪ - tatt̪iwan ~ tt̪iwan</i> ‘eye’ (The plural noun with the prefix is used by older people.) B
t̪	<i>titt̪a</i> ‘nipple, animal breast’ B
t̪	<i>ttu / t̪wi / tt̪wi</i> ‘to fold’ (trans) B
tt̪	<i>tt̪et̪ / tt̪et̪ / tett̪et̪</i> ‘to suckle (breast)’ (trans) B <i>ssut̪et̪ / ssaṭet̪ / ssut̪ut̪</i> ‘to breast-feed, to give the breast’ B See r̪t̪ɛ for PP
t̪b	<i>tt̪aba</i> ‘tobacco’ A
t̪b	<i>tt̪ub</i> Unity F. <i>tt̪uḅa - tt̪ubat̪</i> ‘dried clay’ A
t̪bb	<i>tt̪ib̪ - tt̪ubba</i> F. <i>tt̪iḅa</i> ‘physician, doctor’ A
t̪be	<i>tt̪abiɛa</i> ‘nature’ A
t̪bl	<i>tt̪bel - tt̪bula</i> Augm. <i>aṭebbal</i> Dim. <i>tt̪beyyel - tt̪beyyat̪</i> ‘drum’ A
t̪bn	<i>aṭebbun - iṭebbunen</i> Dim. <i>aṭḅiben - iṭḅiḅnen</i> F. <i>aṭebbunt - iṭebbunan</i> Dim. <i>taṭḅiḅent - tiṭḅiḅnan</i> ‘vagina’ B
t̪bq	<i>tt̪baq</i> Dim. <i>tt̪beyyeq - tt̪biqat̪</i> ‘pan’ A
t̪bs	<i>tt̪ubis - tt̪ubisaṭ̪</i> ‘bus’ A
t̪bʃl	<i>tt̪eḅʃil - tt̪baʃel</i> ‘plate’ A
t̪bz	<i>tebbez / t̪ebbez / t̪ebbaz</i> ‘to hammer’ (trans) B Pass <i>ttebbzet̪</i> PP <i>m̪tebbez / m̪tebbza / m̪tebbzin</i>
t̪ɛm	<i>lmeṭɛem</i> ‘restaurant’ A
t̪ɛm	<i>tt̪ɛam</i> ‘couscous’ A

tem	<i>t̄t̄em</i> - <i>t̄t̄emat̄</i> Dim. <i>t̄t̄eyyem</i> - <i>t̄t̄imat̄</i> ‘bait’ A
tf	<i>aṭaf</i> - <i>iṭafen</i> ‘stalk’ B
tf	PP <i>metfi</i> / <i>metfeyya</i> / <i>metfiyyin</i> ‘extinguish’ E.g. <i>leafya metfeyya</i> ‘the fire is extinguished’ B cf. ns ‘to extinguish’
tf	<i>t̄t̄ef</i> / <i>t̄t̄ef</i> / <i>t̄t̄et̄ef</i> ‘to hold’ (trans) B
tfr	<i>t̄t̄ayfur</i> - <i>t̄t̄wafer</i> Dim. <i>t̄t̄wifer</i> - <i>t̄t̄wifrat̄</i> ‘low wooden table’ A
tgđ	<i>aṭuḡđ</i> - <i>iṭuḡđan</i> ‘finger’ B Names of the individual fingers are: <i>k̄hel ssbae</i> ~ <i>k̄hel aṭaḡđ</i> ‘middle finger’ A <i>leh̄has lemraq</i> ~ <i>leh̄has t̄t̄wažen</i> ‘index finger’ A <i>mul žuž n lexwaṭem</i> ‘ring finger’ A <i>stītu mezyan</i> ‘little finger’ A
tgm	<i>aṭḡam</i> (wa-) ‘yesterday’ B
thk	<i>t̄eh̄hek</i> / <i>t̄eh̄hek</i> / <i>t̄t̄eh̄hak</i> ‘to make laugh’ (trans) B Pass <i>t̄t̄eh̄hket̄</i> PP <i>m̄t̄eh̄hek</i> / <i>m̄t̄eh̄hka</i> / <i>m̄t̄eh̄hkin</i> see đš ‘to laugh’
thk	<i>t̄t̄ahk</i> ‘laughter’
thn	<i>t̄t̄ahuna</i> - <i>t̄t̄waḡen</i> ‘electric mill’ A
thn	<i>t̄t̄hin</i> ‘flour’ A
thr	<i>t̄eh̄her</i> / <i>t̄eh̄her</i> / <i>t̄t̄eh̄har</i> ‘to circumcise’ (trans) B PP <i>m̄t̄eh̄her</i> / <i>m̄t̄eh̄hra</i> / <i>m̄t̄eh̄hrin</i> E.g. <i>š a t̄eh̄rax aeyyal inu</i> ‘I am going to circumcise my child.’
thr	<i>t̄t̄her</i> - <i>t̄t̄hura</i> Dim. <i>t̄t̄theyyer</i> ‘back’ A
thr	<i>t̄t̄hara</i> - <i>t̄t̄harat̄</i> ‘circumcision’ A
tl	<i>aṭil</i> (wa-) ‘grape’ <i>taquqet n waṭil</i> ‘one grape’ B
tl	<i>t̄t̄al</i> / <i>iṭṭal</i> ‘to guess’ (intr) A Pass <i>t̄t̄alet̄</i> PP <i>metṭal</i> / <i>metṭala</i> / <i>metṭalin</i>
tlb	<i>t̄leb</i> / <i>iṭleb</i> ‘to request, to ask for, to order’ (intr) A PP <i>metṭlub</i> / <i>metṭluba</i> / <i>metṭlubin</i> E.g. <i>t̄lebt-lu</i> ‘I ordered from him.’
tlb	<i>t̄t̄aleb</i> - <i>t̄t̄ulba</i> ~ <i>t̄t̄alaba</i> Dim. <i>t̄t̄wileb</i> ‘pupil in Koran school’ A
tle	<i>t̄alee</i> ‘up’ Adv <i>dar t̄alee</i> ‘to up there’ A
tlh	<i>aṭelliḡ</i> - <i>iṭelliḡen</i> ‘forehead’ B
tlł	<i>t̄ellel</i> / <i>t̄ellel</i> / <i>t̄ellal</i> ‘to peek’ (intr) B E.g. <i>iṭellel fxes</i> ‘He peeked at him.’ B
tlq	<i>t̄elleq</i> / <i>t̄elleq</i> / <i>t̄t̄ellaq</i> ‘to divorce’ (trans) B PP <i>m̄t̄elleq</i> / <i>m̄t̄ellqa</i> / <i>m̄t̄ellqin</i>
tlq	<i>t̄leq</i> / <i>t̄leq</i> / <i>t̄t̄leq</i> ~ <i>t̄t̄luq</i> ‘to straight, straighten, to let go’ (trans) B Pass <i>t̄t̄elqet̄</i> PP <i>metṭluq</i> / <i>metṭluqa</i> / <i>metṭluqin</i>
tlq	<i>t̄t̄laq</i> ‘divorce’ A
tme	<i>t̄emmes</i> / <i>iṭemmes</i> ‘to lure, to entice’ (intr) A Pass <i>t̄t̄emmet̄</i> PP <i>m̄t̄emmes</i> / <i>m̄t̄emmesa</i> / <i>m̄t̄emmesin</i>
tme	<i>t̄emmes</i> / <i>t̄emmes</i> / <i>t̄t̄emmas</i> ‘to aspire’ (trans) B

tmr	<i>tmer / tmer / ttmur</i> ‘to bury’ (trans) B E.g. <i>š a neṭmer yan iši</i> ‘We are going to bury someone.’
tmr	<i>aṭemmar - iṭemmaran ~ iṭemmira</i> ‘hole’ B
tmr	<i>tṭmar</i> Unity F. <i>taṭmart - tiṭmaran</i> ‘date’ C
tq	<i>ttaqqa - ttiqqan</i> Dim. <i>tṭwiqa - tṭwiqat</i> ‘small window’ A
tql	<i>teqqel / teqqel / tteqqal</i> ‘to heavy’ (trans) B Pass <i>tṭqalet</i>
tr	<i>aṭar - iṭaren</i> F. <i>tattart - titṭaran</i> ‘leg, foot’ B
trtr	<i>terter / terter / ttertar</i> ‘to fart hard’ (intr) B
trbq	<i>aṭrabeq - iṭrabqen</i> ‘leather ankle strip’ B
trf	<i>tterf - tṭrufa</i> Dim. <i>tṭreyyef - tṭrifin</i> ‘end, side, edge, piece’ A
trf	<i>tterraf - tterrafa</i> ‘shoemaker’ A
trh	<i>terreh / terreh / tterrah</i> ‘to flatten’ (trans) B PP <i>mṭerreh / mṭerrha / mṭerrhin</i>
trq	<i>lemṭirqa - lemṭareq</i> Dim. <i>lemṭirqa - lemṭirqat</i> ‘hammer’ A
trq	<i>terreq / terreq / tterraq</i> ‘to forge’ (trans) B Pass <i>tterreqet</i> PP <i>mṭerreq / mṭerrqa / mṭerrqin</i>
trq	<i>tṭariqa</i> ‘manner’ A
trš	<i>aṭerraš - iṭerrašen ~ iṭerriša</i> Dim. <i>aṭrireš - iṭriřen</i> ‘clay water jar’ B
tryll	<i>tṭrayllil - tṭrayllilen</i> ‘bat’ C
tš	<i>tṭaš n bitelma - tṭišan n bitelma</i> ‘toilet-pot’ A
tš	<i>tṭaša - tṭišan</i> Dim. <i>tṭwiša - tṭwišat</i> ‘bowl, glass’ A
tš	<i>tteš / tteš / tetteš</i> ‘to sleep’ (intr) B Caus <i>saṭeš / suṭeš / suṭuṣ</i> cf. nes for AP and VN
ṭwtw	<i>aṭawṭaw - iṭawṭawen</i> ‘young person (derogative)’ B
ṭwl	<i>aṭewwal - iṭulan</i> F. <i>taṭewwalt - tiṭewwalan</i> ‘brother-in-law, son-in-law, father-in-law, sister-in-law’ B
ṭwl	<i>tewwel / tewwel / ttewwal</i> ‘to prolong, to lengthen’ (trans) B Pass <i>tṭewwlet</i> PP <i>mṭewwel / mṭewwla / mṭewwlin</i>
ṭwl	<i>ṭwil / ṭwil-a / ṭwil-in</i> ‘tall’ Dim. <i>ṭwiwel / ṭwiwl-a / ṭwiwl-in</i> ‘somewhat long’ A
ṭwp	<i>tṭawpa - tṭawpat</i> ‘rat’ A
ṭwr	<i>tewwer / tewwer / ttewwar</i> ‘to let, make develop’ (trans) B Pass <i>tṭewwret</i> PP <i>mṭewwer / mṭewwra / mṭewwrin</i>
ṭwš	<i>aṭewwiš - iṭewwiša ~ iṭewwišen</i> ‘waterfall, rain-pipe’ B
tyb	PP <i>mṭeyyeb / mṭeyyba / mṭeyybin</i> ‘to cook’ B cf. nw ‘to cook’
tyr	<i>tṭiyara - tṭiyayer</i> ‘airplane’ A
tžk	<i>aṭužk - iṭužken</i> ‘partridge male’ B
w	
wḍ	<i>twedda / itwedda</i> ‘to do the ablution’ (intr) A E.g. <i>š nṭwedda</i> ‘I will do my ablutions.’

wdql	<i>wedqul</i> ‘nothing’
wğd	<i>weged / weged / tweğad</i> ‘to make ready’ (trans) B Pass <i>tweğdet</i> PP <i>mweğed / mweğda / mweğdin</i>
we	<i>weei / weea / tweeyay</i> ‘to make wise’ (trans) B Pass <i>tweeat</i> PP <i>mweei / mweeya / mweein</i>
we	AP <i>wai / waeya / wain</i> ‘be wise’
wed	<i>waed / wæed / twæad</i> ‘to promise’ (intr) B PP <i>mwæed / mwæda / mwædin</i> VN <i>leahd</i> E.g. <i>fk ay leahd</i> ‘Give me a promise.’
wfl	<i>tawfalt - tiwfalan</i> Dim. <i>tawfeyyelt - tiwfeyylan</i> Augm. <i>awfal - iwfalen</i> ‘egg’ B
wyd	<i>taweyda - tiydiwan</i> ‘part of the plough’ B
wyll	<i>tay^wlalt - tiy^wlalan</i> Dim. <i>tay^wleyyelt - tiy^wleyylan</i> Augm. <i>ay^wlal - iy^wlalen</i> Dim. ‘pot, pea soup’ B
wh	<i>twaha / itwaha</i> ‘to sigh’ (intr) A
whn	<i>wehhen / wehhen / twehhan</i> ‘to beat up’ (trans) B Pass <i>twehhnet</i> PP <i>mwehhen / mwehhna / mwehhnin</i>
whš	<i>lwehš</i> ‘animal’ A
wk	<i>tawekt ~ tawukt - tiwektan</i> ‘owl’ B
wkl	AP <i>wakel / wakla / waklin</i> ‘to eat’ cf. <i>š</i> ‘to eat’
wl	- / - / <i>twala</i> ‘to see/to be able to see’ (trans) B (Only an imperfective form.)
wl	<i>wali / wala / twalay</i> ‘to hit’ (trans) B Pass <i>twalat</i> PP <i>mwali / mwalya / mwalin</i> E.g. <i>ma eat šk a t iwalan</i> ‘I don’t know who hit her.’
wl	<i>tawla</i> ‘type of disease’ B
wld	<i>lwalid - lwalidin</i> F. <i>lwalida</i> ‘parents, father, mother’ A
wld	<i>lweld</i> ‘good looking young man’ A
wld	<i>lwellada - lwelladat</i> ‘womb’ A
wlf	<i>twalef / itwalef</i> ‘to get used’ (trans) A E.g. <i>nekki twaleft fxes</i> ‘I got used to him/her/it.’
wlk	<i>tawlekt - tiwelkan</i> Dim. <i>tawleyyekt</i> ‘gunny sack’ B
wnf	<i>tawnaft - tiwnafan</i> Dim. <i>tawneyyeft - tiwniftan</i> ‘bread from the frying pan’ B
wnts	<i>lwanṭis</i> ‘gloves’ (Only a plural form.) A/S
wqe	<i>wqee / yewqee</i> ‘to happen’ (intr) A E.g. <i>wqee-lu ši haža</i> ‘something happened to him.’ E.g. <i>daṭimen ka-yewqee ayha</i> ‘This always happens.’
wqf	AP <i>waqef / waqfa / waqfin</i> ‘to stand up’ E.g. <i>ṭṭunubir tebded waqfa</i> ‘The car stood still.’ cf. bdd ‘to stand up’
wqf	<i>weqqef / weqqef / tweqqaf</i> ‘to stop’ (trans) B Pass <i>tweqqfet</i> PP <i>mweqqef / mweqqafa / mweqqfin</i>
wqf	<i>taweqqaft - tiweqqifa</i> Dim. <i>tawqiqeft - tiwqiqfan</i> Augm. <i>aweqqaf - iweqqifa</i> ‘door jamb’ B

wqr	<i>weqqr / weqqr / tweqqar</i> ‘to respect’ (trans) B
wr	PP <i>mwerri / mwerrya / mwerrin</i> ‘to show’ see ml ‘to show’
wrd	<i>lwerḍa - lwerḍat</i> ‘rose’ A
wrd	<i>awerdu - iwerdan</i> ‘louse’ B
wrd	<i>tawerḍat</i> ‘type of disease’ B
wrg	<i>werg / werg / ttarga</i> ‘to dream’ (trans) cf. mnm for VN B
wrš	<i>tawrišt - tiwrišan</i> ‘strainer’ (for flour) B
wrw	<i>awraw - iwrrawn</i> F. <i>tawrawt - tiwrawan</i> ‘two fistfuls’ B
wrz	<i>awrez - iwerzen</i> ‘heel’ B
wṛk	<i>werṛek / werṛek / twerṛak</i> ‘to lie down’ (lab) B PP <i>mwerṛek / mwerrka / mwerrkin</i>
wse	<i>wasee / wase-a / wase-in</i> ‘wide’ Dim. <i>wsisee / wsise-a / wsise-in</i> ‘somewhat wide’ A
wse	<i>wessee / wessee / twessae</i> ‘to widen’ (trans) B Pass <i>twesseet</i> PP <i>mwessee / mwessea / mwessein</i>
wsm	<i>lmawsem - lemwasem</i> ‘annual feast’ A
wsm	<i>tawsamt - tiwsaman</i> ‘bundle of grain tied together’ B
wsr	<i>awsir - iwesran</i> ‘leaf of the dwarf fan palm’
wsr	<i>wsir / wsir / ttusir</i> ‘to age, become old’ (intr) B E.g. <i>ibda ittewsir</i> ‘He is becoming old.’ For caus. cf. šrf for Caus.
wsx	<i>wessex / wessex / twessax</i> ‘to make dirty’ (trans) B Pass <i>twessxet</i> PP <i>mwessex / mwessxa / mwessxin</i>
wšk	<i>wešk / wešk / ttaška</i> ‘to get lost’ (intr) B cf. tlf for PP E.g. <i>twešk ay lmagana</i> ‘I lost my watch.’ <i>qqimax metluf</i> ‘I stayed lost.’ Caus <i>ššwešk / ššušk ~ išwešk ~ iššašk / ššwešk</i> ‘to make lose, to make disappear’
wt	<i>wwet / wwet / kkat ~ itkat</i> ‘to strike, hit, shoot’ (trans) B see ḍrb for Pass and PP <i>iwwet s leklaṭa</i> ‘he has shot with his rifle.’
wṭn	<i>lmuwwaṭin - lmuwwaṭinin</i> F. <i>lmuwwaṭina</i> ‘citizen’ A
wṭn	<i>lwaṭan</i> ‘native country’ A
wxt	<i>lwext - lṣawqat</i> ‘time’ (The plural is a borrowing from Standard Arabic) A
wze	<i>wezze / wezze / twezzae</i> ‘to divide’ (trans) B Pass <i>twezzet</i> PP <i>mwezze / mwezzea / mwezzein</i>
wzn	<i>lwezzan - lwezzana</i> ‘weigher’ A
wzn	<i>wzen / iwzen</i> ‘to weigh’ (trans) A Pass <i>tweznet</i> PP <i>mewzun / mewzuna / mewzunin</i>
wzr	<i>awezzar - iwezzira ~ iwezzaren</i> ‘open spot in a field which is not ploughed’ B
wzr	<i>lwazir - lwazara</i> F. <i>lwazira</i> ‘president’ A

wžd	<i>wžed</i> / <i>iwžed</i> ‘to prepare, to be ready’ (intr) A AP <i>wažed</i> / <i>wažda</i> / <i>waždin</i> PP <i>mewžud</i> / <i>mewžuda</i> / <i>mewžudin</i>
wžr	<i>lwežra</i> ‘wage’ A
wzr	<i>wezzar</i> / <i>wezzar</i> / <i>twezzar</i> ‘to not plough the land well’ (trans) B Pass <i>twezzar</i> PP <i>mwezzar</i> / <i>mwezzarin</i> E.g. <i>tarhebt an mwezzra</i> ‘That land has not been ploughed well (It has many open spots.)’
x	
xbe	<i>xebbeε</i> / <i>xebbeε</i> / <i>txebbaε</i> ‘to hide, preserve’ (lab) B Pass <i>txebbeεt</i> PP <i>mxebbeε</i> / <i>mxebbea</i> / <i>mxebbein</i>
xbe	<i>xubbayea</i> ‘hide and seek’ A
xbr	<i>xebber</i> / <i>xebber</i> / <i>txebbar</i> ‘to warn, inform’ (trans) B PP <i>mxebber</i> / <i>mxebb̄ra</i> / <i>mxebb̄rin</i>
xbr	<i>xebber</i> / <i>xebber</i> / <i>txebbar</i> ‘to announce’ (trans) B Pass <i>txebb̄ret</i> PP <i>mxebber</i> / <i>mxebb̄ra</i> / <i>mxebb̄rin</i>
xbš	<i>axabeš</i> - <i>ixubaš</i> F. <i>taxabešt</i> - <i>tixubaš</i> ‘water jug’ (<i>taxabešt n lqellal</i> 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 <i>ṛraḥma</i> ‘forgiveness’) B
xbt	<i>xebet</i> / <i>xebet</i> / <i>txebbat</i> ‘to trot (by animals)’ (intr) B
xbz	<i>lxubza</i> ‘one bread’ Augm. <i>axubbaz</i> ‘one big bread’
xd	<i>lemxedda</i> - <i>lemxayedd</i> ~ <i>lemxeddat</i> Dim. <i>lemxida</i> - <i>lemxidat</i> ‘pillow’ A
xdm	<i>xdem</i> / <i>xdem</i> / <i>xeddem</i> ‘to work’ (trans) B Pass <i>txedmet</i> - <i>nxedmet</i> AP <i>xeddam</i> / <i>xeddama</i> / <i>xeddamin</i> PP <i>mexdum</i> / <i>mexduma</i> / <i>mexdumin</i> E.g. <i>nxedmet x ufus</i> ‘It is made by hand.’ B
xdm	<i>axeddam</i> - <i>lxeddama</i> F. <i>taxeddamt</i> - <i>tixeddaman</i> ‘servant, worker’ (the form <i>tanexdamt</i> is used only in a fairy tale.) C
xdm	<i>lxidma</i> - <i>lexdayem</i> Dim. <i>lexdima</i> - <i>lxdimat</i> ‘work’ A
xdm	<i>taxademt</i> - <i>tixudam</i> Dim. <i>taxwidemt</i> - <i>tixwidman</i> ‘ring’ B
xdr	<i>axedraw</i> - <i>ixedrawen</i> Dim. <i>axdid̄er</i> - <i>ixdid̄ren</i> F. <i>taxedrawt</i> - <i>tixedrawan</i> Dim. <i>taxdid̄ert</i> - <i>tixdid̄ran</i> ‘green one’ B
xdr	<i>lxudra</i> - <i>lexdari</i> Dim. <i>lexdira</i> ‘vegetables’ A
xdr	<i>xder</i> / <i>xedr-a</i> / <i>xuder</i> ‘green, raw’ Dim. <i>xdid̄er</i> / <i>xdid̄r-a</i> / <i>xdid̄r-in</i> ‘somewhat green’ A
xff	<i>lexfif</i> Dim. <i>lexfeyyef</i> - <i>lexfifat</i> ‘lead’ A
xff	<i>xeffef</i> / <i>xeffef</i> / <i>txeffaf</i> ‘to light’ (trans) B Pass <i>txeffet</i>
xff	<i>xfif</i> / <i>xfif-a</i> / <i>xfif-in</i> ‘light’ A
xl	<i>lexla</i> - <i>lexlawi</i> ‘wilderness’ A

xle	<i>xelleε / xelleε / txellaε</i> ‘to preserve food’ (trans) B PP <i>mxelleε / mxellea / mxellein</i>
xlq	<i>xleq / xleq / xelleq</i> ‘to be born’ (intr) B
xlş	<i>xelleş / xelleş / txellaş</i> ‘to pay’ (trans) B Pass <i>txelleş</i> PP <i>mxelleş / mxellşa / mxellşin</i>
xlt	<i>xalti - xaltiwat</i> ‘mother’s sister’ A
xml	<i>ttexmil - ttxamel</i> ‘colored scarf women put on their head’ A
xml	<i>xemmel / xemmel / txemmal</i> ‘to clean’ (trans) B PP <i>mxemmel / mxemmla / mxemmlin</i>
xmm	<i>xemmem / xemmem / txemmam</i> ‘to think of problems’ (intr) B
xmr	<i>lexmar</i> ‘wine’ A
xms	<i>axemmas - ixemmasen</i> F. <i>taxemmast - tixemmasan</i> ‘slave, servant worker’ B
xms	<i>lexmis</i> ‘thursday’ A
xn	<i>taxna</i> ‘ass’ B
xn	<i>taxxunt - tixxunan</i> Augm. <i>axxun - ixxunen</i> ‘ass’ B
xnb	<i>amexniḅ - imexniḅen</i> F. <i>tamexniḅt - timexniḅan</i> ‘canine tooth’ B
xndf	<i>xendef / xendef / txendaf</i> ‘to drudge’ (trans) B Pass <i>txendfeṭ</i> PP <i>mxendef / mxendfa / mxendfin</i>
xnfr	<i>lexnafer</i> ‘nose’ <i>taxenfurt - tixenfuran</i> Augm. <i>axenfur - ixenfuren</i> ‘nostrill’ A
xnq	<i>xneq / xneq / xxneq</i> ‘to sulk’ (trans) B Pass <i>txenqeṭ</i> PP <i>mexnuq / mexnuqa / mexnuqin</i>
xnq	<i>a^wxnaq ~ axnaq - i^wxnaqen ~ ixnaqen</i> Dim. <i>axneyyeq - ixneyyqen</i> ‘corridor, passage’ B
xnš	<i>lexniš</i> F. <i>taxništ</i> ‘plant’ C
xns	<i>axennus - ixunnas</i> F. <i>taxennust</i> ‘piglet’ B
xnč	<i>lxanča - lxančaṭ</i> Augm. <i>axančiw</i> ‘sack’ A
xnčf	<i>axenčuf - lexnačef</i> Dim. <i>axničef</i> F. <i>taxenčuft</i> Dim. <i>taxničeft - tixničfan</i> ‘beak’ (pejorative) B
xnṭṭ	<i>axenṭuṭ - ixunṭaṭ</i> F. <i>taxenṭuṭt</i> ‘nasal mucus’ B
xr	<i>ttaxer / ittaxer</i> ‘to be last’ (intr) A PP <i>mwexxer / mwexxra / mwexxrin</i>
xrqb	<i>xerqeb / xerqeb / txerqab</i> ‘to eat wildly’
xrtl	<i>lxurtal</i> ‘oats for cattle’ A
xrčf	<i>xerčef / xerčef / txerčaṭ</i> ‘to speak unclearly, to be mixed up’ (intr) B Pass <i>txerčfeṭ</i> PP <i>mxerčef / mxerčfa / mxerčfin</i>
xrş	<i>lxarşi - lexraşa</i> ‘sweater’ A
xrz	<i>lxerraz - lxerraza</i> ‘saddle maker’ A
xrż	<i>lxerża ~ lxurża - lxeṛžaṭ ~ lxuržaṭ</i> ‘exit’ A
xr	<i>llaxri - llaxreyyin</i> F. <i>llaxreyya</i> ‘last, end’ A

xr	<i>xra / ixra</i> ‘to shit’ (intr) A VN <i>lexra</i>
xrb	<i>xerbet - lexreb</i> Dim. <i>lexri̇ba - lexri̇bat</i> ‘ruin’ A
xrb	<i>lxerrub</i> Unity F. <i>taxerrubt - tixerruban</i> ‘carob bean’ C
xrf	<i>lexrif</i> ‘autumn’ A
xrf	<i>xerref / xerref / txerraf</i> ‘to pick fruit’
xrt	<i>taxertit - tixertitan</i> ‘rag’ B
xrw	<i>amexraw - imexrawen</i> Dim. <i>amxiru - imxirwen</i> ‘young rabbit’ B
xrwṭ	<i>axerwiṭ - ixerwiṭan</i> ‘harvest leftover’ B
xrž	AP <i>xarež / xarža / xaržin</i> ‘to go out’ VN <i>lxurža ~ lxuržaṭ</i> cf. fy for verb. The following forms are derived from the causative Pass <i>txeržet</i> PP <i>mxeržež / mxeržža / mxeržžin</i>
xš	<i>lxassa - lxassaṭ</i> ‘fountain’ A
xš	<i>tax^wešt ~ taxušt - tix^wšan</i> ‘tooth - molar’ B
xšr	<i>xšer / ixšer</i> ‘to loose’ (trans) A
xšr	<i>xšer / xšer / xeššer</i> ‘to be broken’ (intr) B
xšr	<i>xšer / xšer / xeššer</i> ‘to loose’ (intr) B Caus <i>xeššer / xeššer / txeššar</i> ‘to make loose’ (trans) B Pass <i>txeššret</i> PP <i>mxexeššer / mxexeššra / mxexeššrin</i>
xšb	<i>axeššab</i> ‘grass and stalks mixed’ B
xšb	<i>taxšeḅt - tixešḅa(n)</i> Dim. <i>taxšeyyeḅt - tixešḅyan</i> Augm. <i>axšeḅ - ixēšḅan</i> ‘trap’ (<i>axšeḅ</i> is for pigs <i>taxšeḅt</i> for birds and <i>taxšeyyeḅt</i> for mice) B
xšm	<i>lexwašem</i> ‘gills’ There is no singular. A
xšin	<i>xšin / xšin-a / xšin-in</i> ‘thick’ A
xṭb	<i>xṭeb / ixṭeb</i> ‘to preach, to ask for marriage’ (intr) A PP <i>mexṭub / mexṭuba / mexṭubin</i>
xṭb	<i>xṭeb / xṭeb / xetṭeb</i> ‘to ask to marry’ (trans) B Pass <i>nxetṭeb</i> PP <i>mexṭub / mexṭuba / mexṭubin</i>
xṭf	<i>lmuxṭaf - lemṭaxef</i> Dim. <i>lemṭaxef - lemṭaxfat</i> ‘anchor’ A
xṭf	<i>xṭef / xṭef / xetṭef</i> ‘to snatch, grab away’ (trans) B
xṭr	AP <i>xatir / xatira / xatirin</i>
xṭr	<i>axetṭar - ixetṭira</i> ‘trap for birds’ B
xṭr	<i>lixṭar</i> ‘The fact of picking’ E.g. <i>gas lixṭar</i> ‘He is picky.’ A
xṭr	<i>lxatar</i> ‘danger’ A
xṭr	<i>lxater - lexwater</i> ‘will’ A
xṭr	<i>xatir / xatir-a / xatir-in</i> ‘dangerous’ A
xṭr	<i>xetṭer / xetṭer / txetṭar</i> ‘to trap’ (trans) B Pass <i>txetṭret</i> PP <i>mxetṭer / mxetṭra / mxetṭrin</i>
xṭr	<i>xṭar / xṭar / ttextar ~ ttaxṭar</i> ‘to choose’ (trans) B Pass <i>textaru</i> PP <i>mexṭar / mexṭara / mexṭarin</i>

xč	<i>xiča</i> Unity F. <i>taxačiw</i> - <i>tixatiwan</i> ‘dried figs’
xty	<i>lexteyya</i> - <i>lexteyyat</i> ‘fine’ A
xw	<i>lexwa</i> ‘valley’ A
xw	<i>xwa</i> / <i>ixwi</i> ‘to empty’ (intr) A Pass <i>texwat</i> PP <i>mexwi</i> / <i>mexwiyya</i> / <i>mexwiyyin</i>
xw	<i>xwi</i> / <i>xwa</i> ~ <i>xwi</i> / <i>xewwi</i> ‘to empty’ (trans) B There is confusion with the Arabic-morphology verb, both are accepted. E.g. <i>argaz ahen ixwa lbaṭil nnes aṭṭam</i> ‘That man has emptied his boat yesterday.’ <i>ša xwix aman zeg elbaṭil</i> ‘I will empty water from the boat.’
xwf	<i>lxawf</i> ‘fear’ A
xwf	<i>lxewwaf</i> - <i>lxewwafin</i> F. <i>lxewwafa</i> ‘scaredy-cat’ A
xwf	<i>xewwef</i> / <i>xewwef</i> / <i>txewwaf</i> ‘to scare’ (trans) B PP <i>mxewwef</i> / <i>mxewwafa</i> / <i>mxewwafin</i>
xym	<i>axyam</i> - <i>ixyamen</i> F. <i>taxyam</i> ‘house’ (A <i>taxyam</i> is a house consisting of a single room.) B
xyt	<i>lxayt</i> Dim. <i>lexweyyet</i> - <i>lexweyyat</i> ‘thread’ A
xyt	<i>lxeyyat</i> - <i>lxeyyata</i> F. <i>lxeyyata</i> ‘tailor’ A
xyt	<i>xeyyet</i> / <i>xeyyet</i> / <i>txeyyat</i> ‘to sew’ (trans) B Pass <i>txeyyet</i> PP <i>mxeyyet</i> / <i>mxeyyta</i> / <i>mxeyytin</i> VN <i>lexyata</i> - <i>lexyatat</i> B
xyx	<i>xeyyex</i> / <i>xeyyex</i> / <i>txeyyax</i> ‘to say ‘x’, to express disgust’ (intr) B
xzn	<i>amxazni</i> - <i>lemxazneyya</i> F. <i>tamxazniṭ</i> ‘government agent’ C
xzn	<i>lexzana</i> - <i>lexzanat</i> ‘big tent’ A
xzn	<i>lmexzen</i> ‘government’ A
y	
yd	<i>ayda</i> - <i>itan</i> ‘dog’ E.g. <i>ayda n lebhar</i> - <i>itan n lebhar</i> ‘shark’ B
yd	<i>tayda</i> - <i>taydat</i> ‘pine tree, fire tree’ B
yfr	<i>tayeffert</i> - <i>tiyeffaren</i> ‘chain around the neck of cows’ B
yft	<i>ayeffet</i> (wa-) ‘cattle’ Dialectal variant: <i>akfet</i> B
yll	<i>taylalt</i> ~ <i>tayellalt</i> - <i>taylalan</i> ‘little butterfly’ (It spoils the harvest.) B
yrn	<i>ayerni</i> ‘arum italicum’ (kind of wild potato) B
yt	<i>tayt</i> - <i>taytwan</i> ‘shoulder’ B
yw	<i>ayaw</i> - <i>iyawen</i> F. <i>tayawt</i> - <i>tiyawtan</i> ‘grandchild’ B
ywl	<i>aywel</i> (wa-) ‘rack in the traditional house’ B
ywm	<i>lyawmeyya</i> - <i>lyawmeyyat</i> ‘calender’ A
ywr	<i>aywer</i> (wa-) (no plural) ‘moon’ B
z	
z	<i>izi</i> - <i>izan</i> F. <i>tizit</i> ‘fly’ (<i>tizit</i> is a small fly) B
zž	<i>zzaž</i> - <i>zzižan</i> ‘glass’ A
zbd	<i>zzebda</i> Dim. <i>zžbida</i> ‘butter’ A

zbg	<i>azebg - izebgan</i> ‘part of the plough’ B
zbl	<i>lmezzbala - lemzabel</i> Dim. <i>lemzibla - lemziblat</i> ‘refuse-dump’ A
zbl	<i>zebbel / zebbel / tzebbal</i> ‘to curse’ (trans) B E.g. <i>izebbel gas</i> ‘He cursed at him/her.’
zdyd	<i>lizdiyad</i> ‘birth certificate’ A
zdz	<i>azedduz - izedduzen</i> ‘big pounding stick’ B
zebl	<i>zzebbul - zzeabel</i> Dim. <i>zzeibla - zzeiblat</i> ‘leather side bag’ A
zef	<i>zeεεef / zeεεef / tzeεεaf</i> ‘to reluctantly do something’ (trans) B AP <i>zeεfan / zeεfana / zeεfanin</i> PP <i>mzeεεef / mzeεεfa / mzeεεfin</i>
zef	<i>zzeaf</i> ‘reluctance’ A
zefrn	<i>zzeefran</i> ‘saffron’ A
zem	<i>zεem / izεem</i> ‘to dare’ (intr) A Pass <i>tzeεmet</i> Caus. <i>zeεεem / zeεεem / tzeεεam</i> ‘to make dare’ PP <i>mzeεεem / mzeεεma / mzeεεmin</i>
zem	<i>zεεama - zεεamat</i> ‘nerve’ A
zeze	<i>zeεzeε / zeεzeε / tzeεzeε</i> ‘to tremble’ (tr) B Pass <i>tzeεzeε</i> B
zf	<i>zzif - zzyufa</i> Dim. <i>zzweyyef - zzwifin</i> ‘handkerchief’ A
zg	<i>azzuġ (wa-)</i> ‘wettness’ B
zybw	<i>azeybiw - izeybiwen ~ izeybunen</i> ‘a single hair’ B
zyl	<i>azyul - izy^wal</i> Dim. <i>azy^weyyel</i> F. <i>tazyult - tizy^wal</i> Dim. <i>tazy^weyyelt - tizy^willan</i> ‘ladle’ B
zgr	<i>azger</i> ‘big bull’ B
zgwzr	<i>zġawger / No Impf.</i> ‘to squat’ (intr) A PP <i>mezzġawger / mezzġawgra / mezzġawgrin</i>
zgz	<i>zzegza</i> ‘type of fish’ A
zgzg	<i>zegzeg / zegzeg / tzegzag</i> ‘to have sex (goats)’ (lab) B PP <i>mzegzeg / mzegzga / mzegzgin</i>
zyr	<i>zzuyur / zzayer / zzuyur</i> ‘to pull’ (trans) B
zhm	<i>zehhem / zehhem / tzehhem</i> ‘to make bad’ (trans) B PP <i>mzehhem / mzeħħma / mzeħħmin</i>
zhm	<i>zeħħem / zeħħem / tzeħħem</i> ‘to narrow’ (intr) B PP <i>mzeħħem / mzeħħma / mzeħħmin</i> VN <i>zħham</i>
zhm	<i>zham / izham</i> ‘to become bad’ (intr) A AP <i>zhim / zhima / zhimin</i>
zhr	<i>zzher</i> Dim. <i>zzheyyer</i> ‘good luck’ A
zkr	<i>zkekrun - zzkaren</i> ‘latch’ A
zl	<i>azal</i> ‘day, noon’ (Also the time when the goats go back to the stable) B
zl	<i>tizelt</i> ‘type of berry’ B
zl	<i>tuzzalt - tiwzzila</i> Dim. <i>tuzizelt - tiwzizlan</i> Augm. <i>awzzal - iwzzila</i> ‘knife’ B
zl	<i>tuzzalt</i> ‘type of plant’ B

zl	<i>uzel ~ azel / uzal ~ azal / ttazel</i> ‘to run’ (intr) B Some younger people know this word, but never use it, <i>žerri</i> ‘to run’ is used instead.
zl	<i>tamezlat - timezlatan</i> Dim. <i>tamzilut - timziwlтан</i> ‘goat which has not given birth’ B
zlf	<i>amzellaf - imzellifa ~ imzellifen</i> ‘sheep’s head’ B
zly	<i>tazalya</i> ‘type of plant’ B
zly	<i>zellyi / zellyiy-a / zellyiy-in</i> ‘bald’ A
zly	<i>azellyi - izellyien</i> F. <i>tazellyt - tizellyan</i> ‘baldness’ B
zlm	<i>tazlemt - tizelman</i> ‘freshwater eel’ B
zlq	<i>nezleq / inezleq</i> ‘to slide or slip’ (intr) A
zlq	<i>zelleq / zelleq / tzelleq</i> ‘to even out’ (trans) B PP <i>mzelleq / mzellqa / mzellqin</i>
zml	<i>zzamel - zzwamel</i> ‘homosexual’ A
zmr	<i>azemmur - izemran</i> ‘wild olive tree’ B
zn	<i>zna / izni</i> ‘to comit adultery’ (intr) A
zn	<i>zzani - zzanin</i> F. <i>zzaneyya - zzaneyyat</i> ‘adulterer’ A
zn	<i>zzina - zzinat</i> ‘adultery’ A
znq	<i>zzenqa - zzenqat ~ zznaqi</i> ‘street’ A
znz	<i>znez / znez ~ zzenz / zznuz</i> ‘to sell’ (trans) B cf. be for Pass and PP
znzl	<i>zzinzal - zzanazil</i> ‘earthquake’ A
zr	<i>azar - izaren</i> ‘feathers, fur of a chicken/bird’ B
zr	<i>azru - izurgan</i> ‘mill’ (only known by old people) B
zr	<i>tazart (ta-)</i> ‘fig’ B
zr	<i>zri / zra / zerri</i> ‘to pound’ (trans) B Pass <i>tezrat</i> PP <i>mezri / mezriyya / mezriyyin</i>
zrb	<i>zreb / zreb / zzrub</i> ‘to hurry’ (lab) B Pass <i>tzerbet</i> PP <i>mezrub / mezruba / mezrubin</i>
zrd	<i>zzerda ~ lezrud</i> ‘festive meal’ A
zre	<i>zzerria - zzerriaat</i> ‘seed’ A
zrf	<i>azref - izerfawen</i> F. <i>tazreft - tizerfawтан</i> Dim. <i>tazreyyeft - tizrifтан</i> ‘road, path’ (<i>tazreft</i> is a small road and <i>tazreyyeft</i> is a small path) B
zrg	<i>azergaw - izergawen</i> Dim. <i>azrireg - izrirgen</i> F. <i>tazergawt - tizergawтан</i> Dim. <i>tazriregt</i> ‘grey person/thing’ B
zryml	<i>azreymel - izreymen</i> ‘centipede’ B
zrmmk	<i>tazermemmukt - tizermamukan</i> ‘small lizard’ B
zrn	<i>tazrint</i> ‘douma plant’ B
zrq	<i>azerqaw - izerqawen</i> Dim. <i>azrireq - izrirgen</i> F. <i>tazerqawt - tizerqawan</i> Dim. <i>tazrireqt - tizrirqan</i> ‘blue person/thing’ B
zrq	<i>zreq / zreq-a / zureq</i> ‘blue’ A
zrq	<i>zzerruq - zzurraq</i> Dim. <i>zzrireq</i> ‘firefly’ A

zrq	<i>zzriqa</i> ‘wale’
zrz	<i>azrez</i> ‘type of plant with berries’ B
zrq	PP <i>mzerreq / mzerrqa / mzerrqin</i> ‘to close with a key’
zrq	<i>zreq / zrireq / zriq-a</i> ‘blue’ Dim. <i>zrireq / zriq-a / zriq-in</i> ‘somewhat blue’ A
zt	<i>zzit</i> ‘oil’ (feminine) Types: <i>zzit kehla</i> ‘olive oil’, <i>zzit bayta</i> ‘cooking oil’ A
zwž	<i>zzawaža - zzawžat</i> Dim. <i>zzwiža - zzwīžat</i> ‘pair’ (<i>zzawaža</i> is used for cattle, while <i>zzwiža</i> is used for donkeys.) A
zwr	<i>zwir / zwir ~ zwar / zuggir</i> ‘to go first’ (intr) B
zwy	<i>zzawya - zzawyaṭ</i> ‘islamic monastery’ A
zytn	<i>zzyaytun</i> Unity F. <i>tazaytunt - tizaytunan</i> Dim. <i>tazwitent - tizwitnan</i> ‘olive’ B
zrz	<i>tazezzert - tizezzraṭan</i> ‘hayfork’ B
zww	<i>tazizwa - tizizwa</i> ‘bee’ B
z	
z	<i>taza (ta-) - taziwan (ta-)</i> ‘udder’ B
z	<i>zzu / zza / tezza</i> ‘to plant’ (trans) B cf. řǵε for PP
zz	<i>tazezziṭ</i> ‘thorns of an ear’ B
zđ	<i>zed / zed / zzađ</i> ‘to grind’ (trans) B
zrz	<i>tazezzarṭ ~ tazzarṭ - tizezzaran</i> ‘kind of bream’ B
zbr	<i>zzebṛa - zzebrat</i> ‘anvil’ A
zer	<i>azeeraw - izeerawen</i> Dim. <i>ažeier - ižeieren</i> F. <i>tazeerawt - tizeerawan</i> Dim. <i>tazeiert - tizeieran</i> ‘blond one’ B
zg	<i>tazga - tizuggan</i> ‘forest’ B
zg	<i>zzeḡ / zzeḡ / tezzeḡ</i> ‘to milk’ (lab) B Pass <i>thelbet</i> E.g. <i>ka tezzeḡ ka baqi</i> ‘Has she been milked or not?’
zgsnt	<i>azgaṣnet ~ azg^wasnet ~ azegg^waṣnet</i> ‘last year’ B
zk	<i>azekka - izukkan</i> ‘tomb’ B
zkn	<i>azekkun - izekkunen</i> Dim. <i>azkiken - izkiknen</i> ‘kind of plant’ (It grows together with crops) B
zł	<i>zzall ~ zzull / zḡall / tḡalla</i> ‘to pray’ (trans) B
zm	<i>tazemmiṭ</i> ‘crushed barley’ B
zm	<i>zum / zum / ttazum</i> ‘to fast’ (intr) B See šm for AP and alternative. (Used by old people.) E.g. <i>izum rremḡan</i> ‘He fasted the Ramadan.’
zmy	<i>azmay - izmayen</i> ‘kind of plant’ (Used to make rugs) B
znt	<i>azenniṭ - izenniṭen ~ izentat</i> F. <i>tazenniṭ - tizenniṭan</i> ‘tail’ B
zr	<i>azar - izuran</i> Dim. <i>azweyyer - izweyyren</i> ‘root’ B
zr	<i>azru - izran</i> ‘stone, rock, battery’ B
zr	<i>zer / zer / zzar</i> ‘to see’ (trans) B
zr	<i>zur / zar ~ izur / tzur</i> ‘to visit a marabout’ (trans) B

zrb	<i>zzerb</i> - <i>lezrub</i> Dim. <i>zreyyeb</i> ‘fence’ A
zrb	<i>zzerbeyya</i> - <i>zrabi</i> Dim. <i>zribeyya</i> - <i>zribeyyat</i> ‘carpet’ A
zre	<i>zreε</i> / <i>zreε</i> / <i>zreε</i> ‘to sow’ (trans) B
zre	<i>zraε</i> ‘grain’ A
zrh	<i>žreh</i> / <i>žreh</i> / <i>gruḥ</i> ‘to injure’ (lab) B Pass <i>ttežreh</i> PP <i>mežruḥ</i> / <i>mežruḥa</i> / <i>mežruhin</i> E.g. <i>ižreh ssiha</i> ‘He was wounded here.’
zrmṭ	<i>zzermuṭa</i> - <i>zramet</i> ‘lizard with red and white stripes’ A
zrwṭ	<i>zzerwata</i> - <i>zzerwataṭ</i> ‘club, stick (for hitting)’ A
zryry	<i>azrayray</i> - <i>izrayrayen</i> ‘hawk’ B
zṭ	<i>zṭiti</i> - <i>zṭitin</i> ‘a bull with one testicle’ (It doesn’t have a lot of offspring.) A
zwwž	<i>zṭawž</i> ‘sparrow’ A
zwwg	<i>azawg</i> - <i>izawgen</i> ‘twig’
zwr	<i>zewwer</i> / <i>zewwer</i> / <i>zewwar</i> ‘to forge’ (trans) B Pass <i>tzewwret</i> PP <i>mzewwer</i> / <i>mzewwra</i> / <i>mzewwrin</i> VN <i>ttezwir</i>
zwt	<i>zṭwit</i> / <i>zṭwit</i> / <i>zṭayat</i> ‘to miss’ (trans) B
zx	<i>tazuxt</i> (ta-) ‘milk’ (no plural) B
zyzn	<i>azayzun</i> - <i>izayzunen</i> F. <i>tazayzunt</i> - <i>tizayzunan</i> ‘mute person’ B
zyzn	<i>zṭayzuneyya</i> ‘sign language’ A
zyr	<i>azeyyar</i> - <i>izeyyaren</i> F. <i>tazeyyart</i> - <i>tizeyyaran</i> ‘a bunch of grapes’ E.g. <i>azeyyar n watil</i> ‘a bunch of grapes’ B
zyr	<i>zeyyer</i> / <i>zeyyer</i> / <i>tzeyyar</i> ‘to tighten’ (trans) B Pass <i>tzeyyer</i> PP <i>mzeyyer</i> / <i>mzeyyira</i> / <i>mzeyyirin</i>
ž	
žbd	<i>ažebbaḍ</i> - <i>ižebbaḍen</i> ‘part of the plough’ B
žbd	<i>žebbeḍ</i> / <i>žebbeḍ</i> / <i>tžebbaḍ</i> ‘to stretch’ (trans) B Pass <i>tžebbeḍet</i> PP <i>mžebbeḍ</i> / <i>mžebbeḍa</i> / <i>mžebbeḍin</i>
žbr	Pass <i>nžebret</i> PP <i>mežbur</i> / <i>mežbura</i> / <i>mežburin</i> ‘to find’ cf. f ‘to find’
žd	<i>žeddi</i> - <i>žeddiwat</i> ‘grandfather’ A
ždd	<i>ždid</i> / <i>ždid-a</i> / <i>ždid-in</i> ‘new’ A
žf	<i>ažuf</i> (wa-) ‘stench’ E.g. <i>ažuf n umaleḥ</i> ‘stench of a fish’ B
žf	<i>žif</i> / <i>žaf</i> / <i>tžif</i> ‘to choke’ (intr) B
žl	<i>žali</i> / <i>žala</i> / <i>tžalay</i> ‘to separate’ (trans) B Pass <i>tžalaw</i> PP <i>mžali</i> / <i>mžalya</i> / <i>mžalin</i>
žme	<i>lmežmuea</i> - <i>lmežmuein</i> ‘crowd’ A
žme	<i>žmeε</i> / <i>žmeε</i> / <i>gmeε</i> ‘to gather’ (trans) B Pass <i>tžemeεt</i> PP <i>mežmue</i> / <i>mežmuea</i> / <i>mežmuein</i>
žmṛ	<i>lmežmar</i> - <i>lemžamer</i> Dim. <i>lemžimer</i> - <i>lemžimrat</i> ‘stove, barbecue’ A
žn	<i>žni</i> / <i>žni</i> ~ <i>ižna</i> / <i>ženni</i> ‘to pluck’ (trans) B

žr	<i>ažar</i> - <i>lğiran</i> F. <i>tažart</i> - <i>tižartan</i> ‘neighbour’ C
žrb	<i>žerreb</i> / <i>žerreb</i> / <i>tžerrab</i> ‘to try out’ (trans) B PP <i>mžerreb</i> / <i>mžerrba</i> / <i>mžerrbin</i>
žrd	<i>žžerda</i> ~ <i>žžerda</i> - <i>žžerdat</i> ~ <i>žžerdat</i> ‘garden’ A
žr	<i>žerri</i> / <i>žerra</i> / <i>tžerray</i> ‘to run’ (intr) B AP <i>žari</i> / <i>žarya</i> / <i>žarin</i> PP <i>mžerri</i> / <i>mžerrya</i> / <i>mžerrin</i> With the preposition fx added it means ‘to chase away’. <i>ižerra fxes</i> ‘he chased him/her away.’
žrh	<i>ažerriħ</i> - <i>ižerriħen</i> F. <i>tažerriħt</i> - <i>tižerriħan</i> ‘wound’ B
žrm	<i>lmužrim</i> - <i>lmužrimin</i> ~ <i>lemžarem</i> F. <i>lmužrima</i> ‘criminal’ A
žrnn	<i>žžurnan</i> - <i>lğurnanat</i> ‘newspaper’ A
žwb	<i>žaweb</i> / <i>žaweb</i> / <i>tžawab</i> ‘to answer’ (trans) B
žwf	<i>žewwef</i> / <i>žewwef</i> / <i>tžewwaf</i> ‘to stink’ (intr) B
žyf	<i>žeyyef</i> / <i>žeyyef</i> / <i>tžeyyaf</i> ‘to choke’ (trans) B Pass <i>tžeyyfet</i> PP <i>mžeyyef</i> / <i>mžeyyfa</i> / <i>mžeyyfin</i> B
žymt	<i>žaymut</i> - <i>ižaymuten</i> ‘type of fly’ B
žyr	<i>žeyyer</i> / <i>žeyyer</i> / <i>tžeyyer</i> ‘to whitewash’ (trans) B Pass <i>tžeyyret</i> PP <i>mžeyyer</i> / <i>mžeyyra</i> / <i>mžeyyriin</i> B
?	
?kd	<i>t?ekked</i> / <i>it?ekked</i> ‘to guarantee’ (intr) A PP <i>met?ekked</i> / <i>met?ekkdā</i> / <i>met?ekkdin</i> VN <i>tt?ekid</i>
?m	<i>?ummi</i> - <i>?ummiyyin</i> F. <i>?ummiyya</i> ‘stupid’ A
?mn	<i>?ammen</i> - <i>t?ammen</i> ‘to trust’ (intr) A <i>?amment gas</i> ‘I trust him.’
?mṛ	<i>?amer</i> / <i>i?amer</i> ‘to command, to order’ (intr) A PP <i>m?amer</i> / <i>m?amṛa</i> / <i>m?amṛin</i>

Bibliography

- Adamou, Evangelia. 2010. Bilingual Speech and Language Ecology in Greek Thrace: Romani and Pomak in contact with Turkish, *Language in Society* 39(2): 147-171.
- Aguadé, Jordi & Vicente, Ángeles. 1997. Un calco semántico del bereber en árabe dialectal magrebí: el uso de la preposición *ela* en el comparativo. In: *Estudios de Dialectología Norteafricana y Andalusí (EDNA)*. Número 2.
- Aissati, A. El, Karsmakers, S., & Kurvers, J. 2011. 'We are all beginners': Amazigh in language policy and educational practice in Morocco. In: *A Journal of Comparative Education*, 41(2), pp. 211-226.
- Andrews, Avery. 2007. The major functions of the noun phrase. In: *Timothy Shopen (ed.), Language Typology and Syntactic Description: Clause Structure (2nd ed)*. Cambridge University Press, Cambridge, United Kingdom, pp. 132-223.
- Aspinion, Robert. 1953. *Apprenons le berbère. Initiation aux dialectes chleuhs*. Rabat: Félix Moncho.
- Basset, André. 1952. *La langue berbère*. Handbook of African Languages, Part I. London/New York/Toronto: Oxford University Press.
- Behnstedt, Peter. 2002. La frontera entre el bereber y el árabe en el Rif. In: *Estudios de dialectología norteafricana y andalusí* 6. Cádiz: Universidad de Cádiz.
- Bentolila, Fernand. 1981. *Grammaire fonctionnelle d'un parler berbère. Ait Seghrouchen d'Oum Jeniba (Maroc)*. Paris: SELAF.
- Boogert N. van den & Kossmann M.G. 1997. Les premiers emprunts arabes en berbère. *Arabica: Journal of Arabic and Islamic Studies/Arabica: Revue d'Etudes Arabes* XLIV: 317-322.
- Boogert, Nico van den. 1997. *The Berber Literary Tradition of the Sous*. Leiden: NINO.
- Boukous, Ahmed. 1990. Pharyngalisation et domaines prosodiques en berbère. In: *Langue et Littérature. Publications de la Faculté des Lettres*. Rabat. p. 153-176.
- Brustad, Kristen E. 2000. *The Syntax of Spoken Arabic. A Comparative Study of Moroccan, Egyptian, Syrian, and Kuwaiti Dialects*. Washington DC: Georgetown University Press.
- Cadi, Kaddour. 1987. *Système verbal rifain. Forme et sens linguistique tamaziqht (Nord Marocain)*. Paris/Louvain: Peeters.
- Caubet, Dominique. 1993. *L'arabe marocain*. 2 Vols. Paris & Louvain: Peeters.
- Caubet, D. & Chaker, S. (eds.). 1996. *La négation en berbère et en arabe marocain*. Paris: L'Harmattan.

- Chaker, Salem. 1983. *Un parler berbère d'Algérie (Kabylie): syntaxe*. Université de Provence.
- . 1984. *Textes en linguistique berbère (introduction au domaine berbère)*. Paris, CNRS.
- . 1985. Adjectif (qualificatif). In: *Encyclopédie berbère II*: 129-136.
- . 1995. Derivation (linguistique). In: *Encyclopédie berbère XV*: 2277-2279.
- Cohen, David. 1993. Racines. In: *A la croisée des études libyco-berbères. Mélanges offerts à Paulette Galand-Pernet et Lionel Galand*. Paris: Geuthner, p. 161-175.
- Colin, Georges S. 1929. 'Le parler berbère des Ġmāra'. In: *Hespéris 9*. Paris: Librairie Larose.
- Dell, François & Mohamed Elmedlaoui. 1989. Clitic ordering, morphology and phonology in the verbal complex of Imdlawn Tashlhiyt Berber. *Langues Orientales Anciennes: philologies et linguistique* 165-94. Louvain/Paris: Peeters.
- . 2002. *Syllables in Tashlhiyt Berber and in Moroccan Arabic (Kluwer International Handbooks in Linguistics 2)*. Dordrecht & Boston: Kluwer Academic Publishers.
- Dixon, Robert M.W. & Aikhenvald, Alexandra. 2000. Introduction. In: *Changing valency: case studies in transitivity*. Edited by R.M.W. Dixon and Alexandra Y. Aikhenvald pp. 1-29. Cambridge: Cambridge University Press. xvi, 413 pp.
- El Hannouche, Jamal. 2008. *Ghomara Berber. A Brief Grammatical Survey*. MA Thesis, Universiteit Leiden.
- . 2010. *Arabic Influence in Ghomara Berber*. MA Thesis, Universiteit Leiden.
- Galand, Lionel. 1964. L'énoncé verbal en berbère: Étude de fonctions. In: *Cahiers Ferdinand de Saussure* 21: 33–53.
- . 1988. Le berbère. In: Jean Perrot, (ed.). *Les langues dans le monde ancien et moderne, III, Les langues chamito-sémitiques (textes réunis par David Cohen)* (Paris: CNRS), pp. 207-242.
- . 2002. *Etudes de linguistique berbère*. Leuven-Paris: Peeters.
- . 2010. *Regards sur le berbère*. Milan: Centro Studi Camito-Semitici.
- Gaudio, Attilio. 1952. Notes sur le Sahara Espagnol. *Journal de la Société des Africanistes* 22: 17-25.
- Harrell, Richard S. 1962. *A Short Reference Grammar of Moroccan Arabic*. Washington: Georgetown University Press.
- Harrell, R.S. & Sobelman, H. (eds.). 1966. *A Dictionary of Moroccan Arabic*. Washington D.C.: Georgetown University Press.

- Haspelmath, Martin. 2007. Coordination. In: Shopen, Timothy (ed.). *Language typology and syntactic description*. Vol. II: Complex constructions. 2nd ed. Cambridge: Cambridge University Press, 1-51.
- Heath, Jeffrey. 2002. *Jewish and Muslim Dialects of Moroccan Arabic*. London & New York: RoutledgeCurzon.
- Kossmann, Maarten. 1995. Schwa en berbère. In: *Journal of African Languages and Linguistics* 16. 71-82.
- . 1997. *Grammaire du parler berbère de Figuig (Maroc oriental)*. Paris & Louvain: Peeters.
- . 1999. *Essai sur la phonologie du proto-berbère*. Cologne: Rüdiger Köppe.
- . 2000. *Esquisse grammaticale du rifain oriental*. Paris & Louvain: Peeters.
- . 2009. La flexion du prétérit d'état en berbère. Questions de morphologie comparée. In: *Salem Chaker, Amina Mettouchi & Gérard Philippon (eds.) Études de phonétique et de linguistique berbères. Hommage à Naïma Louali (1961 - 2005)*. Paris, Louvain & Walpole: Peeters. 155-176.
- . 2010. Parallel System Borrowing: Parallel morphological systems due to the borrowing of paradigms. *Diachronica* 27/3. 459-487.
- . 2012. Berber. In: Zygmunt Frajzyngier & Erin Shay (eds.) *The Afroasiatic Languages*. Cambridge etc.: Cambridge University Press. 18-101.
- . 2013. *A Grammatical Sketch of Ghadames Berber (Libya)*. Berber Studies no. 40. Cologne: Rüdiger Köppe Verlag.
- . 2013. *The Arabic Influence on Northern Berber*. Leiden & Boston: Brill.
- Kossmann, M.G. & Mourigh, K. fc. *Tarifit Berber*.
- Kulikov, Leonid I. 2001. Causatives. In: M. Haspelmath et al. (eds). *Language typology and language universals. An international handbook*. Vol. 2. Berlin etc.: Walter de Gruyter, pp. 886-898.
- Lafkioui, Mena. 1996. La négation en tarifit. In: Caubet, D. and Chaker, S. (eds.). *La négation en berbère et en arabe marocain*. Paris: L'Harmattan. p. 49-77.
- . 2007. *Atlas linguistique des variétés berbères du Rif*. Cologne: Rüdiger Köppe.
- Lahrouchi, Mohamed. 2010. On the internal structure of Tashlhit Berber triconsonantal roots. In: *Linguistic Inquiry* 41/2: 255-285.
- Longacre, Robert E. 2007. Sentences as combinations of clauses. In: Shopen, Timothy (ed.). *Language typology and syntactic description*. Vol. II: Complex constructions. 2nd ed. Cambridge: Cambridge University Press, 372-421.
- Maas, Utz. 2011. *Marokkanisches Arabisch. Die Grundstrukturen*. Munich: Lincom.

- Marçais, Philippe. 1977. *Esquisse grammaticale de l'arabe maghrébin*. Paris: Maisonneuve.
- Mettouchi, Amina. 2003. Dérivation, diathèse et aspect en kabyle (berbère). In: *Travaux du CerLiCO n°16*. Col G. et REGIS J.-P. (eds), P.U.Rennes, pp. 255-270.
- . 2007. Le problème du sujet en berbère. In: *Cahiers de Linguistique de l'INALCO*. A. Donabédian (ed). Publications des LANGUES'O, pp. 33-48.
- Moscoso, Francisco. 2003. *El dialecto árabe de Chauen (N. de Marruecos)*. *Estudio lingüístico y textos*. Cadix: Universidad de Cádiz, Área de Estudios Árabes e Islámicos.
- Noonan, Michael. 2007. Complementation. In: Shopen, Timothy (ed.). *Language typology and syntactic description*. Vol. II: Complex constructions. Cambridge: Cambridge University, 52–150.
- Payne, Thomas E. 1997. *Describing morphosyntax: A guide for field linguists*. Cambridge: Cambridge University Press.
- Penchoen, Thomas. 1973. *Tamazight of the Ayt Ndhir*. Los Angeles: Undena.
- Rapold, Christian. 2010. Beneficiary and other roles of the dative in Tashelhiyt. In: Zúñiga, Fernando and Seppo Kittilä (eds.). *Benefactives and Malefactives: Typological perspectives and case studies*. pp. 351–376.
- Shibatani, Masayoshi & Pardeshi, Prashant. 2002. The causative continuum. In: M. Shibatani (ed), *The Grammar of Causation and Interpersonal Manipulation*. Amsterdam. John Benjamins.
- Strigin, Anatoli. 2008. Secondary predication and the instrumental case in Russian. In: Schroeder, Christoph, Hentschel, Gerd, Boeder, Winfried (eds.). *Secondary predicates in Eastern European languages and beyond*. Oldenburg. 381-400.
- Taine-Cheikh, Catherine. 2008. *Dictionnaire zénaga-français*. Cologne: Rüdiger Köppe.
- Vicente, Ángeles. 2000. *El dialecto árabe de Anjra (norte de Marruecos)*. *Estudio lingüístico y textos*. Saragossa: Área de Estudios Árabes e Islámicos.
- Wehr, Hans. 1976. *A Dictionary of Modern Written Arabic*, ed. by J. Milton Cowan. Ithaca: Spoken Language Services.

internet:

http://www.hcp.ma/Recensement-general-de-la-population-et-de-l-habitat-2004_a633.html

Samenvatting

De Berbertalen vormen samen met het Koesjitsch, 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 Middellandse zee kust 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 beïnvloed. 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 dominant. 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 augmentatieformatie 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 vrouwelijke affixen. De twee systemen kunnen, weliswaar in 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 Arabische 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’, **ḥṣem** ‘zich schamen’, **ṣber** ‘geduld hebben’, **εṭeš** ‘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 zondt 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 mengmoes 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 categorieën 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 II 'zijn' dat afwijkt van andere werkwoorden. In de appendices zijn drie teksten met glossen en vertaling toegevoegd. Tevens is er een woordenlijst op alfabetische volgorde te vinden.

Summary

Berber forms a branch of the Afro-Asiatic language family. Ghomara Berber is spoken in North-Western Morocco by about 10,000 people. The language is spoken in a number of villages along the Mediterranean coast in an area that is known as the *Jbala*. The dominant language in this area is Moroccan Arabic. All speakers of Ghomara Berber are bilingual in Berber and Moroccan Arabic. Ghomara Berber has been thoroughly influenced by Arabic resulting in parallel systems on almost all levels of its grammar. It is hard to determine which language is dominant on these levels. Therefore Ghomara Berber can be classified as mixed in most parts of its grammar. However, in the noun phrase Berber is dominant. In the basic lexicon Berber is slightly dominant as well, but Arabic is more dominant in the rest of the lexicon. The Berber part of the grammar shows a number rare or unique traits.

This grammar consists of a description of the phonology, the morphology and the syntax. In the appendices a number of texts and a word list are included. The data were collected on fieldwork trips between October 2009 and May 2013. The methods used were elicitation and text recordings. The texts were transcribed and translated with the help of informants in the field.

In the phonology the consonants, the vowels, assimilations and labialisation are treated. The Ghomara consonant system has the typical contrastive features of voice, pharyngealisation and length. Furthermore, Ghomara Berber has a number of spirantised consonants which contrast with their non-spirantised counterparts in certain positions in the word. Spirantisation is found in Berber as well as in the Arabic words. Labialised consonants form a part of the consonant inventory as well. In some positions the realisation of labialisation cannot be distinguished from **u**. The vowel system is typical for Northern Berber. The analysis of schwa is not different from other Northern Berber languages.

In the morphology the parallel systems are most evident. The Berber and Arabic systems are treated separately in most parts. In the first part the Berber-morphology noun is treated. The noun expresses gender, number and state. It distinguishes masculine and feminine gender, singular and plural and free (EL: *état libre*) and bound state (EA: *état d'annexion*). Depending on the word, the feminine can express feminine gender or diminutive. The plural is formed by affixation or by a combination of affixation and vowel apophony. The bound state is only used after prepositions. It is not used when the noun is the subject following the verb, as in many other Berber languages. The Arabic-morphology noun is taken over unchanged from Arabic. There are two possible plural formations; by

means of affixation or by means of apophony.

In the third chapter of the morphology, diminutive and augmentative formation are discussed. In Arabic it is possible to form diminutives by inserting a vowel pattern into the noun stem. This system has been adopted in Ghomara Berber. Arabic nouns in Ghomara Berber apply this system. In addition, native Berber-morphology nouns have also adopted this system of diminutive formation. The same patterns are taken over, meaning that this system has been added to the original system which forms diminutives by means of the feminine affixes. The two systems can to a certain extent be combined resulting in a four-way distinction in size. The augmentative is formed by means of Berber morphology.

In chapter four some interactions between the Berber and the Arabic systems are discussed. Collective nouns have Arabic morphology while unity nouns have Berber morphology. Some Berber-morphology nouns have Arabic-morphology plurals. In chapter five non-affix nouns are discussed. In chapter six verbal nouns are discussed.

The Berber-morphology verb, which is the subject of chapter seven, distinguishes three aspectual forms: the Aorist, the Perfective and the Imperfective. Some verbs in the Imperfective are formed by prefixing a **tt-**, geminating a consonant and deleting the first labial consonant, resembling a type of Imperfective formation in Tashelhiyt Berber. The causative is formed by prefixing an **ss-** to the Berber-morphology verb. This type of causative formation is not so productive. In chapter eight the Arabic-morphology verb is discussed. A number of basic verbs can only be conjugated using Arabic-morphology, such as **tkeyyef** 'smoke', **ṣṣad** 'fish', **ḥṣem** 'be embarrassed', **ṣber** 'be patient', **εṭeš** '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 **II** 'to be' is discussed. In the appendices three texts with glosses and translation are included. The final part is a word list.

Curriculum Vitae

Khalid Mourigh was born in Sliedrecht (the Netherlands) the 30th of June 1981. He finished his secondary school in 1999. In 2004 he obtained his Bachelors degree in Marketing (Hogeschool Inholland). In 2008 he obtained his Masters degree in Cultural Anthropology (Utrecht University) and in 2009 he obtained his Masters degree in Linguistics (Leiden University). He specialised in Berber Linguistics and wrote his Mphil thesis on the causatives in Tarifiyt Berber. After graduating he started writing his dissertation on the grammar of Ghomara Berber. This dissertation is the result of his PhD research.