The system of negation in Berber

Amina Mettouchi

This paper is a survey of the forms and functions of negation in various Berber languages covering a vast area in West Africa (Kabyle (Taqbaylit), Rifian (Tarifit), Shilha (Tashelhiyt), Tuareg (Tahaggart, Tayirt), Zenaga). It shows that negation in Berber is characterized by non-verbal predicates which encode the distinction between locative-existential and identification-qualification, as well as by clear-cut aspectual asymmetries with respect to the positive/negative opposition. All those features are shared to a certain extent by many languages of North-West Africa. They are also attested worldwide, in various phyla. We propose that such features are related to the importance of the topic/focus distinction, and the predominance of aspectual over tense distinctions in the language.

Introduction

Berber languages, which are a branch of the Afroasiatic phylum, are scattered over a large area of North Africa, from the Mediterranean to Mali, Burkina Faso and Niger, and from the Atlantic Ocean to the oasis of Siwa in Egypt.

Despite a number of diverging features due to the autonomous evolution of dialects separated by Arabic-speaking zones, and to the lack of a written tradition, the unity of Berber is quite striking.

Typologically, Berber is head-marking at the level of the clause: the verbal stem is completed by a personal affix which refers to the main participant of the situation, and followed by clitics (dative and accusative), and a proximal or distal particle. The most frequent word-order patterns are VSO and SVO, possessors always follow possesseees, and adjectives are placed after nouns. Predicates can either be verbal or non-verbal. The verbal system is dominated by aspect, which is marked with vocalic alternations (aorist, perfect, perfective, negative perfect/ive), prefixation or consonant gemination (imperfective, negative imperfective). Preverbal particles are used to

1. Berber is characterized by a high proportion of ambitransitive verbs, as for instance KRZ 'plough/be ploughed': in ya-kr Braz, the personal affix ya- (3.M.SG) can refer either to the field 'it is ploughed' or to the farmer 'he (has) ploughed', depending on the way the situation is viewed by the speaker.
modify the basic aspectual schemes and provide specific modal and aspectual values (irreals, progressive). As far as the noun phrase is concerned, there are no articles, and NPs are either in the citation form or in the 'another state' Information structure, and especially topic-focus articulation, plays a dominant role in constituent ordering.

As in some other African languages, negation interacts with the aspectual system in an asymmetrical way, which will be described in this article. Non-verbal predications (identificational and locative-existential) are very often expressed with specific negative markers. Other negative markers are used for irreals. Negation also interacts with clitic ordering at the level of the clause.

This paper describes the various salient linguistic facts about negation in several Berber languages. We first present non-verbal negations, which are related to focus on the one hand, and quantification on the other hand. We then turn to the study of verbal negation, by presenting the markers, and the word-order alternations they trigger, and then describing the reduction of aspectual oppositions in the negative subsystem. Throughout this description, we aim to show that, at least for Taqbaylit, these markers and phenomena are actually parts of a system based on the dichotomy between thematic and categorial judgements.

1. Non-verbal negation

1.1 Identificational and existential negations

What we call non-verbal negations are in fact invariant forms which are associated to non-verbal predication, mainly existential (there is not) and identificational ('it is not'). These two labels actually stand for a variety of meanings and constructions, which we are going to describe below. The following examples, in Taqbaylit, provide an overview of the main oppositions.

We can observe that negative and positive identificational predications are symmetrical, with an invariant negative form preceding the copula and the unmarked NP. On the other hand, the positive existential predication is verbal and involves verb 'be, exist' in the perfective, whereas the negative existential predication involves an invariant form.

2. The terminology in Berber studies is "Free" versus "Armenian" state or case. The question is whether Berber has cases as much debatable. The opposition is between an unmarked form and a marked one, but neither the opposition Nominative/Accusative, nor that between Absolute and Ergative accounts for the values of these forms. For a detailed study of this opposition for NPs conferring to subject affixes, see Metouchi (2008).

### Table 1. Non-verbal negations in Taqbaylit

<table>
<thead>
<tr>
<th>Explanatory Form</th>
<th>Tekstual Form</th>
<th>Negative Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>EX</td>
<td>lla-um-man</td>
<td>uša-aman</td>
</tr>
<tr>
<td>EX I/EX=N 3.MP/PL. WIDE/3.PL. ANN</td>
<td>'there is water'</td>
<td>'there is no water'</td>
</tr>
<tr>
<td>QLF</td>
<td>d aman</td>
<td>mačči d aman</td>
</tr>
<tr>
<td>QLF I/EX=CF 3.MP/PL.</td>
<td>cop 'water'</td>
<td>'it is water'</td>
</tr>
</tbody>
</table>

To predicate absence, uša is associated to an accusative clitic:

(1) uša - it

EXISTING ACC/CF.3.M.SG.

'he isn't here/homes

The existence of invariant nominal negations is in no way a peripheral phenomenon: indeed in Taqbaylit for example, the study of a conversational corpus provided us with the following counts: 65% of negative utterances were verbal, and 35% non-verbal. Among the latter, 47% were locative-existential and 53% identificational. Moreover, in all dialects, either existential or identificational negation (or both) is expressed thanks to a special form, as is shown in Table 2.

This is consistent with cross-linguistic generalizations, such as those made by Horn (1989: 451): "The negator used in nonexistence statements and other verbal environments is often formally distinct from the one used in negative identity statements and/or for constituent (especially nominal) negation).

### Table 2. Non-verbal markers

<table>
<thead>
<tr>
<th>Existential Form</th>
<th>Identificational Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taqbaylit (West)</td>
<td>uša</td>
</tr>
<tr>
<td>Taqbaylit (East)</td>
<td>uša</td>
</tr>
<tr>
<td>Tashlhit</td>
<td>uša, uša</td>
</tr>
<tr>
<td>Tamazight</td>
<td>uša</td>
</tr>
<tr>
<td>Ghadames</td>
<td>uša</td>
</tr>
</tbody>
</table>
There is debate on the borrowed or original status of those markers. For instance, Taqbaylit mačči, 'it is not', is considered to be an Arabic loanword, but uša is probably the contraction of Berber ur yallā àša', i.e. being common to Arabic and Berber, but derived to Berber from kra, thing, and in Maghreb Arabic from classical Arabic kay'ān, thing (Brugnatelli 1987: 56).

Table 2 shows that depending on the dialects, existential negation can be realised either as a sentential negation (ur) or as a special form. The various cases correspond to different stages of grammaticalisation. Croft (1991: 6) postulates a negative-existential cycle from Type A to Type C. In Type A, the negation of the existential predicate is performed by the verbal negator. In Type B, there is a special negative existential predicate, distinct from the verbal negator. In Type C, there is a special negative existential predicate, which is identical to the verbal negator. [...] we hypothesise a negative existential cycle, in which a special negative existential form arises (A > B), comes to be used as a verbal negator (B > C), and then is supplemented by the positive existential predicate in its existential function, restoring a 'regular' negative-existential construction (C > A).

Berber languages appear to be situated in-between stages A and B. Stage A is represented by Tamazight and Chadaami, stage A-B by Tariff and Tashawit, stage B by Taqbaylit, Tashellhit and Tuareg.

In Tariff, with both ur(a) ... (5a) and uša, illustrates the evolution from stage A to stage B. In the synchronically variable stage A-B, a special existential negative form, usually but not always a contraction or fusion of the verbal negator and the positive existential form, is found in addition to the regular existential negative form' (Croft 1991: 7).

1.2 Functions

Non-verbal negations are used mainly for constituent negation, focalisation and quantifier negation. The following examples present such negations in pairs, in two Southern dialects.3

Tuareg:

(2) aba hačk erad
EXISTING DAY/2.M-phg, wheat
you have no wheat (there is no wheat for you)

(3) nac adas, ur giy tamač
I man 3SG woman
'I am a man, not a woman'

Tashellhit:

(4) ġaḥ as tafig
EXISTING OBJ/3.Sw sun
'the could not see the sun anymore (there was no sun for him)'

(5) ur D lhyia
ROSSQ YHIA
'It is not Yhia'

Identification negation is used to focalise constituents in negative clifing. The following examples are in Taqbaylit:

(6) mačči d argaz i dīri
ROSSQ COR man BEL COR'bad
'It was not the husband that was bad (= it was something else)'

And also for sentential negation, in rejections:

(7) mačči nac ad sładm ay nitaśl ad smaqul-set
ROSSQ COR AD SADDAM NPWH AD SMQUL NPWH
Pot work/3 Сов.LS then/F Pot watch 3.SING.3.PL.F
'No way I'll be working while they'll be watching'.

On the other hand, existential negation provides the basis for the derivation of negative quantifiers. In Taqbaylit, eight such quantifiers are listed by Chaker (1978: 170-171), all formed on the basis uša: ušašed ('no one'; > heč, 'person'), uľanda ('nowhere'; > anda, 'where'), ušaš ('no way through'; > əʌn, 'through where'), ušayyar ('no reason'; > əyayr, 'why, what for'), ušamok ('no way'; > əmok, 'how'), ušawami ('no one'; > umai, 'nothing', > əumi, 'what', > ušawuluk ('with no one'; > əkul, 'with whom'), ušawawar ('at no one's place'; > əyur, 'at whose place').

The following example, taken from an oral tale in Taqbaylit, shows how those non-asertive forms are used.

(8) t-ego i wodystu mi ulamis
3SG-3PL.SST turn/3PP to reach/3SG-ADN-3SG-ADN INS.PH ph-where she (the witch) turned around the rock, and (finding) no way s t-shk, t-rob
3.SING-3PL.3PL-reach/3PP 3.SING-3PL-3PL
reach her (the little girl), she left.'

1.3. Semantics

The semantics of those non-verbal negations could be summarised as follows: Identification negation indicates conflicting views on a given entity. On the other hand, the
semantic characteristic of existential negation is to express the lack of coincidence between assessment of a situation or event, and prior expectations. This opposition corresponds to the distinction between thematic and categorical judgments exposed in Sasse 1987, after Brentano & Marty (Marty 1918). In that perspective, a categorical judgment is "constituted of two successive acts: naming an entity and making a statement about it" (Sasse 1987: 512), and a thematic judgment, "merely express[es] an event or a state situation" (Sasse 1987: 512). In Sasse's terminology, the former "contain[s] a predication base about which some state of affairs is predicated" (1987: 511) while the latter "[is a] simple nonpredicative assertion of a state of affairs" (1987: 511).

On semantic grounds and in another theoretical framework, it is the same dichotomy which Calloli (1988: 112) considers to be at the heart of the logical operation of negation: "Il existe une opposition primitive de negation liee d’un cote a la valuation subjective (bon/mauvais, dox/rejet, refus) et de l’autre a la localisation spatio-temporelle (presence / absence, video / apparition / disparition / iteration)."

Such a reparation between thematic (existential) and categorical (identificational) negation is encountered in many languages of the world, such as for instance Central Pomo (North California) or Yoruba (Bura, Niger-Congo) (Metouchi 2003). It seems however that North-West Africa is particularly rich in those forms and oppositions, and this may reflect the dominant role of localization and focalization strategies in the languages of this geographical area.

2. Verbal negation

As we indicated in our first part, verbal negation is more frequent than non-verbal negation in everyday use. It is, however, possible to find in the verbal system the same dichotomy between thematic and categorical predications, if we take into account the interaction between the negative particle and the aspect of the verb (Metouchi 2003 & 2006). Indeed, the verbal system of negation is characterized in Berber by a reduction of aspectual distinctions in the negative subsystem. But before we investigate the situation in various dialects, let us describe the negative markers themselves.

2.1 Markers

The most widespread marker is the preverbal negator war/ur and its variants wall and wa. This negator is positioned either between S and V (for the SVO sentences), or in first position (for the VSO sentences). Berber patterns (SNegVO and NegVSO) are therefore among the most common typologically (cf. Dryer 1988: 94, 97).

2.1.1 War, Wal, Wa

War is a particle, it is invariant and preverbal:

(9) ur yu-furz

NEG 3.M.mg-plough/OPEN

he didn’t (hasn’t) plough(ed)

Its origin is uncertain. Brugnoli (2006) presents its extension as follows: the most widespread form is war/ur (Taqbaylit, Tashelhit, Tarf, part of Tamargit, Tuareg...). In some dialects, the corresponding form is wol (Ghadames, Mzab, Neufs, and some Central Moroccan dialects). Finally, some dialects have wa- (兴旺, Mzab, Zwar, Jerba), wa (Gurara), u (Tunisit), ud (Tashavet, Jerba, Mzab). Inside dialectal areas, and in the speech of the same speaker, variants can appear whose motivations have not been studied in depth yet.

The question triggered by these variants is, which particle is the original one. According to Chaker (1996: 12), war/ur is the original form, and wa/ur is a reduced variant, "cette hypothèse [...] suppose la chute – très classique en berbère – d’une semi-voie [u] à l’initiale du verbe (racine VP<BI)". In this view, war is a former state verb meaning ‘be empty’. This hypothesis is based on Basset (1940: 202-222), who postulated a morphological and semantic relationship between the privative prefix war without, and the negative particle war. LOuthier (1924: 177 & 487) found traces of the verb ur, which means ‘be empty’, he desert in Tamargit. Prasse (1972: 244), studying the behavior of the particle in Tuareg, gives arguments in favor of this hypothesis. Having noticed that in negative relative clauses the negative morpheme is worn in the masculine and worn in the feminine, he concludes his demonstration, based on morphemic boundaries, by asserting the former verbal status of the particle war.

Those claims are consistent with studies on the grammaticalization of negation. Payne (1985: 223) indeed notes that "in many cases negative particles which are conditioned in this way by the tense or mood of the predicate turn out to be reduced forms of negative verbs which have lost their person and member inflections". The preverbal position of the negator in Berber might be linked to this former verbal nature, as Grevin (1984) argues, negatives precede the verb in VO languages because they were originally verbs.

Another standpoint is held by Galand (1994: 176). According to him, u is the basic negative particle, and –r comes from the indefinite ara, ‘thing’. ‘existence et la fréquence de la forme u n’ont donc été que d’usage à voix éclaire encore, elle la base de la particule négative. [...] on ne croit donc pas que u soit une forme réductrice de ur. C’est plutôt la forme en –r qu’il convient de rattacher à partir de ur, et non l’inverse [...] on peut se demander si le berbère ur n’était pas, l’ancien nom ara, ‘chose, qui se serait agglutinée à la particule négative”.

8. For instance in ur ‘without-name’ (ring finger), in Taqbaylit.

9. As is the case for Berber, which has special negatives in the austri (see 2.1.4. & 2.2.2.).
Finally, Brugnastelli (2006) proposes another hypothesis, which derives the –r in ur from a preposition, ar (to, till); "ajoute aux autres éléments de réflexion précités la constatation qu'il semble exister un rapport assez étroit entre la forme de la négation et celle de la préposition ar jusqu'à. En fait, d'habitude les parlants qui ont une négation vol ont aussi une préposition al, il ne faut pas oublier qu'un khabyl il existe une variante phonétique a, tout comme il y a ur pour ur. On peut se demander si les deux éléments grammaticaux ont subi les mêmes modifications phonétiques, ou bien il y a eu une assimilation de ladite préposition à une base de négation a."

Other scenarios are also possible. For instance, Dryer (1988: 112) presents the semantic bleaching of more specific negative adverbials with meanings like 'never' etc., as a more plausible source of negators than former negative modality verbs.

### Derived markers

Some adverbials are indeed related to the preverbal negator vol. In Taqbaylit, these markers are warṣin 'never', warraṭ 'not yet', and mazal 'still/yet'.

The former is followed either by the negative perfective, or by the preverbal auxial. The second one is always followed by the (negative) perfective, and the latter is in Arabic loanword (‘quze ṣal, he didn’t cease’), which accepts all aspectual forms.

(10) warṣin a sli-y never DAT/3SG be-in/PPV-3SG

'I never heard him

ya-suṣaṭ amsalay 3MSG-make-abundant/PPV word
‘be so talkative’

(11) warraṭ d ya-kfi amsalay not-yet PROX 3MSG-finish/PPV word
‘the discourse was not finished yet,

t-teuf t-jejini yati-d-i 3MSG-fly/PPV spoon/ANN in-front-of me
and the spoon flew in front of me’

(12) nakwini mazal nattiyaduk us not-cease 1SG visit/PPV
‘as for us, we still practice the family visit’

(13) mazal y-arkid wallay-is not-cease 3PL-be calm/PPV brain/ANN-POS
‘she wasn’t fully awake yet (her brain was not calm yet)’

In those last two cases, we can see that it is interaction with aspect which provides telic (‘not yet’, perfective) or continuous (‘still’, imperfective) interpretations. No adverbials are needed.

Mazal is also grammaticalizing as an adverbial: it is sometimes encountered with discontinuous negations, with the sole meaning of ‘yet’.

#### 2.1.3 Clitic movement

In all dialects, verbal negation triggers clitic movement. This phenomenon occurs after the preverbal negative marker war or one of its variants, but also after aspectual or modal preverbs, and in relative and interrogative clauses. The unmarked order, in declarative, positive, main clauses is:

(14) y-afka yas t iD 3MS-give/PPV DAT/3SG ACC/3MS PROX

‘he gave it to her/him’

In the negative, the whole block of clitics is appended to the preverbal negator ur:

(15) ur s t iD y-akfi NEG DAT/3S ACC/3MS PROX 3MS-give/PPV

‘he did not give it to her/him’

This movement does not occur with negative morphemes other than war or its variants. For instance, in Taqbaylit oath with me, no such displacement is possible. Similarly, in Eastern Taqbaylit, the verb antha (Rabhi 1996: 26) does not trigger clitic climbing.

(16) antha usu-rat D NEG arrive/PPV-3PL PROX

‘they haven’t arrived (didn’t arrive)’

It is interesting to note that neither ma nor antha are associated with negative aspectual forms (see 2.1.5.2). Clitic movement is therefore part of the general asymmetry of negative subsystems compared to positive ones. The common point between all the contexts triggering clitic climbing seems to be the modal nature of the judgement, which is not straightforward assessment of a referential situation. In all cases, predications is filtered through the utterer’s viewpoint.

#### 2.1.4 The negative participle

Participles are used in relative clauses where the subject is relativised: in Taqbaylit, this form is invariable as far as number, person and gender are concerned, whereas in Ait Tuareg for instance (Goland 2002: 1974: 131), it distinguishes masculine singular, feminine singular, and plural. When preceded by a negative marker, the participle is morphologically different, in a way that is reminiscent of the clitic movement described in 2.1.2: the suffixed mark becomes a prefixed one, with minor changes depending on the dialects. The following examples are in Taqbaylit.

The system of negation in Berber
(17) argar\textsuperscript{10} y-em-mut-\textit{za-n}
man die Ipsumdum
'the man who died'

(18) argar ur n-em-mut ara
man NEG stopat die\textsuperscript{11} crops
'postnoq
'the man who didn’t die'

Tables 3 and 4 present the data in a more systematic way in Tuareg and Taqbaylit. The dotted line represents the actually marked verbal stem. It is surrounded by participial affixes.

Such alternations show that negation is not a surface operator, and that it interacts with deeper levels of linguistic organisation.

2.1.5 Reinforcement particles
In Tashelhit, Tuareg, Sori, Zeraga, and more generally in the southern Berber area, negation is realised only by the preverbal morpheme wa-/ur or one of its variants. However, other dialects, especially in the North, have grammaticalized a postverbal indefinite. Brugnatelli (1987) describes various situations, that can be summarized as follows: the most widespread configurations are either dialects with only a preverbal negator, or dialects with a discontinuous negative marker. Basar are dialects with only a postverbal negator (\textit{ka} or \textit{kara} in Awil), which has evolved from a discontinuous marker.

Table 3. The positive participles in two dialects

<table>
<thead>
<tr>
<th>Air Tuareg</th>
<th>sg.</th>
<th>pl.</th>
<th>Taqbaylit</th>
<th>sg.</th>
<th>pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>masc.</td>
<td>y----n</td>
<td>------</td>
<td>masc.</td>
<td>y-----------------n</td>
<td></td>
</tr>
<tr>
<td>fem.</td>
<td>------</td>
<td>fem.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. The negative participles in the same dialects

<table>
<thead>
<tr>
<th>Air Tuareg\textsuperscript{11}</th>
<th>sg. / pl.</th>
<th>Taqbaylit</th>
<th>sg. / pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>masc.</td>
<td>n--------</td>
<td>masc.</td>
<td>n--------</td>
</tr>
<tr>
<td>fem.</td>
<td></td>
<td>fem.</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{10} Here, argar (\textit{man}) could be replaced with taminut (\textit{woman}, feminine) or irgazan (\textit{man}, plural) without altering in any way the form of the participle. This is also true for example 18.

\textsuperscript{11} In some dialects, such as Alaggar Tuareg, the negative participle maintains the gender opposition in the singular.

2.1.5.1 Etymology
The question as to whether those postverbal particles are derived from former Berber nouns or Arabic ones was posed by Laoust (1932: 285) "nombre de parlers, parfois du même berbere, utilisent sa et ka; la question se pose de savoir si l’expression est empruntée à l’arabe say (en maghrébin ¡al), ou du berbère ¡ara. It is not always easy to answer such questions: Berber and Semitic both being subfamilies of Afroasiatic, some markers may be derived from a common protolanguage. The presence of the particle \textit{kar}a in Nefsi, and \textit{kara} in Jerra, reinforces Brugnatelli’s claim that all forms can be derived from a common Berber form *\textit{kara}ti: "Da un punto di vista fonetico, quindi, nulla esclude la possibilità di una derivazione anche di –\textit{t}a\textit{ti} da una base berbère *\textit{kara}ti (o sim.) qualche cosa, che sarebbe così stata usata in tutta la fascia settentrionale dei parlari come particella negativa postverbale" (1987: 56).

The grammaticization of this postverbal particle in Berber may have been reinforced by the existence of ma-\textit{t} discontinuous negations in Arabic, as is suggested by Gelbard (1994: 177) "on pourrait être ici en présence d’un phénomène de convergence entre une donnée du fond berbère et un élément arabe; le cas ne serait pas unique."

Beside the most widespread postverbal negator (an evolution of *\textit{kara}ti), a number of expressive postverbal indefinites can be encountered, with meanings such as \textit{drop}, \textit{onion}, etc. The following example is in Eastern Taqbaylit: 12

(19) ur i-swi tibelt
NEG 3.N.sg be worth/should have
'he isn’t worth a dime! (i.e. he isn’t worth an onion)'

In this case, the standard postverbal negator is excluded.

2.1.5.2 Restrictions
When a postverbal marker is used, there are generally strict appearance conditions. For Taqbaylit, they are listed and analyzed in Mettouchi (1999): presence of an indefinite argument, which therefore acquires negative value, negative coordination, negative oaths, restrictive versus descriptive relative clauses, exclusive versus collaborative attitude towards the interlocutor, etc. We will not illustrate all those contexts, but will only treat the cases which allow some characteristic features of negation to be expressed.

(20) \textit{ax̂atar ma yra-nt}
because if learn/pv+3.pl.1 a-lot
ur itwall-at ywan\textsuperscript{1}
NEG 3.sg/pv+3.pl.1 one
'because if they were too learned, they wouldn’t show respect to anyone (= they would look disdainfully upon everyone)'

In the preceding example, the presence of the indefinite *ywam 'one' prevents the use of
the postverbal negator *a.

The following example is another syntactic context excluding the postverbal negator
in dialects such as *Taghblit, which has such a marker.

(21) ur udi-n yu*xwam ur
xen climb/REV-3PLM houses/PLA.MN NEG
-tarbih
tillahit
3ps-produce/REV agriculture/ANMN

'neither do houses grow (=are houses built), nor does agriculture produce' (63)

Since whole predications are negated and coordinated, ur is used before each verb. For
negative coordination with a focus on nominals, ur is used before the verb, and la be-
fore the noun:

(22) idammun ur d wwi-n
blood/3PLM hit/3PLM take/NPfv-3MPL
la abrid la sin
Cons. way Cons. two

'the blood flew in streams (took not one way, nor two, but all of them)'

The etymology of the particle that is used for this type of coordination has not been
studied, to our knowledge. Our hypothesis is that it is the same particle as the one
which precedes the imperfective aspect in its progressive reading (concomitance).

Another context excluding the use of the postverbal negator in *Taghblit is oaths and
forceful statements:

(23) wabsh ur t y-a*Cul
by-god NEG ACC/3MSG 3MSG-eat/NPfv

'I swear he didn't eat it!'

It must be noted that negative oaths can also contain marker ma 'if', which is not a
negative morpheme:

(24) wabsh ma y-aCul t!
by-god if NEG-ACC/3MSG

'I swear he didn't eat it!'

In that case, unlike ur, ma neither triggers clitic climbing nor the use of a negative
perfect. This morpheme has been thought to be an Arabic loanword, but Bernibli
(1988:63) argues against this hypothesis "Mais la comparaison des parlers et lexicentre
en kabyle mène d'autonome hypothétique ma, "si", nous incite à y voir un
fonctionnement et à interpréter les tours avec ma comme ceux du français avec si (c'est supra-
du diable si je la connaissais)!".

2.2 Aspect

Aspect in Berber is marked with vowel alternations, gemination, or prefixation. Except
for *Tasheliht, which is said to possess a recently acquired tense category as well as as-
pect (Leguill, 1982), the other dialects are genuinely aspectual imperfectives as well as
aorists and perfects/perfectives can have a past, a present or a future interpretation,
depending on the context.14

Four aspectual bases are common to all dialects: perfective, negative perfective/
ive, aorist, and imperfective. In some dialects, such as *Air Tsaarerg, perfect and perfect-
ive are distinct. In others, like Tarfirt or Zenaga, there is a negative imperfective.

The existence of specific aspectual forms in negative contexts is a salient feature of
Berber, and is shared by other African languages.

2.2.1 *Taghblit

The presentation of *Taghblit data in detail allows a more precise view on the interac-
tion of negation and aspect. Despite the fact that it is pragmatically difficult to con-
sider that there should be an 'equivalent' negative form for a positive form, we can
schematize the oppositions as follow:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Negative perfective/ive</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>-nda-</td>
<td>-nda-</td>
<td>-ndí-</td>
<td>-ndadi-</td>
</tr>
<tr>
<td>-kra-</td>
<td>-kra-</td>
<td>-kra-</td>
<td>-kraa-</td>
</tr>
</tbody>
</table>

Table 5. *Taghblit aspectual bases (roots *ND, *COM, and KRA, 'plough')

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-tak-</td>
<td>-tak-</td>
<td>-tak-</td>
<td>-tak-</td>
<td>-taak-</td>
<td>-taak-</td>
</tr>
<tr>
<td>-g(a)-</td>
<td>-g(a)-</td>
<td>-g(a)-</td>
<td>-g(a)-</td>
<td>-taagg(a)-</td>
<td>-taagg(a)-</td>
</tr>
</tbody>
</table>

Table 6. *Air Tsaarerg aspectual bases (roots *TAK, *TAL, and G, 'to do')15

14. For a study of those values in *Taghblit, see Metouchi (2000) for the perfect/ive, Metouchi
(2002) for the aorist, and Metouchi (1990) for the imperfective.


16. Vowel /a/ appears in forms where there is no personal suffix; vowels /a/ and /a/ alternate depend-
ing on the personal affix.

17. For a complete list of roots, see Metouchi (2000).
### Table 7. Taqbaylit aspectual oppositions

<table>
<thead>
<tr>
<th>Taqbaylit</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>optative (= ad + aorist)</td>
<td>a war + aorist</td>
<td></td>
</tr>
<tr>
<td>imperative (= aorist)</td>
<td>ur + imperfective</td>
<td></td>
</tr>
<tr>
<td>ad + aorist</td>
<td>ur = negative perfect (ve)</td>
<td></td>
</tr>
<tr>
<td>ha/ad/D = imperfective</td>
<td>ur = negative perfect (ve)</td>
<td></td>
</tr>
</tbody>
</table>

Thus, for instance, the negative 'equivalent' of (25) in Taqbaylit is (26):

(25) ad i-dala yidas
Pot. 3Sg-com/ADJ with-him/her
'he will accompany him/her'

(26) ur i-toddal yidas
Neg 3Sg-com/INV with-him/her
'he won't accompany him/her'

In quantitative terms, counts\(^{12}\) conducted on spoken and written (non-literature) corpora yielded the following figures, in the negative subsystem:

- Written corpus: 69% negative perfective (two-thirds are marked forms), 30% imperfective, and 1% aorist (optative).
- Spoken corpus: 63% negative perfective (three quarters are marked forms), 37% imperfective.

The repartition of aspectual forms in the positive subsystem is the following:

- Written corpus: 70% perfective, 10% imperfective (with 1.5% preverbal forms), and 20% aorist (16% preverbed).
- Spoken corpus: 53% perfective, 16% imperfective (no preverbal forms), and 30% aorist (all preverbed).

12 The detailed counts can be found in Metouchi (1995: 134-137). The written corpus is a 184-page novel (a total of 372 verbal negations), and the conversational corpus on which the counts were performed is 30 minutes long (a total of 72 verbal negations).

### Table 8. Aspectual oppositions in Taqbaylit

<table>
<thead>
<tr>
<th>Taqbaylit</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>optative (= imperative)</td>
<td>a war + aorist</td>
<td></td>
</tr>
<tr>
<td>(= ad + aorist)</td>
<td>ur = imperfective</td>
<td></td>
</tr>
<tr>
<td>aorist</td>
<td>ur = negative perfect (ve)</td>
<td></td>
</tr>
</tbody>
</table>

Figures:

<table>
<thead>
<tr>
<th>Right</th>
<th>Spoken</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad + aorist</td>
<td>ur = imperfective</td>
</tr>
<tr>
<td>ha/ad/D = imperfective</td>
<td>ur = negative perfect (ve)</td>
</tr>
</tbody>
</table>

Those figures are of course to be taken as indicators, since not all spoken genres have been studied, but they show that:

- The aorist is almost totally excluded from the negative subsystem, whereas it represents between one fourth and one third of verbal predicates in the positive.
- The negative contexts are favoured contexts for the imperfective.
- The proportion of perfective forms is roughly comparable in positive and negative contexts.

A semantic and pragmatic study of negative utterances enabled us (Metouchi 1995) to establish the presuppositional nature of both the negative perfective and the imperfective, and to explain thus their dominance in the negative contexts. The verbal system being based on aspect and not on tense, position in time respective to the speaker is not a dominant factor for the choice of the verbal form. What is first and foremost is the way the situation being referred to is construed. And in this respect, as shown in Metouchi (2005) the interaction of negation and aspect allows the coexistence of two types of negative judgments:

- A thematic one, in which the expected situation is assessed as 'not being the case',
- A categorical one, in which a predicate is attributed to a subject (or more generally, a predication base) in opposition to a competing viewpoint.

Here are examples of the two types of negative judgments, involving root WT, 'hit', with work as negative perfective, and klat as imperfective:

(27) ur t i-dii i-wwiti ara
Neg ACC/Sdg PRED. Sdg-hit/INVP POSTNEG
'the didn't hit him (contrary to expectation)'

(28) wid mni ur klat-an ara
those NTR. hit/INVP-3MPL POSTNEG
'those guys, they didn't (send to) beat/batter (the prisoners)'
Those sets of values are a semantic argument in favour of the hypothesis (Metouchi 1995) according to which the preverbal negator has scope on the core values of aspectual forms, in the same way as aspectual or modal preverbs do in the positive subsystem. Indeed, it is important to note that preverbs are excluded from the negative subsystem in Taqbaylit. Ur and those markers are therefore in complementary distribution.

Pragmatic-oriented studies have shown that negative utterances have their own values, which clearly differ from their positive 'counterparts' (Cantini-Maskava 1989).

The interest of languages such as Taqbaylit is that they encode those functional and semantic differences in the forms themselves, and in their distribution.

2.2.2 Other dialects

The facts described above for Taqbaylit are not valid for the whole of Berber. A study of each dialect would be necessary to assess how negative utterances operate on a semantic and pragmatic level. Since this has not been done yet, we will only list a few distributional and descriptive facts.

For instance, the aspectual asymmetry found in Taqbaylit is not realized in Tashelhit, which is currently grammaticalizing tense distinctions. As is shown by the table below, preverbs appear in the negative subsystem. The oppositions are not totally symmetrical however, since the order of preverbs varies in combination with ur on the basis of a modal (rrealis/realm) distinction.

It would be interesting to check whether, on a larger sample of languages, tense-oriented or tense-drifting languages indeed tend to have regularized positive/negative oppositions, in contrast to aspect-oriented languages.

The study of other dialects allows us to make a few additional remarks.

<table>
<thead>
<tr>
<th>Table 9. Aspectual oppositions in Tashelhit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tashelhit (Galanid 1994)</td>
</tr>
<tr>
<td>optative (= ad + aorist)</td>
</tr>
<tr>
<td>imperative (= aorist)</td>
</tr>
<tr>
<td>rad + aorist</td>
</tr>
<tr>
<td>ur (ad) + imperfective</td>
</tr>
<tr>
<td>perfect(ive)</td>
</tr>
<tr>
<td>ad ur + aorist</td>
</tr>
<tr>
<td>ad ur + aorist</td>
</tr>
<tr>
<td>ur rad + aorist</td>
</tr>
<tr>
<td>ur (ad) + imperfective</td>
</tr>
<tr>
<td>ur + negative perfect(ive)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 10. Aspectual oppositions in Tifinfi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tifinfi (Lafkiati 1996)</td>
</tr>
<tr>
<td>and Kossmann 2000)</td>
</tr>
<tr>
<td>optative (ad + aorist)</td>
</tr>
<tr>
<td>imperative (aorist)</td>
</tr>
<tr>
<td>ad + aorist</td>
</tr>
<tr>
<td>imperfective</td>
</tr>
<tr>
<td>perfect(ive)</td>
</tr>
<tr>
<td>a war + aorist</td>
</tr>
<tr>
<td>ur + negative imperfective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 11. Aspectual oppositions in Air Tuareg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Tuareg (Galanid 2002 [1974])</td>
</tr>
<tr>
<td>optative (ad + aorist)</td>
</tr>
<tr>
<td>imperative (= aorist)</td>
</tr>
<tr>
<td>a / ad + aorist</td>
</tr>
<tr>
<td>ur + negative perfect(ive)</td>
</tr>
<tr>
<td>ur + negative perfective</td>
</tr>
<tr>
<td>ur + negative imperfective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 12. Aspectual oppositions in Zenaga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zenaga (Toine-Chelli 1997)</td>
</tr>
<tr>
<td>optative (= aorist)</td>
</tr>
<tr>
<td>imperative (= aorist)</td>
</tr>
<tr>
<td>ad + aorist</td>
</tr>
<tr>
<td>imperfective</td>
</tr>
<tr>
<td>perfect(ive)</td>
</tr>
<tr>
<td>adds war + negative perfect(ive)</td>
</tr>
<tr>
<td>adds war + negative imperfective</td>
</tr>
</tbody>
</table>

In all dialects, there is a special form for the negative optative, where the negator is under the scope of a particle, which is sometimes ad, sometimes a. In some dialects, a negative imperfective can be found. This form is derived from the positive imperfective (Kossmann 1989).

Another general tendency is the relative symmetry observed in the domain of the perfect/ive: to a perfect or perfective corresponds a negative perfective. This clearest opposition might be linked to the semantics of the perfect/ive aspect: this form has mostly thematic uses, and the opposition between being and not being the case is a binary one. It may be interesting at this point to underline the fact that existential sentences are systematically expressed by the perfect/ive of the verb ibi, 'be, exist'.

The general tendency, despite a few differences in the terminais, is to use imperfections as 'counterparts' to ad + aorist forms. We must bear in mind that the imperfective is a secondary aspectual form which is morphologically derived from the aorist, and was introduced in the verbal system at a later stage than the other aspectual forms, according to a general pattern analyzed in Cohen (1989). There is therefore a derrational link between aorist and imperfective, which parallels to a certain extent the link between perfect/ive and negative perfective, with the restriction that the imperfective is widely used in positive contexts, whereas the negative perfective is restricted to negative or counterfactual contexts.

19. Personal communication. I take full responsibility for possible errors.
Conclusion

The survey which we have conducted in this article underlines the variety of situations but also the common features of negation in the Berber dialects. Such a vast territory, in which dialectal areas are separated from each other, was bound to provide us with a variety of forms. Nevertheless, the unity of Berber as far as negation is concerned is unquestionable: it lies in the existence of non-verbal negations which encode the distinction between locative-existential and identificational-qualificational predications. It also lies in the existence of very clear-cut aspectual asymmetries with respect to the positive/negative oppositions. Moreover, the formal identity of the preverbal negator in the whole Berber area implies that this marker is a very ancient one, whereas postverbal elements are more recent.

All these features are shared to a certain extent by many languages of North-West Africa (Platé, 1990). They are also attested worldwide, in various phyla (Kabriel and Van den Berg 1994; Hoffmann and Mosel, 1999). However, they do seem to cluster in some areas. It might be the case that such areas are also characterized by other linguistic features such as the importance of the topic/focus distinction, and the pre-dominance of aspectual over tense or mood distinctions in the verbal system.

References


The systems of negation in Berber 301


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**List of abbreviations used in the article**

<table>
<thead>
<tr>
<th>SG</th>
<th>OPTNEG</th>
<th>negative optative marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL</td>
<td>COP</td>
<td>copula (invariant d)</td>
</tr>
<tr>
<td>F</td>
<td>PFV</td>
<td>perfect or perfective aspect</td>
</tr>
<tr>
<td>M</td>
<td>NPfv</td>
<td>negative perfective</td>
</tr>
<tr>
<td>ANN</td>
<td>IPFV</td>
<td>imperfective aspect</td>
</tr>
<tr>
<td>ANN</td>
<td>AOR</td>
<td>aorist</td>
</tr>
<tr>
<td>ACC</td>
<td>POT.</td>
<td>particle with future, potential, tendential etc. values</td>
</tr>
<tr>
<td>DAT</td>
<td>(A, AD)</td>
<td>aspectual particle marking</td>
</tr>
<tr>
<td>1, 2, 3</td>
<td>CONC.</td>
<td>concomitance (la)</td>
</tr>
<tr>
<td>NEG</td>
<td>PROX.</td>
<td>proximal particle (d)</td>
</tr>
<tr>
<td>POS</td>
<td>ANAPH.</td>
<td>anaphoric determiner (nni)</td>
</tr>
<tr>
<td>POSTNEG</td>
<td>PART</td>
<td>participle</td>
</tr>
<tr>
<td>EXISTNEG</td>
<td>NPART</td>
<td>negative participle</td>
</tr>
<tr>
<td>IDNEG</td>
<td>REL</td>
<td>relativizer</td>
</tr>
</tbody>
</table>