Word order in Conversational Taqbaylit Berber: Preposed and Postposed ‘Subjects’

Taqbaylit Berber (Afroasiatic) is spoken in the North of Algeria by about four million speakers, five if we include those living in Europe and America. It is generally claimed that word order in Berber languages is VSO. But a look at contextualized, non-elicited spoken data shows that word order in Taqbaylit is much more varied.

In this paper, we would like to examine the case of the preposed and postposed subjects. Our aim is to show that word-order alternations are based on the constraints of information flow, which is organized according to topic-focus articulation. We will then address the problem of the status of personal affixes, and of the case opposition marked on NPs. We would like to contest the assumption according to which personal affixes should be agreement markers and Noun Phrases the real subjects. We would like to propose, in accordance with the berberologist tradition, that the personal affix represents the primary core argument of the clause and that as such it is the real subject, its co-referential NP being an adjunct. The problem of the case distinction ‘état libre’ versus ‘état d’annexion’ will be broached in this perspective.

1. The basic utterance

In Berber, the verbal stem is completed by an obligatory personal affix which refers to the main participant of the event or state.

(1) ye-čča: subj.3sm-eat(perf): ‘he ate/has eaten’
    basic utterance = personal affix: ye- + stem: čča
    stem = root (čč) + aspectual scheme (here perfective, realized -a)

It can be followed by clitics (dative and accusative), and a proximal or distal particle. The order of clitics is rigid.

---

1 Abbreviations are as follows: 1, 2 or 3 refer to person; S = singular, P = plural, F = feminine, M = masculine; SUBJ = subject affix, DAT = dative clitic, ACC = accusative clitic; AS = annexion state (indicated only when it is morphologically marked); FS = free state; PERF = perfective aspect, IMPERF = imperfective, AOR = aorist; CAUS = causative prefix, PASS = passive prefix; NEG = pre-verbal (main) negator, POSTNEG = postverbal (optional) reinforcement of NEG; P.PROX = proximal particle, ANAPH = anaphoric determiner, IRR = irrealis particle, CONC = concomitance particle, COP = copula.
Predicates can be verbal or non-verbal, but our focus in this paper will be on verbal predication. The verbal system is dominated by aspect, which is marked thanks to vocalic alternations, prefixation or consonant gemination. Preverbal particles are used to modify the basic aspectual schemes and provide specific modal and aspectual values (irrealis, progressive). As far as the noun phrase is concerned, there are no articles, and Noun Phrases are either in the citation (unmarked) form, the ‘free state’, or in the ‘annexion state’ (marked). Independent pronouns form a special paradigm, with no state alternations. Possessors always follow possessees, and adjectives are placed after nouns.

2. Word order variations in Taqbaylit Berber

We will start with a provisional definition of the subject as a full Noun Phrase or independent pronoun coreferential to a personal affix. We will later question that definition, but for the time being it allows us to use the standard terminology for word order variation. In that framework, Taqbaylit is usually characterized as a VSO language. It appears however that this classification is problematic when tested on actual data. Actually, in a fifteen-minute conversational excerpt, which provided 143 occurrences of third person verbal predications, we only encountered 5 occurrences of VSO order. For two of them S was an indefinite (yiwen, one and akw, all), and for two others it was a reflexive expression (iman-is, himself): only one was therefore a standard lexical NP.

A number of utterances display an SV or VS order; others display VO or OV orders, and, most importantly, many occurrences are limited to a verb with its personal affix and clitics. The counts we made are summarized in Table 1:

<table>
<thead>
<tr>
<th>VS (incl. VSO 5)</th>
<th>SV (incl. SVO 3)</th>
<th>V</th>
<th>OV</th>
<th>VO</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>25</td>
<td>35</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>42%</td>
<td>17.5%</td>
<td>24.5%</td>
<td>0.5%</td>
<td>15.5%</td>
</tr>
<tr>
<td>(VSO 3%)</td>
<td>(SVO 2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>58</td>
<td></td>
<td>59.5%</td>
<td>40.5%</td>
</tr>
</tbody>
</table>

Table 1. Word-order variation in a conversational² excerpt (143 3rd person verbal predications)³

² The conversation takes place between two women aged 42 and 45 in the village of Ait Ikhlef in Kabylie (Algeria). One of the women is monolingual and has always lived in the village (speaker B), the other (speaker A) speaks a little Arabic and French, and lived in Algiers for a few years in her twenties.
³ We have only considered verbs completed by 3rd person affixes, and their coreferential S and O, in the form of NPs and independent pronouns.
The main findings in this table are the following:
- VS is by far the most frequent configuration, but it is rarely completed by an object (VSO = 3%). This is not surprising, since one of the cross-linguistic constraints on preferred argument structure developed by Du Bois (2003: 33) is thus presented ‘avoid more than one lexical core argument’.
- The V (+ clitics) configuration amounts to almost one quarter of the predications, 40% if we include OV and VO. This in itself might cast doubt on the heuristic value of word order combination comparisons involving only full NPs.
- The SV word order is less frequent than VS in conversation (17.5%, with only 2% SVO).
- Objects tend to follow the verb.

A comparison with narrative data (Table 2) shows that genre influences word order configurations, and that variation is important.

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>SV</th>
<th>V</th>
<th>OV</th>
<th>VO</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>15</td>
<td>51</td>
<td>3</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>18%</td>
<td>14%</td>
<td>46%</td>
<td>3%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>75</td>
<td>68%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Comparison with word-order variation in a narrative excerpt (110 3rd person verbal predications) [Mettouchi 2005]

The counts we made on our narrative corpus (a traditional tale, the Ogre tale) showed that:
- this time, almost half of the predications involve only a minimal utterance, composed of a verb and its obligatory personal affix. If we include OV and VO, the percentage reaches almost 70%.
- as for the SV and VS orders, they are almost equivalently distributed, and they amount, together, to a third of the data.
- finally, here as well, objects tend to follow the verb.

It appears therefore that in some cases, preverbal subjects can be more frequent than postverbal ones (thus questioning the typological characterization of Berber as VS(O)). We propose, on the basis of the data in Tables 1 and 2 and of the following development, to consider Taqbaylit Berber as a non-configurational language, i.e. a language in which subjects and objects ‘cannot be identified by word order and simple constituency tests in any straightforward way’ (Baker 2001: 1433).
3. The SV configuration (preverbal subject)

The various functions encountered in the course of the analysis can be subsumed under two main categories, namely contrast between referents, and selection of a referent as the basis of an assessment.
To facilitate reading, subjects and their co-referential personal affixes are in bold for SV configurations, and underlined for VS configurations.

3.1. Contrast between referents

Most examples of preverbal subjects occur in contrastive contexts. In the following example, after having described the hardships that she has lived through as a widow, Speaker A expresses her wishes.

(3)

\[ e-\text{fmmen}ni \quad n\text{s}\text{allah}, \quad sya \quad ar \quad zzat, \]
\[ \text{SUBJ.1P-hope}(\text{IMPERF}) \quad \text{please-God} \quad \text{from-here} \quad \text{to forward}, \]

\[ \text{We hope please God, (that) from now on,} \]

\[ x\text{as} \quad nek^\text{ni} \quad dd\text{unit-nney} \quad dayen \ t-ru\text{h}, \]
\[ \text{even-if} \quad \text{we} \quad \text{life-POSS.1P} \quad \text{finish} \quad \text{SUBJ.3SF-go(PERF)}, \]

\[ \text{even if our life is now gone,} \]

\[ ak\text{ken} \quad i=t \quad n\text{-seedda} \]
\[ \text{so REL}=\text{ACC.3SM} \quad \text{SUBJ.1P-spend(CAUS.PERF)} \]

\[ \text{we lived it the way it was imposed to us,} \]

\[ ne-\text{fmmen}ni \quad in\text{s}\text{allah} \quad arr\text{ow-nney} \]
\[ \text{SUBJ.1P-hope(IMPREF)} \quad \text{please-God} \quad \text{children.FS-POSS.1P} \]

\[ \text{we hope please God (that) our children} \]

\[ ur=dd \quad t\text{taf-en} \]
\[ \text{NEG=P.PROX} \quad \text{find(IMPREF)-SUBJ.3PM} \]

\[ \text{will not lead a life like this,} \]

In this example, \textit{ddunit-nney} is contrasted to \textit{arr\text{ow-nney}}: the speaker hopes that life will be different for her children.

Topics are not necessarily subjects, as is shown in this example by the independent pronoun \textit{nek^\text{ni}}, which here serves as a viewpoint marker.

Sometimes, the contrast is not so strong, but we have an enumeration of referents to which different predicates are attributed, as in the following example, where speaker B describes the state of her family:
as far as we were concerned, one was a dimwit,

the other, poor man, was killed in the independence war

(as for) my mother-in-law, it happens that she died early.

3.2. Assessments

In other cases, configurations involving topicalized subjects appear when the referent is inferable and taken as a starting-point for a justification, a commentary, an assessment. In the following example, after having expressed her wonder at the fact that the government is not helping her family despite her nine children, Speaker B mentions her husband (‘the father’), who has participated in the independence war and has been jailed for that. This is an additional factor that should have implied government help.

How is it, if it’s a prosperous party,

How is it that it doesn’t help us? The father

got imprisoned, the father participated in the revolution,

God is a witness to that, and moreover

he doesn’t have the least diploma.

Babas is related to the previous context morphosyntactically (it is marked by a possessive) and pragmatically: government help is often dependent on the martyr status of the breadwinner (usually the father) during the independence war. However, other
possibilities were also inferable. Therefore the use of the SV order is a way of selecting
which referent is going to be taken as a basis for further predications. The whole
sentence is a commentary on the first statement: surprise and anger at the lack of
government help. In that respect, topicalized utterances appear as assessments, and are
strongly linked to the preceding context.
Those pragmatic values, contrast-emphasis and selection for assessment, can be ascribed
to a semantic operation, scanning. A limited set of referents is presupposed, and
topicalization in our data consists in selecting one of those referents as a thematic goal,
to the exclusion of other possible ones. The preverbal position has to do with
planification of the thematic structure of the exchange, in the sense of Tomlin & Rhodes
(1992:123), who define thematic information as ‘that knowledge which the speaker
assumes is relevant to the goal of the communicative event’.

4. The VS configuration (postposed subjects)

4.1. Locative-existential contexts
Typically, postposed ‘subjects’ appear in locative-existential contexts, such as for
instance the introduction of new referents, which are liable to become topics afterwards.

(6)
lla-ŋ=dd  ṭīnyuren.  lla-ŋ=dd  ṭībat,
be(PERF)-SUBJ.3PM=PROX  engineers.  be(PERF)-SUBJ.3PM=PROX  doctors.
there are engineers, there are doctors,
lla-ŋ=dd...,  ma  d  ṭībib  ur  ye-ffeaf
be(PERF)-SUBJ.3PM=PROX...,  if  COP  doctor  NEG  SUBJ.3SM-find(IMPERF)
there are ... As for doctors they don’t find
anda  ara  i-dawi,  ma  d  ajnyur  ur
where  REL*  SUBJ.3SM-heal(AOR),  if  COP  engineer  NEG
where to work, as for engineers they don’t
ye-ffeaf  anda  ara  ye-xdem,  ma  d  bugatu
SUBJ.3SM-find(IMPERF)  where  REL*  SUBJ.3SM-work(AOR),  if  COP  sollicitor
find work, as for solicitors
annay  ya!  xas  bbwi-ŋ=dd  diplomat-nnsen,  ma  akka  i
supplication! even-if take(PERF)-3PM=PROX  diplomae-POSS.3PM,  if  so  REL°
good God! Even with their diplomas,
In the previous example, typically, new referents are introduced through an existential verb, *ili* (‘be’, ‘exist’), in the perfective. In our data, 17 occurrences of postverbal subjects out of 60 (32%) appeared after this verb. Indeed, a frequent context for postposed ‘subjects’ is thetic utterances, in the sense of Sasse (1987: 511): ‘categorical sentences contain a predication base about which some state of affairs is predicated, while thetic sentences are simple nonpredicative assertions of states of affairs’.

The thetic nature of most of those predications is manifest in the fact that they involve change of state verbs that refer to appearance or coming into existence: *ydl* (change), *ffy* (go out), *gly* (fall), *kšm* (enter). The predication refers to the manifestation of a state of affairs instead of stating something about a topic.

4.2. Sentence-focus constructions

Not all the verbs, however, refer to changes of state or coming into existence. In the following example, Speaker B says that despite the problems she encountered in her husband’s village when she married, she got used to the situation.

(7)

```
xeğre-ɣ tiziwiwin-iw, wala-ɣ lla-nt tidak
watch(PERF)-SUBJ.1S peers.FS-POSS.1S, see(PERF)-SUBJ.1S be(PERF)-SUBJ.3PF others
```

*I looked at my peers (= the other brides), and I saw that there were others*

```
ife-ɣ, msakit, te-ffray fell-asent
surpass(PERF)-SUBJ.1S, poor, SUBJ.3SF-command(IMPERF) on-DAT.3PF
```

*that were unhappier than I was, poor girls, their mother-in-law gave them orders,*

```
temyart-nnsent, i-heqr=itent wergaz-nni-nnsent
mother-in-law.AS-POSS.3PF; SUBJ.3SM-despise(PERF)=ACC.3PF husband.AS-ANAPH-POSS.3PF
```

*their husband despised them.*

This example shows events, states of affairs seen as a whole. Mothers-in-law or husbands are not topics (both referents will subside into oblivion immediately afterwards; the real topic here is the other brides (*msakit*). It is their behaviour as a whole (commanding or spiteful) which is important for the speaker. This behaviour is culturally coded: traditionally, mothers-in-law are perceived as commanding, and husbands as spiteful towards their wives. The possible gloss ‘with their commanding mothers-in-law and their spiteful husbands’ underlines this close relationship between V and S.

This type of predication corresponds to what Lambrecht (2000:617) terms ‘sentence-focus’ construction: ‘sentence construction formally marked as expressing a pragmati-
cally structured proposition in which both the subject and the predicate are in focus. The focus domain is the sentence, minus any topical non-subject arguments’.

4.3. Collocations and expressions
Finally, VS configurations are found in collocations and expressions, as in example (4), reprinted here as example (8):

(8)
nekəni yiwən  d  aməxul,
we  one  COP  fool.FS
as far as we were concerned, one was a dimwit,

wayed μeskin ye-mmut  d  amjəhed,
other  poor  SUBJ.3SM-die(PERF)  COP  martyr.FS
the other, poor man, was killed in the independence war

tamyart  y-uş  lhal  t-ruh  zik
old.woman.FS  SUBJ.3SM-take(PERF)  situation  SUBJ.3SF-go(PERF)  early
(as for) my mother-in-law, it happens that she died early.

The expression y-uş lhal (‘it happens that’) could easily be taken off from the utterance, yielding tamyart t-ruh zik (‘my mother-in law died early’). This expression could never be phrased with a preposed subject *lhal y-uş.

In the following example, speaker B says that she had no real choice: she had to leave her husband’s village because of the situation of her in-laws.

(9)
Akken  ye-lla  wass  a=t  y eks  umeksa.
so  SUBJ.3SM-be(PERF)  day.AS  IRR=ACC.3SM  SUBJ.3SM-take-to-pasture(AOR)  shepherd.AS.
We have to adapt to circumstances (lit. according to the day, the shepherd will take his flock

akken  te-lla  dđuŋi  a=t  n-elhū.
so  SUBJ.3SF-be(PERF)  life  IRR=ACC.3SF  SUBJ.1P-walk(AOR).
to pasture, and as life is we are to walk through it).

Here again, the relationship between eks (‘take to pasture’) and umeksa (‘the shepherd’) is self-evident, and both elements form a unit, with a certain degree of redundancy (the shepherd being generic): pasturing must be done according to the weather, just as life must be conducted according to circumstances. The shepherd is not a topic, and cannot be preposed: *akken ye-lla wass, ameksa a=t y eks.

What characterizes expressions is the close relationship between V and S, the fact that they form a unit, that their co-occurrence is predictable. They represent the other
pragmatic pole of Tomlin & Rhodes’s opposition (thematic vs. shared information), namely shared information, defined as ‘that knowledge which the speaker assumes he has in common (through like experience) with the hearer’ (1992:123).

The notion of shared information is all the more relevant as detailed counts on our conversational corpus showed that the SV order never appeared in relative clauses (including clefts), and that conversely, out of 60 VS combinations, 10 (16.6%) occurred in relative clauses, which are massively presuppositional.

The common feature in all our examples is that the verb and the postposed ‘subject’ are treated as a unit, either in an event-type predication (with a possible gloss in ‘X appears/happens...’) or in collocations. In none of the cases is the ‘subject’ treated as a topic.

5. V only configuration (minimal utterance)

Taqbaylit Berber subject affixes are often circumfixes, which convey information about person, gender and number. Unlike English or French basic utterances, which must contain at least an unstressed pronoun (*leaves, or *part are not acceptable utterances), Taqbaylit basic sentences are composed of an affix and a stem (see example 1).

Those basic sentences are very frequent in Taqbaylit, especially in narratives. Their relative scarcity in conversation (24.5%, as opposed to narratives, 46%) can be explained by the fluctuating nature of conversation, where referents are more liable to change according to the flow of consciousness, and therefore have to be introduced as lexical NPs.

In our conversation, there are however numerous cases when V-only configurations are met. Most of the time, the referent can be tracked in the previous utterance, as in example (10), which is a part of example (5):

(10)

\[
\text{amek amar d aparti ye-rebh-en,}
\]

how if COP party.FS prosper(PERF.PARTICIPLE),

\text{How is it, if it's a prosperous party,}

\[
\text{amek ur=ay ye-tt\text{\^{e}}awan ara?}
\]

how NEG=ACC.IP SUBJ.3SM-help(IMPERF) POSTNEG?

\text{how is it that it doesn't help us?}

In ye-tt\text{\^{e}}awan, the personal prefix refers to aparti ye-rebh-en (a prosperous party). We can notice that the relationship with the lexical NP is rather of co-reference than agreement, the referent being part of the previous clause.
Sometimes the referent does not even appear in the previous context, and can only be inferred. After a passage in which speaker A explains her hardships as a widow, she utters the following sentence:

(11) 
\[ \text{\textit{m}t\textit{a}k-}\textit{en}=\textit{ay} \quad \text{rbea} \quad \text{duru} \]
\text{give(PERF)-SUBJ3PM=DAT.1P} \quad \text{four} \quad \text{douros (units of money)}

\textit{They give us two pence (and that's all).}

The referent of the third person plural suffix never appears before or after the clause. Only the context, speaker A’s laments about her status as a widow and the problems she had educating her children, as well as her criticism of society, leads us to interpret the referent of the suffix as ‘the government’.

This example shows that the personal affix has a certain degree of autonomy, and that it is difficult to consider it as a mere agreement marker. Indeed, as early as 1964, Galand had claimed that the affixes, being the sole obligatory argument markers, were the true subjects.\(^4\) His claim was based on Martinet’s definition of the subject as the necessary appendage of the predicate ‘l’élément qui, dans tout énoncé non injonctif et non mutilé, accompagne nécessairement le prédicat’ (1962: 76).\(^5\)

Contrary to unstressed pronouns, such as \textit{she} or \textit{they} in English, personal affixes in Berber, being obligatory, do not commute with full NPs. Their role is therefore not to indicate that the referent is known/given or active/semiactive. They only represent the primary core argument of the verb.

Other languages behave similarly. Chafe (1994: 146-152), analysing the information structure of Seneca, a native language of New York State, and comparing it with English, explicitly states the differences between the two languages as far as pronominal affixes and unstressed pronouns are concerned:

Instead of being used to express given information, the Seneca prefixes refer to the core participants of events and states – referents that are obligatorily included in an event or state idea. When a Seneca speaker chooses to categorize an event or state in a particular way, that categorization dictates the presence of one, two, or occasionally three participants which are obligatorily expressed with a pronominal prefix. Their activation cost is irrelevant. Whereas English uses pronouns to verbalize given referents, Seneca uses pronominal prefixes to verbalize core participants. (Chafe 1994: 149)

\(^4\) See Mettouchi (to appear) for more details.
\(^5\) ‘the element which, in any non-imperative and non-mutilated utterance, necessarily accompanies the predicate’.
The fact that affixes are linked neither to semantic role (the referent can be an Actor or an Undergoer\textsuperscript{6}), nor to pragmatic function (it can be a topic or an antitopic) makes them a good candidate for the subject function. Indeed, if we accept to define the grammatical entity ‘subject’ as implying neutralisation of semantic roles (Van Valin & LaPolla 1997:266), affixes can be considered as subjects.

There are however some restrictions to the purely syntactic dimension of affixes. First, affixes only very rarely code impersonal subjects. Second, they are constrained semantically with quality verbs and ambitransitive predications. Therefore, the notion of primary argument seems to us to be more valid than that of subject, which includes impersonals, referents of propositions, etc.

As far as impersonal predications are concerned, Taqbaylit Berber generally encodes them thanks to a non-verbal predicate, or, when verbal expressions are used, a postposed NP in the annexation state is obligatorily coreferent to the personal affix, as shown in the example below:

\begin{center}
\begin{tabular}{lll}
(12) & \textbf{d} & \textbf{ageffur} & = & \textbf{ve-ikkat} & \textbf{ugeffur} \\
& \textsc{cop} & \textsc{rain.FS} & & \textsc{subj.3sm-beat(IMPERF)} & \textsc{rain.AS} \\
& \textsc{It's raining} & & & \textsc{It's raining} \\
\end{tabular}
\end{center}

Concerning the semantic constraints on the system of affixes, Taqbaylit Berber has a class of verbs called ‘quality verbs’, which correspond semantically to states (in the perfective) and to accomplishments (in the imperfective). There are approximately 60 verbs\textsuperscript{7} in that class, and examples are zegg\textsuperscript{ap} ‘be-red (PERF)/redden (IMPERF)’, meqq\textsuperscript{er} ‘be-grown(PERF)/grow(IMPERF)’, etc. Their morphological peculiarity, in the perfective only, is to appear with a zero marker in the third person singular masculine, with a suffixed (instead of prefixed) marker in the second person, and the third person singular feminine, and to have a common suffix for all plurals, regardless of person\textsuperscript{8}.

\begin{center}
\begin{tabular}{ll}
(13) & \textbf{meqq\textsuperscript{er-t}} & \textbf{teqcict} \\
& \textsc{be-big(PERF)-subj.3sf} & \textsc{girl.as} \\
& \textsc{The girl was tall} \\
\end{tabular}
\end{center}

The existence of this special class of verbs underlines the existence of a split case-marking system in the perfective as opposed to the imperfective. The two paradigms

\textsuperscript{6} Those terms refer to macroroles: ‘each of them subsumes a number of specific argument-types (thematic relations). The generalized AGENT-type role [is] termed \textit{actor} and the generalized PATIENT-role [is] termed \textit{undergoer}’ (Van Valin & LaPolla 1997:141). For instance, \textit{actor} subsumes: agent, experiencer, possessor, etc., \textit{undergoer} subsumes patient, theme, recipient, etc.

\textsuperscript{7} Cf. Chaker (1978: 117-118)

\textsuperscript{8} For instance, \textit{meqq\textsuperscript{er}} (‘he is tall’), \textit{meqq\textsuperscript{er-d}} (‘you are tall’), \textit{meqq\textsuperscript{er-s}} (‘she is tall’), et \textit{meqq\textsuperscript{er-it} (‘we are, you are, they are tall’). The first person singular is marked in the same way as for the other verb classes.
reflect the influence of the semantic macro-role in relation to dynamicity or stativity. The special set of affixes is used in the perfective, when the main participant is more of an Undergoer (here, a patient) than of an Actor. Conversely, the standard set is used in the imperfective, when the main participant is an Actor (here, an experiencer). The interpretation of subject affixes is also dependent on communication perspective, in the sense of the way the speaker construes the event or state he or she is referring to.

Indeed, in Taqbaylit, a few hundred verbs are ambidialectal (or ambitransitive), in that they allow both the dynamic and the stative reading, the dynamic reading being correlated to transitivity, and the stative one to intransitivity. For instance, krez can mean either 'plough' or 'be-ploughed', without the addition of any valency or voice marker. For those numerous verbs, which are potentially transitive, the selection of the main participant depends on the choice of the argumental format, which is realised by the affix-clitic configuration: if it is the stative-intransitive predication that is construed, only the personal affix appears (14), if it is the dynamic-transitive, an accusative clitic (or a direct object NP) appears, and the affix refers to the Actor macrorole (15).

(14)  \[
\text{\textit{i-krez}} \\
\text{\textit{SUBJ.3SM-plough(PERF)}} \\
\text{\textit{It (= the field) is ploughed}}
\]

(15)  \[
\text{\textit{i-kerz}} \, \text{\textit{=it}} \\
\text{\textit{SUBJ.3SM-plough(PERF)}} \\
\text{\textit{He (= the farmer) (has) ploughed it (= the field).}}
\]

In the minimal (intransitive) configuration, the subject can therefore only be an Undergoer, while in the transitive configuration, it can only be an Actor. In both cases the subject affix encodes the primary participant of the predication. But the presence or absence of a patient clitic involves the interpretation of the referential value of the affix either as an Actor or as an Undergoer (thus showing from which perspective the state of affair is construed). Transitivity and dynamicity (as well as intransitivity and stativity) being closely linked for this class of verbs, we can state that the configuration of affixes and clitics is sensitive to the semantic nature of arguments, despite the fact that, strictly speaking, affixes do not represent semantic roles.

It appears, especially thanks to the study of ambitransitive verbs, that affixes and clitics refer to the core arguments of the predication. Personal affixes embody most of the properties associated to the syntactic function of subject. They nevertheless retain some semantic features: sensitivity to Aktionsart for some verb classes and referentiality. Those semantic features are even more perceivable for clitics (Mettouchi 2005): accusative clitics tend to be associated with patients and dative clitics with recipients or beneficiaries.

\[\text{\textsuperscript{9} The position of the schwa (here represented by 'e') depends only on intonational (accentual) factors.}\]
6. The motivation for case marking in Taqbaylit Berber

If affixes and clitics are the true arguments, and NPs are adjuncts, whose status as topical or focused is marked by pre- or postverbal position, what is the motivation for case marking ('annexion state') in Taqbaylit?

According to Chaker (1988: 688), it is a means of distinguishing between subject and direct object since both may be postverbal: ‘Dans cette construction, la marque d’état a une fonction syntaxique majeure dans tous les dialectes puisqu’elle permet de distinguer le ‘sujet’ (+ état d’annexion) du complément d’objet direct (+ état libre).

a) ye-nya wergaz = ‘il a tué homme’\(^{10}\) = ‘l’homme a tué’
(wergaz [+ état d’annexion] = ‘sujet lexical’)

b) ye-nya argaz = ‘il a tué homme’ = ‘il a tué (un) homme’
(argaz [+ état libre] = ‘complément direct’).

When two NPs follow the verb, and both are possible primary arguments, the annexion state distinguishes between object and subject, especially as both orders, VSO and VOS are possible.

\begin{align*}
\text{ye-nya} & \quad \text{aqjun} \quad \text{wergaz} \quad \text{aqjun} \\
\text{SUBJ.3MS-kill(PERF)} & \quad \text{dog.FS} \quad \text{man.AS} \quad \text{dog.FS} \\
\text{The man killed a dog.}
\end{align*}

\begin{align*}
\text{ye-nya} & \quad \text{wergaz} \\
\text{SUBJ.3MS-kill(PERF)} & \quad \text{man.AS} \\
\text{The man killed a dog.}
\end{align*}

However, as we saw in Tables 1 and 2, the lexical expression of both S and O is rare in actual spontaneous speech, and the distinction is therefore not frequently necessary.

In other languages presenting both a system of personal affixes representing the core participants, and case-marking on nominals, case-marking is sometimes considered as a cross-referencing device. This hypothesis has been proposed by Jelinek (1984: 51) for Warlpiri ‘My claim is that the verb-aux complex assigns nom/acc/dat case to the verbal arguments, and that the case marking of a nominal shows which verbal argument, if any, it is an adjunct to.’ More precisely, Jelinek proposes a set of rules between L-Case (the case of nominals) and G-Case (the case of affixes).

- ‘Linking Rule’:
  ‘A clitic pronoun may be coindexed with a nominal, providing the L-case of the nominal and the G-case of the clitic pronoun are compatible (assigning a distinct index to each clitic)’ (1984: 52)

- ‘Case Compatibility Rule’:
  a) NOM G-case is compatible with ABS and ERG L-case.

\(^{10}\) a: ‘He killed man’ = the man killed; b: ‘he killed man’ = he killed a man.
b) ACC G-case is compatible with ABS and DAT L-case.
c) DAT G-case is compatible with DAT L-case.' (1984: 52)

In Warlpiri, the precise co-indexing is as follows:
– NOM G-case is compatible with ABS L-case in an intransitive sentence, and with ERG L-case in a transitive sentence [...].
– ACC G-case is compatible with ABS L-case in a transitive sentence, and with DAT L-case in a ditransitive sentence (for first and second person clitics)
– DAT G-case is compatible with DAT L-case (for third-person clitics).

However, the application of those rules to Taqbaylit is moderately interesting, since case marking (with FS = free state, and AS = annexion state) and position are redundant:
a) NOM G-case is compatible with a FS L-case (in preverbal position) or with an AS L-case (in postverbal position).
b) ACC G-case is compatible with a FS L-case (in preverbal position) or with an AS L-case (in postverbal position) if this L-case has not previously been indexed to the NOM G-case.
c) DAT G-case is compatible with a FS L-case (in preverbal position) or with an AS L-case (the latter being necessarily preceded by a preposition, and in postverbal position).

Among berberologists, various hypotheses have been proposed to account for the annexion state. For instance, in the case of postverbal subjects, Galand (1994: 83) states that ‘la ‘traduction française et une certaine routine ont fait (et parfois font encore) considérer [le complément explicatif] comme le ‘sujet’ du verbe, mais l’obligation de mettre le nom à l’état d’annexion prouve que son rôle syntaxique est bien celui d’un complément’. 11

Although we agree on the fact that the NP bearing the ‘annexion state’ is not a real ‘subject’, we do not think that it is a complement, in the sense of a semantic filler completing the information given by the verb. We propose instead to consider it as the anchoring point of a thetic predication as opposed to the object, which is governed by the verb, and opposed to the topic, which is outside the focus domain. We will develop this hypothesis below, but before that, we must list the contexts in which, in Berber, the annexion state is used12:

– genitive constructions of the form N1(free state) – N2 (annexion state), where the possessor is N2 and the possessee N1:

11 "Translation into French, and a certain degree of routine, resulted (and still result) in the fact that the ["complément explicatif"] is considered as the ‘subject’ of the verb. But the necessity of marking the noun with the annexion state proves that its syntactic role is indeed that of a complement'.
12 This presentation is simplified. For details, dialectal differences, and borderline cases, see Chaker (1988).
axxam       umeksa
house.FS    shepherd.AS

_the shepherd’s house_

-Noun phrases complementing a preposition:

er       uxxam
towards house.AS
towards a/the house

-Noun phrase determined by a numeral:

tlata     teqšišin
three     girls.AS

three girls

Reminding us that prepositions in Berber are former nominals, Chaker (1988:689) summarizes the various sequences as follows: ‘tous se ramènent en définitive à la relation déterminative entre deux nominaux: nom déterminé lexical pour le ‘complément de nom’, grammatical pour l’explicitation des personnels’.

Comparing the two cases, Chaker states that (1988:690): ‘l’état libre caractérise les usages ‘hors syntaxe’ (emplois métalinguistiques), les formes thématisées (mises en relief), le nominal en fonction prédicative (quelle que soit la structure syntaxique dialectale), le complément d’objet direct, i.e. tous les cas où le nominal entretient des rapports syntaxiques faibles avec le contexte. Alors que l’annexion est la règle lorsqu’il est dans un rapport de dépendance étroit’.

Dependency is indeed the central value attributed by berberologists to the annexion state. We would like to qualify this value by carrying further the parallel with genitive constructions.

Genitives can either be analyzed as a modification of the head noun (N1) by a complement (N2), or it can be analyzed as involving an anchor, N2, from which a referent or a feature is extracted, or with respect to which a referent is situated. Thus, according to the traditional analysis of axxam umeksa (the shepherd’s house), the noun axxam is postmodified by umeksa, just as it would by a relative clause, for instance. In this perspective, umeksa is a ‘complement’, and it is the dependent of the head axxam. Another, more semantic, analysis, views the relationship between axxam and umeksa as one of location involving an anchor, a locus, umeksa, and a located element, axxam,

13 ‘They can all be reduced to the relation of determination between two nominals: the determined item is lexical for the postmodification, and grammatical for the explicitation of personal affixes.’

14 ‘The ‘free state’ characterizes ‘out-of-syntax’ (métalinguistic) uses, topicalized forms (emphasis), nominals in predicative function (whatever the dialectal syntactic structure), direct objects, i.e. all the cases where the syntactic relationship of the nominal with its context is weak. Whereas annexion is the rule when the dependancy relationship is tight’.
which is a feature, an element of (‘off’) the shepherd’s universe. In quantified expressions (*tlata teqššin*, three girls), the anchor is the referent *teqššin* and quantification is a manifestation of the referent. In phrases introduced by a preposition (*yer uxxam*, towards the house), the anchor is the noun *uxxam* (in this case a target), the preposition being the locative predicate.

Our hypothesis therefore consists in attributing to the annexion state the function of marking which NP is the landmark, the semantic/referential starting point of a possessive, locative existential or quantifying construction.

Location, possession, and quantification are indeed three variants of the same existential construal, which consists in starting from an anchor to extract a term that is an embodiment, a manifestation, a part of this referent. This construal is theorized by Culioli (1999) as a Quantification operation, thus defined: ‘Dans l’emploi que j’en fais, *Quantification* renvoie, non pas à la quantification logique, mais à l’opération par laquelle on construit la représentation d’un quelque chose que l’on peut distinguer et situer dans un espace de référence’. (Culioli 1999: 4)

We would like to hypothesize that the same operation of Quantification in the sense of Culioli (1999) accounts for the presence of the annexion state on postverbal subjects. We have shown in Part 3 that what characterizes postverbal subjects is the close relationship between verb and subject, and more specifically, the fact that the complex verb + affix describes a manifestation of the subject’s referent. This is particularly true for the first category ‘locative-existential contexts’, that corresponds to thetic utterances. The complex verb + affix refers to the actualization, the realization, of the subject’s referent.

Postverbal (as opposed to topicalized) objects might fill in an argument position, or act as a semantic filler, but unlike postverbal subjects, they are not the starting point of an existential predication. They are governed by the verb.

On the other hand, preverbal subjects are the starting points of a Qualification operation, thus defined in Culioli (1999: 6): ‘Passons maintenant à la *Qualification*. Cette dernière entre en jeu chaque fois que l’on effectue une opération d’identification / différenciation portant sur un quelque chose (tel que nous avons défini ce terme plus haut)’.

Qualification is a type of operation that involves debate on the properties of the referent that is represented by a preverbal subject. It is at the basis of, among other linguistic phenomena, the categorical judgement.

---

15 This extractive function of quantifiers is also visible in languages such as English (a lot of people) or French (beaucoup de monde).

16 ‘In my use of the term, Quantification refers, not to quantification in Logic, but to an operation through which a ‘something’ that can be distinguished and situated in a referential space is construed’.

17 ‘Let us now broach the notion of Qualification. It comes into play each time an operation of identification / differenciation bearing on a ‘something’ (as the term was defined above) is effected’. 
Conclusion

In this paper, we have claimed that the true arguments of the verb are its personal affixes and clitics, and that their presence in the utterance is directly linked to the construal of the situation or event by the speaker. Personal affixes are mainly syntactic. They represent the primary participant in the situation or event, regardless of semantic or pragmatic constraints. They are therefore the best candidates for the subject category, as Galand had proposed in 1964.

The appearance of full NPs or independent pronouns is motivated by pragmatic factors: the position of NPs with respect to the verb + affix complex interacts with case marking to signal the topic/focus opposition, and to distinguish, in postverbal position, between government (verb-object relationship) and dependency (verb + affix complex – subject relationship).

Preverbal ‘subjects’ are topics, related to categorical sentences (predicate-focus constructions in the sense of Lambrecht (2000), Qualification in the sense of Culioli (1999)), in the context of knowledge which the speaker assumes is relevant to the goal of the communicative event. Postverbal ‘subjects’ are anchors in existential predications, related to thetic sentences (sentence-focus constructions in the sense of Lambrecht, Quantification in the sense of Culioli), in the context of sharing information with the co-speaker.

We have proposed to consider that, in Taqbaylit, the annexation state, which is also the mark borne by possessors, and NPs following prepositions or numerals, indicates that in the relation of dependency between the verb + affix complex and the NP, the NP is the anchor, the landmark, the semantic/referential starting point of a locative-existential predication.

References


Dixon, Robert M.W., 1994, Ergativity, CUP.


Martinet, André, 1962, ‘Le sujet comme fonction linguistique et l’analyse syntaxique du basque’, BSL, LVII.


Mithun, Marianne, 1999, The Languages of North America, CUP.


