

***Notes on the clausal structure of
Guezenaya Tarifyt Berber***

**Noureddine Elouazizi
Simon Fraser University**

Table of Contents

0. Introduction

1. Structure and constituency of the verbal classes

- 1.1. Introduction
- 1.2. The aorist
- 1.3. The imperfective
 - 1.3.1. The simple imperfective
 - 1.3.2. The imperfective negative
- 1.4. The perfective
 - 1.4.1. The simple perfective
 - 1.4.1. The perfective negative
- 1.5. Grammatical functions alternations
 - 1.5.1. Passive constructions
 - 1.5.2. Causative
 - 1.5.3. Reciprocal
 - 1.5.4. Reflexive
 - 1.5.5. Possessive

2. The preverbal particles: preverbal domain

- 2.1. Introduction
- 2.2. The TAM particles
 - 2.2.1. The irrealis mood/future particles *ga /ad* 'will'
 - 2.2.2 The past tense particle *dɛa* 'was'
 - 2.2.3. The negation particle *wa* 'not'
- 2.3. The non-TAM particles
 - 2.3.1. Interrogative words
 - 2.3.1.1. A note on wh-words in GTB
 - 2.3.2. Relative clause particles
 - 2.3.3. Cleft particles
 - 2.3.4. Declarative complementiser
 - 2.3.5. Summary

3. Word order

- 3.1. Introduction
- 3.2. VSO vs. SVO and O, VS orders
- 3.3. Subjects and pro drop
- 2.4. Summary

4. Bibliography

0. Introduction¹

The aim of this paper is to provide a theory-neutral descriptive overview of the constituency and structural properties of the clause in Guezenaya Tarifyt Berber (Henceforth GTB). In section one, I describe the structure of the verbal domain, specifying and classifying the classes and properties of verbal stems attested in this variety. I also describe the structural encoding of the major grammatical functions alternations of passive, causative, possessive, reciprocal and reflexive. In section two, I describe the constituents and structure of the GTB preverbal ‘functional’ domain. In section three, describes the word order properties of GTB.

1. Structure and constituency of the verbal classes

1.1 Introduction

I follow the mainstream Berber linguists (Basset 1952, Galand 1977, Chaker 1983, Cadi 1987 and Sadiqi 1997) in assuming that Berber (GTB in my case) is mainly an aspectual language. The expression of the aspectual relations that relate GTB verbal stems to each other is founded on aspectual oppositions that are structurally encoded by massive morphophonological alternations. Like other Berber varieties, GTB has both derived and

¹ Unless indicated and documented otherwise the Berber data reported in this paper comes from the variety of Guezenaya Tarifyt Berber, spoken in the central north of Morocco. There are approximately 501 Berber varieties (Abdelmassih 1968) spoken across north and Saharian Africa. The glosses I use for the data are as follows: ART.=Article; AUX=Auxiliary; AOR=Aorist; ACC=Accusative case; CL=Clitics; COP=Copular; CS=Construct state; CM=Cleft marker; COMP=Complementizer; DAT=Dative case; FUT=Future particle; RM=Relative particle; 1=1st Person; 2=2nd Person; 3=3rd Person; DET= Determiner; Fem.=Feminine ; Mas.=Masculine; NOM=Nominative case;. NEG=Negation; SG=Singular; TB= Tarifyt Berber; IMPERF=Imperfective; PERF=Perfective; SM= Singular masculine; SF=Singular feminine PM=Plural masculine; PTP=Past tense particle; PL=Plural; PART=Participle.

underived verbs. These verbs have five different TAM stems.² This includes the aorist, the perfective (referred to also in the literature as *prétérit/accompl*), negative perfective, imperfective (referred to also in the literature as *aoriste intensif/inaccompli*) and negative imperfective forms.³ These verbal forms/stems are respectively illustrated in (1.a-e).⁴

- (1) a. azzr
run.AOR
‘To run.’⁵ [Aorist]
- b. θ-uzzr Fatima ġa θadar^fθ
3S.F-run.PERF Fatima to home
‘Fatima ran home.’ [Perfective/ *prétérit*]

² I understand by the term “stem” the remains of a verbal form when the subject agreement affixes are removed.

³ The morphophonological transformations (apophony rules) which map the morphosyntactic transitions between the perfective, imperfective, perfective negative, imperfective negative, aorist and imperative verbal forms involve a great deal of morphophonological interactions. For ease of exposition, I will not go into specifications about how the phonological and the morphological environments regulate vowel shift and consonants/vowels insertions. For detailed descriptions of vowel shifts and alternations that take place so as to obtain different aspectual-temporal distinctions on the verbal forms, the reader is referred to works of Laoust, (1932) for Siwi Berber; Cadi (1987) and Bouyalmani (1999) for Tarifyt Berber; Bentolila (1982) for Ait Serghroushen Berber, among others.

⁴ Note that there are some differences among Berber linguists as to how many verbal classes are included in Berber TAM system. These differences in the naming of the different stems is based on the differences (the number of stems) in the languages that these linguists investigated. For example, the TAM system described by Basset (1952 :13-16) includes six verbal classes/stems viz. aoriste, aoriste intensif, aoriste intensif negative, *prétérit*, *prétérit intensif* and *prétérit négative*. The one of Galand (1977:293) is equally constituted of six classes viz. aoriste ,inaccompli, inaccompli negative, accompli, accompli negative, accompli resultative. Bentolila (1981:116), on the other hand, includes four classes in his TAM system viz. aorist, imperfective, perfective and perfective negative. The one described by Guerssel (1986: 28) is a four classes system also viz. aorist, imperfective, perfective and irrealis.

⁵ Note that an aorist verbal stem cannot be used on its own to form a sentence in GTB, the single case of second person imperative aside. The translation of the aorist verbal stem as ‘infinitive’ does not imply by any means that the aorist is the equivalent of the infinitive verbal form in languages such as French or English. There is no infinitive inflection on GTB’s aorist stems. My use of the aorist as a citation form translated by the infinitive in these examples is for expository purposes, with an aim of showing the way the five verbal stems of GTB are derived and formally relate to each other.

1981:116 and Basset 1952:14), the aorist is taken as a starting point for comparing and describing the way the five TAM verbal stems relate to each other.

I assume along the lines of Guerssel (1986) and Bentolila (1981) that the aorist verbal stem is an aspectual-temporal neutral verbal form and I mainly follow Laoust (1920: 107) in considering that the aorist verbal stem expresses a fact, a state, an action, a feeling with no specific determination of its aspectual-temporal dimension. These characteristics make the aorist structurally depend on other TAM particles so as to express its aspectual-temporal values. In GTB, like in most other Berber varieties, the aorist verbal stem cannot be used in a sentence without the occurrence of a preceding modal/tense particle as illustrated by the ungrammaticality of (2.b) and (3.b). When used together with the mood/future particles *að* ‘will’ and *ga* ‘will’, the aorist expresses an irrealis mood/future action as illustrated by (2.a) and (3.a).

- (2) a. *að* *y-arri* *θabrat*
 M/F 3S.M-write.AOR letter
 ‘He will write a letter.’
- b. * *y-arri* *θabrat*
 3S.M-write.AOR letter
 ‘He writes a letter.’

- (3) a. mayemmi ga y-arri θabrat?
 why M/F 3S.M-write.AOR letter
 ‘Why will he write a letter?’
- b. * mayemmi y-arri θabrat?
 why 3S.M-write.AOR letter
 ‘Why he write a letter?’

The structural dependency of the aorist verbal stem extends to syntactic contexts other than the ones which involve the presence of irrealis mood/future preverbal particles. For example, in Berber varieties other than GTB and as reported in Guerssel (1986:28), the aorist verbal stem in Ait Serghroushen Berber can occur without a mood/tense particle but it has to follow other verbal stems from which it acquires the specifications of its irrealis mood/future tense values. Consider the examples in (4) and (5).⁶

- (4) a. ad adf-x, ttʃ-x, sw-x
 M/F enter.AOR-1S eat.AOR-1S drink.AOR-1S
 ‘I will go in, eat and drink.’ (Ait Seghroushen Berber, Guerssel 1986:28)
- b.*að adf-x, ʃ-x, ssw-x
 M/F enter.AOR-1S eat.AOR-1S drink.AOR-1S
 ‘I will go in, eat and drink.’ (Guezenaya Tarifyt Berber)

⁶ Note that the future particle *ad* ‘will’ has two allomorphic realisations viz. *að* ‘will’ and *a* ‘will’, depending on the phonological environment they occur in. This allomorphic variation has no bearing on the syntax of the irrealis mood/future particle *að* ‘will’.

- (5) aḏ aḏf-x, aḏ j-x, aḏ ssw-x
 M/F enter.AOR-1S M/F eat.AOR-1S M/F drink.AOR-1S
 ‘I will go in, eat and drink.’

As (4.b) shows, in GTB, the use of the aorist verbal stem following other verbs and without the occurrence of a preverbal mood/tense particle is ruled out. The only possible use of the aorist in such contexts and as illustrated by example (5) indicates that the structural realisation of the aorist stem requires the mandatory occurrence of an irrealis mood/future tense particle. As shown in examples (2-5), the GTB aorist verbal stem can not be used alone to form a sentence. Its structural realisation depends on the occurrence of an irrealis mood/future preverbal particle. However, the aorist verbal stem is used together with the imperative affix to express order, obligation and/or prohibition (negative imperative).

1.3. The imperfective

1.3.1. The simple imperfective

In the TAM system of Galand (1977), the ‘aoriste intensif’, referred to also as the ‘inaccompli’/ imperfective is assumed to be, together with the perfective/prétérit, one of the two main poles around which the Berber TAM system is organized.⁷ It describes the internal temporal structure of an ongoing process/event; that is, the way in which the event

⁷ I use the term imperfective to refer to both of ‘aoriste intensif’ and ‘inaccompli’. See Galand (1977) for discussion.

occurs in time (continuing, iterative). Unlike the aorist verbal stem, the imperfective/‘aoriste intensif’ verbal stem can form a sentence on its own and without the occurrence of an irrealis mood/future preverbal particle (Cf. 6.a and b).

- (6) a. i-qaz armr
 3S.M-dig.IMPERF sand
 ‘He digs the sand.’
- b. i-tuf s w-nza
 3S.M-get wet.IMPERF with CS-rain
 ‘He gets wet because of the rain.’

The imperfective/‘aoriste intensif’ verbal stem is derived by three affixational processes which operate either independently or jointly. The first process involves the prefixation of the affix {t-} or {ti-} to the verbal stem as respectively illustrated by the examples in (7 and 8).

- (7) a. kkes
 take off.AOR
 ‘To take off.’
- b. i-t-kkes arwð
 3S.M-IMPERF-take off. clothes
 ‘He takes off clothes.’

- (8) a. ḥma
 get hot.AOR
 ‘To get hot.’
- b. i-ti-ḥma rḥar ði ssif
 3S.M-IMPERF-get hot situation in summer
 ‘It gets hot in summer.’

The second affixation process is realised by the affixation of a vowel jointly with the affix {t-} as shown by examples (9) and (10).

- (9) a. azz
 break.AOR
 ‘To break.’
- b. i-t-azza izra
 3S.M-IMPERF-break stones
 ‘He breaks stones.’
- (10) a. dgdg
 smash.AOR
 ‘To smash.’
- b. i-t-dgdag izra
 3S.M-IMPERF-smash stones
 ‘He smashes stones.’

Other affixational processes which derive the imperfective verbal stem independently and exclude the use of the prefixation of the affix {t-} or {ti-} are the phonological process of consonantal gemination and process of revowelisation as respectively shown by examples (11) and (12).

- (11) a. fa^rn
 clear.AOR
 ‘To clear.’
- b. i-farn fus ines zeg senanen
 3S.M-clear.IMPERF hand his from thorns.
 ‘He clears the thorns out of his hand.’

- (12) a. ssinef
 put away.AOR
 ‘To put away.’
- b. i-ssanaf lkatba
 3S.M-put away.IMPERF book.this
 ‘He puts this book away.’

Note that the affixational processes which derive the imperfective verbal stems as shown by examples in (12-17) occur between the subject agreement affixes and the verb stem. At

times, they even form part of the internal segmental structure of the verbal stem (Cf. 17.b, 16.b and 15.b).

1.3.2. The imperfective negative

The combination of the ‘aoriste intensif’/imperfective with the negation particles induces a formal affixational alternation within the imperfective verbal stem. That is, the vowel quality on the imperfective verbal stem undergoes a negation-induced revowelisation. This revowelisation process signals the combination of the imperfective verbal stem with the negation particle. The verbal stem which results from the combination of the imperfective verbal stem together with the negation particle is referred to as the imperfective negative (henceforth IMN). For illustration, consider examples in (13.a and b) and (14.a and b).

- | | | | |
|------|----|--------------------------------|----------|
| (13) | a. | i-tǧzzaz | lhalwa |
| | | 3S.M-crunch.IMPERF | sweeties |
| | | ‘He crunches sweeties.’ | |
| | b. | wa y-tǧzziz | lhalwa |
| | | NEG 3S.M-crunch.NEG.IMPERF | sweeties |
| | | ‘He does not crunch sweeties.’ | |
| (14) | a. | i-qaz | armr |
| | | 3S.M-dig.IMPERF | sand |
| | | ‘He digs sand.’ | |

- b. wa y-qiz armr
 NEG 3S.M-want.NEG.IMPERF sand
 ‘He does not dig sand.’

What the examples in (13 and 14) show is that the IMN stem is derived from the imperfective stem by revowelising the vowel /a/ on the imperfective stem into /i/.

1.4. The perfective

1.4.1. The simple perfective

The perfective verbal stem, referred to in the Berber syntax literature also as ‘prétérit’ or ‘accompli’ (Cf. Basset 1952, Galand 1977, Bentolila 1982, among others), describes the process of a completed event/action. It marks the end point of this ‘terminated/completed’ action/event. The derivation of the GTB perfective verbal stems is realised by two main phonological processes which involve suffixation of the vowel /a/ and vowel shift from /i/ to /a/ as respectively illustrated by examples in (15-16) and (17-18).

- (15) a. azz
 break.AOR
 ‘To break.’
- b. y-azza azrw
 3S.M-break.PERF stone
 ‘He broke stone.’

- (16) a. kk
 passby.AOR
 ‘To pass by.’
- b. i-kka zaθi
 3S.M-passby.PERF before me
 ‘He passed in front of me.’

- (17) a. arri
 write.AOR
 ‘To write.’
- b. y-wrra lktab
 3S.M-write.PERF book
 ‘He wrote a book.’

- (18) a. inni
 say.AOR
 ‘To say.’
- b. y-nna s θħajit
 3S.M-say.PERF CL_{HIM} story
 ‘He told him a story.’

In some limited cases wherein the verbal stem bears a vowel/i/, the perfective verbal stem is derived without the two phonological processes described above (Cf. the examples in 19 and 20).

- (19) a. qim
 sit.AOR
 ‘To stay.’
- b. y-qim ðin
 3S.M-sit.PERF there
 ‘He stayed there.’

- (20) a. siwr
 speak.AOR
 ‘To speak.’
- b. y-siwr ag memi s
 3S.M-talk.PERF with son CL_{HIS}
 ‘He talked with his son.’

1.4.2. The perfective negative

The negative perfective verbal form (henceforth NPE) is a subclass of the perfective verbal stem. Like the IMN, the NPE verbal stem is derived by the occurrence of the perfective verbal stem together with the negation particle *wa* ‘not’. This combination results in a

derivational (morpho-)syntactic processes that stand behind the transformations that generate such processes. First, I will describe the inflectional elements involved in coding the three first processes of passive, reciprocal and causatives constructions since these processes seem to operate on the verbal complex in Berber. Then, for the sake of completeness, I will briefly describe the formation of reflexive and possessive constructions.⁸

1.5.1. Passive constructions

The passive verbal forms are derived by the affixation of {twa-}. Consider the example in (22).

- (22) a. θ -mrj (Muna) Muhnd
 3S.F-marry.PERF Muna Muhnd
 ‘Muna married Muhnd.’
- b. y-twa-mrj (Muhnd)
 3S.M-PASS-marry.PERF Muhnd
 ‘Muhnd was married to X (eg. Muna).’

Note that the affix {twa-} is used to derive the passive construction in (22.a) from a transitive verb in (22.b). The postverbal subject in brackets in (22.a) is optional. Another inflection which flags the occurrence of the syntactic process of passivisation is indicated

⁸ For detailed descriptive discussions of these processes in Berber varieties other than GTB, the reader is referred to works of Cadi (1987), among many others.

by the agreement features on the subject agreement affix. In the active construction, the subject agreement affix /θ/ (3S.F) agrees in its phi-features with the postverbal subject ‘Muna’. When the construction undergoes the passive transformation, the agreement of the subject affix switches into agreeing with the object as in (22.b) where/y/ (3S.M) agrees with ‘Muhnd’ .

1.5.2. Causative

The occurrence of the affix {ss} derives a causative verbal stem from a transitive verb as show in (23).⁹

- (23) y-ss-mrj Muhnd Muna i Jamal
 3S.M-CAUS-marry.PERF Muhnd Muna to Jamal
 ‘Muhnd made/caused Muna to marry Jamal.’

1.5.3. Reciprocal

In GTB, the reciprocal constructions can be derived by using two different strategies: The “affixational reciprocal” strategy and the “periphrastic reciprocal” strategy. To illustrate the “affixational reciprocal” strategy, consider the example in (24).

⁹ Note that the causative affix {ss} can also be used to switch the transitivity value of a intransitive verb into transitive, or creat verbs out of onomatopoeic nouns. For a more detailed description of this affix, see Cadi (1987,1994), among others.

- (24) n-**mm**-ruwðuf
 3PL-RECI-catch.PERF
 ‘We got hold of each other.’

The derived verbal stem in (24) is realized by the affixation of {mm}. Unlike this “affixational reciprocal” strategy, the “periphrastic reciprocal” strategy can co-occur with the affixational one in a single construction as shown in (25.d) or occur alone as illustrated in (25.e).

- (25) a. θ-zawa Muna Fatima
 2S.F-insult.PERF Muna Fatima
 ‘Muna insulted Fatima.’
- b. t-**mm**-zawa-nt Muna ð Fatima
 2PL.F-RECI-insult-IMPERF-2PL.F Muna with Fatima
 ‘Muna exchanges insults with Fatima.’ (lit.)
 ‘Muna and Fatima insult each other.’ (translation)
- c. t-**mm**-zawa-nt
 2PL.F-RECI-insult-IMPERF-2PL.F
 ‘They insult each other.’

- d. t-**mm**-zawa-nt ag w-yawya
2PL.F-RECI-insult.IMPERF-2PL.F with CS-each other
'They insult with each other.' (lit.)
'They insult each other.' (translation)
- e. t-zawa-nt ayawya
2PL.F-RECI-insult.IMPERF-2PL.F each other
'They insult each other.'

Moreover, while “affixational reciprocal” strategy is a marking on the verb (verbal complex), the “periphrastic reciprocal” strategy is a marking on a co-construed argument position.

Besides, an additional structural property which characterizes the derived verbs illustrated in (22-25), “periphrastic reciprocal” strategy, is that the affixes of passive, causative and reciprocals all occupy a structural position between the subject agreement affix and the verbal stem. This is exhibited more clearly even in the cases of complex derived verbal forms which attest to the occurrence of a reciprocal and a causative affix, for example. Consider (26).¹⁰

- (26) y-**ss-mm**-ruwðuf imfiðan
3S.M-CAUS-RECI-catch.PERF students
'He makes students catch each other.' (eg. in a Judo lesson)

¹⁰ For a description of these verbal forms, the reader is referred to *sadiqi (1986, 2000)*, *Cadi (1987)*, among many others.

The three types of grammatical functions alternations described above indicate that the processes of causativisation, reciprocity (with affixal strategy) and passivisation all take place within the verbal complex. I approximate the order of these constituents within the verbal complex by (27).

(27) $v[AGR_{SUB} > CAUSATIVE > RECIPROCAL > V > AGR_{SUB}.]$

1.5.4. Reflexive

The encoding of the anaphoric relation of reflexivity in GTB is realised by a reflexive pronominal complex ‘*ixefinnes*’ of the form [N (head)+Clitic/Pronoun]. The nominal constituent in this complex is the word for ‘head’ referred to as ‘*ixef / azzif*’ (head), which is combined with a dative preposition /i/. This preposition /i/ is similar to the one which appears with dative full pronominal forms (but not with datives clitic). This /i/ appears only with the singular (but not plural) forms of the pronoun inside the reflexive complex. For an illustration of the structure of the reflexive pronouns in GTB and their use, consider (28) and (29), respectively.

(28)	Myself	<i>ixef-inw</i>
	Yourself	<i>ixef-inj</i>
	Yourself	<i>ixef-inem</i>
	Himself	<i>ixef-ines</i>

Herself	ixef- ines
Ourselves	ixef- nex
Yourselves	ixef- newn
Yourselves	ixef- nkent
Themselves	ixef- nsen
Themselves	ixef- nsent

- (29) a. θ-n̄ga ixefines
 3S.F-kill.PERF self.her
 ‘She killed herself.’
- b. θ-wθi-nt ixenkent
 2PL.F-hit.PERF-2PL.F self.your
 ‘You hit yourselves.’

1.5.5. Possessive

A possessive construction in GTB can convey the notions of belonging/possession (Cf. 30.a), an attribute (Cf. 30.b), and origin (Cf. 30.c).

- (30) a. lktab inw /inf/ nsent
 book mine/yours/theirs
 ‘The book of mine/ of yours/of theirs.’

- b. rfrahaθ inw /inf/ nsent
 Kindness mine/yours/theirs
 ‘The kindness of mine/of yours/of theirs.’
- c. Izwrān inw /inf/ nsent
 Roots of mine/yours/theirs
 ‘The roots of mine/of yours/of theirs.’

Note that possessive constructions in (30) can be represented as in (31).

(31) [DP N(X) + [PP of + [DP Clitic/Pronoun]]]

2. The preverbal particles: preverbal domain

2.1. Introduction

I categorize Berber preverbal particles into two main classes. The first class, which I label Tense-Aspect-Mood particles (henceforth TAM), includes the irrealis modal (future) particles *ad* ‘will’ and *ġa* ‘will’, the past tense particle *dža* ‘was’ and the negation particle *wa* ‘not’. The second class which I name non-TAM preverbal particles (for lack of a better term) includes interrogative words, declarative complementisers and relative clause particles. The term preverbal particle is used as a cover term for a set of preverbal elements that are neither affixes nor inflections on other grammatical forms. That is, these morphemes have the following structural properties: (i) they occur in a preverbal position

and never in a postverbal one, (ii) they are neither verbs, nouns, adjectives nor prepositions, (iii) they are free morphemes and (iv) the aspectual-temporal realisation of some verbal stems is related to the occurrence of some of these preverbal particles.

2.2. The TAM particles

2.2.1. The irrealis mood/future particles *ga* /*ad* ‘will’

GTB makes use of two preverbal future particles *að* ‘will’ and *ga* ‘will’ to encode the irrealis mood/future. The preverbal particle *að* ‘will’ which is the most discussed in the Berber syntax literature is attributed the status of a future marker in some parts of the literature (see Hanoteau 1858/1906:101-105, Laoust 1920:110 and Dell and Elmedlaoui 1989:172-175) and the status of both a modality marker and a future marker in others (see Bentolila 1981:139 and Chaker 1983:223). I follow Chaker (1983: 223-§15.21) in assuming that the preverbal particles *að* ‘will’ and *ga* ‘will’ are irrealis mood/future particles. Combined with an aorist verbal stem, they encode a future event/action which is virtual, uncertain, probable and hypothetical.

- (32) a. *(að) y-arri lktab
M/F 3S.M-write.AOR book
‘He will write a book.’
- b. (að) i-t-arri lktub
M/F 3S.M-IMPERF-write books
‘He will keep writing books (frequently and habitually).’

- (33) a. mncəf *(að) y-arri lkab
 next year M/F 3S.M-write.AOR book
 ‘Next year he will write a book.’
- b. *mncəf að y-wrra lkab
 next year M/F 3S.M-write.PERF book
 ‘By next year he would have written a book’

As the examples (32.a) and (33.a) show, the preverbal modal/tense particle *að* ‘will’ combines with an aorist verbal stem to express the notion of the unreal state of the event (future/irrealis mood). The absence of *að* ‘will’ in (32.a and 33.a) can result in ungrammaticality because the aorist verbal stem is a structurally dependent verbal stem and cannot form a sentence on its own. Similar to the use of *að* ‘will’, the irrealis mood/future preverbal particle *ġa* ‘will’ combines with the aorist verbal stem to express an unrealised/future event as illustrated in (34).

- (34) i-t-ssn min ġa/*að y-arri
 3S.M-IMPERF-know what M/F 3S.M-write.AOR
 ‘He knows what he will write.’

2.2.2. The past tense particle *džə* ‘was’

Another preverbal particle which falls within the class of TAM preverbal particles is the past tense particle *džə* ‘was’ (henceforth PTP). It is a grammaticalised form of the auxiliary

verb *i-dža* ‘to be’ and it shows up in a position that precedes the verb. The auxiliary *i-dža* ‘to be’, unlike the past tense particle *dža*, inflects for number, person and gender. It assumes three forms viz. *iri*, *tiri* and *dža* which respectively correspond to its uses with irrealis mood, imperfective and perfective. This is illustrated by (35.a, b and c).

- (35) a. aḏ y-iri ḏ aʳ yaz
 M/F 3S.M-be.AOR COP man
 ‘He will be a man/He will become a man.’
- b. i-tiri ḏin
 3S.M-be.IMPERF there
 ‘He is /stays there.’
- c. *(dža) i-dža ijj w-aʳ yaz ḏi θadaʳθ
 PTP 3S.M-be.PERF one CS-man in house
 ‘There was a man in the house.’

2.2.3. The negation particle *wa* ‘not’

GTB makes use of a preverbal negation particle *wa* ‘not’ to negate propositions. This negation particle is optionally followed by another negation *fa* ‘not’ similar to the French negation ‘*pas*’. When occurring together, they constitute a discontinuous negation form, which is *wa...(fa)*. The negation element *wa* ‘not’ always precedes the verb and *fa* ‘not’ element always follows it as illustrated in (36) (see Lafkioui, 1996).

- (36) wa i-tǧzziz (fa) lhalwa
 NEG 3S.M-crunch.NEG.IMPERF not sweets
 ‘He does not crunch sweets.’

2.3. The non-TAM particles

The class of non-TAM preverbal particles that will be described below includes interrogative words, relative clause particles, cleft construction particles and declarative clause particles.

2.3.1. Interrogative words

The data in (37.a-e) provide examples of GTB interrogative words in their clause initial position: *min* ‘what’ (37.a), *uw* ‘who’ (37.b), *ma* ‘yes/no question’ (37.c), *mayemmi* ‘why’ (37.d) and *mermi* ‘when’ (37.e).

- (37) a. min y-wja Jamal i Mena ?
 what 3S.M-give.PERF Jamal to Mena
 ‘What did Jamal give to Mena?’
- b. uw (g) y-wji-n lktab i Mena?
 who X PART-give.PERF-PART book to Mena
 ‘Who gave the book to Mena?’
- c. ma y-wja Jamal l ktab i Mena ?
 Q 3S.M-give.PERF Jamal book to Mena

‘Did Jamal give the book to Mena?’

d. mayemmi y-wʃa Jamal lktab i Mena ?

why 3S.M-give.PERF Jamal book to Mena

‘Why did Jamal give the book to Mena?’

e. mermi y-wʃa Jamal lktab i Mena ?

when 3S.M-give.PERF Jamal book to Mena

When did Jamal give the book to Mena?’

2.3.1.1. A note on wh-words in GTB

In GTB, to form a direct question, it is necessary to have the wh-phrase in a clause initial position as in (Cf. 38.a). In case a GTB sentence is a question about two things, then one of the wh-phrase is fronted and the other remains in-situ (Cf. 38.b&c). Fronting of multiple wh-words is not possible (Cf (38.d) and (38.e)).

(38) a. uw θ-zra Muna

Who 3S.F-see.PERF Muna

‘Who did Muna see?’

b. uw θ-zra Muna y-taʃa manyn

Who 3S.F-see.PERF Muna 3S.M-steal.IMPER what

‘Who did Muna see stealing what?’

c. uw g y-sgi-n manayn

Who X PART-buy.PERF-PART what

‘Who bought what?’

d.* uw manayn g y-sgi-n

Who what X PART-buy.PERF-PART

‘Who what bought?’

e.* y-sg-a uw manayn

3S.M-buy.PERF who what

’bought who what?’

3.3.2. Relative clause particles

GTB relative clauses are introduced by: (i) the relative clause particle *i*, (ii) free relative clause pronouns (*wnni* ‘the one who/masculine’, *θnni* ‘the one who/feminine’) or (iii) zero relative clause particle as illustrated by examples in (39), (40) and (41) respectively.

(39) a. a^f yaz y-ssqad lktab i Mena

man 3S.M-send-PERF book to Mena

‘A man sent the book to Mena.’

b. zri-x a^f yaz i (g) y-ssqad-n lktab i Mena

see.PERF-1S man RM X PART-send.PERF-PART book to Mena

‘I saw the man who sent the book to Mena.’

- (40) a. wnni ġa y-ġa^r-n lktaba að y-njaħ
 RP M/F PART-read.AOR-PART book.this M/F 3S.M-succeed.AOR
 ‘The one who will read this book will succeed.’
- b. θnni ġa y-ġa^r-n lktaba a t-njaħ
 RP M/F PART-read.AOR-PART book.this M/F 3S.F-succeed.AOR
 ‘The one who will read this book will succeed.’

- (41) a^r yaz (g) y-ssqad-n ktab i Mena
 man X PART-send.PERF-PART book to Mena
 i-xj ġa fransa
 3S.M-arrive.PERF to France
 ‘The man who sent the book to Mena arrived in France.’

2.3.3. Cleft particles

Cleft constructions in GTB are a particular type of relative clause constructions. They are also referred to in the Berber syntax literature as ‘focus’ constructions (Cf. Basset 1952, Galand 1957). The displacement of the clefted constituents is marked by the appearance of cleft markers *i* and *umi* which are preceded by the clefted element as shown in examples (42), (43) and (44).

- (42) a. i-sqad Jamal θabrat
 3S.M-send.PERF Jamal letter
 ‘Jamal sent the letter.’
- b. (t) tabrat i (g) i-sqad Jamal
 COP letter CM X 3S.M-send.PERF Jamal
 ‘It is a letter which Jamal sent.’
- c. (ð) Jamal i (g) y-sqad-n θabrat
 COP Jamal CM X PART-send.PERF-PART letter
 ‘It is Jamal who sent the letter.’
- (43) a. wʃi-x lktab i Jamal
 give.PERF-1S book to Jamal
 ‘I gave a book to Jamal.’
- b. (ð) Jamal umi wʃi-x lktab
 COP Jamal CM give.PERF-1S book
 ‘It is to Jamal that I gave the book.’
- (44) (ð) nʃ i (g) y-wʃi-n lktab i Jamal
 COP me CM X PART-give.PERF-PART book to Jamal
 ‘It is me who gave the book to Jamal.’

2.3.4. Declarative complementiser

In addition to the relative clause particle mentioned above, GTB makes use of another complementiser form-declarative complementiser *qa* ‘that’ (Cf. 45.a and b).

- (45) a. *ssn-x* *qa* *i-ssqad* *lktab i Mena*
Know.PERF-1S that 3S.M-send.PERF book to Mena
‘I know that he sent the book to Mena.’
- b. *ssn-x* *qa* *dža wa* *i-ssqid* *lktab i Mena*
Know.PERF-1S that PTP NEG 3S.M-send.NEG.PERF book to Mena
‘I know that he did not send the book to Mena.’

Among the syntactic characteristics that distinguish the declarative complementiser *qa* ‘that’ from the rest is the fact that it occurs just after verbs like *ghir* ‘think’, *ssn* ‘know’, *inni* ‘say’ which select sentential complements.

2.4. Summary

I sum up the order-sequencing scheme for pre-verbal particles by (46).

- (46) Wh-word/REL/CLE /DECL > PTP > NEG / M/F > V

3. Word order

3.1. Introduction

This section describes the word orders of the subject, verb and object in GTB. It also describes the general properties of subjects.

3.2. VSO vs. SVO and O, VS orders

The word order of GTB variety, like other Berber varieties and some of the Hamito-Semitic languages is canonically a VSO word order. Consider the following examples.

- (47)
- a. i-ʃʃa Jamal aɣrum (VSO order)
 3S.M-eat.PERF Jamal bread
 ‘Jamal ate bread.’
- b. Jamal i-ʃʃa aɣrum (SVO order)
 Jamal 3S.M-eat.PERF bread
 ‘Jamal ate the bread.’
- c. i-ʃʃa aɣrum
 3S.M-eat.PERF bread
 ‘He ate bread.’
- d. i-ʃʃa w-a^ɾba aɣrum (VSO order)
 3S.M-eat.PERF CS-boy bread
 ‘The boy ate bread.’

The derivation of the SVO order in (47.b) involves the fronting of the lexical subject to the initial position in the sentence.¹¹ Besides, in addition to SVO and VSO word orders, GTB allows the occurrence of the O,VS word order in a restricted syntactic environment which requires the presence of a resumptive pronoun in the position wherein the object originally occurs. Consider example in (48.a and b).

- (48) a. aǧrum, i-ǧǧi *(θ) Jamal (O,V,CL,S order)
 bread 3S.M-eat.PERF CL_{IT} Jamal
 ‘The bread, Jamal ate it.’
- b. aǧrum, i-ǧǧi *(θ) (O,V,CL order)
 bread 3S.M-eat.PERF CL_{IT}
 ‘The bread, he ate it.’

Note that the presence of a left-dislocated lexical object in the preverbal position, unlike its lexical subject counterpart (Cf. 47.b), is characterised by the occurrence of a clear prosodic break (marked in (48.a) by a comma). In such contexts, the preverbal object receives a

¹¹ The judgements of my GTB speakers indicates that there is no prosodic break after the lexical subject (in declarative, non clefted constructions), especially if compared with the prosodic break that straightforwardly occurs in constructions which involve the fronting (topicalisation) of the lexical object. However, judgements from other adjacent Berber varieties indicate that there might be a prosodic break following the lexical subject. Hence it remains to be determined whether the position that the lexical subject occupies in the SVO order is a topic position or not, especially if the intralanguage jugements and facts are taken into account. This Berber intralanguage microvariation with respect to the position that the lexical subject occupies has been observed in earlier studies. It is reported in Galand (1979a:137) that the southern Berber variety of Touareg, unlike its northern counterparts, marks the order SVO rather than VSO. This stands in contrast with other studies carried out on the northern Berber varieties. In Cadi (1987:122), it is reported that the use of VSO in Tarifyt Berber is of an average of 78% than the use of the SVO order.

focus interpretation and the presence of a postverbal resumptive pronoun is obligatory as shown in example (48.b).

3.3. Subjects and pro drop

Note that a construct state inflection appears on the post verbal lexical nominal category, except for proper names (Cf. 49.d).¹²

- (49) a. i-ʃʃa Jamal aḡrum
 3S.M-eat.PERF Jamal bread
 ‘Jamal ate the bread.’
- b. i-ʃʃa w-a^rba aḡrum
 3S.M-eat.PERF CS-boy bread
 ‘The boy ate the bread.’
- c. a^rba i-ʃʃa aḡrum
 boy 3S.M-eat.PERF bread
 ‘The boy ate the bread.’

¹² For a descriptive/functional view about the syntactic contexts of construct state, the reader is referred to works of Bentolila (1981:46), among others. Within the generative approach, the appearance of the construct state marking on the postverbal lexical subject is assumed to be a subject agreement reflex (signature) which attests to the fact that the postverbal lexical DP has moved to an agreement projection (AGRS.P) to check its case feature (see Ouhalla 1988, 1993, Ennaji 1997, among others).

- d. *w-a^rba i-ɟɟa aɣrum
 CS-boy 3S.M-eat.PERF bread
 ‘The boy ate the bread.’
- e. * i-ɟɟa a^rba aɣrum
 3S.M-eat.PERF boy bread
 ‘The boy ate the bread.’

Note that the construct state inflection does not appear on the same lexical subject when the latter occupies a preverbal position (SVO order) as illustrated by the grammatical (49.c). Like other Berber varieties, the presence of a lexical subject is optional in GTB as shown by (47.c). In (47.c), there is no postverbal or preverbal lexical subject. The interpretation of the sentence maintains the presence of an implicit subject/agent. This interpretation is maintained thanks to the presence of subject agreement affixes which appear on the verb. For an illustration of the distribution of these subject agreement affixes vis-à-vis the verb, consider table.1 in (50).¹³

¹³ The phonetically transcribed segment / ɔ̃ / stands for a spirantised interdental segment. The third person singular /i/ is at times realised in certain restrictive phonological context as /y/. This is the case when the verb to which the subject prefix {i-} gets prefixed starts with a vowel. Hence the following phonological rules apply $i \rightarrow y /-V$.

(50) TABLE.1: Distribution of subject affix agreement markers in GTB

	Subject markers distribution	distribution with verb <i>wj</i> 'give' conjugated into perfective
1.sg.ms/fe	X - x	wj-i- x
2.sg.ms/fe	θ - X - ǿ	θ - wj-i- ǿ
3.sg.masc.	i - X	i - wja
3.sg.femin.	θ - X	θ - wja
1.pl.	n - X	n - wja
2.pl.masc.	θ - X - m	θ - wj-i- m
2.pl.fem.	θ - X - nt	θ - wj-i- nt
3.pl.masc.	X - n	wj-i- n
3.pl.fem.	X - nt	wj-i- nt

In the case of example (47.c) above, it is the presence of the third person singular masculine affix /i - / which ensures the interpretation of a subject. This observation has been articulated since the early studies which describe the grammatical system of Berber language in general either within descriptive functional framework (Cf. Laoust 1928, Galand 1977, Bentolila 1981 and Cadi 1987 a.o) or within generative framework (Cf. Sadiqi, 1986 and Ouhalla 1988 a.o).

Moreover, GTB, like other Berber varieties, apparently uses two syntactic elements to encode the notion “subject”. These are the lexical subject and the subject agreement affixes. The occurrence of the lexical subject is optional and it inflects for construct state inflection when it occurs in the postverbal (but not preverbal) position as described above. Unlike lexical subjects, the position of the subject agreement affixes is fixed and its occurrence is obligatory. The omission or displacement of these subject affix affixes result in ungrammaticality as respectively shown by (51.b) and (51.c).

- (51) a. **θ-wji-nt** lktab i Jamal
 2PL.F-give.PERF-2PL.F book to Jamal
 ‘You gave the book to Jamal.’
- b. ***wji** lktab i Jamal
 give.PERF book to Jamal
 ‘You gave the book to Jamal.’
- c. ***θ-nt -wji** lktab i Jamal
 2PL.F-2PL.F-give.PERF book to Jamal
 ‘You gave the book to Jamal.’

Furthermore, GTB can also be classified as a null subject language/pro drop language along the lines of other null subject languages like Italian and Hebrew. The following examples illustrate the point.

- (52) a. uðf-nt pro
 enter.PERF-3PL.F
 ‘They entered.’
- b. uðf-n pro
 enter.PERF-3PL.M
 ‘They entered.’

3.4. Summary

GTB variety allows four word orders in general. These word orders are the VSO and SVO in addition to O, VS and S,O,V which involve the left dislocation (fronting) of lexical object, lexical subject or both. Word orders such as OSV and SOV are not possible. Moreover, GTB, like Italian and Hebrew, qualifies for a pro drop /null subject language.

4. Bibliography

- Abdel-Massih, E-T. (1968). *Tamazight Verb Structure: A Generative Approach*. Bloomington: Indian University.
- Bhat, D., N.S. (1999). *The prominence of tense, mood and aspect*. Amsterdam: Benjamins.
- Bouyalmani, A. (1999). *Elements of grammar in Tarifyt Beni Touzin*. Unpublished PhD dissertation. Université El-Jadida.
- Basset, A. (1929). *La langue Berbère, morphologie, le verbe et étude de thèmes*. Paris: Lerroux.
- Basset, A. (1936). "Le système phonologique du Berbère", *Comptes rendus de groupe linguistique d' étude Chamito-sémitique*, vol. 4, pp.33-36.
- Basset and Picard (1948). *Eléments de grammaire Berbère (Kabylie-Irjen)*. Alger.
- Basset, A. (1952). *La Langue Berbère*. Handbook of African Languages. Part I. Oxford University Press for International African Institute.
- Bentolila, F. (1974). *Grammaire fonctionnelle du Berbère, le parler Berbère des Ait-Seghroushen d' Oum-Jeniba, (Maroc). Etude des unités significative*. PhD dissertation.

- Bentolila, B. (1981) *Grammaire fonctionnelle d'un parler berbère: Ait Seghroushen d'Oum Jeniba (Maroc)*. Paris: SELAF.
- Boukhris, F. (1998). *Les Clitiques en Berbère Tamazight*, unpublished PhD. dissertation, University Mohamed V, Rabat.
- Cadi, K. (1987). *Le System verbal Rifain: Forme et sens*. Paris. SELAF.
- Chaker, S. (1983). *Un parler berbère d' Algérie (Kabylie): Syntaxe*. Aix-Marseille: Publications Université de Provence, J.Lafitte.
- Chaker, S. (1995). *Linguistique Berbère: Etudes de syntaxe et de diachronie*. Paris: Peeters.
- Chafiq, M. (2000). *44 Lessons in the Tamazight Language*. Arabic teaching manual published by Arab-Africa Press, Cairo & Rabat.
- Dell, F. and Elmedlaoui, M. (1989.a). "Clitic Ordering, Morphology and Phonology in the Verbal Complex of Imdlawn Tashlhiyt Berber", Part I. *Langues Orientales Anciennes Philologie et Linguistique* 2: 165-94.
- Galand, L. (1957). "Un cas particulier de phrase non verbale 'L'anticipation renforcée' et l'interrogation en berbère", In *Mémorial André Basset*, 27-37.
- Galand, L. (1964). "L'énoncé verbal en berbère: Etude de fonctions", *Cahiers Ferdinand de Saussure* 21: 33-53.
- Galand, L. (1977). "Continuité et renouvellement d'un system verbal: le cas du berbère", *Bulletin de la société de Linguistique de Paris* 72-1,275-303.
- Galand, L. (1979a). *Langue et littérature berbères: Vingt cinq ans d'études (Chroniques de l'Annuaire de l'Afrique du Nord)*. Paris: Editions du Centre Nationale de la Recherche Scientifique.
- Guerssel, M. (1986). *An Outline of the Structure of Berber*. ms. MIT.

- Guerssel, M. (1995). "Berber clitic doubling and syntactic structure", *Revue québécoise de linguistique* 24, 111-133.
- Harris, J. (1968). *Syntactic Structures of Tamazight*. Unpublished PhD Dissertation. University of California, Los Angeles.
- Hanoteau, A. (1858.b). *Essai de grammaire kabyle*. Algiers.
- Huang, C.-T. James (1982) *Logical Relations in Chinese and the Theory of Grammar*, PhD Dissertation, MIT.
- Laoust, E. (1920.b). *Cours de berbère marocain*. Paris.
- Laoust, E. (1927). "Le dialecte berbère du Rif", *Hesperis* 7: 173-208.
- Laoust, E. (1932). *Siwa: Son Parler*. Leroux.
- Laoust, E. (1939). *Cours de Berbère Marocain: Dialecte du Maroc central*. Paris: Librairie Orientales Paul Genthner.
- Leguil, A. (1992). *Structures prédicative en Berbère: Bilan et perspectives*. Paris: L' Harmattan.
- Mohammed Ali, Aousouk. (1992). *Tuareg Clause Structure*, unpublished MA dissertation, University of North Wales, Bangor.
- Martinet, A. (1962). *A Functional view of Language*. Oxford: Clarendon Press.
- Ouhalla, J. (1988). *The Syntax of Head Movement: A Study of Berber*. Doctoral dissertation, University College London.
- Penchoen, T.G. (1973). *Tamazight of the Ait Ndhir*. Los Angeles: Undena Publications.
- Sadiqi, F. (1997). *Grammaire du berbère*. Paris: L' Harmattan.