

# On the phono-syntax of verbal affixation in Taqbaylit

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**1. Introduction:** This paper presents a phono-syntactic analysis to account for the allomorphy of all verbal affixes in Taqbaylit Berber. Three types of verbal affixes can be distinguished in this language: (i) voice marker prefixes (causative /s-/, reciprocal /m-/, and anticausative /n-/), (ii) a prefix of the imperfective aspect /t<sup>s</sup>-/, and (iii) subject agreement affixes.

The quantitative allomorphy of some of these affixes is related to their right contexts. Subject agreement is never subject to allomorphy: it is always simplex regardless of its right context (/n-/ of 1PL in (1.a.i-iii)). The imperfective marker /t<sup>s</sup>-/ surfaces as a geminate in \_CC and \_VC contexts (b.i-ii), but as a simplex in \_CV context (b.iii). The voice markers (c-d) are subject to different allomorphies. The causative /s-/ has the same allomorphy as the imperfective marker /t<sup>s</sup>-/: geminate in \_CC and \_VC contexts (c.i-ii), and simplex in \_CV context (c.iii). The reciprocal /m/, however, does not geminate: it involves an epenthetic glide before the stem in \_CC and \_VC contexts (d.i-ii), and surfaces simplex in \_CV context (d.iii).

(1)		VERB	(a). /1PL-VERB/	(b). IMPFV	(c). /S-VERB/	(d). /M-VERB/	
	i.	<u>_CC</u>	jzəm	n <sup>ə</sup> -jzəm	t <sup>s</sup> t <sup>sə</sup> -jzam	ss <sup>ə</sup> -jzəm	m <sup>j</sup> <sup>ə</sup> -jzam
	ii.	<u>_VC</u>	ali	n-ali	t <sup>s</sup> t <sup>s</sup> -ali	ss-ali	m <sup>j</sup> -ali
	iii.	<u>_CV</u>	faɾəs	n-faɾəs	t <sup>s</sup> -faɾəs	s-faɾəs	m-faɾəs

The aim is to study the underlying representation and the quantitative allomorphy of these verbal affixes. My analysis is embedded within Strict CV (Lowenstamm 1996, 1999; Scheer 2004) and uses Cartographic Syntax (Rizzi 2004; Shlonsky 2010). My claims are: (i) the verbal domain includes two CV units at its left-edge; (ii) all affixes are simplex floating morphemes; and (iii) their surface form depends on licensing (Lowenstamm 1999). Syntactic movements explain other phenomena that phonology alone cannot account for, such as affix combinations. Furthermore, although this study is the first to analyze the three types of verbal affixes in a unified framework, it also proposes that the distinction between inflectional and derivational morphemes/morphology discussed in the literature (Chaker 1983; Sadiqi & Ennaji 2004, a.o.) is irrelevant for the case of Taqbaylit Berber.

## 2. Proposal

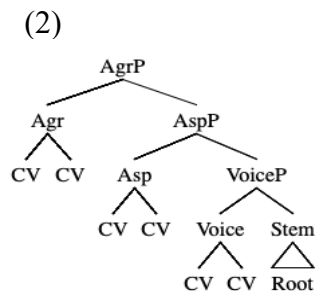
The necessary elements to establish the structure of the verbal domain are:

- (i) Subject Agreement is on (high) Aspect marker: Agr always precedes Asp,
- (ii) Voice markers are closer to the root than Asp marker.

Putting these elements together, we arrive at this structure:

[Agr [Asp [Voice [Stem [Root]]]]]

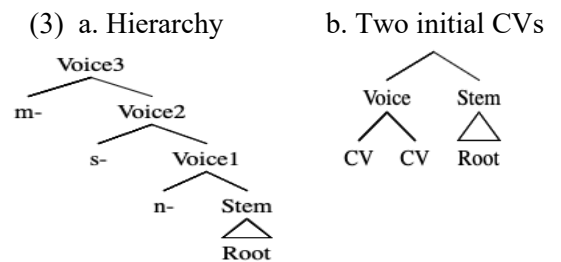
I assume that these three syntactic heads are complex. Each one is bi-partite i.e., is spelled by two CV units, as illustrated in (2).



## 3. Analysis

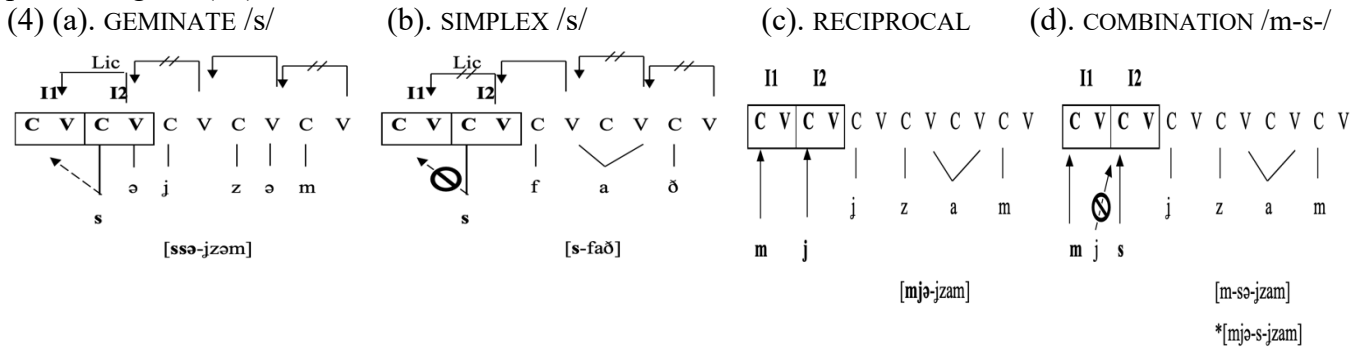
### 3.1. Allomorphy of voice markers

Bedar (2022) has shown that the three voice markers are strictly ordered with respect to the root as illustrated in (3a). Nevertheless, the syllabic structure allows only two CV units at the left edge of the stem as illustrated in (3b). This implies that: (i) no more than two affixes can be combined (Sadiqi & Ennaji 2004, Jebbour 1992); (ii) when two prefixes are combined, both are simplex regardless of their right context; (iii) a prefix can geminate only if there is an empty CV unit at its right (which should be licensed to be identified by the propagation of this prefix).



Following Bedar (2022), I assume that the left-edge of the verb in Taqbaylit has two CV units. To see how the surface form of the voice markers is derived, let us start with the form with a geminate /s-/ in (4a). The prefix /s-/ is on CV-I2. The V position of CV-I2 is not properly governed and can therefore be realized. In doing so, it licenses CV-I1. The latter is exploited by the propagation of /s-/. Therefore, the geminated form is obtained. The second case where /s-/ remains simplex is illustrated in (4b). The V position of CV-I2 is properly governed by the stem vowel. Therefore, it cannot be expressed, and cannot license CV-I1 either. /s-/ is unable to identify C1 and cannot geminate.

The variation in allomorphy between the prefixes /s-/ and /m-/ results from the position of CV sites hosting these prefixes: /s-/ is hosted on the CV site closest to the stem, CV-I2, whereas /m-/ is hosted on the other site, CV-I1. This implies two results: (i) the insertion of an epenthetic glide /j/ to avoid leaving an empty CV inside the domain (4c); (ii) when the reciprocal /m-/ is combined with another morpheme, there is no epenthetic glide (4d).

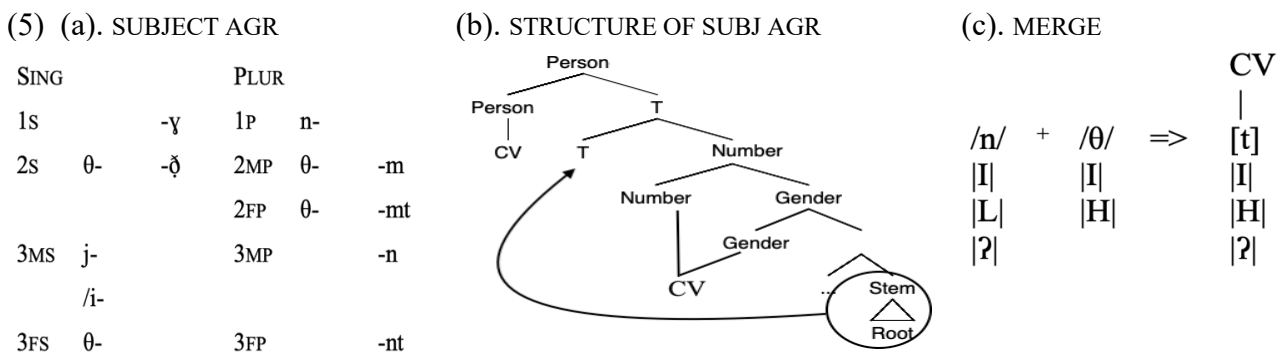


The quantitative allomorphy of the aspect marker /t<sup>s</sup>-/ is similar to that of the causative prefix /s-/ (4a-b).

### 3.2. Subject agreement markers

Subject agreements in Taqbaylit can be prefixes, suffixes or circumfixes (discontinuous affixes). The complete paradigm of subject agreements is given in (5a). According to Pollock (1988) and Shlonsky (1989), Subj Agr clause have the structure given in (5b). Shlonsky (2023) has showed that a verb can carry both a prefix and a suffix by moving to the T node. Thus, it is dominated by Person (prefix), and it dominates Number and Gender (suffixes).

I assume that the exponent of Person is spelled by one CV unit, and the exponents of Number and Gender together are spelled by one CV unit (5b). This implies that: (i) Subject Agr prefixes are never subject to allomorphy (because there is only one CV on the left-edge); (ii) when Number and Gender markers are combined, they are merged into one CV: the suffixes of 3F.PL /n-θ/ surface [t] (5.c).



### 4. References

Bedar, Amazigh. (2022). Morphophonologie et structure argumentale des verbes anticausatifs en kabyle. Chaker, Salem (1983). Un parler berbère d'Algérie (Kabylie). Sadiqi, Fatime & Ennaji, Moha. (2004). A grammar of Amazigh. Shlonsky, Ur. (2023) Rescaffolding the Bundle in Afroasiatic inflection: Tamazight and Hebrew. Shlonsky, Ur. (1989). The hierarchical representation of subject verb agreement. Lowenstamm, Jean. (1996). CV as the only syllable type. Lowenstamm, Jean. (1996). The beginning of the word. Rizzi, Luigi. (2004). On the cartography of syntactic structures. In *The Structure of CP and IP*. Scheer, Tobias. (2004). *A lateral theory of phonology: What is CVCV, and why should it be?*