

## The Imperfective in Tashlyhit Berber: Form, infixation, and apparent multiple exponence

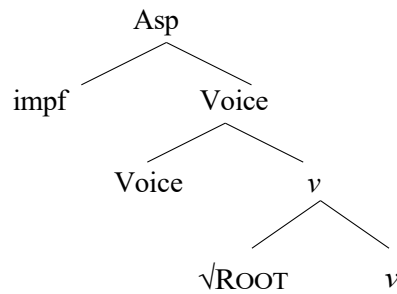
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We provide an analysis of certain parts of the verbal morphology in Tashlyhit Berber (TB), an Amazigh language of Morocco. Our focus is on the *imperfective* forms of the verb, which (oversimplifying somewhat) convey an aspectual meaning related to incompleteness/ongoing activity (see Achab 2012: 159; Iazzi 2018: 522; Basset 1929; and Belkadi 2013). Based on its interactions with other morphemes that are typically close to the verb [ $\sqrt{\text{ROOT}}$  v] (Voice-related reciprocal, causative, passive), we analyze the structure of the imperfective as in (1). The forms realized in (1) are complex, including (but not limited to) cases in which there is gemination of either the medial (2a) or initial (2b) consonant, as well as those with prefixation of *tt-*, with (2c) or without (2d) additional vocalic effects at the right edge of the stem.

(1) structure



(2) some impf. forms

	aorist	impf	gloss
a.	g <sup>w</sup> mr	g <sup>w</sup> m <sup>w</sup> mr	'hunt'
	kʃm	kʃʃm	'enter'
b.	hrg	h <sup>w</sup> hrg	'burn'
	frn	ffrn	'pick over'
c.	bdg	tt-bdag	'be wet'
	bzg	tt-bzag	'inflate'
d.	ddz	tt-ddz	'cram'
	kks	tt-kks	'remove'

Our analysis is centered on the following components: **(i) Linearization**: the [impf] morpheme is first linearized as a prefix: impf-Verb. **(ii) Vocabulary Insertion**: the [impf] morpheme is realized as a consonant C across the board. **(iii) Infixation**: under certain morphophonologically specified conditions, [impf] is infixated into the verb; the position of infixation depends on the host's phonology. **(iv) Form**: the unspecified [impf] C takes the form of the adjacent C when infixated, and otherwise (i.e. when prefixed) defaults to /t/ (and subsequently geminates). **(v) (Morpho)phonology** further processes add vowels near the right edge of the stem; this is notable given the language's general lack of difficulty with consonant sequences.

On the analysis that we propose, the direct ('primary') exponence of [impf] is restricted to a single Vocabulary Item inserting C; the complexity arises in subsequent morphophonological operations that position this affix (iii) and determine the form of [impf]-Host combinations (iv-v). For the latter, we hypothesize that the appearance of a vowel before the final segment in forms like (2c) *tt-bzag* – a type of secondary exponence – results from a process seen elsewhere in the language, notably in action nominals: cf. *bzg*, action nominal *abzzag*. Since by hypothesis the [impf] and head(s) producing action nominals are not identical in feature content, the process resulting in V-insertion appears to be part of the **morphophonology**, where it has been proposed that a single phonological process might be activated in a diverse set of morphosyntactic environments (see e.g. Embick and Halle 2005 on German Umlaut). On our current understanding, the /a/ is inserted in a phonologically defined environment: when there are two unsyllabified consonants word-finally: CC# → CaC#. Though phonologically-defined, this process occurs only in environments that are defined morphosyntactically (imperfectives, nominals, possibly other forms); it is this combination of properties that makes the effect morphophonological (cp. Faust 2025). In our discussion we consider

alternatives that attempt to reduce the effect in different ways: e.g., to affixation, to templatic exponence, or to automatic phonology.

We note that while many of the components identified above have been treated in depth (see Bensoukas 2001; Dell and Elmedlaoui 1988, 1991, 2013, 2002; Jebbour 1999; Lahrouchi 2008, 2010; MacBride 2004: 195, among others), something like a comprehensive analysis from syntax to phonology has not yet been undertaken, a gap we hope to remedy here. In addition (and more ambitiously) we hope to present initial results concerning first, rating studies probing the (morpho)phonological components of the analysis; and second, connections to (and differences from) TB nominal morphology.

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