MISMATCHED SUPPLETION IN AZERI AS MORPHOLOGY/PHONOLOGY COMPETITION

Colin Davis (MIT)

INTRODUCTION: In this paper, I use original fieldwork data to examine a puzzle about suppletion in the northern dialect of Azeri (Turkic). I focus on suppletion of the perfect (PRF) / evidential (EVID) morpheme, whose default form is -mI. This work has found, in agreement with Öztopçu (2003), that this morpheme has an allomorph -Ib that is typically only used with 2nd and 3rd person subjects:

(1) a. o ḏal-miʃ/ib-∅
    3SG run-PRF-3SG
b. ḏal-miʃ/ib-ij
   1PL come-PRF-1PL

'He/she/it has run'

However, this research has found that in contexts where multiple adjacent instances of -mI would surface, one of those instances is realized as -Ib, even when the subject is 1st person:

(2) a. biz gatʃ-ib-miʃ-iʃ
   1PL run-PRF-EVID-1PL
b. mən jə-məj  jə-ib-miʃ-əm
   1SG eat-NMLZ eat-EVID-PRF-1SG

'Apparently we had run'

PWZZLE: Since -Ib suppletion typically requires a 2nd/3rd person subject, we would have expected the 1st person subjects in (2) to make -Ib unavailable. Why did -Ib suppletion in (2) succeed?

SOLUTION: I argue that the overapplication of -Ib suppletion in (2) occurs due to a phonological constraint against forms with adjacent identical morphemes (Menn & MacWhinney 1984, Plag 1998, Yip 1998, a.o.). This phonologically-forced morphological mismatch provides new evidence that morpheme insertion interacts and competes with phonological constraints (Wolf 2008, 2009, Pertsova 2015).

BACKGROUND: As mentioned, the morpheme -mI/-ib has both perfect and evidential uses. The closely related Turkish has a morpheme -mI with similar semantics (Kornfilt 1997, Göksel & Kerslake 2005). While the Turkish -mI usually corresponds to an evidential, with perfect uses more restricted, for the Azeri -mI/-ib this state of affairs is reversed—a perfect reading is typical, with the evidential reading less salient, and perhaps becoming obsolete (Authier 2010). Indeed, Öztopçu’s (2003) Azeri grammar refers to -mI/-ib only as a perfect, with no mention whatsoever of an evidential use.

The evidential interpretation of -mI/-ib does clearly emerge in some contexts, however. One such circumstance is examples like (2) above, where I argue that the evidential is stacked on top of the perfect. A second such circumstance is contexts where -mI/-ib is attached to a copula i/-j (3a). This contrasts with similar examples like (3b) which use the copula ol instead, and have a perfect interpretation:

(3) a. mən xəstə-y/i-miʃ-əm
   1SG sick-be-EVID-1SG
b. mən xəstə ol-miʃ-əm
   1SG sick be-PRF-1SG

'Apparently I was sick'

Kelepir (2001) argues that in Turkish, evidential -mI occupies T, while the perfect -mI sits in a lower position. For Azeri, Davis (2015) argues that while the copular form ol is default, a copula that can raise to T uses the form i/-j. This suggests that the evidential -mI in (3a) occupies T, while the perfect -mI in (3b) occupies a lower position. I extend this reasoning to claim that in stacked examples like (2), the perfect morpheme is syntactically lower than the evidential one. In this head-final context, this means that the evidential is linearized to the right of the perfect, as reflected in the glosses.

A THEORY OF INTEGRATED MORPHO-PHONOLOGY: I argue for the theory in Wolf (2008, 2009), who follows the claim in Distributed Morphology (Halle & Marantz 1993, Harley & Noyer 1999, a.o.) that syntactic heads consist of abstract feature bundles, which are assigned their phonological form at spellout. Spellout maps the features of syntactic heads to morphemes or Vocabulary Items (VIs). Typically, the VI assigned to a given head doesn’t correspond to any features which that head doesn’t have. However, as Wolf shows, morpho-phonological competition can result in mismatches.

To allow morphological insertion to interact with the phonological constraints of Optimality Theory, and derive such mismatches, Wolf proposes that insertion of VIs is also governed by constraints. The constraint most relevant to the Azeri puzzle I focus on here is one that penalizes inserting VIs which correspond to features that are absent in the context of insertion (4):

(4) Match(F): For every instance of the morphosyntactic feature F which a morpheme is specified as spelling out, assign a violation-mark if that morpheme has been inserted onto a feature-bundle which does not contain F.
I argue that (4) is outranked by a constraint against forms with adjacent phonologically identical morphemes (5). While various works propose nuances of this constraint, (5) suffices for this work:

(5) **No Repetition (NoRep):** Assign a violation for forms containing adjacent phonologically identical morphemes.

In the languages of the world, such a constraint is often obeyed by haplography or dissimilation. I argue that the unexpected suppletion in the Azeri (2) is, in essence, morphological dissimilation. In (2) the suppletive form -Ib is used outside of its typical licensing context, to avoid an illegal -mI string.

**Competition forces unfaithful suppletion:** Now let’s see, more formally, how (5) motivates this morphological dissimilation. Given that -mI/-Ib corresponds to either perfect or evidential semantics, its insertion is minimally governed by the constraint Match([PRF]) or Match([EVID]). Since I’ve claimed that in (2) unfaithful suppletion applies to the perfect, I focus on the perfect in what follows.

Given that -Ib suppletion is only possible in the absence of a 1st person subject, evidently -Ib can only be selected as the VI for the feature [PRF] in the context of the phi-feature [-Speaker], following the feature geometry in Harley & Ritter (2002). I assume that T agrees with the subject, and that the phi-features gathered by T via agree serve as the context for potential -Ib suppletion. Since -Ib requires both the features [PRF] and [-Speaker], I’ll assume that its insertion is governed by the corresponding constraints Match([PRF]), as mentioned, in addition to Match([-Speaker]).

Abstracting away from the form of agreement marking on T, (6) shows how such constraints govern the insertion of -Ib in the perfect. Here the syntactic input to the morpho-phonological evaluation contains [+Speaker] features. Due to this, insertion of -Ib will incur a violation of Match([-Speaker]). Insertion of -mI is governed only by Match([PRF]), however, and so it can be inserted without violation:

<table>
<thead>
<tr>
<th>V-PRF-T[+Speaker]</th>
<th>NoRep</th>
<th>Match([-Speaker])</th>
<th>Match(PR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. V-Ib-T</td>
<td>*</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>b. V-mI-T</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

In (6), the highly-ranked constraint NoRep is present, but inactive. This constraint will become active when we consider the stacking contexts in (2) above, modeled in (7) below. Here the (a) form with double -mI is irrelevant for Match([-Speaker]), but violates the highly ranked NoRep. Thus the winner is the (b) form, which satisfies Match([-Speaker]), but satisfies NoRep by using the -Ib allomorph:

<table>
<thead>
<tr>
<th>V-PRF-EVID-T[+Speaker]</th>
<th>NoRep</th>
<th>Match([-Speaker])</th>
<th>Match(PR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. V-mI-mI-T</td>
<td>*</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>b. V-Ib-mI-T</td>
<td>✓</td>
<td>*</td>
<td>✓</td>
</tr>
</tbody>
</table>

In this way, the dominance of NoRep permits an otherwise impossible morphological mismatch.

As expected, a double -mI configuration is not grammatical, as in (8a). But the morpho-phonological evaluation evidently only applies maximally at the word level, since in periphrastic auxiliary constructions with two instances of -mI that are not adjacent, there is no violation (8b):

| a. */? män gatf-mI-mI-am | b. ✓ gatf-mI ol-mI-am |
| 1SG run-PRF-EVID-1SG | run-PRF be-EVID-1SG |

Apparently I had run’ ‘I realize that I have run’

**The puzzle of V-adjacency:** In all data I currently have, it is always the perfect that suppletes in these stacking contexts, rather than the evidential, even though suppletion of the latter would satisfy NoRep. This fact appears to be related to an independent constraint on -Ib so far unmentioned—namely, -Ib must be adjacent to the V stem. This is shown in (9). Here the presence of aspect morphology between V and -Ib is not allowed, though such examples are fine if -mI is used instead:

| a. * at gatf-adgay-ip-∅ | b. * at gatf-ir-ip-∅ |
| horse run-PROS-PRF-3SG | horse run-PROS-PRF-3SG |

‘The horse will have run’ ‘The horse has been running’

I have two hypotheses. #1: This restriction may come from analogy with the converb -Ib, which is homophonous with the perfect/evidential allomorph, and does not seem to affix to aspect morphology either. #2: Perhaps the phi-features that license -Ib suppletion in fact inhabit V (or v), which -Ib must be directly local to, as expected under the theory of strictly local allomorphy in Bobaljik & Harley (2017).