The limits of replacing morphology with phonology in allomorphy

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Background: several types of phonologically-conditioned allomorphy (PCA) have been identified in the literature. At one end of the spectrum the selection of allomorph gives rise to a phonologically unmarked structure; it is phonologically optimizing. This is illustrated in (1) with the 3rd sg. masculine pronominal clitic in Moroccan Arabic, where the selection of one allomorph over the other results in a less marked syllable structure. At the other end, one can find examples in which reference must be made to phonological properties for the selection of the allomorphs, but none of them improves phonological structure in any sense; this type of case is illustrated in (2) with an example of the perfective suffix in Tzeltal. While for the clearly non-optimizing cases everybody agrees that the selection must be done lexically (in Distributed Morphology terms, at Vocabulary insertion), phonologically optimizing (or partially optimizing) cases pose a serious challenge to theorists that advocate strict modularity between components. Among these, one type of reaction has been to deny the synchronic character of this optimization and to identify these cases with the lexically determined ones, reducing them to pure morphology (VIEW A); under this view any possible phonological generalization is treated as an accident (along these lines see Paster 2006, Embick 2010, Bye 2015, a. o.). A more recent type of reaction has been to try to reduce all cases to pure phonology and deny the existence of allomorphy whenever possible by enriching a single underlying representation with floating segments for each case (VIEW B); under this view, all surface alternants should be derived in the phonology proper (along these lines see del Gobbo 2001, Scheer 2016, Faust et al 2018, a.o.). Most non-strict modularity views of phonologically conditioned allomorphy have been framed within Optimality Theory (VIEW C): all allomorphs are made available to the phonology and the selection is made by ranked constraints, some of which may be morphological in character (see Kager 1996, Lapointe 1999 and Mascaró 2007, a.o).

Goal of the talk: to show that VIEW B can only be maintained for cases without suppletion; that is, for cases in which one of the allomorphs is a subset of the other. Even then only some of the cases have a preferable analysis in terms of floating segments. For the rest of the cases VIEW C is assumed. VIEW A is rejected for lack of explanatory power.

Line of argumentation: first two different cases will be compared for which very similar underlying representations have been proposed (Scheer 2016): Hungarian 3sg suffix (example in (3)), in which one allomorph (*i*) is a subset of the other one (*ja*), and Spanish copulative conjunction (example in (4)), in which the allomorphs are suppletive (/i/ vs. /e/). The corresponding URs (in (5a,b)) contain a linked high vowel and a floating non-high vowel. It will be shown that the analysis works well for Hungarian, but not for Spanish. For Spanish, within an OT approach, DEP-X (against inserting X-slots) has to be ranked above MAX-FLOAT (against floating material) to account for the selection of /i/, the faithful candidate, in the general case (see (6a)). However, when the phonological constraint OCP is violated, this same ranking favors a non-suppletive allomorph */ie/, the desired suppletive output /e/ being harmonically bounded because it violates both DEP-X and MAX-FLOAT (see (6b)). The predicted non-suppletive output is precisely what is found in Hungarian. A floating segment view cannot account either for phonologically optimizing cases with suppletive allomorphs, like the Moroccan Arabic example in (1). As will be shown, the only chance of success is to posit two floating segments, /h/ and /u/ and a morphological constraint of the type REALIZE-MORPHEME that forces the realization of at least one of the exponents. But positing this type of constraint contradicts the strict modularity view. Suppletive cases, like the Moroccan Arabic and Spanish examples, cannot be accounted for by resorting to floating segments. Only a multiple-input approach (VIEW C) can capture the role of phonology in the

selection of allomorphs without running into the problems met by the single-UR-with-floating-segments approach.

(1) Moroccan Arabic optimizing allomorph selection:

    -h after vowel-final stems   *-u* after consonant-final stems

    ʃafʊ-h 'they saw him' (*ʃafu-u)   *ʃaf-u* 'he saw him' (*ʃaf-h)

(2) Tzeltal non-optimizing allomorph selection:

    -oh with monosyllabic stems   *-ɛh* with polysyllabic stems

    s-mah-oh 'he has hit something'   *s-majlij-ɛh* 'he has waited for someone'
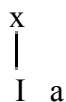
(3) Hungarian 3rd.sg suffix:

    -ja with stems with a back vowel   *-i* with stems with a front vowel

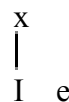   *dob-ja* 'throws it'   *ker-i* 'asks for it'

(4) Spanish copulative conjunction 'and':

    e before a high front vowel   *y* /i/ elsewhere

    e Isidro 'and Isidro'   *y Pedro* 'and Pedro'

(5) a. Hungarian UR for 3sg ind. *-i/-ja*   b. Spanish UR for 'and' *y/e*

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        x                           x
        |                           |
      I  a                        I   e
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(6) Wrong predictions for Spanish suppletive allomorphy

(a) María [i] Pedro

	OCP	DEP-X	MAX-FLOAT
☞ x / | / i e			*
x x / | | / i e		*W	L
x / | / i e		*W	*

DEP-LINK >> MAX-FLOAT

(b) María [e] Isidro

	OCP	DEP-X	MAX-FLOAT
☹ x / | / i e		*	*
😱 x x / | | / i e		*	
x / | / i e	*!		*

harmonically bounded by the second candidate

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