



ing the affixes following non-final conjuncts (Despić, 2017; Erschler, 2018; Guseva and Weisser, 2018). The present squib is concerned with one small set of data from Turkish that has featured in this debate, in which the morpheme at the end of the non-final conjunct is sensitive to the phonological effects of the suspended affix. Guseva and Weisser (2018) have argued that these examples constitute evidence for the ellipsis approach since they demonstrate that the affix must be local to the the non-final conjunct at a previous stage of the derivation before deletion. However, I show that under either analysis, the data remain a genuine puzzle. Solving this puzzle, I suggest, might require a different understanding of the nature of phonological knowledge than standardly assumed.

## 2 The data

I begin by introducing the two relevant sets of examples. First, in example (2), an agreement morpheme is suspended, which is generally possible in Turkish. In this particular case, however, the result is degraded for some speakers:

(2) %[Hastalan-acak ve doktor-a gid-eceğ]-im.

get.sick-FUT and doctor-DAT go-FUT-1SG

‘I will get sick and (I will) go to the doctor.’

(Kornfilt, 2012:185)

Kornfilt (2012) links the unacceptability of (2) to the k-to-zero alternation, a regular phonological rule in Turkish which softens or deletes morpheme-final /k/ in certain contexts (Denwood, 2002; Ünal-Logacev et al., 2019; Zimmer and Orgun, 1999). The output of

the alternation is commonly referred to as soft ‘g’ and represented orthographically as *ğ*. In (2), the vowel-initial 1SG agreement morpheme triggers soft ‘g’ on the preceding future morpheme *-EcEk* in the final conjunct, as boldfaced in (2). If the agreement morpheme is not suspended but also surfaces after the future morpheme at the edge of the non-final conjunct, the latter naturally undergoes the k-to-zero alternation as well. Suspending a consonant-initial agreement morpheme such as 2SG *-sIn* which does not trigger the k-to-zero alternation is perfectly acceptable (3):

- (3) [Hastalan-acak ve doktor-a gid-ecek]-**sin**.  
 get.sick-FUT and doctor-DAT go-FUT-**2SG**  
 ‘You (sg.) will get sick and (you will) go to the doctor.’ (Kornfilt, 2012:185)

Thus, the reason why (2) is perceived as degraded appears to be related to the fact that if the suspended agreement morpheme were present on the first conjunct, the final morpheme would not be realized as *-EcEk* but as *-EcEğ*, undergoing the k-to-zero alternation. However, the latter morpheme cannot surface under suspended affixation either (4):

- (4) \*[Hastalan-acağ ve doktor-a gid-eceğ]-im.  
 get.sick-FUT and doctor-DAT go-FUT-1SG  
 ‘I will get sick and (I will) go to the doctor.’

In fact, while judgments for (2) vary considerably and some speakers find such examples perfectly acceptable, (4) is strongly rejected.



is clearly ungrammatical in the context of suspended affixation (7):

- (7) \*[san ve ban]-a  
you and I-DAT  
'you (sg.) and me (dat.)'

The pattern observed in both of these two cases is summarized in (8):

- (8) a. A'-X & B'-X  
b. %A & B'-X  
c. \*A' & B'-X

The affix X triggers a phonological alternation (vowel harmony or k-to-zero) in the morpheme it attaches to, with A and B representing the conjuncts as they are realized in isolation and A' and B' representing the phonological variants triggered by X. In the unsuspended form (8a), both conjuncts predictably undergo the alternation. If X is suspended and attaches only to the final conjunct, the non-final conjunct is degraded for some speakers when surfacing in its base form A (-*EcEk*, *sen*) (8b) but also clearly ungrammatical for all speakers in the alternative form A' (-*EcEğ*, *san*) (8c).

### 3 A previous analysis

Guseva and Weisser (2018)<sup>1</sup> have claimed that the data presented in the previous section constitute clear evidence that suspended affixation in Turkish is derived via ellipsis. A base generation analysis, they argue, cannot account for the fact that the morpheme end-

ing the non-final conjunct is sensitive to the phonological effect of the suspended affix, given that the latter would never be local to the non-final conjunct at any stage of the derivation. Under an ellipsis analysis, on the other hand, the phonological operations in question – k-to-zero and vowel harmony – can simply be posited to apply before the deletion of the affix, as summarized in (9). The forms *hastalan-acak* and *sen*, perceived as degraded by some speakers, are not generated by this derivation.

- (9) a.  $hastalan-acak-im \rightarrow hastalan-aca\check{g}-im \rightarrow hastalan-aca\check{g}-\cancel{im}$   
 b.  $sAn-A \rightarrow san-a \rightarrow san-a$

I argue that this account faces three problems. To begin with the most obvious one, the account in (9) would predict that the morpheme ending the non-final conjunct should surface in the form it would take when preceding the affix, i.e., *-EcEğ* and *san*. As reported above, these forms are strictly ungrammatical under suspended affixation. Being aware of this issue, Guseva and Weisser argue that *san* violates the rules of vowel harmony on the surface in that the morpheme which would trigger the back vowel is, at the final stage of the derivation, not present locally. A similar argument could be made for *EcEğ*. However, the analysis crucially relies on soft ‘g’ and vowel harmony being established *before* the deletion of the affix. In consequence, it is not at all obvious why the alternations are bled by deletion, and it is logically perfectly possible that they would not. The forms generated in (9) could surface as standard instances of phonological opacity; hence, something else needs to be said.

One possibility is that *hastalan-acağ* and *san* are derivationally licit but violate some independently motivated output constraint. Kabak (2007), while not himself part of the ellipsis camp, has argued that suspended affixation must always result in what he labels a morphological word, but since he does not offer a definition of this notion (Kornfilt, 2012), there is little for us to work with here. Another possibility is that the strings in question are phonologically or prosodically in some way ill-formed, but this does not seem to hold either. As for *-EcEğ*, soft ‘g’ is attested in word-final position elsewhere in Turkish (Ünal-Logacev et al., 2019), as in *ağ* ‘net.’ As for *san*, the latter is not only a perfectly possible word of Turkish but even a very rare, largely unknown actual word meaning ‘title.’ In short, there is no reason to assume that *-EcEğ* and *san* are blocked by an independent constraint unrelated to the phonological alternations in question.

Consequently, we are left with having to somehow stipulate that the k-to-zero alternation and vowel harmony must apply before deletion but then be evaluated again after deletion. However, it is still not clear why such an evaluation should return an error message. The word *san* is not vowel-disharmonious, and *-EcEğ* does not violate a constraint which penalizes [k] in certain environments. Moreover, deletion bleeds the contexts in which such constraints could be evaluated in the first place: the grammar cannot check if the pronoun harmonizes with the dative affix if no dative affix is present, or if the velar is realized correctly before vowel-initial morphemes such as *-Im* if there is no such morpheme. And to reiterate, removing the trigger of an operation does not per se render the output of the operation invalid: opacity is an option.

We can now turn to the second problem faced by Guseva and Weisser’s argument, which is that the forms which would surface without the suspended affix – *-EcEk, sen* – are only moderately to mildly degraded, and for some speakers even perfectly acceptable. Speakers’ judgments for such examples do not fall into two neatly separated camps but span different shades of grammaticality, meaning that the problem is not solved by positing two different grammars. The analysis in (9) does not leave much room for gradience. If the non-final affixes must exert their phonological influence before deleting, *-EcEk* and *sen* should simply never be able to surface.

For completeness’ sake, note that both issues discussed so far persist in a fully constraint-based framework. To implement Guseva and Weisser’s analysis, it would be necessary to let the relevant constraints governing k-to-zero, vowel harmony and suspended affixation apply not in parallel but in the order outlined above. That is, a first set of constraints would need to assess the candidates for well-formedness in terms of k-to-zero or vowel harmony, with the winner of this evaluation then being passed on to a second set of constraints which enforce suspended affixation. As before, the candidates which disobey phonological well-formedness in the pre-ellipsis state – *-EcEk, sen* – are ruled out completely, contrary to fact. In addition, there is again no way of blocking the fully unacceptable candidates *-EcEǵ* and *san*, unless by appealing to a highly ranked MAX constraint penalizing deletion. This, however, would throw out suspended affixation as a whole with the ungrammatical bathwater: if *hastalan-acaǵ-ım* cannot become *hastalan-acaǵ*, and *san-a* cannot become *san* simply because the deletion of the affix is

penalized, suspended affixation should never be licensed in the language. In short, the conundrum in question is independent of the choice between rules and constraints.

Finally, it is worth briefly highlighting that Guseva and Weisser's analysis presupposes a non-standard architecture of the grammar by letting ellipsis apply after phonology. It has long been argued that if suspended affixation, and subword coordination in general, is generated via ellipsis, the deletion operation in question must be sensitive to morpheme boundaries and not simply target phonological segments, as demonstrated by Bruening (2018) in (10):

- (10) a. bi- and a-sexual  
b. \*bi- and ma-son paraphernalia (Bruening, 2018:13)

The idea that a genuinely syntactic, chunk-wise deletion process can reasonably be expected to wait until far-PF operations such as allophony and vowel harmony have been executed should raise some eyebrows. In sum, there are both empirical and theoretical issues with Guseva and Weisser's account. In the next section, I summarize the state of affairs and suggest to turn the problem on its head.

#### **4 Reframing the puzzle**

To recapitulate, we are concerned with the pattern in (8), repeated below as (11):

- (11) a. A'-X & B'-X  
b. %A & B'-X

c. \*A' & B'-X

Guseva and Weisser have argued that the unacceptability of A in (11b) can be accounted for if X is merged locally to A, triggers the change to A' and then deletes. I have argued that besides raising problems for modularity, this leaves the questions open 1. why (11c) is ruled out as well and 2. why (11b) is only mildly degraded, and even fully acceptable for some speakers. Consequently, I propose to take the alternative route and let ellipsis apply before phonology. This not only conforms with a more standard picture of modularity but also naturally derives the clear-cut ungrammaticality of (11c): X deletes (or forgoes spell-out) before it ever has the chance to influence the shape of the preceding morpheme; hence, A' is never generated. The puzzle we now face, of course, is why some speakers nevertheless feel queasy about (11b).

I have no fully-fledged solution to this puzzle to offer but will merely sketch out a possible way of wrapping our collective head around it. What the pattern in (11) suggests is that speakers know that A should actually be realized as A' when adjacent to X, and that this knowledge still kicks in even when X is not pronounced but only silently present at LF. That is, to take the soft 'g' case as an example, speakers not only know under which phonological circumstances /k/ must generally surface as [ǰ] (i.e., simplifying drastically, before a vowel), but they also know more concretely that /k/ must surface as [ǰ] before a 1SG agreement marker. This more concrete fact is not reducible to a purely phonological generalization because if it were, it should not apply whenever said 1SG agreement marker is not present at PF and thus is not the kind of thing that could start

with a vowel in the first place. To put matters differently, it might be that the soft-‘g’-inducing effect of 1SG *-Im* is not purely a function of its vowel-initial shape as captured by the allophonic rule but has become associated with the morpheme as a whole, which allows the effect to sometimes be triggered even by the morpheme’s LF alone.

This idea might become clearer by considering it against the background of phonological rules and suppletive allomorphy. Phonological rules – such as the devoicing of plural [z] after voiceless consonants in English – are assumed to apply in any environment that meets the relevant phonological specifications, independently of the lexical items involved: speakers know that [z] is devoiced after [–voice], not that it is devoiced after *cat*, *map*, etc. In contrast, suppletive allomorphy – such as the plural morpheme being realized as *-ren* after *child* – targets specific lexical items. Vowel harmony and k-to-zero are certainly productive phonological rules, but if this was all they were, speakers should not memorize which lexical items they apply to. Hence, if these items are not realized phonologically, nothing should trigger the rules. In short, what we seem to see here is that processes that are successfully described by a general and productive phonological rule behave at the same time, to some extent and for some speakers, like item-specific suppletive allomorphy. This would give us a very different picture of the nature of phonological knowledge than standardly assumed in generative phonology.

So far, I have framed the puzzle in terms of an ellipsis analysis which arguably offers the more natural perspective. However, matters don’t look too differently from a base-generation point of view: the ungrammaticality of (11c) would fall out equally nat-

urally since X is never present locally to A at any stage of the derivation, while the degraded status of (11b) would be equally puzzling. It might also be possible to pursue the same line of argument as outlined above within a base generation approach: instead of assuming that speakers know A to be realized as A' next to X, one could adapt the story only slightly and posit that speakers know A to be realized as A' when combining semantically with X, knowledge that, again, goes beyond abstract phonological rules. I will not discuss this avenue more in detail but merely wish to point out that the data discussed here are not necessarily as obvious an argument against the base generation approach as they might seem to be.

To conclude, while both an ellipsis and a base-generation analysis can easily derive the ungrammaticality of \*A' & B'-X, the mixed judgments for %A & B'-X are puzzling under either view. In response, I have suggested that the phonological effect of the affix might be associated with the morpheme as a whole and thereby be evoked even by the morpheme's shadowy LF existence, thus blurring the line between phonological rules and suppletive allomorphy. I hope to have offered a fruitful perspective on the data which can be explored further in future research.

## References

Bruening, B. (2018). The lexicalist hypothesis: Both wrong and superfluous. *Language*, 1–42. <https://doi.org/10.1353/lan.2018.0000>

- Denwood, A. (2002). K-Ø: Morpho-phonology in Turkish. *SOAS Working Papers in Linguistics and Phonetics*, 12, 89–98.
- Despić, M. (2017). Suspended morphology in Serbian: Clitics vs. affixes. *Glossa: a journal of general linguistics*, 2(1). <https://doi.org/10.5334/gjgl.130>
- Dolatian, H. (2022). An apparent case of outwardly-sensitive allomorphy in the Armenian definite. *Glossa: a journal of general linguistics*, 7(1). <https://doi.org/10.16995/glossa.6406>
- Erschler, D. (2018). Suspended affixation as morpheme ellipsis: Evidence from Ossetic alternative questions. *Glossa: a journal of general linguistics*, 3(1). <https://doi.org/10.5334/gjgl.501>
- Gong, Z. M. (2021). Postsyntactic lowering and linear relations in Dagur noun phrases. *Glossa: a journal of general linguistics*, 6(1). <https://doi.org/10.5334/gjgl.1397>
- Guseva, E., & Weisser, P. (2018). Postsyntactic reordering in the Mari nominal domain: Evidence from suspended affixation. *Natural Language & Linguistic Theory*, 36, 1089–1127. <https://doi.org/10.1007/s11049-018-9403-6>
- Kabak, B. (2007). Turkish suspended affixation. *Linguistics*, 45, 311–347. <https://doi.org/10.1515/LING.2007.010>
- Kornfilt, J. (2012). Revisiting ‘Suspended Affixation’ and other coordinate mysteries. In L. Brugé, A. Cardinaletti, G. Giusti, N. Munaro, & C. Poletto (Eds.), *Functional heads: The cartography of syntactic structures* (Vol. 7). Oxford UP. <https://doi.org/10.1093/acprof:oso/9780199746736.003.0014>

Ünal-Logacev, Ö., Žygis, M., & Fuchs, S. (2019). Phonetics and phonology of soft ‘g’ in Turkish. *Journal of the International Phonetic Association*, 49, 183–206. <https://doi.org/10.1017/s0025100317000317>

Zimmer, K., & Orgun, O. (1999). Turkish. *Handbook of the International Phonetic Association*, 154–156.

### **Notes**

<sup>1</sup>Guseva and Weisser’s interpretation of the Turkish examples is little more than a side-note in a paper which is primarily concerned with quite different data from suspended affixation in Mari. Nothing in the present squib impacts the actual gist of their work.