

## Introduction

When examining suppletion in comparatives and superlatives, we often take examples which show the ungrammatical forms that we wish to throw out (i.e. \*gooder / \*goodest) for granted; we naturally assume them to be unattested or immediately deemed ungrammatical by native speakers. One of the most common examples of a case in which the (ungrammatical) regular form is attested to is the superlative 'baddest', and its associated comparative 'badder', meaning good or other positive meanings. I will write the associated adjective for 'worst' as  $bad_1$  and the adjective for 'baddest' as  $bad_2$ . The question that arises, when we are faced with the attestation of both 'baddest' and 'worst', is the following: is baddest simply the superlative of  $bad_1$  without suppletion, or is it the regular superlative that arises from a different stem,  $bad_2$ ? And if the latter is the case, then by what mechanism is suppletion arrested?

## Background: \*ABA & the Containment Hypothesis

In Jonathan Bobaljik's *Universals in Comparative Morphology* (2012), he describes the mechanism by which patterns such as good — better — best (ABB) can be generated but those such as good — better — \*goodest (\*ABA) cannot. The attested patterns which Bobaljik outlines are AAA (long — longer — longest), ABB (bad — worse — worst), and ABC (bonus — melior — optimus 'good' in Latin), but importantly \*ABA and \*AAB are not attested and cannot be generated by his machinery. The proposed theory states that, in all languages, the underlying representation of the superlative contains the comparative, which Bobaljik calls the containment hypothesis.

(1) *Examples of overt morphological marking from Hungarian and Persian*

	POS	CMPR	SPRL	
Hungarian	nagy	nagy-obb	leg-nagy-obb	'big'
Persian	kam	kam-tar	kam-tar-in	'little'

In the next example from Czech, we can see both overt morphological marking of the comparative and superlative, but also an ABB pattern of suppletion.

(2) 

	POS	CMPR	SPRL	
Czech	špatn-ý	hor-ší	nej-hor-ší	'bad'

The Czech vocabulary entries for this example according Bobaljik's theory is given below:

SPRL → nej-  
CMPR → -ší  
BAD → hor- / \_\_ ] CMPR ]  
BAD → špatn-

An important assumption that this theory makes is *elsewhere ordering*. The logic of this assumption is that the most specific allomorph in any given context wins. In the context of the Czech example above, both versions of the root for 'bad' compete for insertion in the comparative, but the most specific form, the context-sensitive root 'hor-', is chosen by virtue of elsewhere ordering. In the positive setting, there is no competition at all, as the context for the insertion of 'hor-' is not met, and 'špatn-' wins by default.

### The Problem

We are faced with a difficult theoretical question when a suppletive form, 'worst', exists alongside a non-suppletive form, 'baddest'. This would be akin to having both 'went' and 'goed' be attested to by a large swath of native speakers. If we use Bobaljik's containment hypothesis as our model, then we have a structure within which our problem applies. That is, the question becomes: at what point within the structure of the comparative or superlative is suppletion being blocked, or is it being blocked at all? If we want to assume that suppletion is being blocked (i.e. the root for 'baddest' and 'worst' is the same), then we can point to specific locus within the hierarchical structure of the superlative at which this blocking takes place.

### Hypotheses

- (3) *Complete Stem Replacement*: When a regularized form arises from, or alongside, an irregular form, it does so by creating a new homophonous stem, upon which regular morphology is built.
- (4) *Evaluative Head Intervention*: When a regularized form arises from, or alongside, an irregular form, it does so through the intervention of a speaker-oriented null evaluative morpheme, which impedes the process of suppletion, resulting in regular morphology.
- (5) *Stepwise Replacement*: Regularization occurs differently for speakers at different stages of regularization. *Complete Stem Replacement* is the final stage of regularization, a state at which a new lexical entry has been created. Speakers for which regularization has not fully taken place deal with the existence of regularized homophonous forms through *Evaluative Head Intervention*.

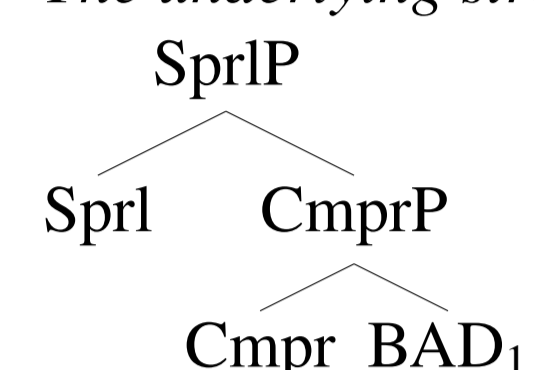
## Complete Stem Replacement and Evaluative Head Intervention

In the examples below, I will outline the underlying structures of 'worst' and 'baddest' according to *Complete Stem Replacement* and *Evaluative Head Intervention*.

### Complete Stem Replacement

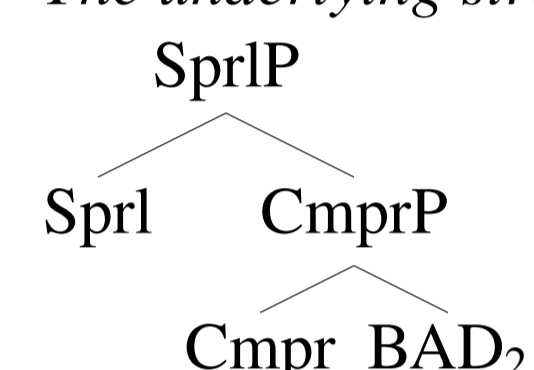
The underlying structures of 'worst' and 'baddest' according to *complete stem replacement* are found below.

(6) *The underlying structure of worst*



$BAD_1 \rightarrow \text{wor- / __ ] CMPR ]}$

(7) *The underlying structure of baddest*



No such replacement rule exists for  $BAD_2$

Some of the best evidence for this hypothesis comes from language change. The Latin positive adjective *bonus*, 'good', has an associated comparative *melior*, 'better', and superlative *optimus*, 'best'. This example exhibits an ABC pattern of suppletion. While this is the case in Latin, the English adjective derived from the superlative *optimus* is not. Rather, we have the adjective 'optimal', the comparative 'more optimal', and the superlative 'most optimal'. The most streamlined answer to the question of how this change occurred is that 'optimal' simply took on a new meaning, and with this new meaning, a new stem was created. If one wants to suppose that optimal is in fact *boni-mal* in disguise, then they would need to, by extension, hypothesize that all language change is simply suppletion to the n-th degree. That is, language change, or borrowing, can never allow for lexicalization, rather; the Pre-Indo-European lexical item is the underlying form.

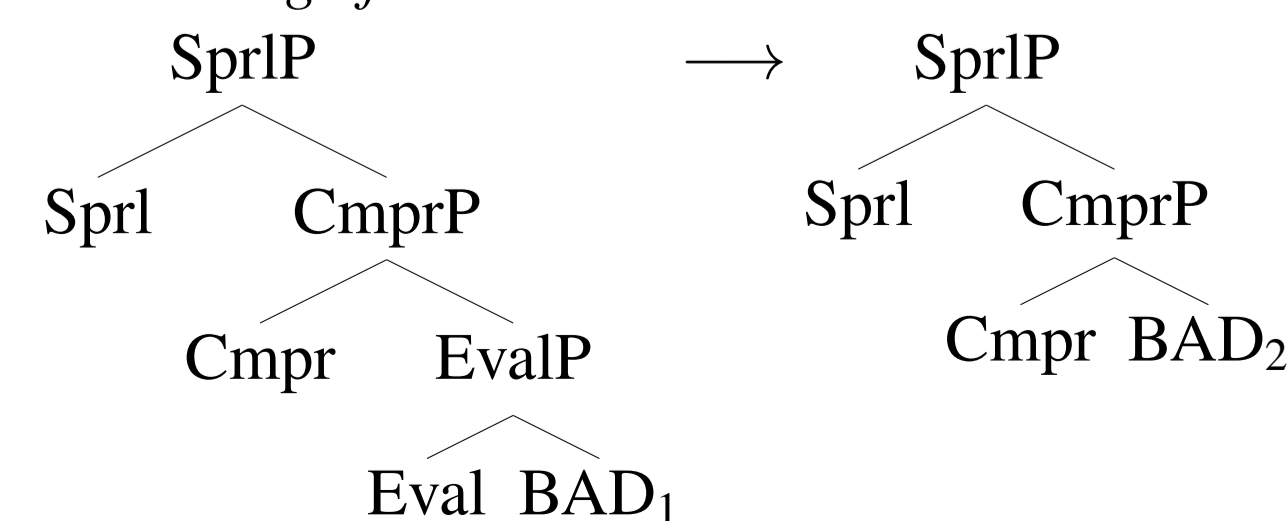
## Stepwise Replacement

The claim of *stepwise replacement* is that speakers, depending on how lexicalized a regularized form is, will either use *complete stem replacement* or *evaluative head intervention* to generate the regularized form. This hypothesis follows closely the stages of singular they usage in Konnelly & Cowper (under review). *Stepwise replacement* argues that speakers at an earlier stage of regularization usage for a particular stem will use *evaluative head intervention* to generate the regularized form, whereas speakers who are at the final stage of usage have completely lexicalized the regularized form, using a different stem entirely.

The logic of this middleground feels solid if we consider the notion that speakers who are less familiar with a regularized form need more processing to either generate or parse a phrase which includes baddest, for example. Speakers for whom this is a common superlative will have less trouble processing the phrase, and therefore need no such evaluative; this would mean they are using less morphological material to process and generate the superlative itself.

Additionally, this approach allows us to make generalizations about language change as a whole, especially as it pertains to synonymous or near synonymous forms. We might wish to claim that at the earliest stages of language shift, speakers who have yet to fully lexicalize a new item require evaluative heads (or another head, if you wish) to aid them in their parsing and generating of this new item. Later, once the new item is fully lexicalized, the evaluative head is no longer required. In the instance of regularized superlatives, the results of each stage on the surface form become conflated because the evaluative morpheme blocks suppletion, resulting in regular morphology, while the replacing of a new stem entirely would result in the same regular morphology

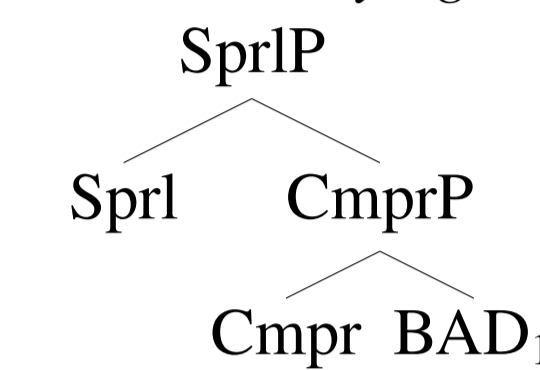
(10) *The change from evaluative head intervention to complete stem replacement over time*



### Evaluative Head Intervention

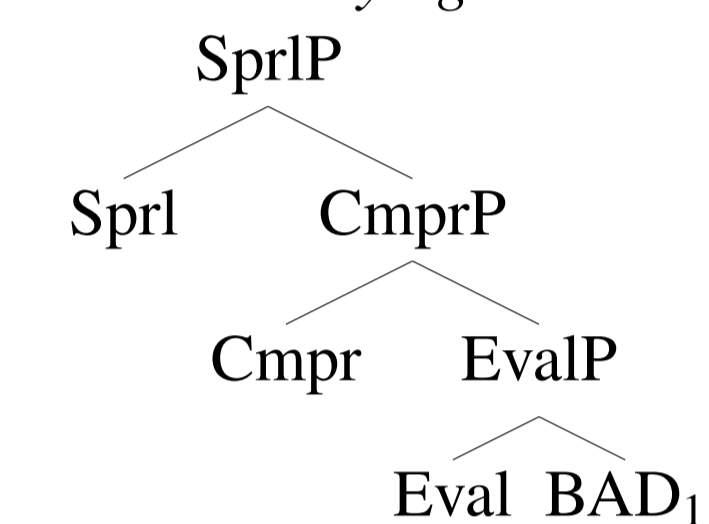
Now, let's examine the underlying structure of 'worst' and 'baddest' according to *evaluative head intervention*.

(8) *The underlying structure of worst*



$BAD_1 \rightarrow \text{wor- / __ ] CMPR ]}$

(9) *The underlying structure of baddest*



The basic structure underlying this hypothesis is visualized in (9). The essential principle is that a speaker-oriented null evaluative morpheme is attached to the adjective, which in turn blocks suppletion from taking place. The context for suppletion (i.e. / \_\_ ] CMPR ] ) is interrupted by the evaluative morpheme, and therefore the elsewhere allomorph is inserted. There is often a distinction in specificity that we observe when comparing irregular and regularized forms. In Norwegian, for example, we have the regular *ver-st* meaning 'worst' and the regularized *vond-este*, meaning 'bad tasting'. It is often the case that more specificity can be correlated with more morphological material. To use a very transparent example, if we take the noun 'chair', this can mean any number of chairs, but a 'highchair' can mean only the specific kind of chair upon which a small child sits to reach their food. The Italian regularized superlative *più buono*, 'tastiest' or 'kindest', relative to its irregular counterpart, *migliore*, 'the best', occurs in more limited contexts than migliore, leading us to deduce that it contains more morphological material, which we may be inclined to call an evaluative morpheme.

## Discussion

If we want to claim that all regularized forms are generated through either *evaluative head intervention* or *complete stem replacement* (which very well may be true), then we cannot make larger claims about language change as a whole. Rather, we would be making a claim about the structure of regularized forms, full stop. This is neither better nor worse (nor badder) than *stepwise replacement*, but it certainly has less of a dynamic scope. This is, in my opinion, what makes *stepwise replacement* so attractive as a hypothesis, as it bridges the early and late stages of language change into a single unified idea. It allows us to make a claim as to the processes by which speakers deal with the slight change in meaning or usage of a lexical item, and the morphological effect this interpretation has (the addition of an evaluative). This brings up an interesting notion as to how speakers at different stages of language change are able to effectively communicate by generating the same surface form, but processing and constructing this form through different means — essentially meeting each other in the middle.

### Abbreviations

CMPR — Comparative  
SPRL — Superlative  
EVAL — Evaluative  
 $BAD_1$  — The hypothesized root from the superlative 'worst'  
 $BAD_2$  — The hypothesized root from the superlative 'baddest'

### References

- Arregi, Karlos and Andrew Nevins. 2014. A monoradical approach to some cases of disuppletion. *Theoretical Linguistics*. 40(3-4): 311-330. Retrieved 17 Mar. 2020, from doi:10.1515/tl-2014-0014
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