

Explaining Bobaljik's Root Suppletion Generalization as an instance of the Adjacency Condition (and beyond)

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Abstract: Bobaljik (2012) observes on the basis of an impressive sample of languages that root suppletion is hardly ever conditioned by degree markers that do not form a word with the root. He calls this the Root Suppletion Generalization (RSG). If true, the generalization provides a possible argument for the lexicalist position: RSG can be seen as a consequence of the lexicalist architecture, where words are built pre-syntax, and therefore syntax cannot influence their shape (Williams 2007). Against this background, this paper discusses evidence (some of it presented already in Bobaljik's work) that the RSG (when stated over words) is empirically (sometimes) too weak and (sometimes also) too strong. In view of these observations, I suggest an account that does not lend any support to lexicalism, simply because the word is not the relevant notion for blocking suppletion.

Keywords: suppletion; comparatives; RSG; adjacency; words

1. Introduction: What is RSG and how to account for it?

This paper is an attempt at a reformulation of a generalization proposed in Jonathan Bobaljik's 2012 book. The book presents a theoretically oriented discussion of a large wealth of empirical data, focusing primarily on the attested and unattested patterns of root suppletion in adjectival degree expressions (of the sort *good*, *better*, *best*). Among the core generalizations of the book, we find the so-called Root Suppletion Generalization (RSG), which is given in (1) below.

- (1) The Root Suppletion Generalization (Bobaljik 2012:ex. 3)
Root suppletion is limited to synthetic (i.e., morphological) comparatives.

The generalization (descriptively) rules out certain patterns of root suppletion as impossible, while allowing others. Specifically, when the comparative is expressed as an affix on the root, root suppletion is possible, see (2a). However, comparatives can also be periphrastic (2b). The RSG says that periphrastic marking never triggers root suppletion; so cases like (2c) should be unattested. Needless to say, Bobaljik's impressive sample of data supports that generalization almost without a single exception.

- | | | | | |
|-----|------------------------|-------------|------------------|-----------------|
| (2) | | POS | CMPR | |
| | (a) English | good | bett-er | (morphological) |
| | (b) English | intelligent | more intelligent | (periphrastic) |
| | (c) the RSG rules out: | intelligent | more comptus | (periphrastic) |

Theoretically, Bobaljik implements RSG in a Distributed Morphology architecture as a restriction on Vocabulary Insertion rules. VI rules specify how syntactic nodes are to be pronounced, and in doing so, they may inspect the surroundings of the particular node. For instance, the adjectival roots *good* and *bett-* seen in (2a) would have their specifications as shown in (3a,b).

- (3) a. *good* = A b. *bett-* = A / _CMPR

(3b) is a contextually dependent spell-out rule for the adjectival root, which applies when the root is embedded under a CMPR head. In this setting, where suppletive forms are introduced by contextually specified VI rules, Bobaljik proposes that if the search space of VI rules would be somehow restricted to periphrastic forms, then the RSG follows.

Following the standard stance in DM and much of other research, Bobaljik understands periphrastic forms (i.e., words) as complex heads, formed either by head-movement or Merger. Hence, the concrete proposal is to restrict the search space to heads; see (4).

- (4) Head locality: Spell-out rules cannot look outside of a complex head
- (a) * alpha ...]_{XP} ... beta
- (b) ok alpha ...]_{X⁰} ... beta

This specific account of (1) raises some theoretical issues. For instance, Julien (2002), Koopman (2005) and a number of other researchers argued that words do not necessarily correspond to heads. If that is so, the question is how to account for (1) without making reference to the head-phrase distinction.¹

In a still wider theoretical perspective, the very statement (1) is actually surprising for any ‘neo-constructivist’ theory that has adopted the move from lexicalism to something like ‘syntax all the way down.’ In order to see why that is so, consider the following passage from Edwin Williams’ (2007) paper *Dumping Lexicalism*. He writes:

The Lexical Hypothesis is about the organization of the grammar into modules. It suggests that the system of words in a language is independent of the system of phrases in a language in a particular way. ...The essence of the hypothesis is the separation of the two systems and the asymmetric relation between them ...[Specifically,] the channel of communication is asymmetrical, by virtue of the fact that phrases are made out of words, but not vice-versa.

The encapsulation prevents analyses. It narrows the scope of word/phrase interaction. For example, the parts of a word are not accessible in the phrasal system, ... From this flows many mundane but important facts (Williams, 2007).

As far as I can tell, the RSG – if correct – would be one of these “mundane but important facts.” If looked upon from the lexicalist perspective, the generalization says that the shape of the morphemes in a word cannot be influenced by a category expressed outside of that word (recall 2c). However, if the very same category is expressed inside that word, it does

¹ In Bobaljik and Harley (2013), the constraint on suppletion is shown to be actually compatible with word-phrase interactions; the idea is that suppletion can be triggered by elements that are inside the maximal projection of the root (which includes, e.g., a phrasal complement). I ignore this in the current paper, and focus rather on the antecedent issue of whether (1) is the right way to look at the data to begin with.

have the power to influence the shape of other morphemes inside that word (2a). This perfectly instantiates the logic of “information encapsulation,” which is at the heart of the lexicalist framework. So the question is how strong is the empirical motivation for (1).

In this paper, I discuss a couple of data points which suggest that (1) should actually be rethought and stated in different terms. This is possible due to the extreme clarity with which Bobaljik presents and discusses his data, which much of this discussion heavily depends upon. Specifically, in section 2, I suggest that some of the core examples discussed in Bobaljik’s book in support of (1) are quite likely indecisive, because they are already ruled out by an independent condition, namely the Adjacency Condition. The crucial theoretical difference in explaining the patterns by adjacency is that adjacency is a concept that does not need to make a distinction between words and phrases, or heads and non-heads; in other words, there is no clear point in favor of the Lexicalist Hypothesis to be made on the basis of such examples. In section 3, I turn to Bulgarian, where Bobaljik (2012) found a surface counterexample to the RSG, one where suppletion seems to be triggered across a word boundary. I show how this particular example may be better explained under the adjacency-based reformulation of RSG.

In section 4, I turn to additional data from Czech and argue that in this language, there seem to be cases where suppletion is blocked ‘inside’ words in a way that is reminiscent of (2c), strengthening the point that the boundaries of words and boundaries for suppletion actually diverge. I follow this track and suggest that these cases can ultimately be attributed to the analytical/fusional expression of categories.

2. “Core RSG” as an instance of adjacency

Let us now turn to some of the core data that motivate Bobaljik’s proposal. The strongest evidence in favor of RSG apparently comes from languages where periphrastic and morphological comparatives can be formed side by side. A couple of examples is given in (5). In these examples, comparative markers are set in bold.

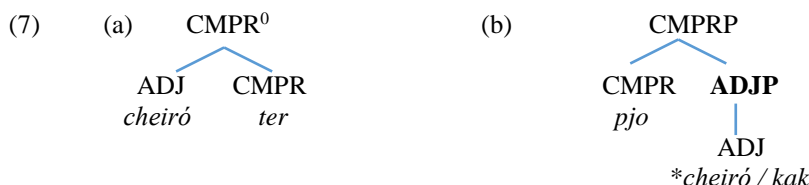
(5)	data from Bobaljik (2012)	POS	CMPR	
a.	Greek	‘good’	kak-ós	cheiró- ter -os (morphological)
			kak-ós	pjo kak-ós (periphrastic)
b.	Georgian	‘good’	k’arg-i	u-k’et- es -i (morphological)
			k’arg-i	upro k’arg-i (periphrastic)

What we see in these languages is that suppletion is found in cases where the comparative marker is an affix on the root. When the comparative marker is a separate word, no suppletion takes place. Obviously, the reason for the regular forms is not that the language would lack a suppletive root in the lexicon. We know that there is one (because we see it in the morphological comparative), it is simply not used. For instance, the Greek pair *kak-ós* – *chiró-ter-os* ‘good – better’ tells us that there must be two VIs as shown in (6):

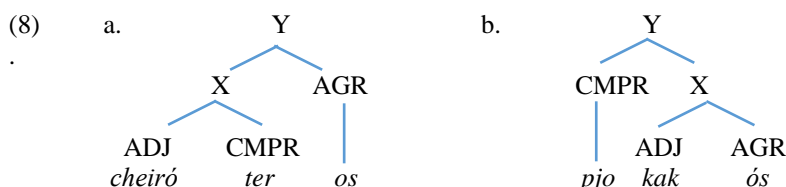
- (6) a. *kak* = ADJ
b. *cheiró* = ADJ / _ CMPR

Now given the presence of suppletive lexical items in the relevant languages, the question is why they are not used in the periphrastic case. Bobaljik’s idea, expressed in (1) and implemented in (4), is that this does not happen because the morphological form

corresponds to a single word, see (7a), while the periphrastic form contains a phrasal node, boldfaced in (7b). This node intervenes in between ADJ and CMPR and blocks suppletion.



However, the two examples are not such a neat minimal pair as indicated in (7). Specifically, in both Greek and Georgian, there is also an agreement marker, which the parses in (7) simply ignore. It is possible that the agreement marker indeed plays no role, but the argument for (1) is exactly as strong as that assumption. If, on the other hand, the agreement marker is present in the structure, then the structures look like in (8a,b) respectively. The non-terminals in the trees are labelled in a way such that the labelling avoids making any reference to the head-phrase distinction.



If (8) is the right way to depict the structures, then there is an additional difference between the two cases. Specifically, ADJ and CMPR are included in a single constituent (labelled X) in (8a), but there is no such constituent in (8b). In derivational terms, this means that the CMPR marker *ter* is combined directly with the root, whereas the derivation of the periphrastic form has to first combine the root with *-ós* and add the comparative only later on. This in turn leads to the conclusion that in the periphrastic case, the root is never combined with the CMPR marker directly, and their interaction may therefore be blocked for this reason. If correct, this could be seen as an instance of the Adjacency Condition (Siegel 1978), according to which (in simple terms) the interaction between morphemes is only allowed if they attach one after the other.

Let me add that the adjacency condition is independently used in Bobaljik's work to rule out suppletion in cases which are analogous to (8b). For instance, the adjective *good-ly* has the comparative *good-li-er* and not **bett-li-er*, because here the comparative morpheme *-er* is separated from the root by *-ly*. What I suggest, then, is that the account of *good-li-er* is simply extended to cases such as (8b), where the role of the intervening *-ly* is taken on by the agreement marker. If this analysis is correct, the generalization in (1) is a red herring; what matters in cases such as (5) is not the fact that the comparative marker is outside of the root's word, but the (structural and derivational) separation of the root from the comparative by an agreement marker.

3. Bulgarian *po-veče* ‘more’

The natural thing to do now is to look at cases where agreement is missing, as in English and other languages like that. If (1) is a side-effect of agreement intervention, we should find cases where – in the absence of agreement – suppletion can be triggered across a word boundary. One such case is in fact found in Bulgarian (and discussed in Bobaljik’s book as a potential counterexample to (1)), and I turn to this example presently.

The first thing to note is that Bulgarian is a language where adjectives generally agree with the head noun, as illustrated in (9).

- (9) a. *dobr-ø* *máž* b. *dobr-a* *žen-a* c. *dobr-o* *dete*
 good-m man good-f woman-f good-n child.n
 ‘a good man’ ‘a good woman’ ‘a good child’

Comparatives are formed by putting the marker *po* to the left of the agreeing adjective. Bobaljik independently shows that the marker *po* is a phrasal marker that can attach to a variety of categories, some of them obviously phrasal; see (10a,b) for examples.

- (10) a. *na* *jug* b. *po* *na* *jug*
 to/on south po to/on south
 ‘to the south’ ‘more southerly (more to the south)’

Given these facts, both adjacency and word-locality predict that there should be no suppletion in Bulgarian. From the perspective of RSG, this is because the comparative marker is periphrastic. From the perspective of the adjacency-based explanation, this is because the agreement marker is closer to the root than the comparative marker, and blocks their interaction, see (11).

- (11)
-
- ```

graph TD
 Root[] --- CMPR[CMPR]
 Root --- X[X]
 CMPR --- po[po]
 X --- ADJ[ADJ]
 X --- AGR[AGR]
 ADJ --- dobr[dobr]
 AGR --- a[a]

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This is borne out, and there are no agreeing suppletive adjectives in BG. So, for instance, one of the most frequently suppletive root (judging from Bobaljik’s sample of languages) is the root for the meaning ‘good,’ whose positive forms are in (9). The comparatives are shown in (12), and we see no root suppletion.

- (12) a. *po-dobr-ø*    *máž*    b. *po-dobr-a*    *žen-a*    c. *po-dobr-o*    *dete*  
       po-good-m    man                po-good-f    woman                po-good-n    child  
       ‘a better man’                ‘a better woman’                ‘a better child’

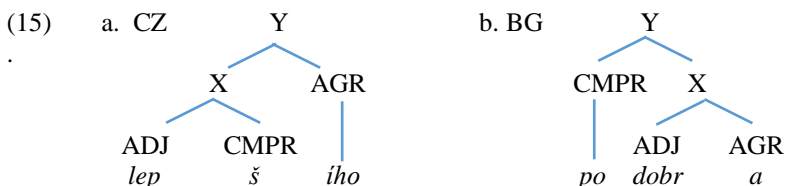
This contrasts with the majority of the other Slavic languages, where comparative markers attach to the root, and may trigger suppletion. To illustrate this, let me turn to Czech which we will look at in the next section in more detail. What we see in this language is that the comparative marker *-š* comes in between the root and the agreement marker, see (13).

- (13) a. star-əho      muže      b. star-š-iho      muže  
old-m.gen    man.gen      old-er-m.gen    man.gen  
,of an old man'      ,of an older man'

Given this, we expect that root suppletion is possible in Czech. And this expectation is borne out, see (14). Note that the positive in (14a) is obviously cognate with the BG root.

- (14) a. dobr-ého      muže      b. lep-š-ího      muže  
good-m.gen    man.gen    bett-er-m.gen    man.gen  
,of a good man‘      ,of a better man‘

The difference between the Czech and Bulgarian comparatives is thus exactly the same as the difference between the two different ways of forming comparatives in Greek, compare (15) with (8), and both theories make the same predictions.



A difference appears when we look at non-agreeing modifiers. A case in point are quantificational adjectives like „much – more – most.“ These show no agreement in BG:

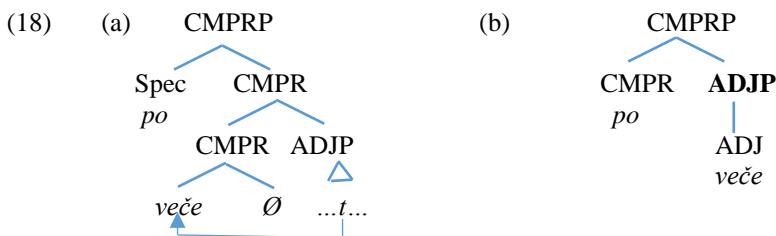
- (16) a. mnogo snjag      b. mnogo voda      c. mnogo drvo  
       much snow.m      much water.f      much wood.n  
       , a lot of snow'      , a lot of water'      , a lot of wood'

Given the absence of agreement, the adjacency based theory would seem to allow for an exception to the general pattern of non-suppletion in exactly such cases. And that is in fact what we find; the form meaning 'more' is suppletive in Bulgarian (and non agreeing):

- (17) a. po-veče    snjag            b. po-veče    voda            c. po-veče    drvo  
          po-more    snow.m            po-more    water.f            po-more    wood.n  
          ,more snow‘            ,more water‘            ,more wood‘

Such data are surface problematic for the RSG. Here it seems that a comparative marker that is phrasal (recall (10b)) apparently triggers suppletion across a word boundary. If one wants to show that phrasal syntax has the power to influence the shape of words, this is the kind of example one would want to find.

Theoretically, it seems tempting to attribute to the comparatives in (17) the structure in (18b), where the comparative *po* takes the ADJP as a complement (with no AGR present). This structure, is, however, identical to (7b), so the phrasal ADJP is expected to block suppletion per (4). This is, however, not the case for an adjacency-based account, which correctly allows the interaction between the two markers.



Bobaljik accommodates this example by proposing a slightly more complex structure for BG. He suggests that *po* is not the true comparative marker, but rather an obligatory reinforcer, which occupies a higher position in the tree than CMRP, perhaps the Spec position, as shown in (18a). In such an analysis, the true comparative marker is silent, and forms a complex head with the adjective. The silent comparative marker (rather than the overt one) is then the real trigger for suppletion.

The account clearly works for the suppletive case, but it no longer explains why BG is special in the context of Slavic, recall the contrast between (12) and (14). The initial insight was that BG differs from related languages like Czech because it has a comparative marker which is periphrastic; that is why BG has so little suppletion compared to the related languages. But this explanation is now lost; according to the new analysis in (18), BG also has a word internal comparative marker. Hence, the proposal fails to explain the observed contrast between BG and the majority of other Slavic languages. The adjacency based alternative fares well: the phrasal nature of the comparative marker leads to it appearing outside of agreement, which (when present) bans suppletion. When agreement is absent, suppletion may still arise.

The place where this brings us is that the evidence for proposing something like the RSG as an independent generalization (over and above the Adjacency Condition) is weakened. The empirical record in favor of RSG which remains after agreement intervention is admitted to be a potential confound, needs to be re-established and re-evaluated, a task which is beyond the scope of this paper. It is clear though that some cases will remain; for instance, the English pattern in (2) does not seem to be due to agreement intervention. What can be said about such cases? The following section presents a short case study of Czech comparatives that may have some bearing on the answer.

#### 4. A restriction on suppletion in Czech comparatives

BG has provided us with a case where the RSG seems to be too restrictive: comparative markers may – in special (and admittedly rare) cases – apparently trigger suppletion across a word boundary. In this section, I discuss data from Czech suggesting that the RSG may also be too permissive. Specifically, I argue that in Czech, there is a systematic restriction on suppletion that is in a way analogous to (2c), but which in fact restricts suppletion inside a single word. This will lead me to formulate a generalization that will apply to both English and Czech, and make the RSG superfluous in (2).

Let me then turn to the Czech data which are going to be crucial for what follows. Below in (19) I give a couple of adjectives in their positive and comparative degree. What we see is that the comparative is formed by attaching *-ějš* to the root. The sign *ě* corresponds to an *e* which triggers the palatalization of the preceding consonant, a process which only happens “word internally.” The bracketed segments are concord markers.

|      |          |            |                |
|------|----------|------------|----------------|
| (19) | gloss    | POS        | CMPR           |
|      | ‘fast’   | rychl-(ý)  | rychl-ejš-(i)  |
|      | ‘red’    | červen-(ý) | červen-ějš-(i) |
|      | ‘stupid’ | hloup-(ý)  | hloup-ějš-(i)  |
|      | ‘wild’   | bujar-(ý)  | bujar-ejš-(i)  |

However, there are reasons to think that *-ějš-* should be split into two morphemes, *-ěj* and *-š*, because each of these markers leads an independent life. The first piece of evidence for this comes from comparative adverbs, seen in the second column of (20). Here the *-š-* part of the comparative adjective is systematically missing.

|      |          |                 |                 |
|------|----------|-----------------|-----------------|
| (20) | gloss    | CMPR ADJ        | CMPR ADV (no š) |
|      | ‘fast’   | rychl-ej-š-(i)  | rychl-ej-(i)    |
|      | ‘red’    | červen-ěj-š-(i) | červen-ěj-(i)   |
|      | ‘stupid’ | hloup-ěj-š-(i)  | hloup-ěj-(i)    |
|      | ‘merry’  | bujar-ej-š-(i)  | bujar-ej-(i)    |

The absence of *-š* is hard to attribute to phonology, because the adverbial marker *-i* has the same quality as the agreement marker *-í*, and the two differ only in length. Therefore, it seems necessary to separate the comparative marker *-ějš* into two parts, *-ěj* and *-š*. The description then says that the first part of the comparative is preserved in the adverb, while the second part is lost. The separation of the comparative into two markers is similar to Bobaljik’s proposal for BG. The difference is that neither *-ěj* nor *-š* can be considered a Spec, because they are both inside one and the same word. Therefore, I propose that in Czech (and probably more generally) there are two comparative heads, CMPR1 and CMPR2; see also the Georgian morphological comparative in (5b).<sup>2, 3</sup>

The second thing to note concerning the separation of *-ěj-* and *-š-* is the fact that some adjectives lack the first part of the comparative marking and only have the second part. (Velars are subject to palatalization before *-š*.) Again, this points to the conclusion that *-ěj* and *-š* are separate, because some forms lack one but have the other.

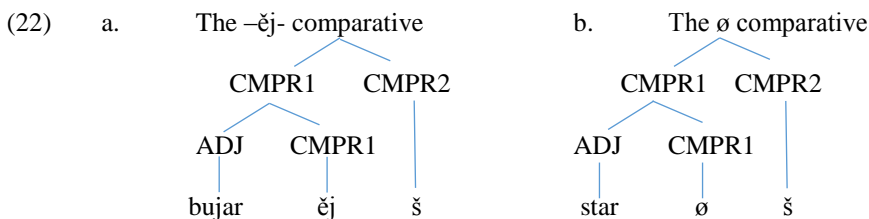
|      |             |          |                |
|------|-------------|----------|----------------|
| (21) | gloss       | POS      | CMPR (no -ěj-) |
|      | ‘old’       | star-(ý) | star-ø-š-(i)   |
|      | ‘hard’      | tvrđ-(ý) | tvrđ-ø-š-(i)   |
|      | ‘expensive’ | drah-(ý) | draž-ø-š-(i)   |
|      | ‘silent’    | tich-(ý) | tiš-ø-š-(i)    |

Let me suppose, for the start, that there is simply a zero allomorph of the CMPR1 *-ěj*, as indicated in the second column. The structures of the two types of comparatives would then look as follows:

<sup>2</sup> For languages, where we only see one of them, we can consider the other as null for the moment; later, I will develop a phrasal-spell-out account of the phenomenon, proposing that CMPR1 and CMPR2 may be pronounced by a single morpheme.

<sup>3</sup> A virtually identical approach is proposed for independent reasons in De Clercq and Vanden Wyngaerd (2016) and embedded within a more general account of adjectival meaning.





The question I turn to now is whether the facts and generalizations that we have seen up to now lead us to expect anything about the distribution of suppletion in the two sets of cases. The answer is, I think, “no.” There is no reason why CMPR1  $-\check{e}j$  should refuse to trigger suppletion, or why its silent counterpart should do so. Similarly, if there is in fact no silent CMPR, and the CMPR1 node is radically missing, then  $-\check{s}$ , being both adjacent to the root as well as being word internal, should be able to trigger suppletion.

However, contrary to the expectations, there is in fact an asymmetry in suppletion patterns between (22a) and (22b). Specifically, suppletion takes place only in cases like (22b), but never in those which are like (22a). The data in (23a) illustrate this for the roots which are “radically” suppletive, the data in (23b) illustrate this for “mildly” suppletive roots. (I consider them both suppletive, endorsing a theory without morphologically triggered readjustment rules.) Just for completeness, I give the forms of the comparative adverbs. These essentially retain suppletion (and are subject to palatalization and vowel lengthening), but lack the  $-\check{s}$  just like their regular counterparts.

| (23) | gloss   | POS     | CMPR    | CMPR.ADV |
|------|---------|---------|---------|----------|
| a.   | ‘good’  | dobr-ý  | lep-š-i | lěp-e    |
|      | ‘bad’   | špatn-ý | hor-š-i | hůř-e    |
| b.   | ‘small’ | mal-ý   | men-š-i | měn-ě    |
|      | ‘big’   | velk-ý  | vět-š-i | víc-e    |

So the generalization is that there is an asymmetry such that  $-\check{s}$  comparatives allow suppletion (even in the absence of  $-\check{s}$ ), while  $-\check{e}j$ - $\check{s}$  comparatives do not. The generalization can be stated in the following shape:

- (24) The Czech suppletion generalization (CSG)  
When the comparative degree is expressed by two overt morphemes in addition to the root, there is no suppletion.

I will try to implement this generalization theoretically in the next section. What is relevant for me now is that if the CSG were generalized beyond Czech, it is also relevant to the English examples in (2), repeated below in (25).

| (25) |                    | POS         | CMPR                     |                  |
|------|--------------------|-------------|--------------------------|------------------|
| a.   | English            | good        | bett- <b>er</b>          | (mono-morphemic) |
|      |                    | intelligent | <b>mo-re</b> intelligent | (bi-morphemic)   |
| b.   | the CSG rules out: | intelligent | mo-re comptus            |                  |

In order to show the relevance of (24), I have to first make explicit an analysis of *more* which I am assuming, namely that *mo-re* is actually bi-componential, corresponding to the comparative form of *much* (Corver 1997, Bobaljik 2012, a.o.). If that is so, the original

data set from (25) shows not only an asymmetry in terms of word internal/word external expression of the comparative, but also an asymmetry in terms of complexity. Specifically, in examples like *mo-re intelligent*, the comparative is expressed by the combination of two markers, and hence the phrase is an instance of a “bi-morphemic” comparative. This means that the lack of suppletion in these cases may be the consequence of (24).

Summing up this section: in Czech, there is a restriction on root suppletion that is unrelated to the word/phrase distinction, but seems to care instead about how many pieces of morphology there are in the comparative. This generalization – applied to the case of English – yields the same cut between *A-er* comparatives and *mo-re A* comparatives as the RSG. Since the latter are bi-morphemic, they are expected to trigger no suppletion. Importantly, the blocking of suppletion has nothing to do with whether the two comparative morphemes are in the same word or not. They happen to be so in Czech, but not in English; yet this is irrelevant for how the condition is applied. In the next section, I turn to some ideas as to what theory may lie behind the existence of the CSG.

## 5. The underpinnings of the Czech suppletion generalization

In Bobaljik’s (2012) book, there are two ways to be suppletive. For some pairs of roots, Bobaljik proposes that the suppletive form corresponds to a lexical item which spells out a complex non-terminal containing the ADJ node and the CMPR feature. Such a pair is for instance *bad* and *worse*, seen in (26a,b). This seems to me an intuitive way of encoding that *worse* conveys the meaning of both *bad* and the meaning of CMPR.

(26) Two ways to suppletion in Bobaljik (2012)

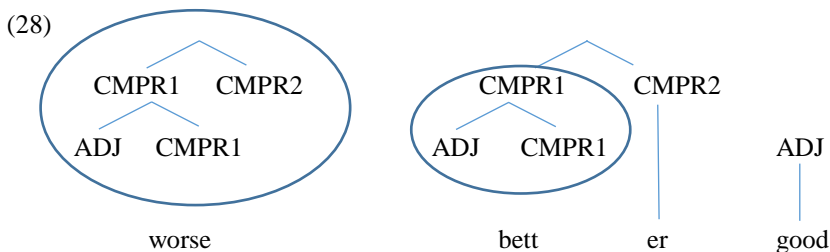
- |    |                                    |    |                                    |
|----|------------------------------------|----|------------------------------------|
| a. | ADJ $\Leftrightarrow$ bad          | c. | ADJ $\Leftrightarrow$ good         |
| b. | [ADJ CMPR] $\Leftrightarrow$ worse | d. | ADJ \_CMPR $\Leftrightarrow$ bett- |

However, for pairs such as *good* – *bett-er*, Bobaljik finds this account unsatisfactory. That is because in the suppletive form *better*, it is only the *bett* part which is suppletive, while the *-er* part is fully regular. Therefore, Bobaljik proposes that in *bett-er*, *-er* spells out the CMPR node as usual, which only leaves the ADJ node for spell out. Hence, there must be a second way to suppletion, which is provided by rules such as (26d). These rules say that the form of the root meaning *good* is *bett* in the context of CMPR. These lexical entries produce structures such as (27), where the arrow indicates that insertion under ADJ is sensitive to the presence of CMPR.

(27)



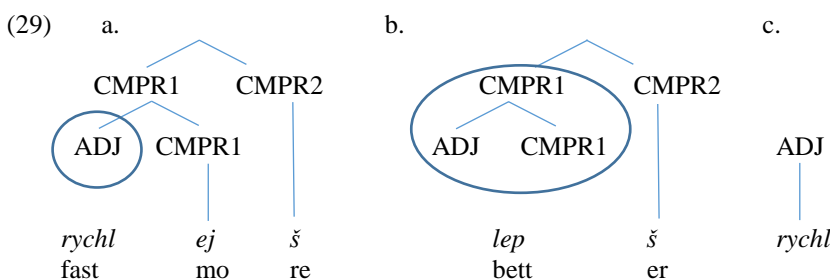
However, once CMPR is split into two parts, it is no longer necessary to use two distinct mechanisms for suppletion. The difference between *bett-* and *worse* can be modelled by the proposal that they differ in how many CMPR heads they spell out. Specifically, *worse* spells out both CMPR1 and CMPR2 with the adjectival root, while *bett-* spells out only the lower CMPR1. This is shown in (28). For clarity, I also illustrate the tree for the simple positive form *good*.



Under this approach, any adjective in English that combines with *-er* must have an entry like *bett*. If that adjective is suppletive, it means that there is an entry like (26a) which only targets the ADJ node. If such an adjective turns out not to be suppletive, it just means that for the ADJ node, there is no dedicated competitor, and that such a root is able to be inserted also under the simple ADJ node. The precise mechanisms for such “shrinking” has been elaborated within the Nanosyntax framework (Starke 2009, Caha 2009) and I refer the interested reader to this literature.

The idea that there is only a single route to suppletion leads to an explanation for the CSG. The starting point is the fact that we get a suppletive root pair only when we have two entries for a root. The positive-degree entry spells out ADJ (see *good* in (28)), and the comparative degree root spells out either one (*bett*) or both (*worse*) comparative heads. In such a scenario, it is impossible to have a suppletive root for the comparative and simultaneously leave *both* comparative heads intact and empty for insertion. And since bi-partite comparative markers may arise only if both heads are in fact available for insertion, we derive the fact that a bi-partite comparative is incompatible with suppletion, the content of CSG.

Let me now turn to Czech and show how exactly the theory derives the forms and the CSG. In (29a), we see the comparative of an adjective that has a bi-morphemic comparative. The root is inserted under ADJ, leaving the two comparative nodes available for insertion. By necessity, the positive degree will have the same root in this case, because the positive corresponds exactly to the node that the root occupies in the comparative, see (29c).



On the other hand, in suppletive forms, the root must be different from the one found in the positive degree, and must therefore spell out minimally CMPR1 (as the root *lep* ‘bett’). If that is so, then it is no longer the case that both CMPR1 and CMPR2 are available for insertion in comparatives, see (29b); the one closer to the root disappears.

The idea that suppletion arises simply due to the spell out of CMPR1 explains also what happens in the comparative adverbs. Recall that the comparative adverb lacks the CMPR2 *-š*, and it is based on the shape of CMPR1. For the suppletive cases, this

entails that we will only see the suppletive root followed by the adverbial marker, but with no –š. This prediction is borne out, see (23): the form is *lép-e* ‘bett-ly’. This seems to confirm the idea that suppletion does not arise as a consequence of a contact between the root and the –š; rather, suppletion is connected to the non-terminal spell out of CMPR1 by the root.

## 6. Conclusions

The goal of this paper was to discuss one of the generalizations proposed in Jonathan Bobaljik’s recent book, namely the RSG. The RSG says that suppletion is restricted by wordhood: comparatives expressed word externally may not condition suppletion. My goal was to suggest that the empirical evidence in favor of such a condition is weaker than initially thought, because agreement markers represent a confounding factor that needs to be controlled for. Further, I suggested a way in which some of the residual cases may be reinterpreted, arguing that the relevant dividing line runs between mono-morphemic and bi-morphemic forms. Whether this reinterpretation can be maintained in the face of the complete record of the phenomenon remains, however, an open question.

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