Markedness and *ABA

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Outline

1. Introduction
2. The comparative: evidence from Czech
3. Suppletion
4. Explaining the CSG
5. The superlative: evidence from Latin
6. Explaining *ABA
7. Conclusion
Outline

1 Introduction
2 The comparative: evidence from Czech
3 Suppletion
4 Explaining the CSG
5 The superlative: evidence from Latin
6 Explaining *ABA
7 Conclusion
Markedness in degree comparison

**Comparative-Superlative Generalisation**

When the comparative has a suppletive form, the superlative will also be suppletive, and vice versa (Bobaljik 2012: 29-30).
Markedness in degree comparison

Comparative-Superlative Generalisation

When the comparative has a suppletive form, the superlative will also be suppletive, and vice versa (Bobaljik 2012: 29-30).

(1)  ABB  good  better  best
    *AAB  good  gooder  best
    *ABA  good  better  goodest
**Markedness and *ABA**

*ABA = ‘Avoid ABA’

= Arrange paradigms in such a way that syncretic forms are contiguous.

⇒ ‘Avoid ABA’ gives Markedness Hierarchy.

(2)  
  a. POS < CMPR < SPRL  
  b. POS < SPRL < CMPR  
  c. *CMPR < POS < SPRL
Markedness hierarchies by the ‘Avoid ABA’ principle

Bobaljik (2012); Wiese (2008); Caha (2009); Smith et al. (2016)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Markedness Hierarchy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>POS &lt; CMPR &lt; SPRL</td>
</tr>
<tr>
<td>Ablaut</td>
<td>PRESENT &lt; PARTICIPLE &lt; PRETERITE</td>
</tr>
<tr>
<td>Case</td>
<td>UNMARKED &lt; DEPENDENT &lt; OBLIQUE</td>
</tr>
<tr>
<td>Case</td>
<td>NOM &lt; ACC &lt; GEN &lt; PREP &lt; DAT &lt; INSTR</td>
</tr>
<tr>
<td>Clusivity</td>
<td>1SG &lt; 1EXCL &lt; 1INCL</td>
</tr>
<tr>
<td>Number</td>
<td>SG &lt; PL &lt; DU</td>
</tr>
<tr>
<td>Number</td>
<td>SG &lt; DU &lt; PL</td>
</tr>
</tbody>
</table>
Question

Have we done anything more than arrange paradigms in an aesthetically pleasing fashion?
### Russian Case endings (Caha 2009)

<table>
<thead>
<tr>
<th></th>
<th>window (sg.)</th>
<th>teacher (pl.)</th>
<th>both</th>
<th>book (sg.)</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM</td>
<td>okn-o</td>
<td>učitel-ja</td>
<td>dv-a</td>
<td>knig-a</td>
<td>st-o</td>
</tr>
<tr>
<td>ACC</td>
<td>okn-o</td>
<td>učitel-ej</td>
<td>dv-a</td>
<td>knig-u</td>
<td>st-o</td>
</tr>
<tr>
<td>GEN</td>
<td>okn-a</td>
<td>učitel-ej</td>
<td>dv-ux</td>
<td>knig-y</td>
<td>st-a</td>
</tr>
<tr>
<td>PREP</td>
<td>okn-e</td>
<td>učitel-jax</td>
<td>dv-ux</td>
<td>knig-e</td>
<td>st-a</td>
</tr>
<tr>
<td>DAT</td>
<td>okn-u</td>
<td>učitel-am</td>
<td>dv-um</td>
<td>knig-e</td>
<td>st-a</td>
</tr>
<tr>
<td>INSTR</td>
<td>okn-um</td>
<td>učitel-ami</td>
<td>dv-umja</td>
<td>knig-oj</td>
<td>st-a</td>
</tr>
</tbody>
</table>

(3) NOM < ACC < GEN < PREP < DAT < INSTR
Russian Case endings

6 cases = 203 syncretism patterns

| CASE  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | ...
|-------|----|----|----|----|----|----|----|--------
| NOM   | A  | C  | C  | C  | A  | D  | D  |        |
| ACC   | B  | A  | D  | D  | B  | A  | E  |        |
| GEN   | A  | B  | A  | E  | C  | B  | A  |        |
| PREP  | C  | A  | B  | A  | A  | C  | B  |        |
| DAT   | D  | D  | A  | B  | D  | A  | C  |        |
| INSTR | E  | E  | E  | A  | E  | E  | A  |        |
The fact that it is at all possible to arrange paradigms in an ‘Avoid ABA’ fashion is not coincidental.

It tells us something:
The fact that it is at all possible to arrange paradigms in an ‘Avoid ABA’ fashion is not coincidental.

It tells us something:

Hypothesis about syncretism

The link between meaning and form is not entirely arbitrary: Syncretism (i.e. formal identity) is revealing about underlying organisation.
Markedness

Markedness Theory (MT)

Markedness is a function of internal complexity.
Markedness

**Markedness Theory (MT)**

Markedness is a function of internal complexity.

- Items higher on the hierarchy have greater internal complexity.
- Internal complexity (among other things) derives *ABA

(4) $\text{POS} < \text{CMPR} < \text{SPRL}$

(5) SPRL has greater internal complexity than CMPR
    CMPR has greater internal complexity than POS
Containment Hypothesis

‘The representation of the superlative properly contains that of the comparative’ (Bobaljik 2012: 4)

(6) A

(7) CMPR

A     CMPR

(8) SPRL

CMPR   SPRL

A     CMPR

Markedness and *ABA bit.ly/2u9SVDF
<table>
<thead>
<tr>
<th>Language</th>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persian</td>
<td>kam</td>
<td>kam-tar</td>
<td>kam-tar-in</td>
<td>‘little’</td>
</tr>
<tr>
<td>Cimbrian</td>
<td>šüa</td>
<td>šüan-ar</td>
<td>šüan-ar-ste</td>
<td>‘pretty’</td>
</tr>
<tr>
<td>Czech</td>
<td>mlad-ý</td>
<td>mlad-ší</td>
<td>nej-mlad-ší</td>
<td>‘young’</td>
</tr>
<tr>
<td>Hungarian</td>
<td>nagy</td>
<td>nagy-obb</td>
<td>leg-nagy-obb</td>
<td>‘big’</td>
</tr>
<tr>
<td>Latvian</td>
<td>zil-ais</td>
<td>zil-âk-ais</td>
<td>vis-zil-âk-ais</td>
<td>‘orange’</td>
</tr>
<tr>
<td>Ubykh</td>
<td>nüs⁵w³</td>
<td>ç’³-a-nüs⁵w³</td>
<td>a-ç’³-a-nüs⁵w³</td>
<td>‘pretty’</td>
</tr>
</tbody>
</table>
Aims of this talk:

- refine Bobaljik’s proposal on the internal complexity of CMPR and SPRL
- develop an analysis of root suppletion in terms on internal complexity
- derive the impossibility of ABA patterns in root suppletion from internal complexity
Outline

1. Introduction

2. The comparative: evidence from Czech

3. Suppletion

4. Explaining the CSG

5. The superlative: evidence from Latin

6. Explaining *ABA

7. Conclusion
Czech regular comparative degree morphology

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bujar-ý</td>
<td>bujař-ejš-í</td>
<td>nej-bujař-ejš-í</td>
<td>‘merry’</td>
</tr>
<tr>
<td>červen-ý</td>
<td>červen-ějš-í</td>
<td>nej-červen-ějš-í</td>
<td>‘red’</td>
</tr>
<tr>
<td>hloup-ý</td>
<td>hloup-ějš-í</td>
<td>nej-hloup-ějš-í</td>
<td>‘stupid’</td>
</tr>
<tr>
<td>moudr-ý</td>
<td>moudř-ejš-í</td>
<td>nej-moudř-ejš-í</td>
<td>‘wise’</td>
</tr>
</tbody>
</table>
Czech regular comparative degree morphology

-ějš-

(10) POS CMPR SPRL bujar-ý bujař-ejš-í nej-bujař-ejš-í ‘merry’
    červen-ý červen-ějš-í nej-červen-ějš-í ‘red’
    hloup-ý hloup-ějš-í nej-hloup-ějš-í ‘stupid’
    moudr-ý moudř-ejš-í nej-moudř-ejš-í ‘wise’

í/ý = adjectival agreement: Case, number, gender
ějš = ěj + š

2 pieces of evidence showing that -ějš- consists of two parts:

1. -ěj- disappears with certain adjectives
2. -š- disappears with comparative adverbs
-ěj- disappears with certain adjectives

(11) | POS  | CMPR     |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>star-ý</td>
<td>star-š-í</td>
</tr>
<tr>
<td>such-ý</td>
<td>suš-š-í</td>
</tr>
<tr>
<td>drah-ý</td>
<td>draž-š-í</td>
</tr>
<tr>
<td>tvrd-ý</td>
<td>tvrd-š-í</td>
</tr>
<tr>
<td>tich-ý</td>
<td>tiš-š-í</td>
</tr>
</tbody>
</table>

- roots ending in velars undergo palatalisation triggered by š
- the distribution of the allomorphs is not phonologically conditioned, e.g. bujař-ejš-í ‘merrier’ vs star-š-í ‘older’ (see also comparison w Polish)
-š- disappears with comparative adverbs

<table>
<thead>
<tr>
<th>CMPR ADJ</th>
<th>CMPR ADV</th>
<th>'redder'</th>
<th>'sillier'</th>
<th>'wiser'</th>
<th>'faster'</th>
</tr>
</thead>
<tbody>
<tr>
<td>červen-ěj-š-í</td>
<td>červen-ěj-i</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hloup-ěj-š-í</td>
<td>hloup-ěj-i</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>moudř-ej-š-í</td>
<td>moudř-ej-i</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rychl-ej-š-í</td>
<td>rychl-ej-i</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Polish

Phonologically conditioned allomorphy of -ejsz-(y) and -sz-(y):

- -ejszy appears when the adjectival root ends in a cluster of either increasing or the same sonority (Rubach 1986).

(13)

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. mądr-y</td>
<td>mądrz-ejsz-y ‘wise’</td>
</tr>
<tr>
<td>rozlegl-y</td>
<td>rozlegl-ejsz-y ‘vast’</td>
</tr>
<tr>
<td>fajn-y</td>
<td>fajni-ejsz-y ‘nice’</td>
</tr>
<tr>
<td>zimn-y</td>
<td>zimni-ejsz-y ‘cold’</td>
</tr>
<tr>
<td>b. głup-i</td>
<td>głup-sz-y ‘silly’</td>
</tr>
<tr>
<td>mil-y</td>
<td>mil-sz-y ‘pleasant’</td>
</tr>
<tr>
<td>tward-y</td>
<td>tward-sz-y ‘hard’</td>
</tr>
<tr>
<td>prost-y</td>
<td>prost-sz-y ‘simple’</td>
</tr>
</tbody>
</table>
### Polish vs Czech

(14) | POS | CMPR |
--- | --- | --- |
Czech: hloup-ý | hloup-ěj-š-í | ‘silli(er)’
Polish: głup-i | głup-sz-y | ‘silli(er)’
Czech: mil-ý | mil-ejší | ‘nice(r)’
Polish: mił-y | mil-sz-y | ‘nice(r)’

(15) | POS | CMPR |
--- | --- | --- |
Czech: červen-ěj-š-í | ‘redder’
Czech: bujar-ěj-š-í | ‘merrier’
Czech: divok-ěj-š-í | ‘wilder’
Conclusion and Proposal

- The alternation between -eĵš- and -š- is morphologically conditioned
- The Czech comparative suffix consists of two parts: ěj+š
- These two parts correspond with two syntactic heads: C1 and C2
- These two heads supersede Bobaljik’s CMPR
Comparative

(16) The -ějš-comparative

\[
\begin{array}{ccc}
\text{A} & \text{C1} & \text{C2} \\
\text{bujar} & \text{ěj} & \text{š}
\end{array}
\]

(17) The -š-comparative

\[
\begin{array}{ccc}
\text{A} & \text{C1} & \text{C2} \\
\text{star} & \emptyset & \text{š}
\end{array}
\]
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Suppletion

Two types:

- Portmanteau suppletion (18a)
- Root suppletion (18b)

(18) | POS | CMPR |
- |     |      |
- a.  | bad  | worse |
- b.  | good | bett-er |
Suppletion in DM

(19)  
\[
\begin{array}{c}
\text{SPRL} \\
\text{CMPR} \\
\text{A} \\
\end{array}
\]

(20)  
\begin{enumerate}
\item \(\sqrt{\text{BAD}} \oplus \text{CMPR} \rightarrow \text{worse}\)
\item \(\sqrt{\text{BAD}} \rightarrow \text{bad}\)
\end{enumerate}

(21)  
\begin{enumerate}
\item \(\sqrt{\text{GOOD}} \rightarrow \text{bett-} / \underline{\text{____}} ] \text{CMPR} \]
\item \(\sqrt{\text{GOOD}} \rightarrow \text{good}\)
Suppletion in DM

(22) Portmanteau suppletion

(23) Root suppletion

CMPR

A

worse

CMPR

CMPR

A

bett

er
Suppletion in DM

- Caha (2016): ‘Do we expect there to be a difference between (16) and (17) with respect to root suppletion?’

(16) The -ějš-comparative

\[
\text{C1} \quad \text{C2}
\]

\[
\text{A} \quad \overset{-j}{\text{C1}} \quad \overset{\varsigma}{\text{C2}}
\]

\[
\text{X} \quad \overset{\varepsilon}{\text{ěj}} \quad \overset{\varsigma}{\text{š}}
\]

(17) The -š-comparative

\[
\text{C1} \quad \text{C2}
\]

\[
\text{A} \quad \overset{\varepsilon}{\text{C1}} \quad \overset{\varsigma}{\text{C2}}
\]

\[
\text{X} \quad \overset{\varepsilon}{\phi} \quad \overset{\varsigma}{\text{š}}
\]

(24) a. \( \sqrt{X} \rightarrow Y / \_ \_ \_ \] C1 ]

b. \( \sqrt{X} \rightarrow X \)
- suppletion is only found with (17)
- -ěj- systematically disappears with suppletive roots:

(25) | POS   | CMPR   | ‘good’
---|-------|--------|---------
   | dobř-ý | lep-š-í   | good’
   | špatn-ý | hor-š-í   | ‘bad’
   | mal-ý   | men-š-í   | ‘little, small’
   | velk-ý   | vět-š-í   | ‘big’
   | dlouh-ý | del-š-í   | ‘long’
   | vysok-ý | vyš-š-í   | ‘tall’
**Comparative Suppletion Generalisation (CSG) (Caha 2016)**

When the comparative degree is expressed by two overt markers in addition to the root, there is no suppletion.

<table>
<thead>
<tr>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘merry’</td>
<td>bujar</td>
<td>ěj</td>
<td>š</td>
</tr>
<tr>
<td>‘bett-’</td>
<td>lep</td>
<td>Ø</td>
<td>š</td>
</tr>
<tr>
<td>‘old’</td>
<td>star</td>
<td>Ø</td>
<td>š</td>
</tr>
<tr>
<td>*</td>
<td>ěj</td>
<td>š</td>
<td>2 markers, suppletion</td>
</tr>
</tbody>
</table>
CSG

- morphological comparative: *fast-er*
- syntactic comparative: *more intelligent*
CSG

- morphological comparative: *fast-er*
- syntactic comparative: *more intelligent*

**Hypothesis**

*More* is bi-componential, like *ej-š.*

(27)  
<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td>bett-er</td>
</tr>
<tr>
<td>much</td>
<td>mo-er</td>
</tr>
</tbody>
</table>
Hypothesis

*More* is bi-componential, like *ej-š*.

(28)  

<table>
<thead>
<tr>
<th>A</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>intelligent</td>
<td>mo-</td>
<td>er</td>
</tr>
<tr>
<td>bett</td>
<td>Ø</td>
<td>er</td>
</tr>
<tr>
<td>fast</td>
<td>Ø</td>
<td>er</td>
</tr>
</tbody>
</table>
## CSG

(29) | A       | C1 | C2                        |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bujar</td>
<td>ėj</td>
<td>š</td>
</tr>
<tr>
<td>lep</td>
<td>ø</td>
<td>š</td>
</tr>
<tr>
<td>star</td>
<td>ø</td>
<td>š</td>
</tr>
<tr>
<td>*</td>
<td>ėj</td>
<td>š</td>
</tr>
<tr>
<td>intelligent</td>
<td>mo-</td>
<td>er</td>
</tr>
<tr>
<td>bett</td>
<td>ø</td>
<td>er</td>
</tr>
<tr>
<td>fast</td>
<td>ø</td>
<td>er</td>
</tr>
<tr>
<td>*</td>
<td>mo-</td>
<td>er</td>
</tr>
</tbody>
</table>
The gap in English in (29) falls under the RSG:

(30)  * \textit{Root Suppletion Generalisation} (Bobaljik 2012)
Root suppletion is limited to synthetic (i.e., morphological) comparatives.
The gap in English in (29) falls under the RSG:

(30)  
Root Suppletion Generalisation (Bobaljik 2012)
Root suppletion is limited to synthetic (i.e., morphological) comparatives.

But the same gap in Czech does not fall under the RSG.
Both gaps fall under Caha’s CSG.

**Comparative Suppletion Generalisation (CSG)**

When the comparative degree is expressed by two overt markers in addition to the root, there is no suppletion.
Outline

1. Introduction
2. The comparative: evidence from Czech
3. Suppletion
4. **Explaining the CSG**
5. The superlative: evidence from Latin
6. Explaining *ABA
7. Conclusion
Nonsuppletive patterns

Explaining the CSG

- There are no zero exponents.
- A single lexical item may realise multiple positions in the syntactic/morphological structure (＝phrasal spellout).
Explaining the CSG

(31) Old (with zeroes)

(32) New (without zeroes)
Explaining the CSG

(32) C2
   /\  \
  C1 /  \ C1
     A    ě

star

(33) C2
   /\  \
  C1 /  \ C1
     A    er

fast
Explaining the CSG

(16) C2
   / \  \
  C1   C2
  /   /
A    C1
   / \  
  bujar ěj

(34) C2
   / \  \
  C1   C2
  /   /
C1  er
   /  
  mo-
Hypothesis

All suppletion is portmanteau suppletion.
Explaining the CSG

(35) C2
   /   \
  C1   C2
 /     /
A     C1

worse

(36) C2
   /   \
  C1   C2
 /     /
A     C1

er

bett
Explaining the CSG

- The table in (37) shows a root-affix tradeoff:

(37) | A | C1 | C2 |
--- | --- | --- | --- |
| bujar | ĕj | š |
| lep | š |
| intelligent | mo- | er |
| bett | er |
| worse | |

(38) a. *lep-ĕj-š-í
b. *mo-er bett
Suppletive patterns

(36) C2
   /   \
  C1   C2
 /     |
A     er

(33) C2
   /   \
  C1   C2
 /     |
A     er

bett

fast

Markedness and *ABA

bit.ly/2u9SVDF
The Lexicon

‘The lexicon contains nothing but well-formed syntactic expressions’ (Starke 2014).
Suppletive patterns

(39)  
\[
\text{good} \\
\text{bett} \\
\text{C1} \\
\text{A} \\
\]

(40)  
\[
\text{fast} \\
\text{C1} \\
\text{A} \\
\]

46/74
Explaining the CSG

(41) *Superset Principle* (Starke 2009; Caha 2009)
(Overspecified) lexical entries spell out syntactic structures that they contain.

(42) *Elsewhere Principle*
If there is more than one candidate for insertion, the lexical item with least superfluous structure wins.
Comparative adverbs

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>Adv</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rychl</td>
<td>ěj</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lep</td>
<td></td>
<td>ě</td>
<td></td>
</tr>
</tbody>
</table>
(44) ADV
   / \ 
   C1 C1
  / \ / \ 
 A  rychl  ěj  ADV  C2

(45) ADV
   / \ 
   C1 C1
  / \ / \ 
 A  lep  ADV  C2
    / 
   ě   

(Caha et al. in preparation)
Outline

1. Introduction
2. The comparative: evidence from Czech
3. Suppletion
4. Explaining the CSG
5. The superlative: evidence from Latin
6. Explaining *ABA
7. Conclusion
Regular degree morphology

(46)  CMPR        SPRL

alt-us   alt-ior   alt-issim-us  'high'
     alt-ius

Markedness and *ABA

bit.ly/2u9SVDF
Regular degree morphology

(46)  

<table>
<thead>
<tr>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>alt-us</td>
<td>alt-ior</td>
</tr>
<tr>
<td>alt-ius</td>
<td>alt-issim-us</td>
</tr>
</tbody>
</table>

alt-us alt-ior alt-issim-us ‘high’

CMPR

- *altius* in NOM/ACC.N, *altior* elsewhere.
- *ior/ius* = *i-or/i-us* = -i-AGR (De Clercq and Vanden Wyngaerd 2017)
Regular degree morphology

(46) \[\text{CMPR} \quad \text{SPRL}\]

<table>
<thead>
<tr>
<th>alt-us</th>
<th>alt-ior</th>
<th>alt-issim-us</th>
<th>‘high’</th>
</tr>
</thead>
<tbody>
<tr>
<td>alt-ius</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CMPR**

- *altius* in NOM/ACC.N, *altior* elsewhere.
- *ior/ius = i-or/i-us = -i-AGR* (De Clercq and Vanden Wyngaerd 2017)

**SPRL**

- *-issimus = -i-ssim-AGR*
- *-ssim- has an allomorph -im-, which appears with (some) suppletive roots (e.g. *opt-im-us ‘best’*)
- *-ssim- = -ss-im-*
### Regular degree morphology

- SPRL is split up in S1 and S2

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>S1</th>
<th>S2</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR</td>
<td>alt</td>
<td>i</td>
<td></td>
<td></td>
<td></td>
<td>or</td>
</tr>
<tr>
<td>SPRL</td>
<td>alt</td>
<td>i</td>
<td>ss</td>
<td>im</td>
<td>us</td>
<td></td>
</tr>
</tbody>
</table>

(47)
Regular degree morphology

alt

S2

S1

C2

S1

im

C1

C2

ss

A

C1

i
Suppletive patterns

Three types:

- ABB(1): some suffixes disappear (suppletion at the S1 level)
- ABB(2): all suffixes present (suppletion at the C1 level)
- ABC (suppletion at both levels)
### Comparative Suppletion

Explaining the CSG

Superlative

Explaining *ABA

Conclusion

References

#### ABB(1)

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>parvus</td>
<td>min-or</td>
<td>min-<em>im</em>-us</td>
</tr>
<tr>
<td>paucus</td>
<td>min-or</td>
<td>min-<em>im</em>-us</td>
</tr>
<tr>
<td>multus</td>
<td>plūs</td>
<td>plūr-<em>im</em>-us</td>
</tr>
</tbody>
</table>

- comparative *-i* is absent (in both CMPR and SPRL)
- superlative *-ss* is absent

[bit.ly/2u9SVDF](bit.ly/2u9SVDF)
**ABB(1)**

- suppletive root *min-* is a portmanteau for $A+C1+C2+S1$

(49)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>S1</th>
<th>S2</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS</td>
<td></td>
<td>parv</td>
<td></td>
<td></td>
<td></td>
<td>us</td>
</tr>
<tr>
<td>CMPR</td>
<td></td>
<td>min</td>
<td></td>
<td></td>
<td></td>
<td>or</td>
</tr>
<tr>
<td>SPRL</td>
<td></td>
<td>min</td>
<td></td>
<td>im</td>
<td>us</td>
<td></td>
</tr>
</tbody>
</table>
suppletive root *min-* is a portmanteau for $A+C_1+C_2+S_1$

<table>
<thead>
<tr>
<th></th>
<th>$A$</th>
<th>$C_1$</th>
<th>$C_2$</th>
<th>$S_1$</th>
<th>$S_2$</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS</td>
<td>parv</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>us</td>
</tr>
<tr>
<td>CMPR</td>
<td>min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>or</td>
</tr>
<tr>
<td>SPRL</td>
<td>min</td>
<td></td>
<td>im</td>
<td></td>
<td>us</td>
<td></td>
</tr>
</tbody>
</table>

This explains:

- the absence of the $S_1$ exponent *-ss-* in *minimus* ‘smallest’
- the absence of the $C_1$ exponent *-i-* in *minor* ‘smaller’
ABB(1)
ABB(2)

(50) | POS | CMPR | SPRL |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>malus</td>
<td>pē̄-j-or</td>
<td>pe-ss-im-us</td>
</tr>
</tbody>
</table>
### ABB(2)

#### Suppletive root

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>malus</td>
<td>pē-j-or</td>
<td>pe-ss-im-us</td>
<td>‘bad’</td>
</tr>
</tbody>
</table>

- Suppletive root *pē-* is a portmanteau for A+C1

#### Table

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>S1</th>
<th>S2</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS</td>
<td>mal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>us</td>
</tr>
<tr>
<td>CMPR</td>
<td>pe</td>
<td>i</td>
<td></td>
<td></td>
<td></td>
<td>or</td>
</tr>
<tr>
<td>SPRL</td>
<td>pe</td>
<td>i</td>
<td>ss</td>
<td>im</td>
<td>us</td>
<td></td>
</tr>
</tbody>
</table>
Introduction
Comparative
Suppletion
Explaining the CSG
Superlative
Explaining *ABA
Conclusion
References

ABB(2)

Markedness and *ABA
bit.ly/2u9SVDF
ABC patterns combine ABB(1) (suppletion at the S1 level) with ABB(2) (suppletion at the C1 level)

(52) \[
\begin{array}{ccc}
\text{POS} & \text{CMPR} & \text{SPRL} \\
\hline
\text{bonus} & \text{mel-i-or} & \text{opt-im-us} & \text{‘good’} \\
\end{array}
\]
ABC

- ABC patterns combine ABB(1) (suppletion at the S1 level) with ABB(2) (suppletion at the C1 level)

(52) \[
\begin{array}{cccc}
\text{POS} & \text{CMPR} & \text{SPRL} \\
\text{bonus} & \text{mel-i-or} & \text{opt-im-us} & \text{‘good’}
\end{array}
\]

- suppletive root \textit{mel-} is a portmanteau for A+C1
- suppletive root \textit{opt-} is a portmanteau for A+C1+C2+S1

(53) \[
\begin{array}{ccccccc}
\text{A} & \text{C1} & \text{C2} & \text{S1} & \text{S2} & \text{AGR} \\
\text{POS} & \text{bon} & \text{} & \text{} & \text{} & \text{} & \text{us} \\
\text{CMPR} & \text{mel} & \text{i} & \text{} & \text{} & \text{} & \text{or} \\
\text{SPRL} & \text{} & \text{opt} & \text{im} & \text{} & \text{} & \text{us}
\end{array}
\]
Outline

1. Introduction
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5. The superlative: evidence from Latin
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7. Conclusion
The impossibility of ABA in Latin follows from

- the standard logic excluding ABA patterns, in particular the Elsewhere Principle
- general principles governing cyclic spellout.
Two cases to consider:

(54)  

a.  *bon-us mel-i-or bon-im-us  
b.  *bon-us mel-i-or bon-i-ss-im-us
*bon-im-us

(55) \[\begin{array}{cccccc}
& A & C1 & C2 & S1 & S2 & AGR \\
\hline
POS & bon & & & & us & \\
CMPR & mel & i & & or & \\
SPRL & bon & & im & & us \\
\end{array}\]

- in SPRL, *bon spells out A+C1+C2+S1
- in POS, *bon loses against *mel because it has more superfluous structure (Elsewhere Principle)
"bon-i-ss-im-us"

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>S1</th>
<th>S2</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS</td>
<td>bon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>us</td>
</tr>
<tr>
<td>CMPR</td>
<td>mel</td>
<td>i</td>
<td></td>
<td></td>
<td></td>
<td>or</td>
</tr>
<tr>
<td>SPRL</td>
<td>bon</td>
<td>i</td>
<td>ss</td>
<td>im</td>
<td>us</td>
<td></td>
</tr>
</tbody>
</table>

- *bon* spells out A, thus winning against *mel-* in POS
- in SPRL, C1 does not get spelled out
Is ABA ruled out in principle?

No, there is an ABA loophole. However, there are two clear predictions for languages with an ABA pattern:

- no ABB
- no morphological containment
Attested ABA: Bulgarian/Macedonian (Bobaljik 2012: 126):

(57) | POS | CMPR   | SPRL       |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bul.</td>
<td>mnogo</td>
<td>po-veče</td>
</tr>
<tr>
<td>Mac.</td>
<td>mnogu</td>
<td>po-veke</td>
</tr>
</tbody>
</table>

‘much/many’
Attested ABA: Bulgarian/Macedonian (Bobaljik 2012: 126):

\[(57)\]

<table>
<thead>
<tr>
<th></th>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bul.</td>
<td>mnogo</td>
<td>po-veče</td>
<td>naj-mnogo</td>
<td>‘much/many’</td>
</tr>
<tr>
<td>Mac.</td>
<td>mnogu</td>
<td>po-veḱe</td>
<td>naj-mnogu</td>
<td></td>
</tr>
</tbody>
</table>

\[(58)\]

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS</td>
<td>mnogo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMPR</td>
<td>veče</td>
<td>po</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPRL</td>
<td>mnogo</td>
<td></td>
<td>naj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPRL</td>
<td>veče</td>
<td></td>
<td>*naj</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
No constituent in (59) contains C2, S1, S2 (excluding C1)
Two predictions:

- no ABB
- no morphological containment of CMPR in SPRL

(60)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPRL-ABB(2)</td>
<td>X</td>
<td></td>
<td></td>
<td>*naj</td>
<td></td>
</tr>
<tr>
<td>SPRL-ABB(1)</td>
<td>X</td>
<td></td>
<td></td>
<td>*naj</td>
<td></td>
</tr>
<tr>
<td>SPRL-CTMT</td>
<td>X</td>
<td></td>
<td>po</td>
<td>*naj</td>
<td></td>
</tr>
</tbody>
</table>

Markedness and *ABA

bit.ly/2u9SVDF
The two predictions are borne out (data from Bobaljik 2012: 45)

- no ABB in Bulgarian/Macedonian
- no morphological containment of CMPR in SPRL

(61)

<table>
<thead>
<tr>
<th>Language</th>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgarian</td>
<td>dobər</td>
<td>po-dobər</td>
<td>naj-dobər</td>
</tr>
<tr>
<td>Czech</td>
<td>dobr-ý</td>
<td>lep-š-í</td>
<td>nej-lep-š-í</td>
</tr>
<tr>
<td>Sorbian</td>
<td>dobr-y</td>
<td>redl-iši</td>
<td></td>
</tr>
<tr>
<td>Serbian</td>
<td>dobar</td>
<td>bol-ji</td>
<td>naj-bol-ji</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>dobr-yj</td>
<td>krašč-yj</td>
<td>naj-krašč-yj</td>
</tr>
<tr>
<td>Russian</td>
<td>xoroš-ij</td>
<td>luč-š-e</td>
<td>(nai-luč-š-ij)</td>
</tr>
</tbody>
</table>
Outline

1. Introduction
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5. The superlative: evidence from Latin
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7. Conclusion
Summary

- ‘Avoid ABA’: arrange paradigms such that syncretic forms are contiguous.
- ‘Avoid ABA’ yields markedness hierarchies.
- Markedness is a function of structural complexity.
- All suppletion is portmanteau suppletion.
- *ABA follows from
  - internal complexity
  - phrasal spellout, Superset Principle, Elsewhere Principle
- *ABA loopholes exist, but in languages where the pattern is attested
  - no ABB can arise
  - no morphological containment is possible
References


Smith, P., Moskal, B., Xu, T., Kang, J. and Bobaljik, J. (2016), Case and number suppletion in pronouns. Ms., Goethe-Universität Frankfurt am Main, Syracuse University, University of Connecticut.

