Unmerging Analytical Comparatives

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Introduction

The comparative: splitting up CMPR

PRE vs POST

Decomposing more

Unmerge: empirical evidence from suppletion

Summary
Introduction

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Summary
Introduction

<table>
<thead>
<tr>
<th>(1)</th>
<th>POS</th>
<th>CMPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNTHETIC</td>
<td>smart</td>
<td>smart-er</td>
</tr>
<tr>
<td>ANALYTIC</td>
<td>intelligent</td>
<td>more intelligent</td>
</tr>
</tbody>
</table>
Root Suppletion Generalisation (RSG) (Bobaljik 2012)

Root suppletion is limited to synthetic (i.e., morphological) comparatives.

(2) | Greek | POS | CMPR |
--- | --- | --- | ---
SYNTHETIC | kak-ós | cheiró-ter-os | ‘bad’
ANALYTIC | kak-ós | pjo kak-ós
ANALYTIC | kak-ós | *pjo cheir-ós

(3) | POS | CMPR |
--- | --- | ---
SYNTHETIC | good | bett-er
ANALYTIC | intelligent | more intelligent
ANALYTIC | good | *more bett
Generalisation on Suppletion and PRE-marking (GOSP)
When there is root suppletion, the marker of the comparative degree cannot occur to the left of the adjectival root.
Aims of this talk:

- Refine Bobaljik’s proposal on the internal complexity of CMPR by splitting up CMPR into C1 and C2.
- Present an account of the distribution of analytic vs synthetic comparative marking in terms of this more fine-grained structure.
- Show that GOSP is valid.
- Explain GOSP as a consequence of:
  - A principled distinction in the way PRE markers differ from POST markers.
  - A restriction against feature overlap.
- Where feature overlap arises, an Unmerge operation removes previously merged heads.
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Unmerge: empirical evidence from suppletion

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The comparative: splitting up CMPR

<table>
<thead>
<tr>
<th></th>
<th>Pos</th>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>bujar-ý</td>
<td>bujař-ejš-í</td>
<td>nej-bujař-ejš-í ‘merry’</td>
</tr>
<tr>
<td></td>
<td>červen-ý</td>
<td>červen-ějš-í</td>
<td>nej-červen-ějš-í ‘red’</td>
</tr>
<tr>
<td></td>
<td>hloup-ý</td>
<td>hloup-ějš-í</td>
<td>nej-hloup-ějš-í ‘stupid’</td>
</tr>
<tr>
<td></td>
<td>moudr-ý</td>
<td>moudř-ejš-í</td>
<td>nej-moudř-ejš-í ‘wise’</td>
</tr>
</tbody>
</table>

í/ý = adjectival agreement: Case, number, gender
Comparative 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
1. -ěj- disappears with certain adjectives (the *star* ‘old’ class)

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>‘old’</th>
</tr>
</thead>
<tbody>
<tr>
<td>star-ý</td>
<td>star-š-í</td>
<td>‘old’</td>
</tr>
<tr>
<td>such-ý</td>
<td>suš-š-í</td>
<td>‘dry’</td>
</tr>
<tr>
<td>drah-ý</td>
<td>draž-š-í</td>
<td>‘expensive’</td>
</tr>
<tr>
<td>tvrd-ý</td>
<td>tvrd-š-í</td>
<td>‘hard’</td>
</tr>
<tr>
<td>tich-ý</td>
<td>tiš-š-í</td>
<td>‘silent’</td>
</tr>
</tbody>
</table>
2. -š- disappears with comparative adverbs

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

(7)
Decomposing A

- the head A has internal structure, and is composed of
  - a root feature $\sqrt{\ }$ (some prefer $\cdot$)
  - a gradability feature $Q$
Modelling the lexical difference between two adjective classes

- different types of adjectival roots realise constituents of different sizes (=phrasal spellout)

(8) \[ \sqrt{Q} \quad C1 \quad C2 \]

<table>
<thead>
<tr>
<th></th>
<th>bujar</th>
<th>ěj</th>
<th>š</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>star</td>
<td></td>
<td>š</td>
</tr>
</tbody>
</table>


Lexical entries for the two adjective classes

(9) QP $\leftrightarrow$ /bujar/  
    Q $\sqrt{\ }$

(10) C1P $\leftrightarrow$ /star/  
    C1
    Q $\sqrt{\ }$
Lexical entries for the comparative markers

(11) $C_1P \iff /\ddj/$

(12) $C_2P \iff /\ddz/$
The *bujar* ‘merry’ class

- adjectival roots of the *bujar* type realise a phrasal node QP
The *bujar* ‘merry’ class

- Adjectival roots of the *bujar* type realise a phrasal node QP

\[
\text{(13)} \quad \text{QP} \quad \text{Q} \quad \sqrt{\text{Q}}
\]

*bujar*
Comparative marking in the *bujar* ‘merry’ class

(14)  
\[
\begin{array}{c}
\text{C1P} \\
\text{C1} \\
\text{QP} \\
\text{Q} \\
\sqrt{\text{bujar}}
\end{array}
\]

(15)  
\[
\begin{array}{c}
\text{C1P} \\
\text{QP} \\
\sqrt{\text{bujar}} \\
\text{Čj}
\end{array}
\]

▶ (movement preferred over direct spellout of C1P by Faithfulness)
Comparative marking in the *bujar* ‘merry’ class

(16)  

(17)
The star ‘old’ class

- adjectival roots of the star type realise a phrasal node QP or C1P

\[(18)\]
\[
\begin{array}{c}
\text{QP} \\
Q \quad \sqrt{\text{star}}
\end{array}
\]

\[(10)\]
\[
\begin{array}{c}
\text{C1P} \\
\leftrightarrow \text{/star/}
\end{array}
\]

\[
\begin{array}{c}
\text{C1} \\
\text{QP} \\
Q \quad \sqrt{-}
\end{array}
\]
The *star* ‘old’ class

- adjectival roots of the *star* type realise a phrasal node QP or C1P

(18) QP
    Q
    \(\sqrt{\quad}\)
    \*star\*

(10) C1P \iff /star/
    C1
    QP
    Q
    \(\sqrt{\quad}\)

(19) The Superset Principle
A lexically stored tree \(\lambda\) can spell out a syntactic constituent \(\sigma\) iff \(\lambda\) contains \(\sigma\) as a subtree.
The *star* ‘old’ class

- in the comparative, adjectival roots of the *star* class spell out the node C1P
- this explains the absence of ėj

(20)
The root-affix tradeoff

- as the root grows, less suffixes get spelled out

(21) bujar
(22) star
The root-affix tradeoff

(23) \[ \begin{array}{cc|cc|c} \sqrt{\vphantom{\text{P}}} & Q & C1 & C2 & \text{‘slippery’} \\ \hline \text{kluz} & k & & & \text{‘merry’} \\ \text{bujar} & \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \text{‘old’} \\ \text{star} & \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \text{‘old’} \\ \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \check{\text{\vphantom{C}}} & \text{‘sharp’ (NE Bohemian)} \\ \end{array} \] (Caha et al. 2017)
English analytic-synthetic comparatives (Caha 2017b)

- analytic-synthetic distinction in the comparative is lexical
- it relates to the size of the root
- the comparative markers likewise also vary in size

(24)

<table>
<thead>
<tr>
<th>√</th>
<th>Q</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
</tr>
<tr>
<td>intelligent</td>
<td>mo</td>
<td>re</td>
<td></td>
</tr>
<tr>
<td>smart</td>
<td>er</td>
<td></td>
<td></td>
</tr>
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English analytic-synthetic comparatives (Caha 2017)  

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<td>int</td>
<td>mo</td>
<td>re</td>
<td></td>
</tr>
<tr>
<td>smart</td>
<td></td>
<td>er</td>
<td></td>
</tr>
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</table>

- the distribution is not determined by phonology, but by frequency (Graziano-King 1999; Bobaljik 2012)
  - *more lax, gaunt, ill, apt*  
  - *older, longer, smarter, thinner*
Lexical entries for the two adjective classes

(25) QP ↔ /intelligent/  (26) C1P ↔ /smart/

Q \sqrt{−}  C1  QP

Q \sqrt{−}
(27)

star / smart

\[ C2P \]
\[ C1P \]
\[ C1 \quad QP \]
\[ Q \quad \sqrt{P} \]
\[ \check{\text{š}} / er \]
Although we assume that more does spell out both C1 and C2, the above structure is plainly incorrect.

Czech comparative marking is entirely suffixal, but the English analytic marker of the comparative precedes the root.

(28)

bujar / intelligent ěj / mo
Although we assume that *more* does spell out both C1 and C2, the above structure is plainly incorrect.

- Czech comparative marking is entirely suffixal, but the English analytic marker of the comparative precedes the root.
A better structure is (29) (to be updated later):

(29)

- C2P
- C2
- C1

- QP
- Q
- $\sqrt{ }$

more

intelligent
Side note: the lexicon

The traditional lexicon
The lexicon is ‘a messy and an ugly place, full of disorder, exceptions, and cacaphony’.

The nanosyntactic Lexicon (Starke 2014)
The lexicon contains nothing but well-formed syntactic expressions.
The traditional lexicon

- The analytic-synthetic distinction: a lexical diacritic\([+M]\) on certain adjectives (which triggers Merger) (Bobaljik 2012: 164)

\[(30)\]
\[\begin{align*}
    & a. \ [\_A \ \text{smart}[+M] ] \\
    & b. \ [\_A \ \text{intelligent}[-M] ]
\end{align*}\]

- The prefix-suffix distinction: lexically specified (Embick and Noyer 2007)

- The suppletive/nonsuppletive distinction: context-sensitive insertion rules

- etc.
The nanosyntactactic lexicon

- The analytic-synthetic distinction: a difference in the size of lexical trees (works for both Czech and English)
- The suppletive/nonsuppletive distinction: a difference in the size of lexical trees
- The prefix-suffix distinction: a difference in the internal makeup of lexical trees
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PRE vs POST

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Summary
PRE vs POST

POST marking:

▸ suffixal
▸ to the right of the stem
▸ displays mirror principle ordering
▸ results from movement of the stem to the left of the POST marker

PRE marking:

▸ prefixal
▸ functional material to the left of the stem
▸ ordering reflects the underlying order of the functional sequence
▸ involves no movement, but a separately merged complex specifier
PRE vs POST

Starke (2018): two modes of combination:

- Merge-F
- Merge-XP
Merge-F

(31)

K3
   K2
      K1
         Z
             Y
                  X
Spellout Algorithm

Merge-F and
a. Spell out FP
b. If (a) fails, move the (spec of the) complement of F, and retry (a)
(32)

```
( root )

Z
|    |
Y    X

( POST marker )

K3
|    |
K2    K1
```
Merge-XP

- Merge-XP merges an XP as a complex specifier
- XP is merged in a separate workspace (by Merge-F), and subsequently gets merged into the main derivation

(33)

![Diagram](attachment:image.png)

PRE marker          root

K3                  Z
K2  K1              Y  X
PRE vs POST

Spellout Algorithm

Merge-F and

a. Spell out FP
b. If (a) fails, move the (spec of the) complement of F, and retry (a)
c. If (b) also fails, spawn a new derivation providing F and merge that with the current derivation, projecting F to the top node.
The prefix-suffix distinction: a difference in the internal makeup of lexical trees

(34) POST: unary bottom

(35) PRE: binary bottom
PRE vs POST

- assume that Merge is always binary
- the spellout algorithm orders Merge-F before spellout
- therefore, in the absence of movement, any lexical item must minimally spell out two features
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Synthetic-analytic comparatives

- C1 can either be provided by the adjectival root, or by *more*
- Analytic comparatives with *more* are triggered by the need to spell out C1, when the adjectival root does not realise C1

(36) \[ \begin{array}{c|c|c|c} \sqrt{ } & Q & C1 & C2 \\ \hline \text{intelligent} & \text{more} & & \\
\text{smart} & & \text{er} & \\
\text{intelligent} & & \text{er} & \\
\end{array} \]
Synthetic-analytic comparatives

- C1 can either be provided by the adjectival root, or by *more*.
- Analytic comparatives with *more* are triggered by the need to spell out C1, when the adjectival root does not realise C1.

\[
\begin{array}{c|c|c|c}
\sqrt & Q & C1 & C2 \\
\hline
\text{intelligent} & \text{more} & & \\
\hline
\text{smart} & \text{er} & & \\
\hline
\text{intelligent} & \text{er} & & \\
\end{array}
\]

(36)

(37)
Decomposing *more*

- *more* realises additional features beyond C1 and C2
- *more* can not only occur as a marker of the comparative with adjectives, but also as an adverb with verbs and as an adnominal modifier

(38)  
  a. They laughed more than I expected.  
  b. She needs to eat more vegetables.
Decomposing *more*

- *more* functions as a gradable adjective itself
- *more* is itself the (suppletive) comparative of *much*: *much–more–most*
- this is further confirmed by the fact that there exist analytic ‘comparatives of inferiority’ with *less* (e.g. *less intelligent*).
- these are absent with synthetic comparatives (*Lesslessness*; Bobaljik 2012: 4):

(39) Lesslessness
    No language has a synthetic comparative of inferiority.

- *more* and *less* have richer internal structure than the suffixal comparative marker *-er*.
Decomposing *more*

- non-gradable adjectives do not form morphological comparatives in English (40a)
- the same adjectives can form analytic comparatives with a (coerced) gradable interpretation (40b) (Matushansky 2013)

(40) a. *?Becky’s uncle is Frencher/righter/maler than Napoleon.
   b. Becky’s uncle is more French/more right/more male than Napoleon.
Decomposing *more*

- nongradable adjectives lack the gradability feature Q
- this would imply that they spell out just $\sqrt{\text{}}$
- but adjectival roots need to spell out minimally two features
- the nongradable adjectives need to spell out more than $\sqrt{\text{}}$
- there is an additional feature between Q and $\sqrt{\text{}}$: a feature STATE (or S)

(41) 

```
(41) QP
    Q
      S
      SP
        French
      S
    S
```
Decomposing *more*

\[(42)\]

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>Q</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>er</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Decomposing *more*

- *more* is the suppletive comparative of *much*
- a suppletive form contains a pointer to its nonsuppletive counterpart
- the lexical entry of *more* contains a pointer to the entry for *much*

(43)  
```
C1P ↔ /bett/  
   \  
  C1   good
```

(44)  
```
C2P ↔ /more/  
   \  
  C2   C1P  
      \  
     C1   much
```
Decomposing *much*

- A handful of English adjectives allow modification by *much* (Bresnan 1973; Corver 1997)

(45)  
  a. *much intelligent/smart/kind/ ...
  b. much alike/different/afraid/aware/reliant/
      dependent/offended

- *much* is a PRE marker, therefore it must spell out at least two features

- These features are Q and S:

(46)  

\[
\begin{array}{c}
\text{QP} \\
\text{Q} \\
\text{S} \\
/much/
\end{array}
\]
Decomposing *more*

(44) \[ C2P \leftrightarrow \text{/more/} \]

(46) \[ QP \leftrightarrow \text{/much/} \]

\[ \begin{array}{c}
\text{C2} \\
\text{C1P} \\
\text{C1} \quad \text{much}
\end{array} \]
Decomposing *more*

(47)  C2P  $\iff$  /more/

        C2     C1P
        /   \
        |     |
        C1    QP  $\iff$  /much/
          /   \
         Q    S
Feature overlap

- Can PRE markers recurse the functional sequence already spelled out in the main spine?

(48)
Feature overlap

Can PRE markers recurse the functional sequence already spelled out in the main spine?

(48)

We shall argue that such overlap is in fact disallowed.
Two options for structure removal

- remove structure from the main spine

(49)
Two options for structure removal

- remove structure from the specifier:

\[(50)\]

\[
\text{C2P} \quad \text{QP} \\
\text{C2} \quad \text{SP} \\
\text{C1} \quad \text{Q} \\
\text{more} \quad \text{S} \\
\text{intelligent} \\
\]

This second option is problematic for the Superset Principle because structure removal would have to 'eat away' structure at the bottom of the specifier, which is arguably countercyclic.
Two options for structure removal

- remove structure from the specifier:

$\text{(50)}$

![Diagram of tree structures]

- this second option is problematic for the Superset Principle
  - structure removal would have to ‘eat away’ structure at the bottom of the specifier, which is arguably countercyclic
Interim summary

We have argued that

- feature overlap is banned
- structure removal takes place in the main spine
Interim summary

We have argued that
  ▶ feature overlap is banned
  ▶ structure removal takes place in the main spine

We shall now argue that
  ▶ empirical evidence from patterns of suppletion supports this
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Unmerge: empirical evidence from suppletion

Generalisation on Suppletion and PRE-marking (GOSP)
When there is root suppletion, the marker of the comparative degree cannot occur to the left of the adjectival root.
only two languages (Bulgarian/Macedonian) have a PRE comparative marker

no comparative suppletion in Bulgarian/Macedonian in GOOD

(51)

<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>Macedonian</td>
<td>dobro</td>
<td>po-dobro</td>
<td>naj-dobro</td>
</tr>
<tr>
<td>Czech</td>
<td>dobr-ý</td>
<td>lep-ší</td>
<td>nej-lep-ší</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>
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<td>krašč-yj</td>
<td>naj-krašč-yj</td>
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<tr>
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<td>krašč-yj</td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td>xoroš-ij</td>
<td>luč-še</td>
<td>(nai-luč-š-ij)</td>
</tr>
</tbody>
</table>
Bobaljik’s (2012) data

<table>
<thead>
<tr>
<th>MEANING</th>
<th>N</th>
<th>POST</th>
<th>PRE</th>
<th>CIRCUM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOOD</td>
<td>32</td>
<td>24</td>
<td>–</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>BIG</td>
<td>7</td>
<td>5</td>
<td>–</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>BAD</td>
<td>22</td>
<td>19</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>SMALL</td>
<td>9</td>
<td>6</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>MUCH, MANY</td>
<td>31</td>
<td>25</td>
<td>1</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>101</td>
<td>79</td>
<td>1</td>
<td>4</td>
<td>17</td>
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</table>
Bobaljik’s (2012) data

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<tr>
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</tr>
<tr>
<td>BIG</td>
<td>7</td>
<td>5</td>
<td>–</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>BAD</td>
<td>22</td>
<td>19</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>SMALL</td>
<td>9</td>
<td>6</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>MUCH, MANY</td>
<td>31</td>
<td>25</td>
<td>1</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>101</td>
<td>79</td>
<td>1</td>
<td>4</td>
<td>17</td>
</tr>
</tbody>
</table>

- out of a total of 101 suppletive triplets, only 1 is PRE-marked, while 4 are circumfixal
- the circumfixal cases are spurious
Georgian

(53) pos CMPR
    k’argi-i u-mjob-es-i ‘good’
    u-k’et-es-i

it is tempting to think of the double marking as realisations of C1 and C2 ...

(54)     A   | C1 | C2
         es   | u  |
         u    | es |
 k’argi   |     |
 mjob     |     |
 k’et     |     |
it is tempting to think of the double marking as realisations of C1 and C2 ...

... but probably incorrect
Gippert (1996):

- ‘The Old Georgian comparatives, nowadays used with a ‘superlative/elative’ function only, were commonly formed with a prefixed u- plus a suffix that appeared either as a shorter variant, -e or -o, or as a longer, declinable one, ēs-

- …these formations are restricted to superlative/elative functions today while real comparatives are built analytically ...

- …the prefix appearing as u- [...] is identical with the versional marker of a third person in finite verbal forms and refers to the object of the comparison’
Old Georgian

(55)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C1</th>
<th>C2</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>k’argi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mjob</td>
<td>es</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td></td>
<td>k’et</td>
<td>es</td>
<td>u</td>
<td></td>
</tr>
</tbody>
</table>
Svan

(56) POS CMPR ezär xo-č-a ‘good’ xo-č-ēl

(57) POS CMPR ēl dzyəd xo-š-a ‘big’ xo-š-ēl

Bobaljik (2012: 108n):
‘Gudjedjiani and Palmaitis (1986) list four suppletive comparatives in Svan; but note also that the comparative forms in xo-…-a for these adjectives are used with a positive sense, and subject to further comparative formation in xo-...-el. It may thus be synchronically inappropriate to include these forms here.’
Gippert (1996: 37)
‘It can easily be shown that the synthetic type was inherited from Proto-Kartvelian, given that similar formations exist in the Zan languages as well as Svan; cp. Megrelian u-magal-aš-i ‘highest (from magal-i ‘high’), Laz u-ʒgi-š-i ‘best’, or Svan xo-lqmaš-a ‘strongest (from əqmăš ‘strong’). Curiously enough, all sister languages show the same tendency as Georgian does, in that these formations are restricted to superlative/elative functions today while real comparatives are built analytically: Megrelian uses umosi, Laz, dido, and Svan, gun or ʒəd as equivalents of Georgian upro.’
<table>
<thead>
<tr>
<th></th>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bg.</td>
<td>mnogo</td>
<td>po-veče</td>
<td>naj-mnogo</td>
</tr>
<tr>
<td>Mac.</td>
<td>mnogu</td>
<td>po-veke</td>
<td>naj-mnogu</td>
</tr>
</tbody>
</table>

Bulgarian/Macedonian

(58)
### Bulgarian/Macedonian

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

- problematic for GOSP, but we set this case aside, and we take GOSP to be a valid generalisation for now
Suppletion

- suppletive roots (like English *bett*) spell out C1P (Caha 2017a; De Clercq and Vanden Wyngaerd 2017)

(59)
Suppletion

- Confirmed by the absence of ěj in Czech suppletive comparatives

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>‘Meaning’</th>
</tr>
</thead>
<tbody>
<tr>
<td>dobr-ý</td>
<td>lep-š-í</td>
<td>‘good’</td>
</tr>
<tr>
<td>špatn-ý</td>
<td>hor-š-í</td>
<td>‘bad’</td>
</tr>
<tr>
<td>mal-ý</td>
<td>men-š-í</td>
<td>‘little, small’</td>
</tr>
<tr>
<td>velk-ý</td>
<td>vět-š-í</td>
<td>‘big’</td>
</tr>
<tr>
<td>dlouh-ý</td>
<td>del-š-í</td>
<td>‘long’</td>
</tr>
<tr>
<td>vysok-ý</td>
<td>vyš-š-í</td>
<td>‘tall’</td>
</tr>
</tbody>
</table>
Suppletion

(61)

\[ \text{lep} \]

\[
\begin{array}{c}
\text{C}1 \\
\text{QP} \\
\text{Q} \\
\text{S} \\
\sqrt{} \\
\text{C}1\text{P} \\
\text{C}2\text{P} \\
\text{C}2 \\
\end{array}
\]
GOSP follows from this analysis, provided feature overlap is not permitted.

Consider the hypothetical situation in (62), which is not allowed:

(62)

PRE marker

suppletive root
if structure could be removed from the specifier (countercyclically), a PRE marker could combine with a suppletive root

(63)
Unmerge removes C1, Q, S from the main spine

the remaining √ is too small to spell out a suppletive root

(64)

PRE marker

nonsuppletive root
the proposal works for English, where *more* is really big, and the adjective must consequently be small (too small to be suppletive)

(65)
the proposal works for English, where *more* is really big, and the adjective must consequently be small (too small to be suppletive)

![Diagram of the proposal structure]

> but can this conclusion be generalised?
languages may have PRE markers which are smaller than English more
but given the Spellout Algorithm, a PRE marker needs to realise at least two features
therefore, the adjectival root is maximally QP (=nonsuppletive)

(66)

PRE marker

nonsuppletive root
GOSP is derived, assuming

- an fseq $<C2, C1, Q, S, \sqrt{\cdot}>$
- the Spellout Algorithm and the binary nature of Merge
- a restriction against feature overlap
- an Unmerge operation, which removes structure from the main spine
Introduction

The comparative: splitting up CMPR

PRE vs POST

Decomposing *more*

Unmerge: empirical evidence from suppletion

Summary
Summary

- GOSP: PRE marking is incompatible with suppletion
- GOSP follows from a ban against overlapping derivations
- an Unmerge operation may remove previously generated structure in the main derivation
- adjectival roots may vary in size
- comparative marking varies in function the size of the root: as the root grows, the marking shrinks, and vice versa
- POST marking involves lexical items with a unary bottom, PRE marking lexical items with a binary bottom
References


