Splitting up the comparative
Evidence from Czech

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CRISSP10
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Outline

1. The Containment Hypothesis
2. Czech morphology
3. The internal structure of the comparative
4. Suppletion
5. Suppletion meets Negation
6. Conclusions
Outline

1. The Containment Hypothesis
2. Czech morphology
3. The internal structure of the comparative
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Containment Hypothesis

‘The representation of the superlative properly contains that of the comparative’ (Bobaljik 2012: 4)
(1) \[ \text{CMPRP} \]
\[ \begin{array}{c}
\text{A} \\
\text{CMPR}
\end{array} \]

(2) \[ \text{SPRLP} \]
\[ \begin{array}{c}
\text{CMPRP} \\
\text{SPRL}
\end{array} \]
\[ \begin{array}{c}
\text{A} \\
\text{CMPR}
\end{array} \]
Morphological evidence

<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>nüs₁⁰⁰</td>
<td>ç’a-nüs₁⁰⁰</td>
<td>a-ç’a-nüs₁⁰⁰</td>
<td>‘pretty’</td>
</tr>
</tbody>
</table>
CSG

Comparative-Superlative Generalisation

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

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

(3) ABB good better best
*ABA good better goodest
*AAB good gooder best
Cmpr = C1 + C2

Our claim

- the Cmpr head is to be split up into two distinct heads, C1 and C2 (see also Caha 2016)

(4)  

```
   C2P
   /   \
C2    C1P
    /     \  
   C1      A
```
### Evidence comes from Czech

- regular degree morphology
- root suppletion in degree morphology
- the interaction of negation and root suppletion in degree morphology
Outline

1 The Containment Hypothesis
2 Czech morphology
3 The internal structure of the comparative
4 Suppletion
5 Suppletion meets Negation
6 Conclusions
Regular comparative degree morphology

-ějš-

<table>
<thead>
<tr>
<th></th>
<th>Pos</th>
<th>Cmpr</th>
<th>Sprl</th>
</tr>
</thead>
<tbody>
<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>
Regular comparative degree morphology

-ějš-

(6)  
<table>
<thead>
<tr>
<th>Pos</th>
<th>Cmpr</th>
<th>Sprl</th>
</tr>
</thead>
<tbody>
<tr>
<td>červen-ý</td>
<td>červen-ějš-í</td>
<td>nej-červen-ějš-í</td>
</tr>
<tr>
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<td>hloup-ějš-í</td>
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</tr>
<tr>
<td>moudr-ý</td>
<td>moudř-ejš-í</td>
<td>nej-moudř-ejš-í</td>
</tr>
</tbody>
</table>

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

5 pieces of evidence showing that -ějš- consists of two parts (ĕj+š)

1. -ěj- disappears with suppletive roots
2. -ěj- disappears in cases where the root shortens
3. -ěj- can disappear non-predictably
4. -ěj- disappears with de-adjectival verbs
5. -š- disappears with comparative adverbs
-ěj- disappears with suppletive roots

<table>
<thead>
<tr>
<th>Pos</th>
<th>Cmpr</th>
<th>Sprl</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dobr-ý</td>
<td>lep-š-í</td>
<td>nej-lep-š-í</td>
<td>‘good’</td>
</tr>
<tr>
<td>špatn-ý</td>
<td>hor-š-í</td>
<td>nej-hor-š-í</td>
<td>‘bad’</td>
</tr>
<tr>
<td>mal-ý</td>
<td>men-š-í</td>
<td>nej-men-š-í</td>
<td>‘little, small’</td>
</tr>
<tr>
<td>velk-ý</td>
<td>vět-š-í</td>
<td>nej-vět-š-í</td>
<td>‘big’</td>
</tr>
</tbody>
</table>
-ěj- disappears in cases where the root shortens

<table>
<thead>
<tr>
<th>Pos</th>
<th>Cmpr</th>
</tr>
</thead>
<tbody>
<tr>
<td>dlouh-ý</td>
<td>del-š-í</td>
</tr>
<tr>
<td>blízk-ý</td>
<td>bliž-š-í</td>
</tr>
<tr>
<td>vys-ok-ý</td>
<td>vyš-š-í</td>
</tr>
</tbody>
</table>

‘long’

‘close’

‘tall’
-ěj- can disappear non-predictably

\[
\begin{array}{ccc}
\text{Pos} & \text{CMPR} & \text{Translation} \\
\hline
\text{star-ý} & \text{star-ʃ-í} & \text{‘old’} \\
\text{such-ý} & \text{suʃ-ʃ-í} & \text{‘dry’} \\
\text{drah-ý} & \text{draž-ʃ-í} & \text{‘expensive’} \\
\end{array}
\]
-ěj- disappears with de-adjectival verbs

(10) | **Pos** | **Cmpr** | **Verb** | **Verb** |
--- | --- | --- | --- | --- |
such-ý | suš-š-í | (u-)suš-i-t | ‘dry’ |
mokr-ý | mokř-ejš-í | (za-)mokř-i-t | ‘wet’ |
levn-ý | levn-ějš-í | z-levn-i-t | ‘cheap’ |
drah-ý | draž-š-í | z-draž-i-t | ‘expensive’ |
dlouh-ý | del-š-í | z-dlouž-i-t, z-del-š-i-t | ‘long’ |
-š- disappears with comparative adverbs

(11)  

<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>‘more stupid’</td>
</tr>
<tr>
<td>moudř-ej-š-í</td>
<td>moudř-ej-i</td>
<td>‘wiser’</td>
</tr>
</tbody>
</table>
Preliminary Conclusion

The regular comparative suffix consists of two parts: ěj+š
Nanosyntax

- One Feature, One Head (OFOH)
- Postsyntactic Lexicon
- Phrasal Spellout
- Language variation can be reduced to the size of lexically stored trees (Starke 2011)
Outline

1. The Containment Hypothesis
2. Czech morphology
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The Czech regular comparative

(12)

\[ C2P \Rightarrow -\text{š}- \]

\[ C2 \quad C1P \Rightarrow -\text{ěj}- \]

\[ C1 \quad QP \Rightarrow moudr- \]

\[ Q \quad aP \]

\[ a \quad \sqrt{P} \]
The lexicon

(13)  a.  \(< /moudr-/, [QP Q [aP a [\sqrt{P} \sqrt{]}]], \text{ WISE} >

b.  \(< /-\varepsilon j-/, [C1P C1 ] >

c.  \(< /-\check{s}-/, [C2P C2 ] >
The derivation-1

(14)  C1P
     /\   /
    C1  QP ⇒ moudr-
       \   /
        Q  aP
           \  /
            a  √P

< /moudr-/ , [QP Q [aP a [√P √ ]]], WISE >
< /-ěj-/ , [C1P C1 ] >
The derivation-2 (spellout-driven movement)

(15)

\[
\text{moudr-} \leftrightarrow \text{QP} \quad \text{C1P} \quad \text{QP} \\
\text{Q} \quad \text{aP} \quad \text{C1P} \Rightarrow -\ddot{e}j-
\]

\[
\text{a} \quad \sqrt{P} \quad \text{C1}
\]

\[\langle /-\ddot{e}j-/, [\text{C1P C1}] \rangle\]
The derivation-3

(16)

\[
\text{moudr-} \leftarrow \text{QP} \quad \text{C1P} \Rightarrow -ěj-
\]

\[
\text{QP} \quad \text{C1P} \Rightarrow -ěj-
\]

\[
\text{Q} \quad \text{aP} \quad \text{C1}
\]

\[
\text{a} \quad \sqrt{P}
\]

\[
< /-š-/, [C_{2P} \ C2 ] >
\]
The derivation-4

(17)

\[
\text{moudr-} \iff \text{QP} \quad \text{C1P} \quad \text{C2P} \\
\text{Q} \quad \text{aP} \quad \text{C1} \quad \text{C2} \\
\text{a} \quad \sqrt{P}
\]

\(< \sim /-\tilde{\mathbf{s}}-/, [\text{C2P C2 }] >\)
The derivation-5

\[(18)\]

\[
\begin{array}{c}
\text{nej-} \iff \text{SprlP} \\
\text{Sprl} \\
\text{moudr-} \iff \text{QP} \\
\text{Q} \\
\text{aP} \\
\text{a} \\
\sqrt{P}
\end{array}
\]

\[
\begin{array}{c}
\text{SprlP} \\
\text{C2P} \\
\text{C1P} \\
\text{C2P} \Rightarrow -\check{\varepsilon}- \\
\text{C2}
\end{array}
\]

\[
< \neg\text{-nej-}, [\text{SprlP Sprl}] >
\]
English

(19) \[ C2P \Rightarrow -er \]
\[ \quad \]
\[ \quad \]
\[ \quad C2 \quad C1P \]
\[ \quad \]
\[ \quad \]
\[ \quad \]
\[ \quad C1 \quad QP \Rightarrow wise \]
\[ \quad \]
\[ \quad \]
\[ \quad \]
\[ \quad Q \quad aP \]
\[ \quad \]
\[ \quad \]
\[ \quad \]
\[ \quad a \quad \checkmark \]

(20) a. \[ < \text{wise}/, [QP Q [aP a [\checkmark_P \checkmark ]]] > \]
b. \[ < \text{-er}/, [C2P C2 [C1P C1] ] > \]
(21) \[ \text{SprlP} \Rightarrow \text{-est} \]

- Sprl
- C2P
- C2
- C1P
- C1
- QP \Rightarrow \text{wise}
- Q
- aP
- a
- \sqrt

(22) \[ < /-\text{est}/, [\text{SprlP} \text{ Sprl} [\text{C2P} \text{ C2} [\text{C1P} \text{ C1}]]] > \]
## Language variation

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>wise</td>
<td>wis-er</td>
<td>wis-est</td>
</tr>
<tr>
<td>moudr-ý</td>
<td>moudřej-š-í</td>
<td>nej-moudřej-š-í</td>
</tr>
</tbody>
</table>

- the difference between Czech and English is entirely located in the size of the lexically stored trees
Outline

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Suppletion

Two types:

- Portmanteau suppletion (24a)
- Root suppletion (24b)

(24) | Pos | Cmpr | Sprl |
--- | --- | --- | --- |
| a. | bad | worse | worst |
| b. | good | bett-er | be(t)-st |
Portmanteau suppletion: pointers

(25)  a.  $<_{\text{WORSE}} /\text{worse}/, [C_2P \text{ BAD ER }]>$

b.  $<_{\text{BAD}} /\text{bad}/, [QP Q [aP a \sqrt{P} ]]>$

c.  $<_{\text{-ER}} /-\text{er}/, [C_2P C2 [C_1P C1 ]]>$
Portmanteau suppletion: pointers

(25) a. \(<_{\text{WORSE}} /\text{worse}/, [C_2P \text{ BAD ER }] >\) 
b. \(<_{\text{BAD}} /\text{bad}/, [QP Q [aP a \sqrt{P} ]] >\) 
c. \(<_{\text{-ER}} /-\text{er}/, [C_2P C2 [C_1P C1 ]] >\)

(26) 

\[
\text{bad} \iff QP_{\text{BAD}} \\
\text{bad} \iff C2P \Rightarrow \text{worse} \\
C2P_{\text{ER}} \Rightarrow -\text{er} \\
\text{bad} \iff C1P \\
\]
Root Suppletion in Distributed Morphology

- root suppletion = contextual allomorphy
Root Suppletion in Distributed Morphology

- root suppletion = contextual allomorphy

(27) $A \quad \sqrt{\text{GOOD}}$

(28) $\text{CmprP}$

\[ A \quad \sqrt{\text{GOOD}} \]

(29) a. $\sqrt{\text{GOOD}} \rightarrow \text{be(t)-} / \quad [\text{Cmpr} ]$

b. $\sqrt{\text{GOOD}} \rightarrow \text{good}$
Nanosyntax

- lexical insertion is uniquely governed by the *Superset Principle* and the *Elsewhere Principle*
- rules of contextual allomorphy are unavailable
- the contrast between *good* and *bett-* is one of internal makeup
  - *good* spells out QP
  - *bett-* spells out C1P (and contains a pointer to *GOOD*)
- we will argue that this approach is superior to the DM one
better

(30)  \[
\text{C2P} \Rightarrow -er
\]
\[
\text{C2} \quad \text{C1P} \Rightarrow \text{bett-}
\]
\[
\text{C1} \quad \text{QP} \Rightarrow \text{good}
\]
\[
\text{Q} \quad \text{aP}
\]
\[
a \quad \sqrt{P}
\]

(31)  a.  \[
<_{\text{GOOD}} /\text{good}/, [\text{QP} \; \text{Q} \; [\text{aP} \; \text{a} \; [\sqrt{P} \; \sqrt{P}]]] >
\]
b.  \[
<_{\text{BETT}} /\text{bett-}/, [\text{C1P} \; \text{C1} \; \text{GOOD}] >
\]
This analysis explains 1

5 pieces of evidence showing that -ějš- consists of two parts (ěj+š)

① -ěj- disappears with suppletive roots
② -ěj- disappears in cases where the root shortens
③ -ěj- can disappear non-predictably
④ -ěj- disappears with de-adjectival verbs
⑤ -š- disappears with comparative adverbs
**containment**

Czech

The comparative

Suppletion

Suppletion meets Negation

Conclusions

References

*lep*- eats up *-ěj-*

(32) \[ C2P \Rightarrow -š- \]

\[ \begin{array}{c}
\text{C2} \\
\text{C1P} \Rightarrow \text{lep-} \\
\end{array} \]

\[ \begin{array}{c}
\text{C1} \\
\text{QP} \Rightarrow \text{dobr-} \\
\end{array} \]

\[ \begin{array}{c}
\text{Q} \\
\text{aP} \\
\end{array} \]

\[ \begin{array}{c}
a \\
\sqrt{P} \\
\end{array} \]

(33) a. \[ <_{\text{DOB}} /\text{dobr-}/, [\text{QP Q [aP a [\sqrt{P} \sqrt{ ]}] >} \]

b. \[ <_{\text{LEP}} /\text{lep-}/, [\text{C1P C1 DOBR }] > \]

c. \[ < /-ěj-/, [\text{C1P C1 }] > \]

d. \[ <_{š} /-š-/, [\text{C2P C2 }] > \]
This analysis explains 1

1. -ěj- disappears with suppletive roots

- -ěj- spells out the C1 feature
- the suppletive root lep- also spells out C1
- therefore, suppletive roots are predicted to be incompatible with -ěj- in principle
DM: contextual allomorphy

(34)

```
A  C1
\sqrt{GOOD}  C2
      C1P  C2P
```

References

DM: contextual allomorphy

(35)  a. \( \sqrt{GOOD} \rightarrow \text{lep-} / \ldots \)  \( \text{C1} \)  
      b. \( \sqrt{GOOD} \rightarrow \text{dobr-} \)

(36)  a.  \( \text{C1} \rightarrow \text{ěj} \)  
      b.  \( \text{C1} \rightarrow \emptyset / \text{lep} \ldots \)

- a rule like (36b) must be duplicated for each suppletive root
- nothing in principle prevents the existence of suppletive roots with -ěj-: these would simply be cases where a rule like (36b) would be lacking
- there is no principled explanation for the systematic absence of -ěj- with suppletive (and shortened) roots
The analysis explains 2

5 pieces of evidence showing that -ějš- consists of two parts (ěj+š)

1. -ěj- disappears with suppletive roots
2. -ěj- disappears in cases where the root shortens
3. -ěj- can disappear non-predictably
4. -ěj- disappears with de-adjectival verbs
5. -š- disappears with comparative adverbs

⇒ shortened roots (like suppletive roots) spell out C1P
(8) \begin{tabular}{ll}
\textbf{Pos} & \textbf{Cmpr} \\
dlouh-ý & del-š-í \ ‘long’ \\
blízk-ý & bliž-š-í \ ‘close’ \\
vys-ok-ý & vyš-š-í \ ‘tall’ \\
\end{tabular}

(37) a. $<_{\text{DLOUH}} /dlouh-/, [QP Q [aP a [\sqrt{P} \ \checkmark ]] ] >$

b. $<_{\text{DEL}} /del-/, [C1P C1 DLOUH ]] >$
The analysis explains 3

5 pieces of evidence showing that -ějš- consists of two parts (ěj+š)

1. -ěj- disappears with suppletive roots
2. -ěj- disappears in cases where the root shortens
3. -ěj- can disappear non-predictably
4. -ěj- disappears with de-adjectival verbs
5. -š- disappears with comparative adverbs

⇒ the relevant lexical items spell out C1P
(9)  | Pos  | Cmpr  |
     | star-ý | star-š-í  | ‘old’ |
     | such-ý  | suš-š-í   | ‘dry’ |
     | drah-ý  | draž-š-í  | ‘expensive’ |

(38)  | < /star-/, [C₁P C₁ [QP Q [aP a [√P √ ]]]] > |

- *star*- can spell out C₁P, causing -ěj- to disappear in the comparative
- *star*- does not contain a pointer
- in virtue of the Superset Principle, *star*- can also spell out QP
- the difference between these adjectives and the ones that do take -ěj-š- is a matter of lexical idiosyncrasy
5 pieces of evidence showing that -ějš- consists of two parts (ěj+š)

1. -ěj- disappears with suppletive roots
2. -ěj- disappears in cases where the root shortens
3. -ěj- can disappear non-predictably
4. -ěj- disappears with de-adjectival verbs (difficult)
5. -š- disappears with comparative adverbs (easy)
5 pieces of evidence showing that -ějš- consists of two parts (ěj+š)

1. -ěj- disappears with suppletive roots
2. -ěj- disappears in cases where the root shortens
3. -ěj- can disappear non-predictably
4. -ěj- disappears with de-adjectival verbs (difficult)
5. -š- disappears with comparative adverbs (easy)

We skip 4 and 5 here
...and move on to the interaction with negation ...
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1. The Containment Hypothesis
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A hypothetical case

The hypothetical case we wish to consider is one of an adjective with the following properties:

1. a morphological comparative
2. a negative prefix
3. root suppletion

- *unhappier* has 1 and 2, but not 3
- *ungood* would have all three (if it existed!)
- Czech has the equivalent of *ungood*
Unhappier has – theoretically speaking – 2 possible bracketings:

(39)  

a. \[ \text{MORE} \ [ \text{NOT happy} ] \]  
b. \[ \text{NOT} \ [ \text{MORE happy} ] \]
Unhappier has – theoretically speaking – 2 possible bracketings:

(39)  
   a.  [ MORE [ NOT happy ]]  
   b.  [ NOT [ MORE happy ]]  

- these bracketings correspond with two readings  
- the readings are distinguished in contexts where A and B are equally unhappy  
- only (39b) can describe such a situation.
(40) A is *unhappier* than B.

- this is incompatible with a situation where A and B are equally unhappy
- the structure (39a) is correct for *unhappier*

(41) [ -er [ un [ happy ]]]
\[[\text{unhappi}]\text{er}\]
A hypothetical case

(43)

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>SPRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td>better</td>
<td>best</td>
</tr>
<tr>
<td>ungood</td>
<td>unbetter</td>
<td>unbest</td>
</tr>
<tr>
<td>ungood</td>
<td>ungooder</td>
<td>ungoodest</td>
</tr>
</tbody>
</table>

- we predict ungooder rather than unbetter
- this follows from the structure in (30), and the lexical items in (31) (repeated from above)
better

(30) C2P ⇒ -er

C2         C1P ⇒ bett-

C1        QP ⇒ good

Q         aP

a          √P

(31) a.  <GOOD /good/, [QP Q [aP a [√P √ ]]] >
b.  <BETT /bett-/, [C1P C1 GOOD ]] >
ungooder/*unbetter

(44) C2P ⇒ -er

C2C1P ⇒ bett-

C1NegP

NegP ⇒ un-

NegNeg′

NegQP

QP ⇒ good

QP

aP

a√/P
- if NegP intervenes between C1P and QP, *bett*- can no longer spell out C1P
- this is because the syntactic tree now contains a feature Neg between C1 and Q
- as a result, C1P contains a Neg feature, which is not part of the lexical makeup of *bett*-
- as a result, *bett*- cannot spell out C1P
- in contrast, there is no problem with *un-good-er*: each exponent spells out a constituent in the syntactic tree
An actual case

Czech confirms our prediction

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>‘good’</th>
</tr>
</thead>
<tbody>
<tr>
<td>dobr-ý</td>
<td>lep-š-í</td>
<td>‘good’</td>
</tr>
<tr>
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<td>*ne-lep-š-í</td>
<td>‘bad’</td>
</tr>
<tr>
<td>ne-dobr-ý</td>
<td>ne-dobř-ej-š-í</td>
<td>‘bad’</td>
</tr>
</tbody>
</table>

(pos cmpr)

Suppletion meets Negation

Conclusions

References

An actual case

Czech confirms our prediction

<table>
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<tr>
<th>POS</th>
<th>CMPR</th>
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Czech confirms our prediction

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<td>ne-dobř-ej-š-í</td>
<td>‘bad’</td>
</tr>
</tbody>
</table>

(pos cmpr)
An actual case

Czech confirms our prediction

(45)  | POS  | CMPR       | ‘good’ |
      | dobro-ý | lep-š-í | ‘good’ |
      | nedobro-ý | *ne-lep-š-í | ‘bad’ |
      | nedobro-ý | nedobr-jej-š-í | ‘bad’ |

*ne-dobr-jej-š-í

[un good er]

= [more [not good]]

= worse

= incompatible with a situation where A and B are equally bad
(46) $C2P \Rightarrow -\check{s}$

$C2 \quad C1P \Rightarrow -\check{e}j$

$C1 \quad NegP$

$NegP \Rightarrow ne-$

$Neg$ $QP$

$QP \Rightarrow dobr-$

$QP \Rightarrow dobr-$

$Neg'$

$Neg$

$QP$

$Q$

$Q$

$aP$

$a$

$\sqrt{P}$

$\langle LEP /lepo/, [C1P C1 DOBR ] \rangle \rangle$
Another actual case

(47) Czech

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>‘easy’</th>
</tr>
</thead>
<tbody>
<tr>
<td>snadn-ý</td>
<td>snaz-š-í</td>
<td>‘easy’</td>
</tr>
<tr>
<td>ne-snadn-ý</td>
<td>*ne-snaz-š-í</td>
<td>‘difficult’</td>
</tr>
<tr>
<td>ne-snadn-ý</td>
<td>ne-snadn-ej-š-í</td>
<td>‘difficult’</td>
</tr>
</tbody>
</table>

(48) German

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>‘good’</th>
</tr>
</thead>
<tbody>
<tr>
<td>gut</td>
<td>besser</td>
<td>‘good’</td>
</tr>
<tr>
<td>ungut</td>
<td>*unbesser</td>
<td>‘bad’</td>
</tr>
<tr>
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<td>‘bad’</td>
</tr>
</tbody>
</table>
A twist

(49) | POS     | CMPR    |
-----|--------|---------|
mal-ý | men-š-í | ‘small’ |
ne-mal-ý | ne-men-š-í | ‘not small, big’ |
ne-mal-ý | *ne-mal-š-í |
A twist

<table>
<thead>
<tr>
<th>POS</th>
<th>CMPR</th>
<th>‘small’</th>
</tr>
</thead>
<tbody>
<tr>
<td>mal-ý</td>
<td>men-š-í</td>
<td>‘small’</td>
</tr>
<tr>
<td>ne-mal-ý</td>
<td>ne-men-š-í</td>
<td>‘not small, big’</td>
</tr>
<tr>
<td>ne-mal-ý</td>
<td>*ne-mal-š-í</td>
<td></td>
</tr>
</tbody>
</table>

- the suppletion is unexpected
- the meaning is different
A twist

(49) \[
\begin{array}{ll}
\text{POS} & \text{CMPR} \\
\text{mal-ý} & \text{men-š-í} \quad \text{‘small’} \\
\text{ne-mal-ý} & \text{ne-men-š-í} \quad \text{‘not small, big’} \\
\text{ne-mal-ý} & *\text{ne-mal-š-í}
\end{array}
\]

- the suppletion is unexpected
- the meaning is different

\textit{ne-men-š-í}

\begin{itemize}
  \item [not [more small]]
  \item not smaller
  \item compatible with a situation where A and B are equally big
\end{itemize}
Negative adjectives spell out a Neg feature

*mal-ý* ‘small’

(50) \[ \text{NegP} \Rightarrow \text{mal-} \]

\[
\text{Neg} \quad \text{QP} \\
\text{QP} \quad \text{aP} \\
\quad \text{a} \\
\quad \sqrt{\text{P}}
\]

\[
<_{\text{MAL}} /\text{mal-}/, [\text{NegP} \quad \text{Neg} \quad [\text{QP} \quad \text{Q} \quad [\text{aP} \quad \text{a} \quad [\sqrt{\text{P}} \quad \sqrt{\text{P}}]]]] >
\]
men-š-í ‘smaller’

(51)  
\[ \text{C2P} \Rightarrow -š- \]

\[ \text{C2} \quad \quad \text{C1P} \Rightarrow \text{men-} \]

\[ \text{C1} \quad \quad \text{NegP} \Rightarrow \text{mal-} \]

\[ \text{Neg} \quad \quad \text{QP} \]

\[ \text{Q} \quad \quad \text{aP} \]

\[ \text{a} \quad \text{vP} \]

\[ <_{\text{MEN}} /\text{men-}/, [\text{C1P C1 MAL }] > \]

\[ <_{\text{š}} /-š-/, [\text{C2P C2 }] > \]
(52)

```
NegP
  /   
NegP  → ne-
     /   \   |
     Neg  QP  Q
     /   \  /  |
     Neg  Q   C2P  → -š-
              /   |
              C2  C1P  → men-
                      /   |
                      C1  NegP  → mal-
                                        /   |
                                        Neg  QP
                                        /   |
                                        Q   aP
                                        /   |
                                        a   √P
```

NegP  \ne-  Neg'

NegP  \neg P

Neg  \neg

QP  \neg

Q  \neg

C2P  \neg

C1P  \neg

men-

mal
• because the low Neg position is already taken up by *men/mal*, the *ne*-prefix has to take scope in a higher position
• (52) has the bracketing [[NOT [[MORE [[small]]]]]]
• this bracketing accounts for the meaning of *ne-men-š-í* ‘not smaller’ (A and B can be equally big)
• it also accounts for the presence of root suppletion
Outline

1. The Containment Hypothesis
2. Czech morphology
3. The internal structure of the comparative
4. Suppletion
5. Suppletion meets Negation
6. Conclusions
Conclusions

- Bobaljik’s Cmpr needs to be split up into two distinct heads/features, C1 and C2
- Czech morphology provides evidence for two distinct exponents corresponding to these two features: ěj+š
- we developed an analysis of root suppletion that accounts for the systematic absence ěj with suppletive and shortened roots in Czech comparatives, which also allows for lexically determined cases of ěj-absence
- the interaction of negation with suppletion provides support for our analysis
Thank you!

Pavel Caha
References


Starke, Michal. 2011. Towards an elegant solution to language variation: Variation reduces to the size of lexically stored trees. Ms., Tromsø University.