

Approaching Allomorphy

Topic 2: Root Suppletion and Stem Allomorphy

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- (1) Under what conditions may one morpheme (M1) condition allomorphy for (including the appearance or absence of) another morpheme (M2)?

1 Structure

- (2) Suppletion
- | | POS | CMPR | |
|-----------------|--------------------------|-----------------|--------------------|
| a. Comparative: | long | long-er | |
| | good | bett-er | *good-er |
| b. Past: | walk | walk-ed | |
| | go | wen-t | *go-ed |
| c. Plural: | boy | boy-s | |
| | person | people-Ø | |
| d. cf. Russian: | lošad^j | lošad-i | ‘horse(s)’ Russian |
| | čelovek | lʲud-i | ‘person/PL’ |

- (3) Suppletion as contextual allomorphy:

- | | | | | | | |
|----|------|---|---------|---|-----|----------|
| a. | GOOD | → | be(tt)- | / | ___ |] CMPR] |
| b. | GOOD | → | good | | | |
| c. | GO | → | wen- | / | ___ |] PAST] |
| d. | GO | → | go- | / | | |

- (4) Elsewhere Condition (after Kiparsky, 1973 attrib. Pāṇini)

If two or more (incompatible) rules R_1 , R_2 may apply to a given structure, then the more specific rule takes precedence over the more general.

- (5) Czech
- | | POS | CMPR | SPRL |
|---------|----------------|----------------|---------------------|
| ‘young’ | mlad-ý | mlad-ší | nej- mlad-ší |
| ‘bad’ | špatn-ý | hor-ší | |

- (6) a. BAD → hor- / ___] CMPR
b. BAD → špatn-

- (7)
- ```
graph TD
 a1[a] --- ADJ1[ADJ]
 a2[a] --- ADJ2[ADJ]
 c1[c] --- ADJ2
 c1 --- CMPR1[CMPR]
 s[s] --- SPRL[SPRL]
 s --- c2[c]
 c2 --- a3[a]
 c2 --- CMPR2[CMPR]
 a3 --- ADJ3[ADJ]
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- |                  |                 |                 |                   |      |        |
|------------------|-----------------|-----------------|-------------------|------|--------|
| (8)              |                 | POS             | CMPR              | SPRL |        |
| a. English:      | <b>good</b>     | <b>bett-er</b>  | <b>be-st</b>      |      |        |
| b. English:      | <b>bad</b>      | <b>worse</b>    | <b>wor-st</b>     |      |        |
| c. Danish:       | <b>god</b>      | <b>bed-re</b>   | <b>bed-st</b>     |      | ‘good’ |
| d. Czech:        | <b>špatn-ý</b>  | <b>hor-ší</b>   | <b>nej-hor-ší</b> |      | ‘bad’  |
| e. Estonian:     | <b>hea</b>      | <b>pare-m</b>   | <b>par-im</b>     |      | ‘good’ |
| f. Kildin Saami: | <b>šig’</b>     | <b>per’-am</b>  | <b>per’-mus</b>   |      | ‘good’ |
| g. Basque:       | <b>asko</b>     | <b>gehi-ago</b> | <b>gehi-en</b>    |      | ‘many’ |
| h. Kabardian:    | <b>kwad, ba</b> | <b>nax</b>      | <b>nax-deda</b>   |      | ‘many’ |

- |     |             |                |                    |                                 |        |
|-----|-------------|----------------|--------------------|---------------------------------|--------|
| (9) | ABC         | POS            | CMPR               | SPRL                            |        |
| a.  | Latin:      | <b>bon</b> -us | <b>mel</b> -ior    | <b>opt</b> -imus                | ‘good’ |
| b.  | Welsh:      | <b>da</b>      | <b>gwell</b>       | <b>gor</b> -au                  | ‘good’ |
| c.  | Old Irish:  | <b>maith</b>   | <b>ferr</b>        | <b>dech</b>                     | ‘good’ |
| d.  | M. Persian: | <b>xōb</b>     | <b>weh/wah</b> -īy | <b>pahl</b> -om/ <b>pāš</b> -om | ‘good’ |

- (10) a. GOOD  $\rightarrow$  opt- /      ] CMPR ] SPRL ]  
b. GOOD  $\rightarrow$  mel- /      ] CMPR ]  
c. GOOD  $\rightarrow$  bon-

- (11) Universals in Comparative Suppletion (Bobaljik, 2012)

|    | POS | CMPR | SPRL |                                 |
|----|-----|------|------|---------------------------------|
| a. | A   | A    | A    | <i>big – bigger – biggest</i>   |
| b. | A   | B    | B    | <i>good – better – best</i>     |
| c. | A   | B    | C    | <i>bonus – melior – optimus</i> |
| d. | A   | B    | A    | <i>*good – better – goodest</i> |
| e. | A   | A    | B    | <i>*good – gooder – best</i>    |

cf. Ultan (1972); apparent counterexamples to \*ABA: %Basque ‘good’, %Karelian ‘many’, Bulgarian/Macedonian ‘many’ – see Bobaljik (2012)

- (12) Superlative =<sub>def</sub> Relative superlative

*tallest* = ‘taller than all others’

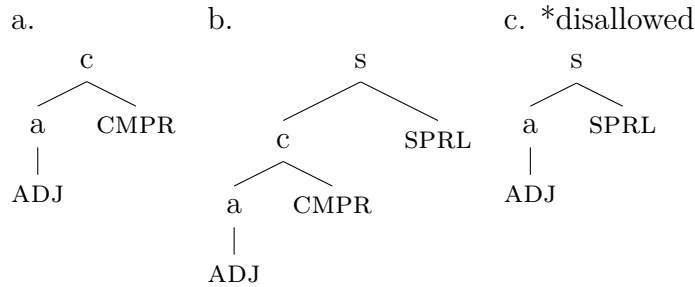
- (13) Excluded: *Absolute* superlative or ‘elative’ (very high degree)

|    |       | ABSOLUTE              | RELATIVE                       |                |
|----|-------|-----------------------|--------------------------------|----------------|
| a. | Ital. | bell- <b>issim</b> -a | <b>la</b> più bell-a           | bell- ‘pretty’ |
| b. | Slov. | <b>pre</b> -lép       | <b>naj</b> -lep-ši             | lép ‘pretty’   |
| c. | Russ. | vern- <b>ejš</b> -ij  | <b>sam</b> - <b>yj</b> vern-yj | vern- ‘true’   |

(14) Support: Transparent Containmentment

|                   | CMPR                     | SPRL                   |
|-------------------|--------------------------|------------------------|
| a. Persian:       | X-tær                    | X-tær-in               |
| b. Lithuanian:    | X-iau                    | X-iaus-ia              |
| c. Cimbr. German: | X-ar                     | X-ar-ste               |
| d. Batsbi:        | X-vx                     | X-vx-č                 |
| e. Latvian:       | X-âk                     | vis-X-âk               |
| f. Czech:         | X-ši                     | nej-X-ši               |
| g. Hungarian:     | X-bb                     | leg-X-bb               |
| h. Chukchi:       | X-əŋ                     | ənan-X-əŋ              |
| i. Cherokee:      | X-ka/ya/...              | w-X-kāʔi/yāʔi/...      |
| j. Ubykh:         | ç'a-X                    | a-ç'a-X                |
| k. Latin:         | X-ior < -ios             | X-issimus < -is-m.mo-s |
| l. P-IE:          | *X- <u>i</u> os-, *X-is- | *X-is-to-s             |

(15) The Containmentment Hypothesis



$$(16) \quad \text{CMPR} \rightarrow \emptyset \quad / \quad \_ ] \text{SPRL} ]$$

Why not...

- (17) a. GOOD  $\rightarrow$  be(tt)- /  $\_ ]$  DEG ]  
 b. GOOD  $\rightarrow$  good

- (18) a. GOOD  $\rightarrow$  bon- /  $\_ ]$  CMPR ] SPRL ]  
 b. GOOD  $\rightarrow$  mel- /  $\_ ]$  CMPR ]  
 c. GOOD  $\rightarrow$  bon-

(19) Anti-Homophony:

Learners avoid positing homophony whenever possible.

Learners avoid positing a contextual allomorph of a morpheme  $\mu$  that is homophonous with the default exponent of  $\mu$

(20) Cognate triples: GOOD-BETT-BETT

|              | POS          | CMPR            | SPRL              |
|--------------|--------------|-----------------|-------------------|
| a. English   | <b>good</b>  | <b>bett-er</b>  | <b>be-st</b>      |
| b. German    | <b>gut</b>   | <b>bess-er</b>  | <b>be-st-...</b>  |
| c. Gothic    | <b>goþ-s</b> | <b>bat-iz-a</b> | <b>bat-is-t-s</b> |
| d. Afrikaans | <b>goed</b>  | <b>bet-er</b>   | <b>be-ste</b>     |
| e. Swedish   | <b>god</b>   | <b>bätt-re</b>  | <b>bä-st</b>      |
| f. Cimbrian  | <b>guat</b>  | <b>pez-ar</b>   | <b>pez-ar-ste</b> |

...

= 1 of 116 triples

(21) Cognate triples (positive, comparative, superlative; synthetic only)  $n=116$

|                               | permitted |     | excluded |     |
|-------------------------------|-----------|-----|----------|-----|
|                               | ABB       | ABC | ABA      | AAB |
| adjectives of quality:        | 67        | 5   | (1)      | 0   |
| adverbs:                      | 4         | 0   | 0        | 0   |
| quantifiers (many/much; few): | 36        | 0   | (3)      | 0   |

## 2 Locality I - Words and Domains

(22) The Root Suppletion Generalization (RSG)

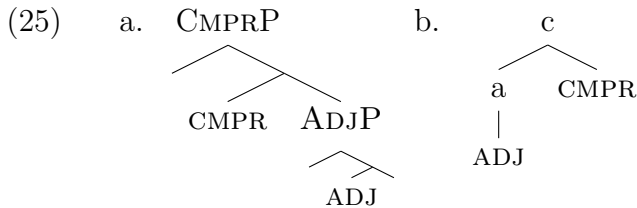
Root suppletion is limited to synthetic (i.e., morphological) comparatives.

|    | POS | CMPR     | SPRL     |  | POS           | CMPR                 | SPRL                         |
|----|-----|----------|----------|--|---------------|----------------------|------------------------------|
| a. | A   | B-er     | B-est    |  | <b>kak-ós</b> | <b>cheiró-ter-os</b> | o <b>cheiró-ter-os</b> ‘bad’ |
| b. | A   | * more B | * most B |  | <b>kak-ós</b> | pjo <b>kak-ós</b>    | o pjo <b>kak-ós</b> ‘bad’    |

(24) Locality:

$\beta$  may condition  $\alpha$  in (a), not (b):

- a.  $\alpha \dots ]_{X^0} \dots \beta$  Trigger and target in same m-word  
b.  $*\alpha \dots ]_{XP} \dots \beta$

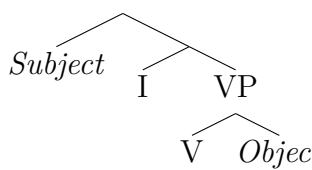
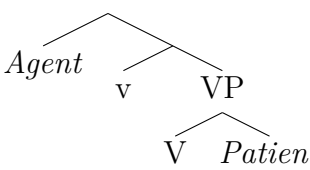


- (26) Greek a. BAD  $\rightarrow$  cheiró /  $\_\_ ]$  CMPR ]  
b. BAD  $\rightarrow$  kak-  
c. CMPR  $\rightarrow$  -tero /  $]_{ADJ} \_\_ ]$   
d. CMPR  $\rightarrow$  pjo

- (27) Apparent suppletion across word boundaries?  
 Number-governed suppletion in Hiaki (Yaqui) (Harley et al., 2009; Bobaljik & Harley, 2017)

- a. *vuite* ~ *tenne* ‘run sg. ~ pl.’ *weana* ~ *rehte* ‘wander sg. ~ pl.’  
 b. *mea* ~ *sua* ‘kill sg.obj. ~ pl.obj.’

- (28) a. *Aapo weye.*    b. *Vempo kate.*  
           3SG    walk.SG    3PL    walk.PL  
           ‘He/she/it is walking.’ ‘They are walking’

- (29) a.  b. 

- “[I]n every observed case of stem suppletion for number it is the number of the principally affected argument [i.e., object or intransitive subject] for which the verb suppletes” (Durie, 1986, 356-7; Corbett, 2000; Veselinova, 2006)

- (30) Proposal 1 (Bobaljik & Harley, 2017)  
 The locality condition in (24) is not the same thing as saying suppletion is fundamentally word-internal. Locality is *syntactically* defined; since words (normally) don’t contain phrases, the syntactic boundary is close to, but not the same as, a ‘word’ vs. phrase distinction.

- (31) Proposal 2 Thornton (2020)  
 There is a word-internal number agreement (pluractional) head, which is the controller of suppletion

- Number-suppletion is suppletion (Bobaljik, 2015; Harley, 2015)

- (32) Lui **va** al negozio e noi **andiamo** al cinema  
 He goes to.the store and we go to.the cinema  
 ‘He’s going to the store and we’re going to the cinema.’ (Italian)

- (33) Hiaki (Harley 2015)  
 a. *Itepo ume toto’im hiva suak,*    *kaa uka kowita.* (*mea* ~ *sua* ‘kill’)  
     We the chickens just **kill**.PL.PRF, not theACC pigACC  
     ‘We only killed the chickens, not the pig.’  
 b. *Aapoik asoam wohmamni mechaka rehtitaitek,*    *taa Jasper e’e.*  
     3SG.GEN child.PL ten months **walk**.PL.START.PRF, but Jasper no.  
     ‘Her children started walking at 10 months, but Jasper didn’t.’ (*weyama* ~ *rehte* ‘walk’)

- (34) Georgian: [num + noun] = singular agreement, but plural suppletion:

- a. Čem-i sam-i megobar-i še-mo-vid-a da da-**sxd**-a.  
 my-AG three-AG friend.SG-NOM PRV-PRV-enter-3SG and PRV-sit.PL-3.SG  
 ‘My three friends entered and sat down.’ Aronson (1989) (*jdoma* ~ *sxdoma*)
- b. isini-c balax-ze **sxed-an**,  
 they-also grass-on sit.PL-PL,  
 ...da magati deda-c ~~zi-s~~ / \*~~sxed-s~~  
 ...and their mother-also sit.SG-3SG / sit.PL-SG  
 ‘They are sitting on the grass, and their mother too.’

### 3 Lesslessness - Word as Domain

- (35) Complexity Condition? – Some meanings are too complex for a single (functional) morpheme

- CMPR = > =  $\llbracket -er \rrbracket(d)(d')=1$  iff  $\max(d) > \max(d')$
- SPRL = ‘than all (others)’

- (36) Lesslessness

No language has a synthetic comparative of inferiority.

- (37)
- |                |          |           |
|----------------|----------|-----------|
|                | analytic | synthetic |
| a. superiority | more ADJ | ADJ-er    |
| b. inferiority | less ADJ | *         |

- (38) *short* = NOT-TALL; or LITTLE-TALL; or  $\rightleftharpoons$ -TALL

$\rightleftharpoons$  = polarity-reversing operator

(Rullmann, 1995; Heim, 2006; Buring, 2007)

- (39) *less* X = MORE +  $\rightleftharpoons$  + X

- (40)
- ```

      CMPRP
     /    \
  CMPR  Adj'P
        /  \
      ⇔  AdjP
         |
        ADJ
  
```

- (41) Komi (kpv, Uralic)

- a. bur bur-č̣ik
 ‘good’ ‘good-CMPR’ i.e., ‘better’
- b. mič^ja **abu**-č̣ik mič^ja
 ‘beautiful’ ‘NEG-CMPR beautiful’ = ‘less beautiful’

- (42) Sonora Yaqui (Hiaki) (yaq, Uto-Aztecan; Dedrick & Casad, 1999, 111)

- a. čé'a húní'i tú'ii
more even good
'it is even better'
- b. čé'a húní'i **kaa**-tú'ii
more even not-good
'it is even worse'

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