

# Negative Adjectives: Evidence from Czech\*

Karen De Clercq & Guido Vanden Wyngaerd  
FWO/UGent & KU Leuven

## 1 Introduction

- ▷ The Czech positive gradable adjective *dobr-ý* ‘good’ has a suppletive stem *lep-*, which is used in the comparative *lep-ší* ‘better’ (see (1)).
- ▷ Its antonym *ne-dobr-ý* ‘bad’ uses the same root, yet does not have the suppletive stem in the comparative (see (2)).

- |     |    |                                 |     |    |   |
|-----|----|---------------------------------|-----|----|---|
| (1) | a. | dobr-ý<br>good-NOM<br>‘good’    | (2) | a. | ne-dobr-ý<br>NEG-good-NOM<br>‘bad’      |
|     | b. | lep-ší<br>good-CMPR<br>‘better’ |     | b. | ne-dobř-ejší<br>NEG-good-CMPR<br>worse’ |

- ▷ *malý* ‘small’ has a suppletive stem *men-* (3).
- ▷ its antonym *ne-mal-ý* ‘big’ also makes use of the suppletive stem (4).

- |     |    |                                   |     |    |   |
|-----|----|-----------------------------------|-----|----|---|
| (3) | a. | mal-ý<br>small-NOM<br>‘small’     | (4) | a. | ne-mal-ý<br>NEG-small-NOM<br>‘big, large’ |
|     | b. | men-ší<br>small-CMPR<br>‘smaller’ |     | b. | ne-men-ší<br>NEG-small-CMPR<br>‘bigger’   |

---

\*We are very grateful to Pavel Caha, who pointed us to this data set.

- ▷ The aim of this talk:
  - to account for the data pattern above in terms of the presence of a negative feature in negative gradable adjectives;
  - to show how the presence or absence of suppletion correlates with the different scopes that negative features can take.

- ▷ Structure of this talk:
  - Prerequisites for the analysis
  - The Czech data: analysis
  - Conclusion

## 2 Prerequisites for the analysis

### 2.1 Nanosyntax: general principles

- ▷ late (postsyntactic) insertion
- ▷ phrasal spellout: lexical items are inserted at the *phrasal* level (not at the level of the head)
- ▷ in this way, lexical items can straightforwardly spell out *sets* of syntactic features (without the need for local dislocation, fusion, merger, etc.)
- ▷ account for syncretism in terms of overspecification (instead of underspecification)

(5) *Superset Principle*  
A lexical entry may spell out a syntactic node iff the features of the lexical entry are a superset of the features dominated by the syntactic node.

(6) *The Elsewhere Principle*  
In case two rules,  $R_1$  and  $R_2$ , can apply in an environment  $E$ ,  $R_1$  takes precedence over  $R_2$  if it applies in a proper subset of environments compared to  $R_2$ .

- ▷ Suppose we have a syntactic object  $XP$  containing the features  $A$ ,  $B$ , and  $C$  (as in (7)), and a lexicon as in (8):

(7) [<sub>XP</sub> A B C ]

- (8) a.  $\langle / \alpha /, [A B C D] \rangle$   
 b.  $\langle / \beta /, [A B C] \rangle$   
 c.  $\langle / \gamma /, [A B] \rangle$

- ▷ both the lexical items  $\alpha$  and  $\beta$  are candidates for insertion (by the Superset Principle)
- ▷ (8c) is not a candidate
- ▷ by the Elsewhere Principle,  $\beta$  will be inserted, as it is a closer match for (7), blocking the insertion of  $\alpha$

## 2.2 Nanosyntax of negation

- ▷ languages quite often have a variety of negative markers (e.g. English *not*, *non-*, and *un-*)
- ▷ these different negative markers have different scopes (e.g. sentence negation vs constituent negation)
- ▷ De Clercq (2013) distinguishes four different categories of negative markers (based on their functions, semantics, scope, and differences in stackability)
  - $T^{\text{Neg}}$ -markers take sentential scope, and can stack on all the others.
  - $\text{Foc}^{\text{Neg}}$ -markers take scope over the untensed predicate.
  - $\text{Class}^{\text{Neg}}$ -markers scope over the predicate term.
  - $Q^{\text{Neg}}$ -markers take lowest scope and do not stack on top of any others.
- ▷ studying syncretisms in negative markers in a sample of nine different languages, De Clercq (2013) has found that negative markers can be arranged in a paradigm that respects the \*ABA-restriction (syncretism only affects contiguous cells):

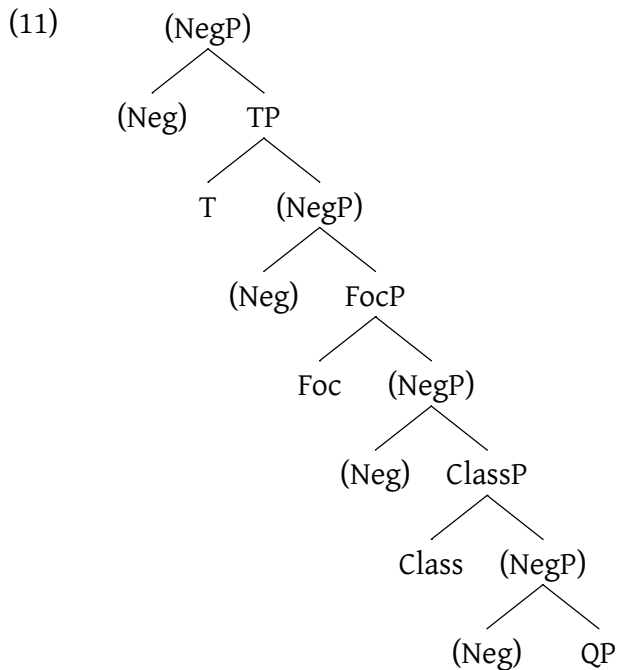
(9)

	$T^{\text{Neg}}$	$\text{Foc}^{\text{Neg}}$	$\text{Class}^{\text{Neg}}$	$Q^{\text{Neg}}$
Greek	dhen	oxi	mi	a-
English (formal)	not	not	non	un-
English (informal)	n't	not	non	un-
French (formal)	ne ... pas	pas	non	iN-
French (informal)	pas	pas	non	iN-
Chinese	bù	bù	fēi	fēi
MS Arabic	laa	laa	ghayr-	ghayr-
Persian	na	na	qheyr-	qheyr-
Moroccan Arabic	ma (ši)	muši	muši	muši
Dutch	niet	niet	niet-	on-
Hungarian	nem	nem	nem	-tElEn
Czech	ne-	ne	ne-	ne-

- ▷ Greek does not show any syncretism, and therefore provides evidence for the existence of four different types of negation.
- ▷ Czech has a single syncretic negative marker (*ne-*), which is the equivalent of *not*, *non-* and *un-* in English.

- (10)
- a. Ja *ne-* jsem št'astný.  
I NEG- am happy.  
'I am not happy.'
  - b. Ja jsem *ne-* št'astný.  
I am NEG- happy.  
'I am unhappy.'
  - c. Je *ne-* americký.  
is NEG American  
'He is un-American.'  
'He is non-American.'

- ▷ the Czech-type syncretism shows that there must be an underlying featural unity to all these negation types.
- ▷ the underlying featural unity resides (minimally) in the presence of the feature Neg.
- ▷ the Neg-feature is never spelled out alone: the different negative markers represent packagings of Neg with different sets of features.
- ▷ we assume an fseq for negative markers <T, Foc, Class, Q>.
- ▷ negative markers are built by adding a negative feature Neg on top of either QP, ClassP, FocP, or TP:



- ▷ (11) is shorthand for a series of four different trees, each corresponding to a particular negative marker
- ▷ (12) gives the lexical items for the negative markers *not*, *non*, and *un-*, respectively:

- (12)
- a.  $\langle /nDt/, [_{NegP} Neg [_{TP} T [_{FocP} Foc [_{ClassP} Class [_{QP} Q ]]]]] \rangle$
  - b.  $\langle /nDn/, [_{NegP} Neg [_{ClassP} Class [_{QP} Q ]]] \rangle$
  - c.  $\langle /\Delta n/, [_{NegP} Neg [_{QP} Q ]]] \rangle$

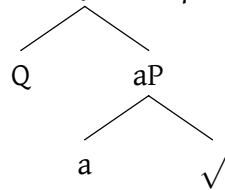
- ▷ negative markers also have an external syntax
- ▷ the highest non-negative feature in the nanospine indicates where negation will take scope in the clausal spine
  - if the nanospine spells out as *not*, its highest non-negative feature is either T or Foc; negation will then take scope high in the clausal spine, i.e. be inserted above either FocP or TP
  - if the nanospine spells out as *un-*, its highest non-negative feature is Q; its scope will be limited to those positions in the clausal spine where a QP occurs (i.e. low in the clausal spine)

### 2.3 Adjectives: a difference in size

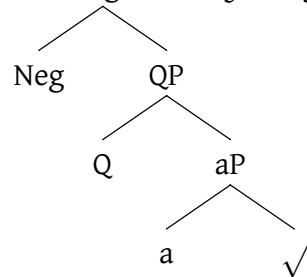
- ▷ gradable adjectives spell out:

- a root feature ( $\checkmark$ )
- a categorial head feature ( $a$ )
- a gradability feature (Q)
- negative gradable adjectives differ from positive ones in the presence of an additional Neg-feature

(13) a. QP  $\Rightarrow$  *positive gradable adjective* (e.g. *happy*)



b. NegP  $\Rightarrow$  *negative gradable adjective* (e.g. *sad*)



## 2.4 Evidence for a Neg-feature in negative adjectives

- ▷ De Clercq & Vanden Wyngaerd (2016) argue that there exists a ban on stacking negative affixes that are structurally adjacent
- ▷ data illustrating this ban from English morphology are given in (14):

- (14) a. \*UN+DIS: \*undishonest, \*undiscourteous, \*undisloyal, \*undiscomfortable  
 b. \*UN+LESS: \*unuseless, \*unbreathless, \*unsenseless, \*unmerciless, \*uncheerless  
 c. \*UN+IN: \*unirreligious, \*unillegitimate, \*unillogical, \*unimpossible, \*unincoherent, \*uninappropriate  
 d. \*UN+UN, \*DIS+DIS, \*LESS+LESS

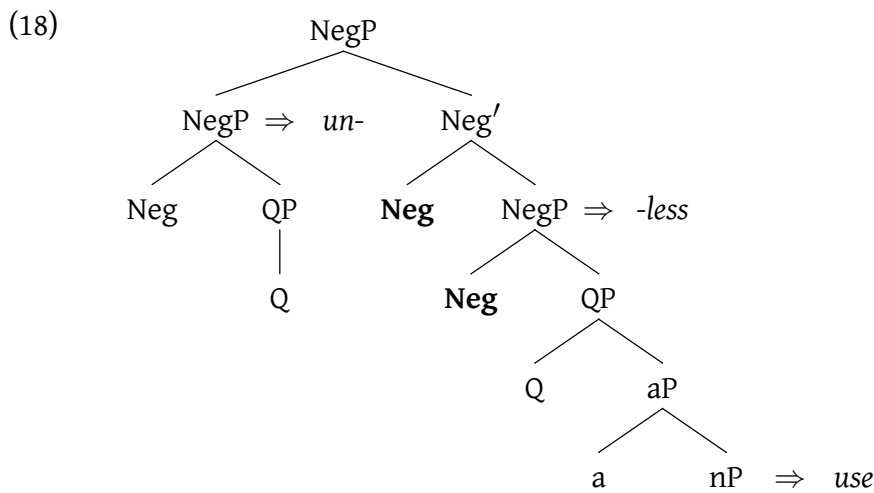
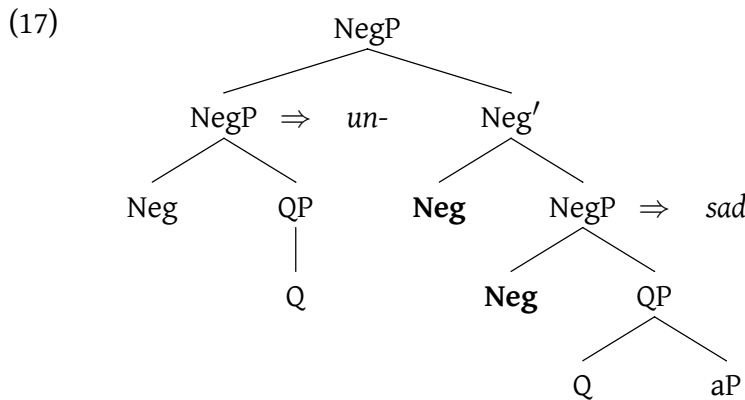
- ▷ next consider the data in (15), with ‘synthetically negative adjectives’ (Jespersen 1942, Zimmer 1964, Horn 1989):

- (15) a. unhappy, unwise, unclean, unfriendly, unhealthy, untrue

b. \**unsad*, \**unfoolish*, \**undirty*, \**unhostile*, \**unsick*, \**unrude*, \**unfalse*

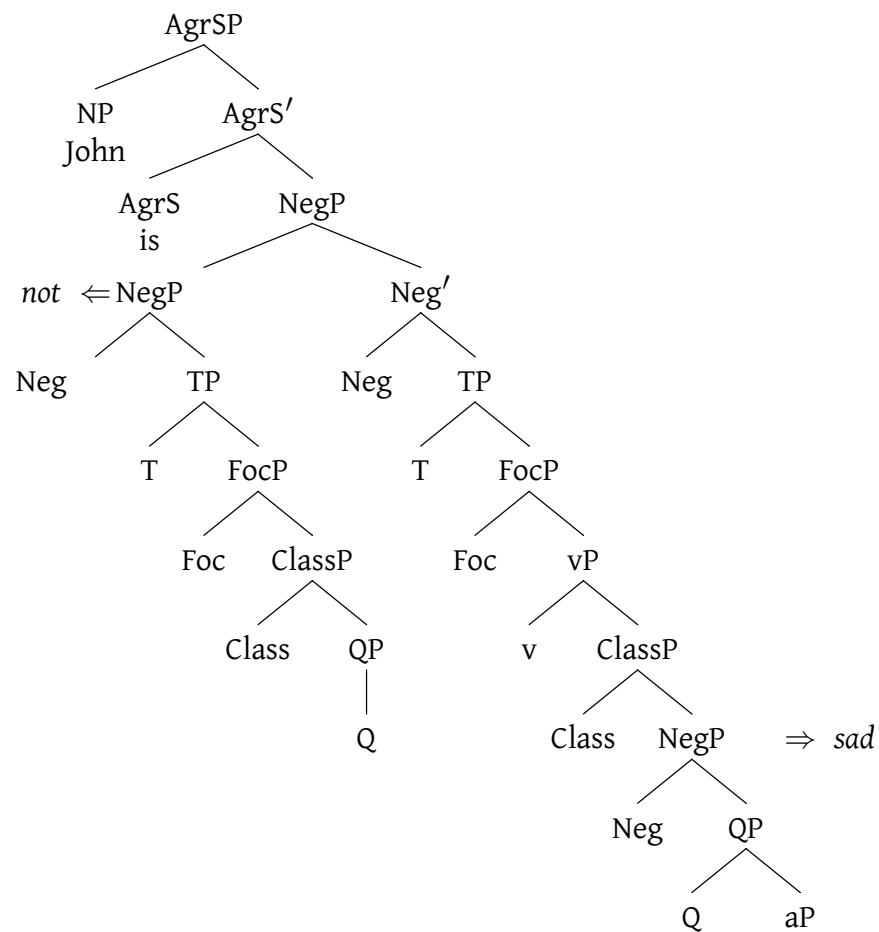
- ▷ the data in (15b) instantiate the same restriction as the ones in (14), assuming that negative adjectives have a Neg-feature
- ▷ we argue that these facts follow from the following constraint on double negation:

(16) \* $\langle \text{Neg}, \text{Neg} \rangle$   
 The functional sequence must not contain two immediately consecutive Neg-features.



- ▷ the prefixes *un-*, *iN-*, *dis-* and the suffix *-less* all take scope in the same position, at QP
- ▷ the negative marker *not* takes higher scope, and can therefore be stacked onto *un/iN/dis/less* without violating (16) (e.g. *not disloyal/not useless/not impossible/not sad*):

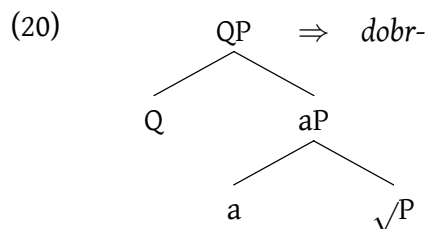
(19)



### 3 The Czech data: analysis

#### 3.1 Positive gradable adjectives and suppletion

▷ the positive gradable adjective *dobr-* spells out the following structure:



▷ in the comparative, the suppletive root *lep-* appears (*lep-ší* 'better')



- ▷ DM-analysis (Bobaljik 2012): suppletion is triggered by the presence of the Cmpr-head which is structurally adjacent to the root, as per the following insertion rule (B assumes that CmprP immediately dominates the root):

(21)  $\sqrt{\text{DOBR}} \rightarrow \text{lep} / \text{ \_\_\_ } ] \text{Cmpr}$

- ▷ this proposal accounts for the the generalisation that, if the comparative uses a suppletive root, the superlative also does (Bobaljik 2012).  
 ▷ NS-approach to suppletion: pointers in lexical items, pointing to other lexical items  
 ▷ *bring/brought* suppletion: the lexical item of *brought* contains a pointer to the lexical items for *bring* and the past tense morpheme *-ed*:

(22) a.  $\langle_{24} /brought/, [_{XP} 22\ 23] \rangle$   
 b.  $\langle_{22} /bring/, V \rangle$   
 c.  $\langle_{23} /ed/, PastP \rangle$

(23)

```

      XP24 ⇒ brought
     /      \
  bring ← V22   PastP23 ⇒ ed
  
```

- ▷ suppletion in the comparative and superlative is different, as it concerns only the root, not the affix  
 ▷ we propose to decompose Cmpr into two different features,  $\sigma$  and Cmpr. The suppletive root spells out  $\sigma P$ , as shown in (24):

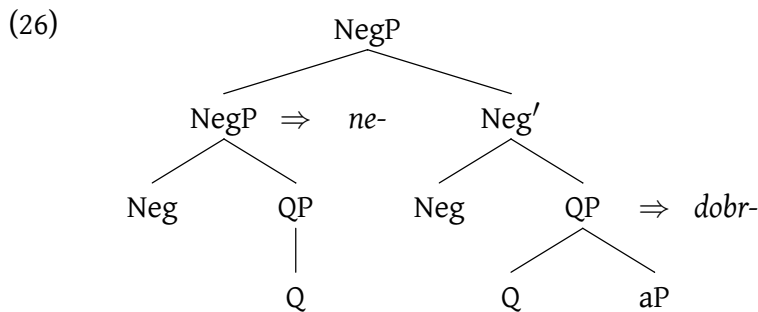
(24)

```

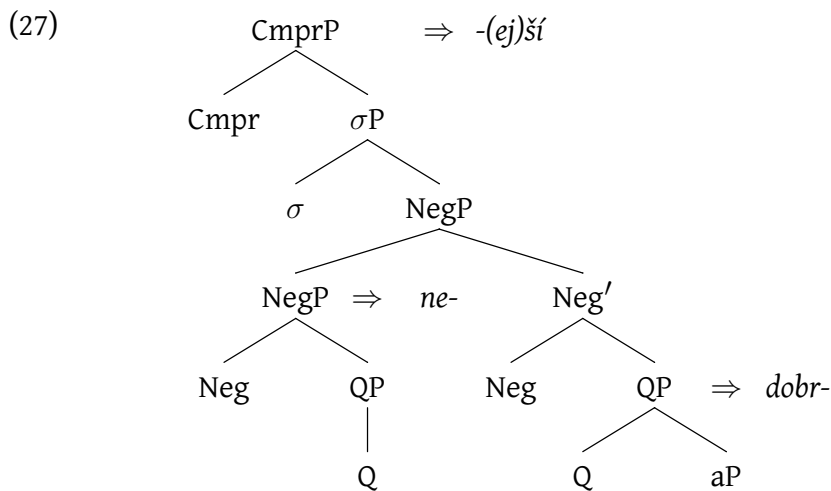
      CmprP ⇒ -ší
     /      \
  Cmpr   σP ⇒ lep-
        /      \
       σ       QP ⇒ dobr-
            /      \
           Q       aP
                /      \
               a       √P
  
```

(25) a.  $\langle /-ší/, [_{CmprP} [_{\sigma P} \sigma]] \rangle$   
 b.  $\langle_{34} /lep-/, [_{\sigma P} \sigma\ 32] \rangle$   
 c.  $\langle_{32} /dobr-/, [_{QP} [_{aP} [ \sqrt{\quad} ]]] \rangle$

- ▷ *dobr-* spells out QP.
- ▷ at  $\sigma$ P, *dobr-* is overwritten by the suppletive form *lep-*
- ▷ at CmprP the comparative suffix is spelled out (modulo raising of  $\sigma$ P into SpecCmprP)
- ▷ Czech also has ‘analytic negative adjectives’, i.e. positive adjectives that feature the negative morpheme *ne-* and get a negative meaning, e.g. *ne-dobr-* ‘bad’.
- ▷ we assume that these have the same structure as negative gradable adjectives (see (13) above), except that there is a complex specifier in SpecNegP:



- ▷ the comparative of *ne-dobr-* ‘bad’ shows no suppletion (*\*ne-lep-ší* vs *ne-dobřejší* ‘worse’).
- ▷ in Bobaljik’s terms, this would suggest that there is no structural adjacency between Cmpr and the root  $\sqrt{\text{DOBR}}$ , as this will bleed the application of the rule in (21).
- ▷ this nonadjacency is achieved in the structure we propose, which has a Neg-head between QP and Cmpr:

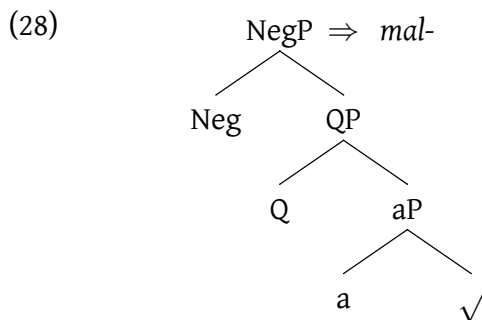


- ▷ no constituent in (27) could spell out the suppletive root *lep-* ‘bett-’.
  - $\sigma$ P dominates too many features
  - the lexical entry for *lep-* (see (30) above) does not contain a superset of the features of the syntactic tree  $\sigma$ P, since it does not contain a Neg-feature, and  $\sigma$ P does.

- ▷ A negated positive gradable adjective cannot get a suppletive comparative root because  $\sigma$ P dominates a NegP, and the the lexical entry for the suppletive root does not contain a Neg-feature.

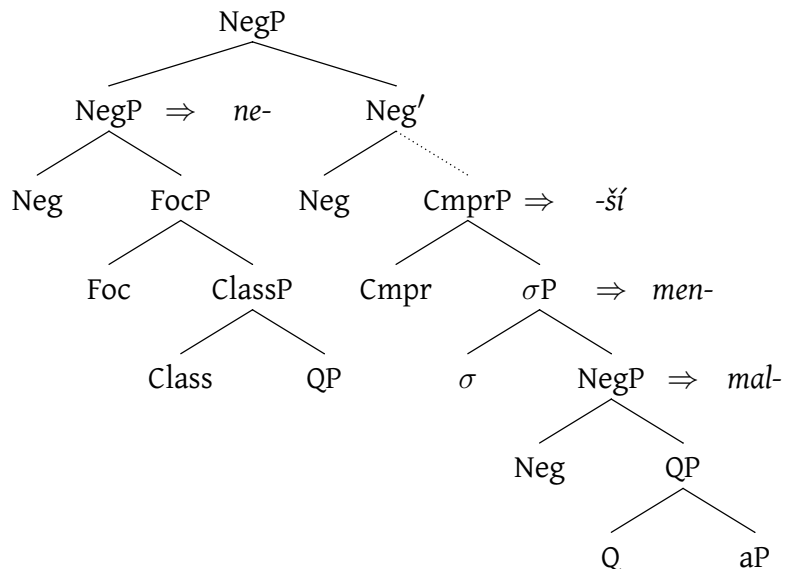
### 3.2 Negative gradable adjectives and suppletion

- ▷ the negative gradable adjective *malý* ‘small’ spells out the following structure:



- ▷ *malý* ‘small’ has a suppletive comparative *menší*
- ▷ the suppletive form is not blocked in the context of the negative prefix: *ne-men-ší* (neg-small-er).
- ▷ the tree structure in (29) explains why this is the case:

(29)



- ▷ *mal-* 'small' spells out NegP.
- ▷ at  $\sigma$ P, *mal-* is overwritten by the suppletive root *men-*.
- ▷ the *ne-* marker preceding the negative adjective cannot be merged at QP because of the ban on double negation
- ▷ *ne* is merged higher in the structure, i.e. it takes scope higher than CmprP (e.g. at the FocP level).

- (30)
- a.  $\langle /-\text{š}'\text{í}/, [\text{CmprP} [\sigma\text{P} \sigma]] \rangle$
  - b.  $\langle {}_{66} /men-/ , [\sigma\text{P} \sigma {}_{65}] \rangle$
  - c.  $\langle {}_{65} /mal-/ , [\text{NegP} [\text{QP} [\text{aP} [\checkmark]]]] \rangle$

- ▷ A negated negative adjective can get a suppletive stem:
  - because a negative adjective spells out NegP, and a suppletive negative adjective spells out  $\sigma$ P immediately dominating this NegP
  - the negative marker *ne-* cannot be merged at the same position because of the ban on double negation
  - it must therefore be merged in a higher position, after the suppletion root was spelled out at  $\sigma$ P.

### 3.3 Readings of negated comparatives

- ▷ our analysis entails a different scope for the overt negative marker in *ne-dobřejší* and *ne-menší*.
- ▷ this structural difference entails a scopal and meaning difference:

- (31) a. [[ne-dobř-]ejší] = [MORE [NOT-GOOD]] i.e. ‘worse’  
 b. [ne-[men-ší]] = [NOT [MORE SMALL]] i.e. ‘not smaller’ (rather than ‘bigger’)

- ▷ (31a) is *inconsistent* with a situation where the two entities being compared are equally bad
- ▷ (31b) is *consistent* with a situation where the two entities being compared are equally small

- (32) a. Your lunch was bad, but mine was worse.  
 b. Your donation was big, but mine was not smaller.

- ▷ in the latter case, the scalar focus marker *even* is not possible, whereas it is possible (in fact preferred) in the former one.

### 3.4 Double negation in Czech negative adjectives

- ▷ in contrast to English (recall \**unsad*), Czech negative adjectives can be negated by *ne*:

- (33) ne-malý  
 NEG-small  
 ‘big, large’

- ▷ given that the Czech negative marker *ne* is fully syncretic, this is due to the fact that *ne-* can take higher scope than English *un-/dis-/iN-/less*.
- ▷ that is, (33) is in fact equivalent to something like *not inconsiderable*

## 4 Conclusion

- ▷ We accounted for the Czech data pattern in terms of
  - the presence of a negative feature in negative gradable adjectives
  - the ban on double negation
- ▷ In negated *positive* adjectives
  - the negative marker *ne-* takes low scope, between Cmpr and Q
  - Neg acts as an intervener, blocking suppletion
- ▷ In a negated *negative* adjective
  - the negative marker *ne-* takes high scope, because the adjective already contains a negative feature, and because of the ban on double negation
  - as a result, the negative marker *ne-* does not act as an intervener between Cmpr and Q
  - suppletion takes place in the same manner as with positive adjectives: there is a lexical item that contains one extra feature ( $\sigma$ ) as compared with the nonsuppletive root.

## References

- Bobaljik, Jonathan. 2012. *Universals in comparative morphology*. Cambridge, Mass.: MIT Press.
- De Clercq, Karen. 2013. *A unified syntax of negation*: University of Ghent dissertation.
- De Clercq, Karen & Guido Vanden Wyngaerd. 2016. A constraint on double negation. Ms. U Gent/KU Leuven.
- Horn, Laurence. 1989. *A natural history of negation*. Chicago: The University of Chicago Press.
- Jespersen, Otto. 1942. *A modern English grammar on historical principles*, vol. VI Morphology. London: George Allen & Unwin.
- Zimmer, Karl. 1964. *Affixal negation in English and other languages* Supplement to Word, Monograph 5.