

Negative Adjectives: Evidence from Czech*

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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
good-NOM
‘good’ | (2) | a. | ne-dobr-ý
NEG-good-NOM
‘bad’ |
| | b. | lep-ší
good-CMPR
‘better’ | | b. | ne-dobř-ejší
NEG-good-CMPR
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
small-NOM
‘small’ | (4) | a. | ne-mal-ý
NEG-small-NOM
‘big, large’ |
| | b. | men-ší
small-CMPR
‘smaller’ | | b. | ne-men-ší
NEG-small-CMPR
‘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) [_{XP} 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 α and β are candidates for insertion (by the Superset Principle)
- ▷ (8c) is not a candidate
- ▷ by the Elsewhere Principle, β will be inserted, as it is a closer match for (7), blocking the insertion of α

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^{Neg} -markers take sentential scope, and can stack on all the others.
 - Foc^{Neg} -markers take scope over the untensed predicate.
 - $\text{Class}^{\text{Neg}}$ -markers scope over the predicate term.
 - Q^{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):

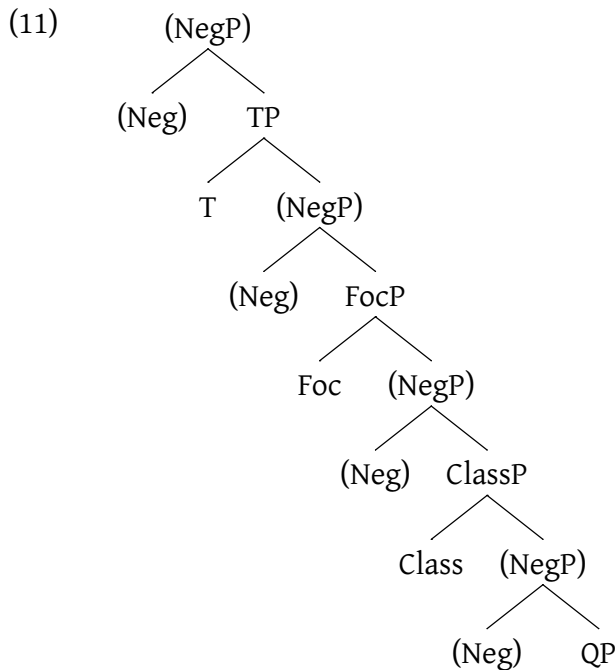
(9)

	T^{Neg}	Foc^{Neg}	$\text{Class}^{\text{Neg}}$	Q^{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. $\langle /\Delta n/, [_{NegP} Neg [_{QP} Q]]] \rangle$

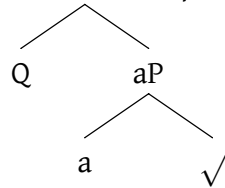
- ▷ negative markers also have an external syntax
- ▷ the highest non-negative feature in the nanospine indicates where negation will take scope in the clausal spine
 - if the nanospine spells out as *not*, its highest non-negative feature is either T or Foc; negation will then take scope high in the 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

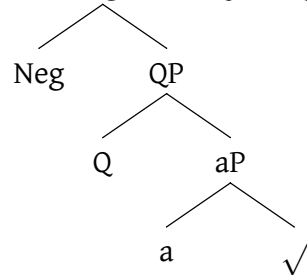
- ▷ gradable adjectives spell out:

- 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

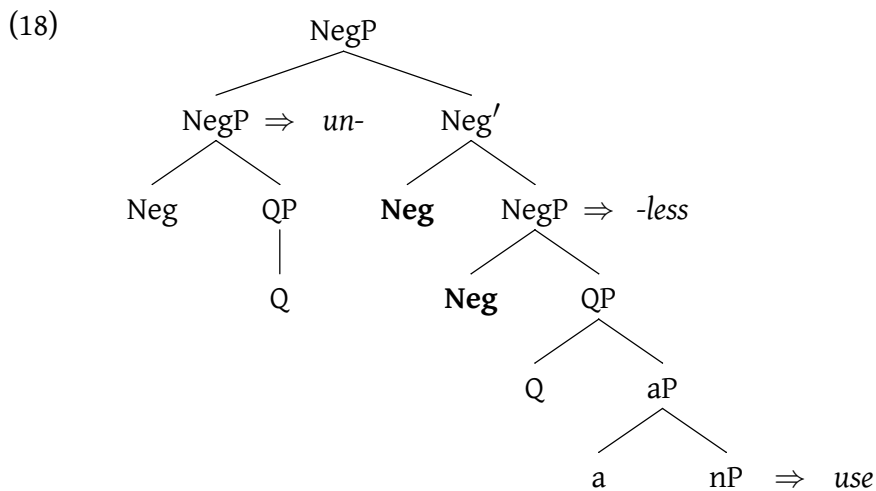
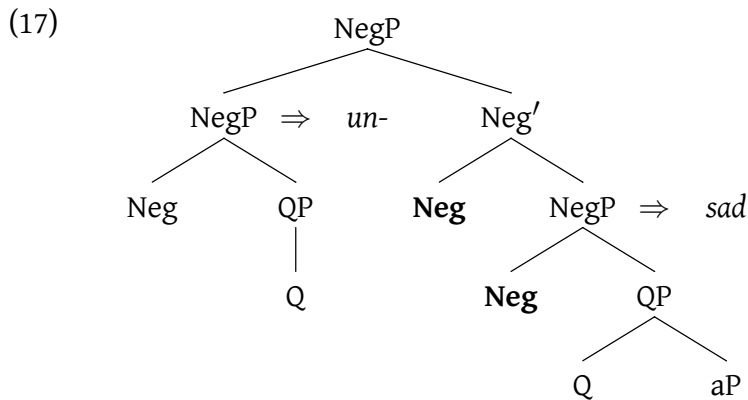
- ▷ next consider the data in (15), with ‘synthetically negative adjectives’ (Jespersen 1942, Zimmer 1964, Horn 1989):

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

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

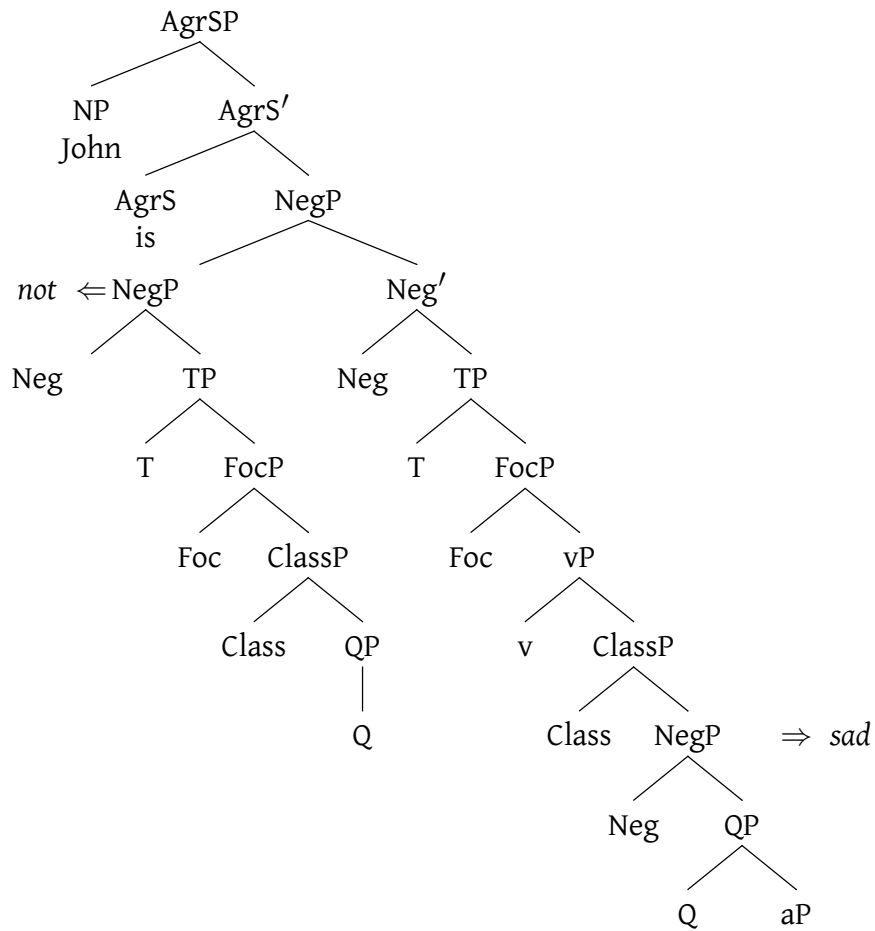
- ▷ the data in (15b) instantiate the same restriction as the ones in (14), assuming that negative adjectives have a Neg-feature
- ▷ we argue that these facts follow from the following constraint on double negation:

(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*):

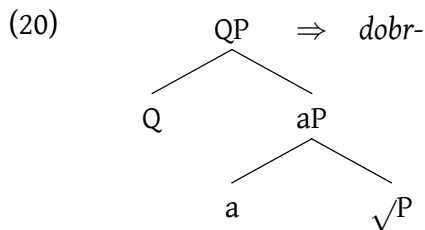
(19)



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 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)

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      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, σ and Cmpr. The suppletive root spells out σP , as shown in (24):

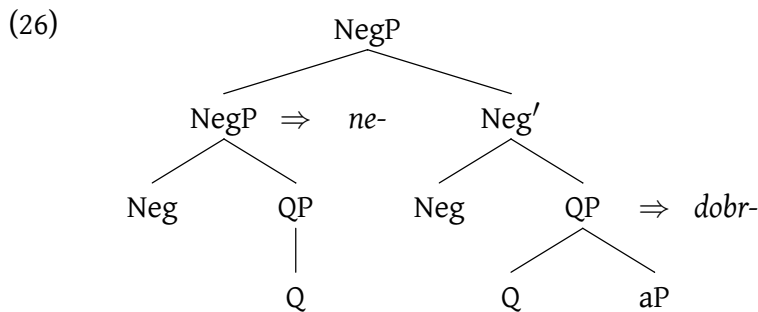
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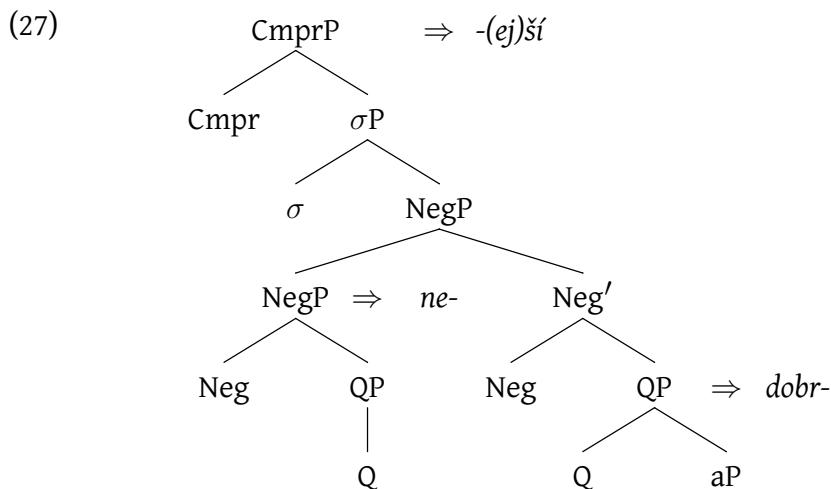
      CmprP ⇒ -ší
     /      \
  Cmpr   σP ⇒ lep-
        /      \
       σ       QP ⇒ dobr-
             /      \
            Q       aP
                 /      \
                a       √P
  
```

(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 σ P, *dobr-* is overwritten by the suppletive form *lep-*
- ▷ at CmprP the comparative suffix is spelled out (modulo raising of σ 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:

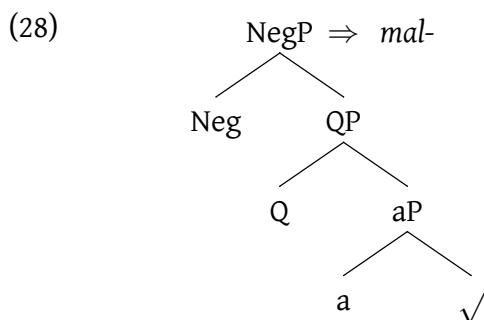


- ▷ no constituent in (27) could spell out the suppletive root *lep-* ‘bett-’.
 - σ P dominates too many features
 - the lexical entry for *lep-* (see (30) above) does not contain a superset of the features of the syntactic tree σ P, since it does not contain a Neg-feature, and σ P does.

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

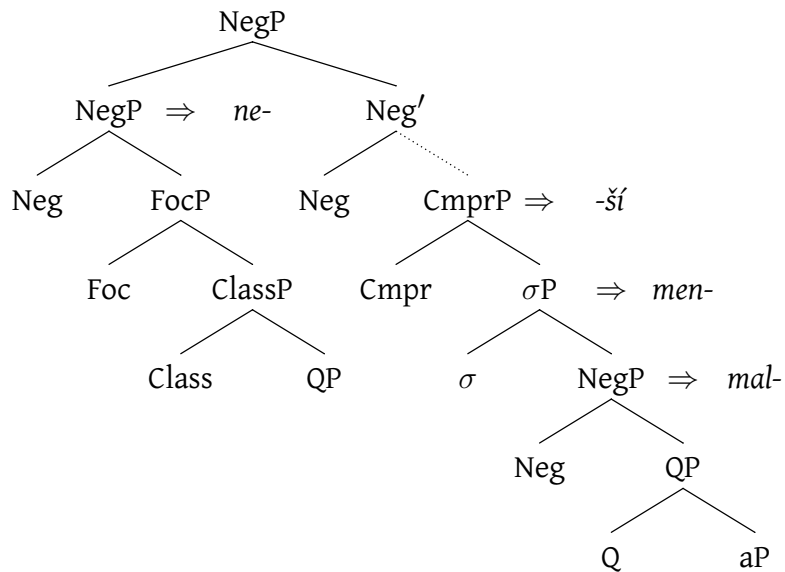
3.2 Negative gradable adjectives and suppletion

- ▷ 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 σ 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. $\langle /-ši/, [CmprP [\sigma P \sigma]] \rangle$
 - b. $\langle {}_{66} /men-/ , [\sigma P \sigma {}_{65}] \rangle$
 - c. $\langle {}_{65} /mal-/ , [NegP [QP [aP [\checkmark]]]] \rangle$

- ▷ A negated negative adjective can get a suppletive stem:
 - because a negative adjective spells out NegP, and a suppletive negative adjective spells out σ 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 σ 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 (σ) as compared with the nonsuppletive root.

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