

The Word-Morpheme Distinction — an Epiphenomenon?

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What is a word?
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Introduction

Prerequisite: Nanosyntax

Analysis I

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Analysis II

Conclusion

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Haspelmath's claim

Linguists have no good basis for identifying words across languages, and hence no good basis for a general distinction between syntax and morphology as parts of the language system. (Haspelmath 2011: 24)

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- ▶ We present a case in support of H's claim.

The data I

(1)	a.	unhappy	b.	*unsad	c.	not sad
		unwise		*unfoolish		not foolish
		unclean		*undirty		not dirty
		unfriendly		*unhostile		not hostile
		unhealthy		*unsick		not sick
		unkind		*unrude		not rude
		untrue		*unfalse		not false
		uneasy		*undifficult		not difficult

- ▶ *un-* shows a polarity restriction:
 - ▶ positive adjectives can generally be prefixed with *un-*
 - ▶ negative ones systematically cannot
- ▶ positive and negative adjectives alike can be negated with *not*

The data II

- ▶ noun-derived adjectives with the negative suffix *-less* also resist *un-*prefixation:

(2)

<i>N-less</i>	<i>un-N-less</i>	<i>not N-less</i>
breathless	*unbreathless	not breathless
senseless	*unsenseless	not senseless
merciless	*unmerciless	not merciless
useless	*unuseless	not useless
cheerless	*uncheerless	not cheerless

(3)

<i>N-ful</i>	<i>un-N-ful</i>	<i>not N-ful</i>
successful	unsuccessful	not successful
lawful	unlawful	not lawful
eventful	uneventful	not eventful
helpful	unhelpful	not helpful
faithful	unfaithful	not faithful

The data III

▶ *un-dis-, *un-iN-, *un-a-, *un-un-, *dis-dis-

- | | | |
|-----|-------------------|--------------------|
| (4) | *undishonest | not dishonest |
| | *undiscourteous | not discourteous |
| | *undisloyal | not disloyal |
| | *undiscomfortable | not discomfortable |
| (5) | *unimpossible | not impossible |
| | *unillogical | not illogical |
| | *unabnormal | not abnormal |
| | *unatypical | not atypical |
| | *ununhappy | not unhappy |
| | *disdishonest | not dishonest |

Preliminary generalisation

- (6) Negative morphemes cannot be stacked.

Preliminary generalisation

- (6) Negative morphemes cannot be stacked.
- ▶ (6) appears to apply word-internally only (since *not* can be stacked onto adjectives of all kinds).
 - ▶ (6) therefore appears to confirm that there is a meaningful morphology-syntax boundary.

'It's the Morphology!'

- (7) **Negative affixes** are not used with adjectival stems that have a 'negative' value. (Zimmer 1964: 15)
- (8) The stem to which a relatively nonproductive **negative affix** can attach tends to be an UNMARKED, WEAK POSITIVE scalar value. (Horn 1989: 286)
- (9) Words in *un* are thrown out if the morpheme **dis** is uniquely contained in the cycle adjacent to *un*. (Siegel 1977: 192)
- (10) **Condition on un-prefixation** (Allen 1978: 50)
Un's base may not have negative content.
- (11) Principle 3 (Seuren and Jaspers 2014: 632)
A **negative affix** can only be attached to the positive member of a positive-negative pair.

New Observation

Certain cases of **syntactic** negation show exactly the same restriction as *un-*.

- (12) a. Zijn houding is **weinig** actief/*passief
his attitude is little active/passive
'His attitude is not very active/passive.'
- b. Son comportement est **peu** actif/*passif
her attitude is little active/passive
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- ▶ It's not the morphology!

Claim

The restrictions on stacking negative markers follow from the general restriction on admissible functional sequences in (13).

(13) * $\langle X, X \rangle$

The functional sequence must not contain two immediately consecutive identical projections.

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- (14) Negative morphemes contain a Neg-feature.
- (15) Phrasal spellout
 - a. The lexicon contains nothing but well-formed syntactic expressions (i.e. syntactic trees).
 - b. Lexical items spell out phrasal nodes in syntactic trees
- (16) *Superset Principle*

A lexical entry may spell out a syntactic node iff the lexical tree is identical to the syntactic tree, or if it contains the syntactic tree as a constituent.
- (17) *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 .

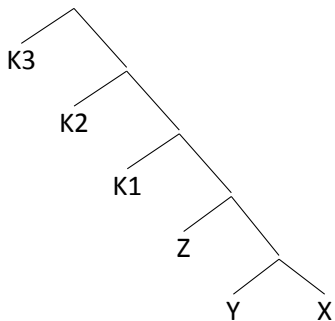
PRE vs POST marking (Starke to appear)

Starke (to appear): two modes of combination:

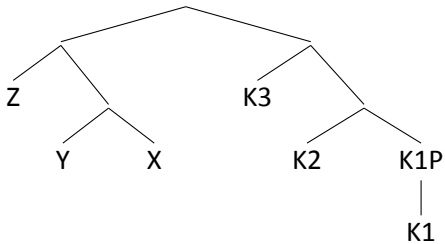
- ▶ Merge-f
- ▶ Merge-XP

POST

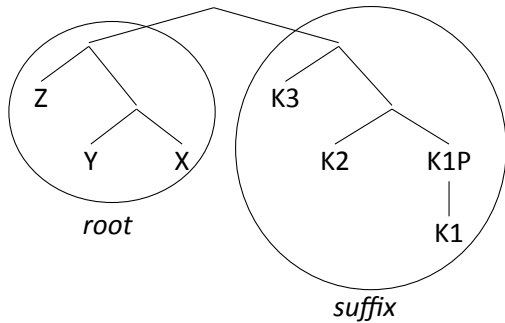
(18) Merge-f



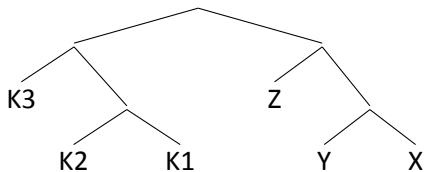
(19) Move-ZP



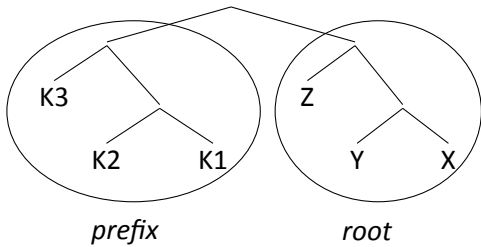
(20) Move-ZP



(21) Merge-XP

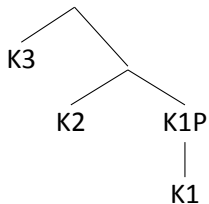


(22) Merge-XP

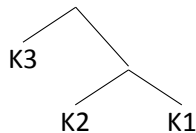


The Lexicon

(23) POST: unary bottom



(24) PRE: binary bottom



Introduction

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Analysis I

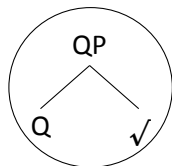
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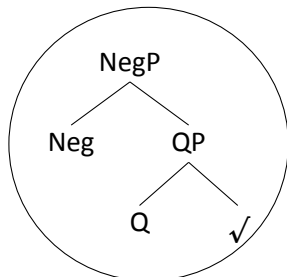
Positive and negative gradable adjectives

(25)



happy

(26)



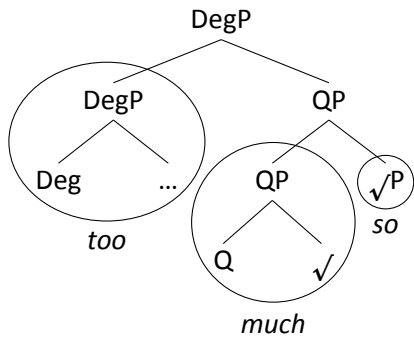
sad

much-support (Corver 1997)

- ▶ Q = gradability
- ▶ *much* = spellout of QP

- (27)
- John is fond of Mary. Maybe he is **too much** so.
 - John is fond of Mary. Maybe he is **as much** so as Bill.
 - The weather was hot in Cairo—**so much** so that we stayed indoors all day.

(28)



un-/iN vs non

Zimmer (1964: 33):

- (29)
- a. non-christian: '(not) related to, pertaining to, characteristic of certain religious doctrines'
 - b. un-christian: 'a **scale** of conformity or opposition to certain norms'

un-/iN vs non

Zimmer (1964: 33):

- (29)
- a. non-christian: '(not) related to, pertaining to, characteristic of certain religious doctrines'
 - b. un-christian: 'a **scale** of conformity or opposition to certain norms'

- ▶ *un-* is a scalar negator
- ▶ *un-* spells out a Q and a Neg feature

un-/iN vs non-

Lieber (2004: 121): “*non-* attaches to all kinds of adjectival bases, both gradable and ungradable , and quite consistently forms negatives that are both nongradable and contradictory in meaning”.

(30)

A	<i>non-A</i> <i>nongradable</i>	<i>un-A</i> <i>gradable</i>
American	non-American	unamerican
grammatical	nongrammatical	ungrammatical
Cartesian	non-Cartesian	un-Cartesian
maternal	nonmaternal	unmaternal
motherly	??nonmotherly	unmotherly

un-/iN- vs non-

- (31) a. This sentence is more ungrammatical than that one.
b. *This sentence is more nongrammatical than that one.
- (32) a. The blood found in in the closet was
nonhuman/*inhuman.
b. Their behaviour was inhuman/*nonhuman to the
extreme.

un-/iN- vs non-

Horn (1989: 281)

- (33) downright un-American/#non-American
 very un-Christian/#non-Christian
 extremely unnatural/#nonnatural
 somewhat immoral/#nonmoral
 awfully irrational/#nonrational
 rather unscientific/#nonscientific

Zwicky (1970) on *usually, typically, characteristically, probably, ...* :

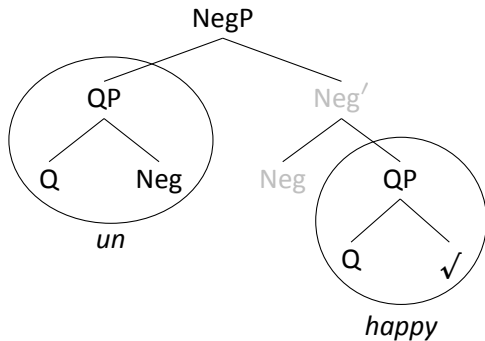
- ▶ sentential adverb reading without *un-*
- ▶ sentential adverb reading absent with *un-*

- (34) a. The children are usually noisy.
b. Usually, the children are noisy.
- (35) a. The children are unusually noisy.
b. *Unusually, the children are noisy.

un-

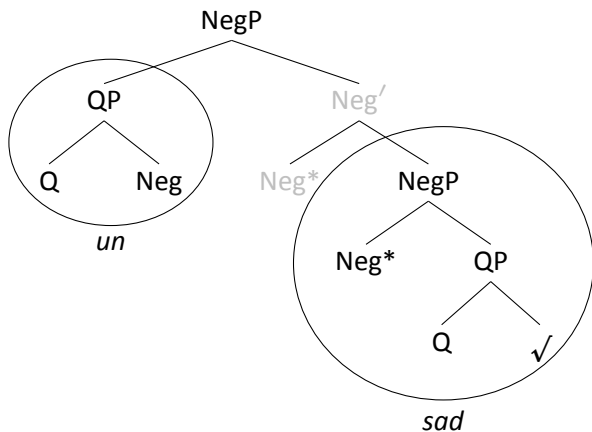
- ▶ *un* = scalar negator
- ▶ *un* spells out Neg+Q

(36)



*un-prefixed negative adjectives

(37)



*un-prefixed negative adjectives

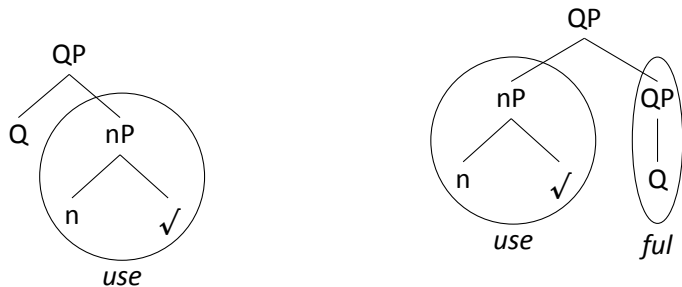
- ▶ (37) violates (13):

(13) * $\langle X, X \rangle$

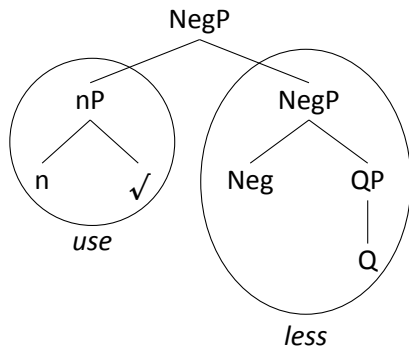
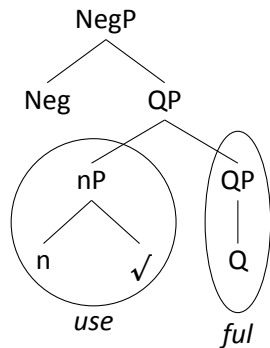
The functional sequence must not contain two immediately consecutive identical projections.

*un-prefixed derived negative adjectives

(38)

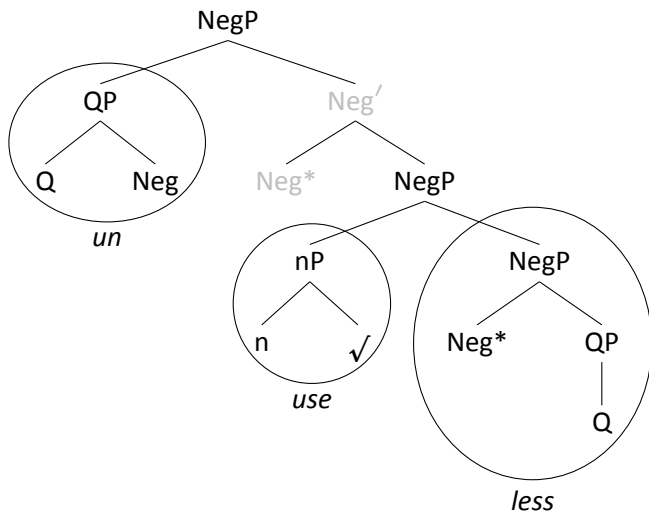


*un-prefixed derived negative adjectives



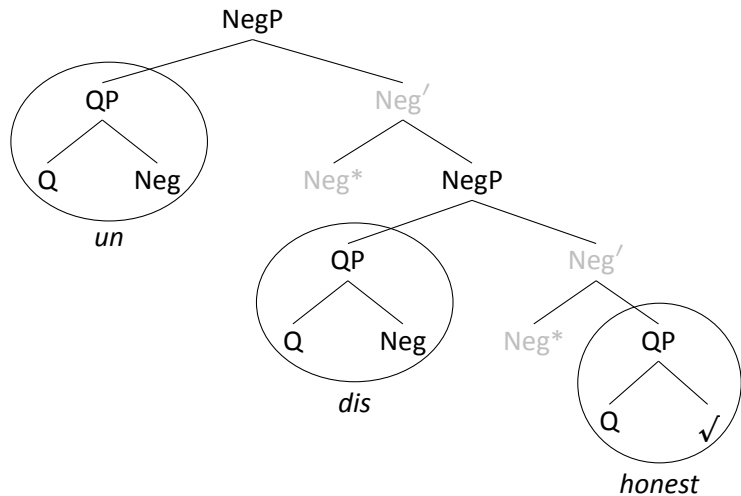
*un-prefixed derived negative adjectives

(39)



*un-prefixed derived negative adjectives

(40)



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Q-word LITTLE

English	EQUATIVE		COMPARATIVE		SUPERLATIVE	
	COUNT	MASS	COUNT	MASS	COUNT	MASS
POSITIVE	many	much	more		most	
NEGATIVE	few	little	fewer	less	fewest	least

Q-word LITTLE

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POSITIVE	many	much	more		most	
NEGATIVE	few	little	fewer	less	fewest	least

Dutch	EQUATIVE		COMPARATIVE		SUPERLATIVE	
	COUNT	MASS	COUNT	MASS	COUNT	MASS
POSITIVE	veel		meer		meest	
NEGATIVE	weinig		minder		minst	

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French	EQUATIVE		COMPARATIVE		SUPERLATIVE	
	COUNT	MASS	COUNT	MASS	COUNT	MASS
POSITIVE	beaucoup		plus		le plus	
NEGATIVE	peu		moins		le moins	

Q-word LITTLE

- ▶ MUCH is severely restricted as an adjectival modifier
- ▶ LITTLE can modify adjectives in many languages
- ▶ if it does, LITTLE displays a polarity restriction, combining only with positive adjectives

Dutch *weinig* 'little'

- ▶ can modify positive adjectives
- ▶ cannot modify negative adjectives, whether lexically negative or with a negative prefix or suffix

weinig + positive/*negative adjective

- (41)
- a. *weinig* actief/*passief
little active/passive
 - b. *weinig* gezond/*ziek
little healthy/sick
 - c. *weinig* correct/*fout
little correct/wrong
 - d. *weinig* verstandig/*dom
little clear/confused
 - e. *weinig* interessant/*saai
little interesting/boring
 - f. *weinig* duidelijk/*verward
little clear/confused

weinig + positive/**un*-prefixed adjective

- (42)
- a. *weinig* geloofwaardig/*ongeloofwaardig
little credible/unbelievable
 - b. *weinig* verstandig/*onverstandig
little intelligent/unintelligent
 - c. *weinig* aantrekkelijk/*onaantrekkelijk
little attractive/unattractive
 - d. *weinig* duidelijk/*onduidelijk
little clear/unclear
 - e. *weinig* zichtbaar/*onzichtbaar
little visible/invisible
 - f. *weinig* geduldig/*ongeduldig
'little patient/impatient'

weinig + N-ful/-less*

- (43)
- a. weinig berouwvol
little remorseful
 - b. weinig begripvol
little understanding
 - c. weinig hoopvol
little hopeful
 - d. weinig succesvol
little successful
- (44)
- a. *weinig ademloos
little breathless
 - b. *weinig zinloos
little senseless
 - c. *weinig genadeloos
little merciless
 - d. *weinig nutteloos
little useless

French

- ▶ a set of negative prefixes corresponding to *un-*:
iN/dés/dis/mal/mé
- ▶ these show the same polarity restriction as *un-*

injuste	*infaux	'unjust/unfalse'
immodeste	*inorgueilleux	'immodest/unproud'
désagréable	*désennuyeux	'unpleasant/unannoying'
discourtois	*ingrossier	'uncourteous/unrude'
malheureux	*maltriste	'unhappy/unsad'
mécontent	*mésenneuyé	'dissatisfied/disannoyed'

French *peu* 'little'

- ▶ can modify positive adjectives
- ▶ cannot modify negative adjectives, whether lexically negative or with a negative prefix

peu + positive/*negative adjective

- ▶ *peu* only modifies positive adjectives:

(45)		actif/*passif	'active/passive'
		agréable/*embêtant	'pleasant/annoying'
	peu	aimable/*hostile	'friendly/hostile'
		clair/*embrouillé	'clear/confused'
		intéressant/*ennuyeux	'interesting/boring'

**peu* + UN-prefixed adjective

- ▶ *peu* does not modify adjectives with a negative prefix:

(46)	actif/*inactif	'active/inactive'
	probable/*improbable	'likely/unlikely'
	crédible/*incrédible	'credible/incredible'
	agréable/*désagréable	'pleasant/unpleasant'
<i>peu</i>	tolérant/*intolérant	'tolerant/intolerant'
	patient/*impatient	'patient/impatient'
	content/*mécontent	'satisfied/dissatisfied'
	courtois/*discourtois	'courteous/uncourteous'
	heureux/*malheureux	'happy/unhappy'

Interim summary and preview

- ▶ the polarity sensitivity displayed by LITTLE is the same as that displayed by UN-
- ▶ therefore, the prospects of accounting for this polarity sensitivity in terms of a principle that applies only word-internally are dim
- ▶ we argue that $LITTLE = MUCH + Neg$
- ▶ the account we provided for UN- extends straightforwardly to LITTLE

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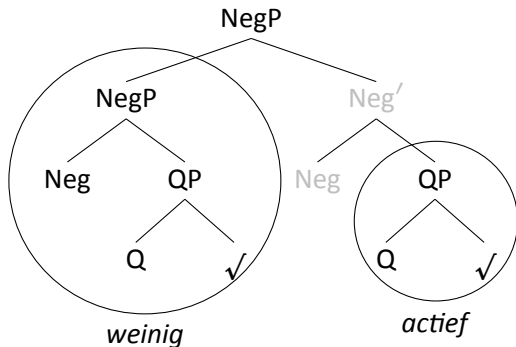
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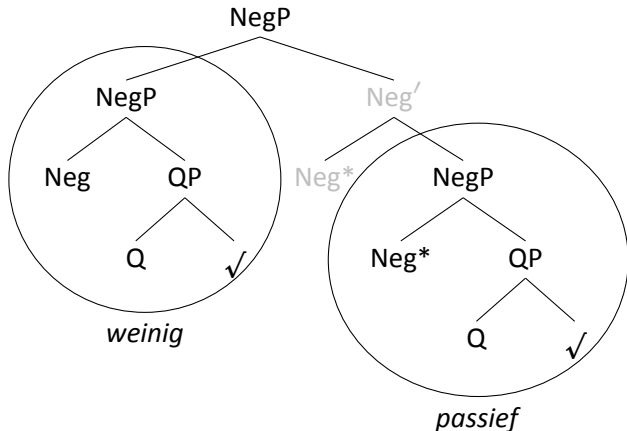
weinig actief 'little active'

(47)



**weinig passief* 'little passive'

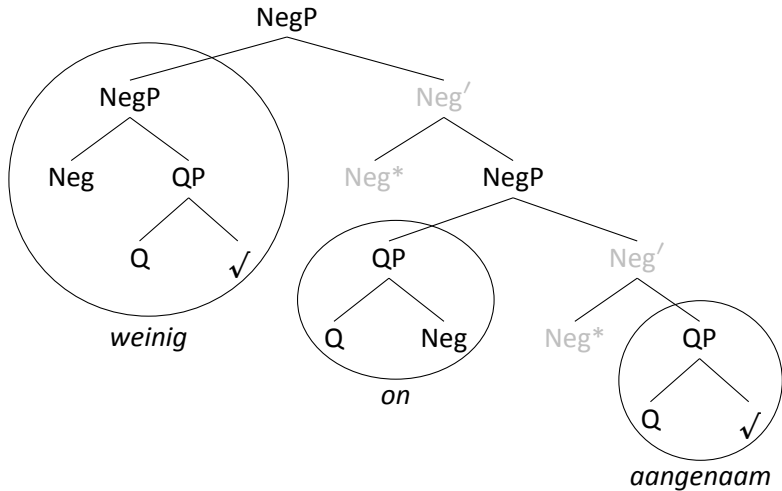
(48)



- ▶ this violates the restriction (13) on admissible functional sequences.

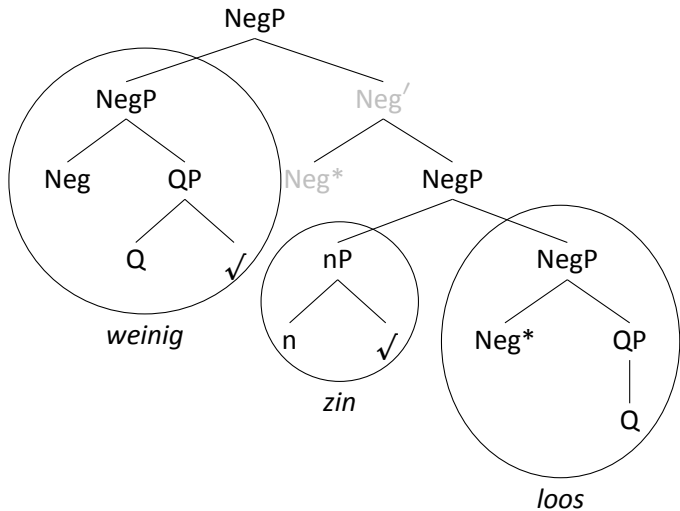
**weinig onaangenaam* 'little unpleasant'

(49)



**weinig zinloos* 'little senseless'

(50)



Structural nonadjacency

▶ 'positive' *un*-adjectives

(51)	undisheartened	unscathed
	undisputed	undefeated
	undiscoverable	unblamable
	unharméd	unobjectionable
	invulnerable	irreproachable

Structural nonadjacency

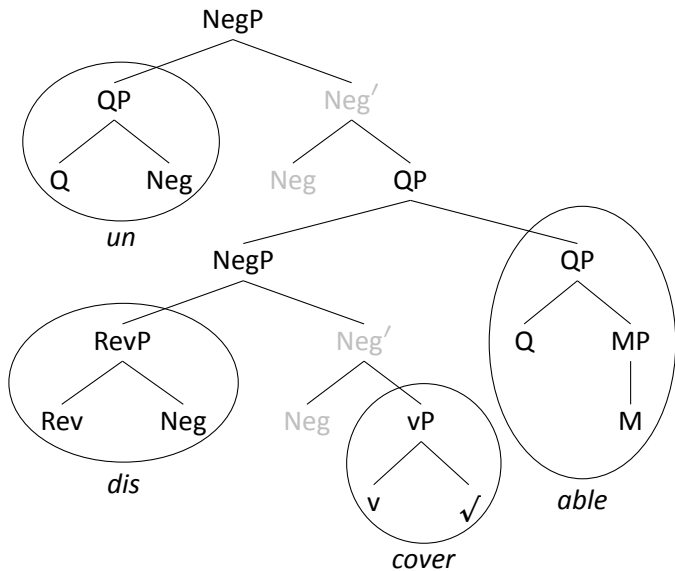
- ▶ 'positive' *un*-adjectives

(51)

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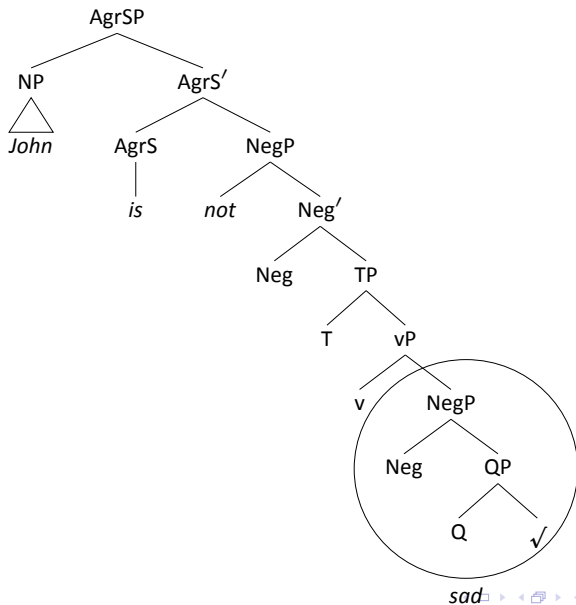
- ▶ these are all derived from verbs or nouns
- ▶ an adjective-deriving suffix structurally intervenes between the negative prefix and the negative verb/noun

(52)



John is not sad

(53)

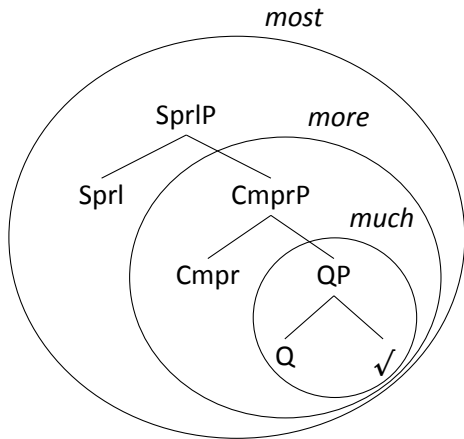


Comparatives

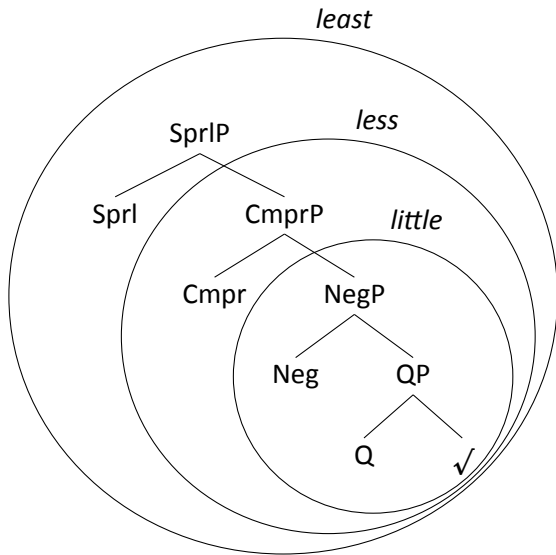
- ▶ all the (polarity) restrictions that hold for the equative degree of the Q-adjectives disappear in the comparative and superlative degrees.

- (54) a. more/less intelligent
b. more/less likely
c. more/less interesting
- (55) a. more/less foolish
b. more/less annoying
c. more/less dangerous
- (56) a. more/less unfriendly
b. more/less unhealthy
c. more/less unkind

(57)

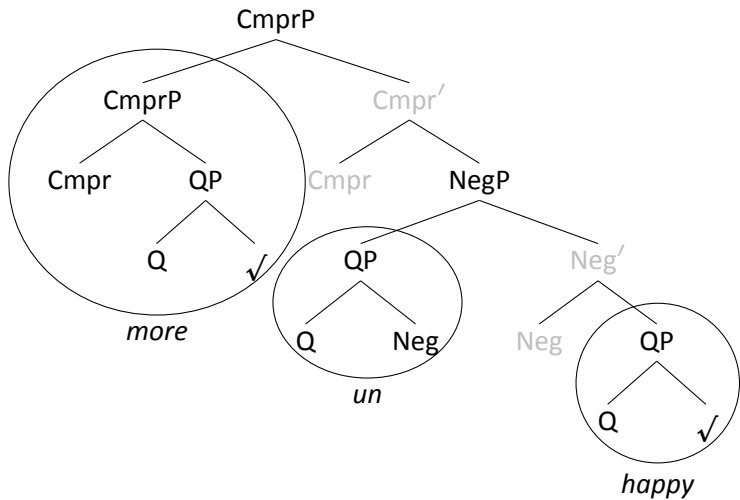


(58)



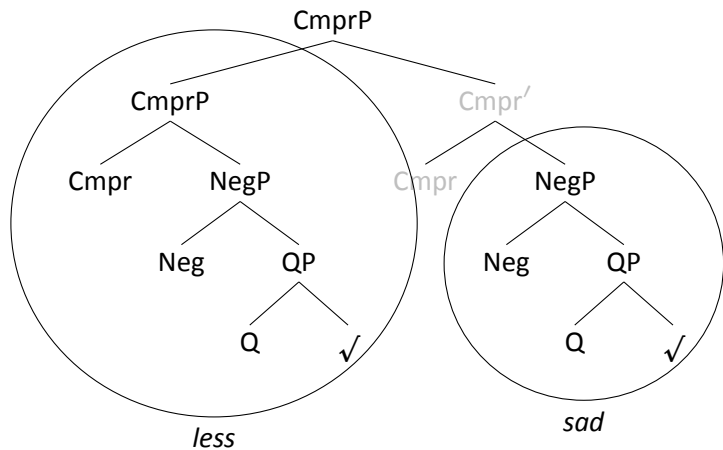
more unhappy

(59)



less sad

(60)



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Conclusion

We discussed a case study that provides support for the idea that

- ▶ the word-morpheme distinction is an epiphenomenon
- ▶ the same syntactic constraint, i.e. $\langle *X X \rangle$, operates across levels, i.e. both at the level of what is taken to be “morphology”, and what is taken to be “syntax”.

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