

# A Constraint on Double Negation



# Karen De Clercq & Guido Vanden Wyngaerd Ghent University/FWO & KU Leuven

The Word and the Morpheme, HU Berlin, 22-24 September 2016

### 1) The Problem: morphological negation

• positive adjectives may be prefixed with un-, but negative ones systematically cannot; both positive and negative adjectives can be negated with not (???):

a. unhappy b. \*unsad c. not sad \*unhostile not hostile unfriendly \*unfalse not false untrue

⇒ Zimmer/Horn-generalisation:

'Negative affixes are not used with adjectival stems that have a negative value.' (?:15) (2)

'The stem to which a relatively nonproductive negative affix can attach tends to be an unmarked, weak positive scalar value.' (?:286)

• on closer scrutiny, the pattern turns out to be more general:

• nouns suffixed with *-less* resist *un*-prefixation (though again not negation per se)  $\rightarrow$  (3).

• nouns suffixed with -ful allow un-prefixation  $\rightarrow$  (4).

• stacking multiple negative prefixes (un+dis, un+iN, un+un, dis+dis) is ruled out  $\rightarrow$  (5)-(6).

breathless \*unbreathless not breathless \*unsenseless not senseless not lawless \*unlawless lawless

successful unsuccessful not successful eventful uneventful not eventful unlawful lawful not lawful

\*undishonest not dishonest \*undiscourteous not discourteous not disloyal \*undisloyal

\*unimpossible not impossible \*unillogical not illogical \*disdishonest not dishonest

Generalisation: negative morphemes cannot be stacked.

⇒ Two important questions:

• Q1 (empirical): Why is this pattern restricted to affixal negation?

• Q2 (theoretical): Is it a coincidence that *negative* markers are excluded with *negative* adjectives?

 $\Rightarrow$  Answers: • A1: The above pattern is not restricted to affixal negation, but can be observed both with morphological and syntactic negation.

• A2: This is not a coincidence, but it follows from a general restriction on admissible functional sequences, as claimed in (7):

\*<X, X>

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

#### 2) Prerequisites

#### • General background assumptions

• the lexicon is postsyntactic, the syntax works with features.

• phrasal spellout: words spell out syntactic phrases (i.e. collections of features).

• lexical insertion is subject to the Superset Principle (?) and the Elsewhere Principle (?).

The feature structure of adjectives

• there is a (partial)  $f_{seq}$  of features: <Neg, Q, a,  $\sqrt{>}$ 

• \( \tau \): a root feature (a dimension) • a: a categorial head feature

• Q: contributes gradability (an ordering < on a scale)

• Neg: a negation feature (scale reverser: reverses the ordering of the scale of the adjective)

(8)  $NegP \Rightarrow negative gradable adjective (e.g. sad)$  $QP \Rightarrow positive gradable adjective (e.g. happy)$ Neg  $aP \Rightarrow nongradable adjective (e.g. nuclear)$ 

## On-prefixed positive adjectives

• the un-prefix spells out a Neg-feature and a Q-feature (?):

 $</\Lambda n/, [NegP Neg [QP Q]] >$ 

• evidence that un- makes gradable adjectives:

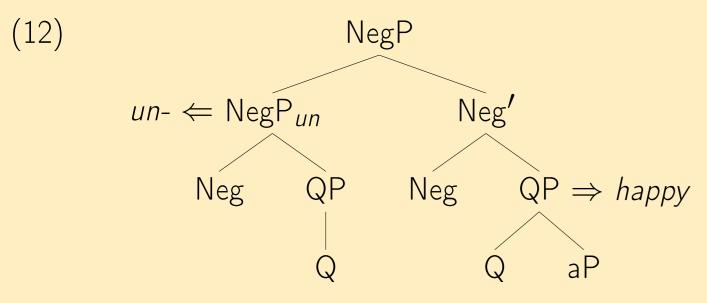
a. The blood found in in the closet was nonhuman/\*inhuman. (10)

b. Their behaviour was inhuman/\*nonhuman to the extreme.

(classifies sth as human vs nonhuman) (puts sth on a scale of humanity)

(11)a. \*This sentence is more nongrammatical than that one.

b. This sentence is more ungrammatical than that one.



happy spells out QP.

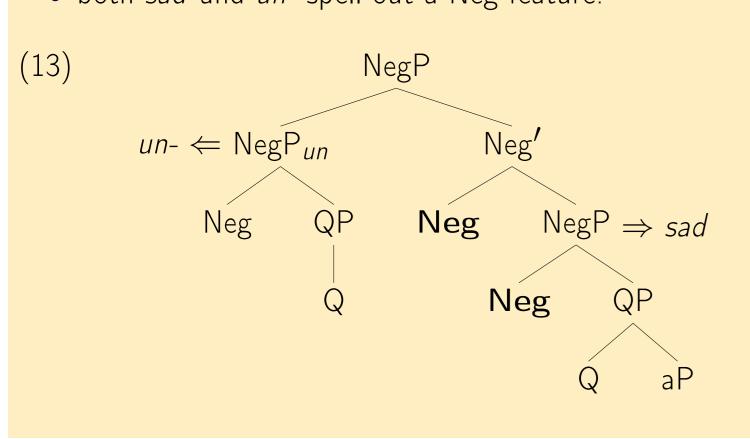
• in a parallel derivation, a complex specifier (NegP<sub>un</sub>) is created, which spells out as un-.

• this  $NegP_{un}$  is merged in the Spec of a Neg-head dominating the QP of happy.

# (3) The account

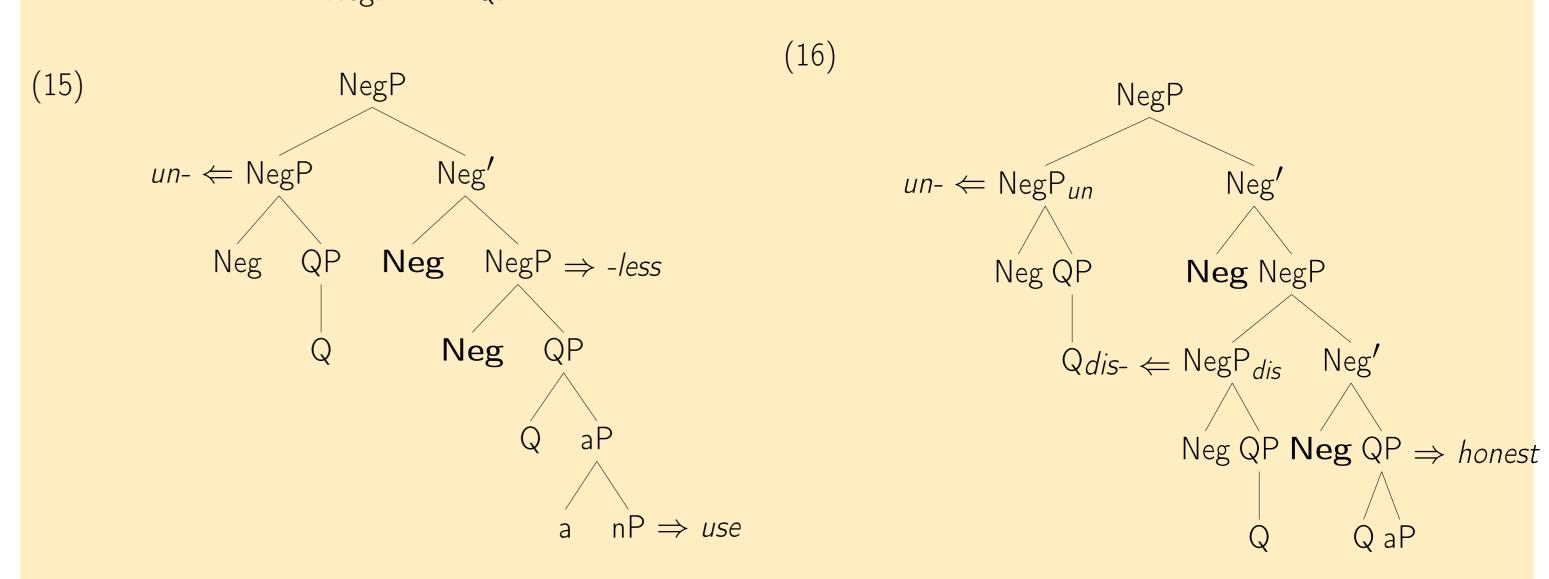
### • Un-prefixed negative adjectives

• both sad and un-spell out a Neg feature:



- (13) violates the restriction on the functional sequence in (7), since we now have <Neg, Neg, Q, a>.
- 2 Un-prefixed derived negative adjectives
- the feature set of -less reflects the fact that -less derives negative gradable adjectives (i.e. Neg, Q, and a, respectively).
- dis- spells out the same features as un-.

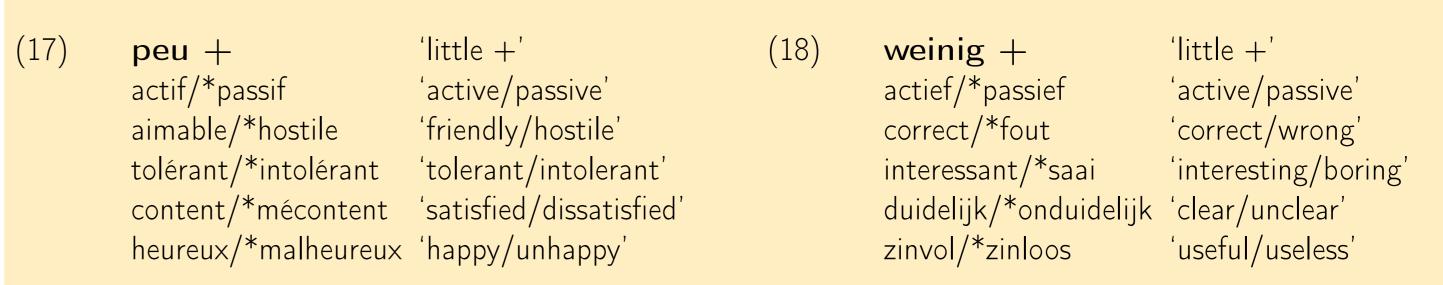
a. < /las/, [NegP Neg [QP Q [aP a ]]] >b. < /dis/, [NegP Neg [QP Q]] >



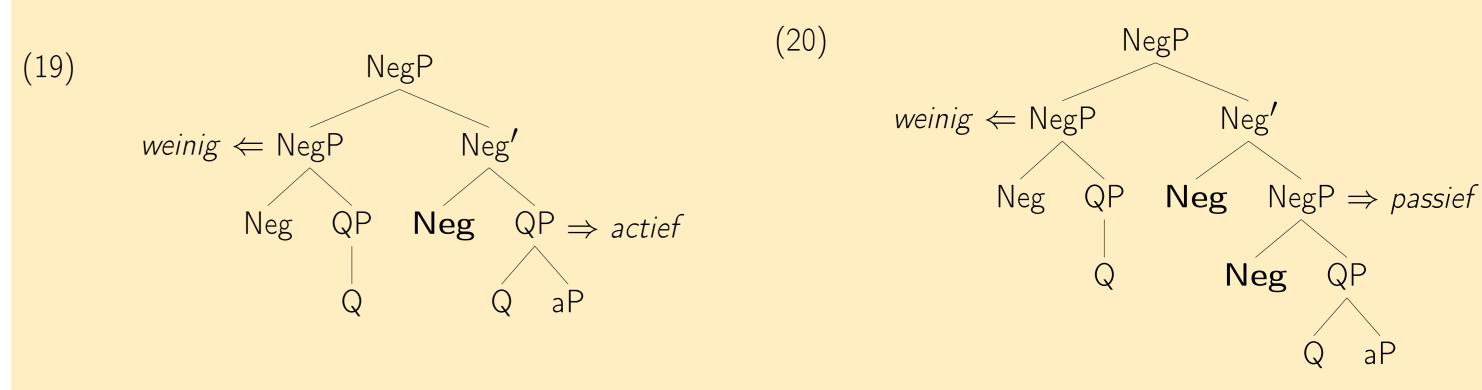
- (15) and (16) have the same violation of (7) as unsad in (13): <Neg, Neg, Q, a>
- the restrictions on morphological negation discussed in section 1 are accounted for in a principled manner by the restriction on the  $f_{seq}$  in (7).

#### 4) Additional support

- Syntactic negation
- French and Dutch not only show the pattern in (1), but the same pattern with the syntactic modifiers peu and weinig 'little', respectively:



• these data can be explained by the same account if we assume that peu/weinig 'little' are the phrasal spellout of Neg+Q:



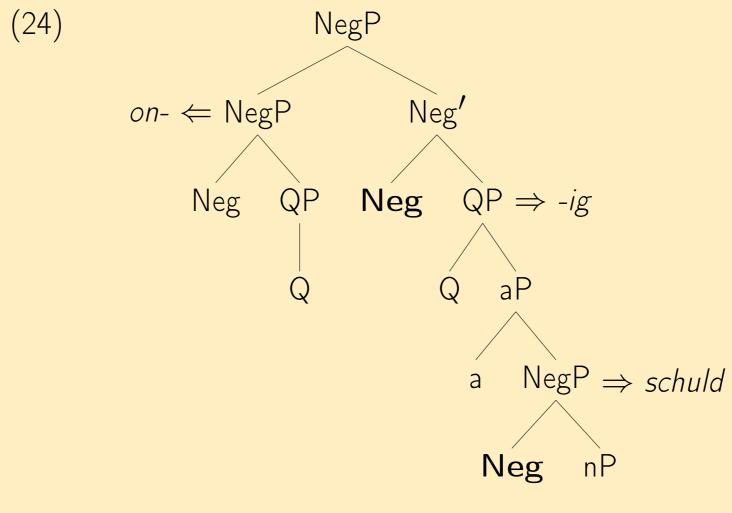
 $\bullet$  these data show that the pattern in (1) is not restricted to morphological negation, but extends to certain cases of syntactic negation.

### Apparent counterexamples

• cases like (21) (?:190-191), (22) (?) and (24) appear to contradict the earlier generalisation:

onschadelijk 'harmless' (21)undiscoverable unharmed onschuldig 'innocent' undisputed unscathed undefeated undisheartened ondogmatisch d. unblamable undismayed 'undogmatic'

- these adjectives are all derived from (negative) verbs or nouns.
- if there is a negative head, it attaches to the noun or verb.
- this does not conflict with the higher negative head spelled out by un-/on-.



• the two Neg heads are separated by other heads in the  $f_{seq}$ : the tree does not violate (7).

### (5) Conclusion

- empirical evidence suggests that the restriction on the stacking of multiple negative morphemes is not to be formulated in terms of the morphology-syntax divide.
- we account for it in a principled manner in terms of a general constraint on two successive identical features in the f<sub>seq</sub>.

### References

De Clercq, Karen. 2013. A unified syntax of negation. Ghent: University of Ghent dissertation.

Horn, Laurence. 1989. A natural history of negation. Chicago: The University of Chicago Press.

Horn, Laurence. 2005. An un-paper for the unsyntactician. In Salikoko Mufwene, Elaine Francis & Rebecca Wheeler (eds.), Polymorphous linguistics. Jim McCawley's legacy. 329–365. Cambridge, Mass.: MIT Press.

Kiparsky, Paul. 1973. "Elsewhere" in phonology. In Stephen Anderson & Paul Kiparsky (eds.), A festschrift for Morris Halle. 93–106. New York: Holt, Rinehart, & Winston.

Siegel, Dorothy. 1977. The adjacency constraint and the theory of morphology. Proceedings of NELS 8. 189–197.

Starke, Michal. 2009. Nanosyntax: A short primer to a new approach to language. Nordlyd 36. 1–6. Zimmer, Karl. 1964. Affixal negation in English and other languages Supplement to Word, Monograph 5.