

Jespersen's cycle: the argument phase

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1. Trajectories of negation

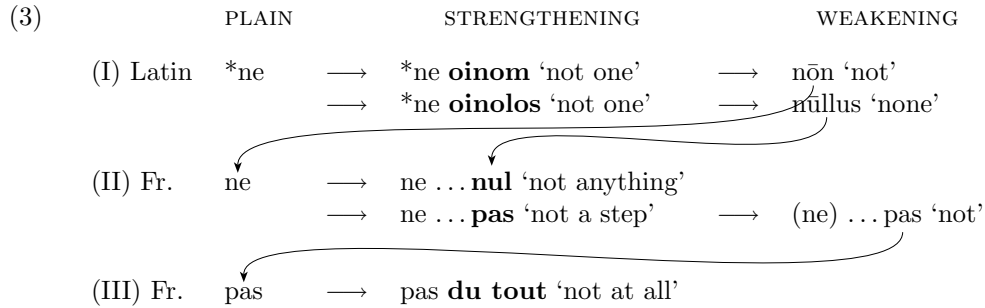
(1) JESPERSEN'S CYCLE

... “the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and this in its turn may be felt as the negative proper and may then in the course of time be subject to the same development as the original word.” (Jespersen 1917:4)

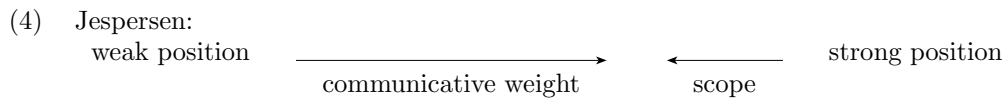
(2) Iteration of two processes:

- a. **Morphological/syntactic strengthening:** A plain negation is emphasized with a focused indefinite (**boldfaced**).
 1. Latin **ne* ‘not’ → *ne ... unum* ‘not (even) one’
 2. French *ne* ‘not’ → *ne ... pas* ‘not (even) a step’, ‘not at all’
 3. Class. Greek $\tilde{o}\tilde{u}$ → $\tilde{o}\tilde{u}\delta\epsilon \tilde{\xi}\nu$ ‘not even one’
 4. Maniot Greek $\delta\acute{\epsilon}\nu$ ‘not’ → $\delta\acute{\epsilon}\nu ... \chi\acute{\alpha}(\nu)$ ‘not even’
 - b. **Semantic weakening (“bleaching”):** The emphatic negation becomes noncompositional, and turns into a plain negation.
 1. Latin *ne ... unum* ‘not (even) one’ → *non* ‘not’ → French *ne*
 2. French *ne ... pas* ‘not at all’ → *(ne) pas* ‘not’
 3. Greek $\tilde{o}\tilde{u}\delta\acute{\epsilon}\nu$ ‘not even one’ → $\delta\acute{\epsilon}\nu$ ‘not’
 4. Calabrian Maniot $\delta\acute{\epsilon}\nu ... \chi\acute{\alpha}$ ‘not even’ → $(\delta\acute{\epsilon}\nu) ... \chi\acute{\alpha}(\nu)$ ‘not’
- Strengthening adds an expressive resource; weakening eliminates it.

- Semantic weakening can be followed by phonological reduction or loss of the original head.

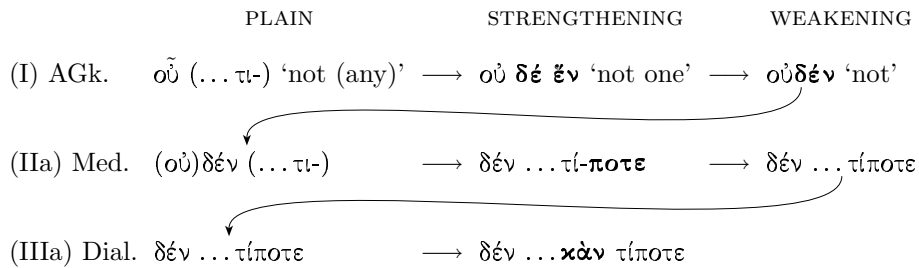


2. What drives the cycle?

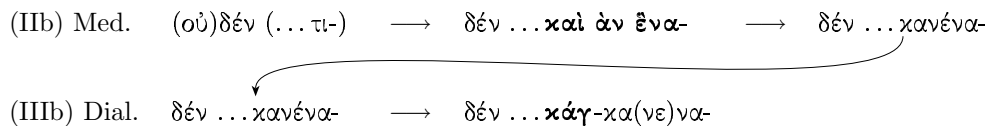


- How can parallel opposing forces generate cyclic change?
- Numerous instantiations of the cycle from Medieval to Modern Greek, but the syntax of negation stays the same.

(5) Naousa, Samothraki:



(6) Macedonia, Asia Minor:



(7) Crete:

(IIIc) δέν ... τίποτε → δέν ... **πρᾶμα** 'not a thing' → δέν ... πρᾶμα 'nothing'

(IVc) δέν ... πρᾶμα → δέν ... **δρῶσά, ἀπαντοχή** 'not a dewdrop', 'not a hope'

(8) Ἔφαες πρᾶμα; — Δρῶσά!
eat-2Sg thing dewdrop
'Did you eat anything? Nothing!' ('Not a dewdrop!')

(9) Willis (2004): a minimalist account

- The negative head's Neg feature changes from interpretable to uninterpretable, and then is lost.
- An indefinite postverbal nominal argument, becomes first a VP-adverb, then a negative specifier with an uninterpretable Neg feature, and finally a negative specifier with an interpretable Neg feature.

(10) • Another account of weakening (Bybee et al.): frequently used elements undergo "bleaching" ("inflation").

- But what causes emphatic negatives to be used frequently?
- And why are they always regenerated (the strengthening phase)?
- Answer to both questions: rhetorical function of emphatic negation.

(11) Two types of "bleaching"

- a. Compensatory bleaching: the automatic consequence of the loss of morphology (Deo 2005).
- b. Spontaneous bleaching: caused by pragmatically motivated overuse of items at the top of an evaluative scale.
- c. Weakening of emphatic negation is of the second type.

(12) All dialects of Greek at all stages distinguish emphatic negation from plain negation.

(13) Functions of emphatic negation:

- a. Denial of a (possibly implicit) assertion.
- b. Denial of a presumption or an expectation.
- c. Strengthening of a negative assertion.

(14) Strengthening of a negative assertion for aspectual disambiguation:

- Sentences like *I haven't eaten the porridge* have two readings (distinguishable in some languages by aspect or case): (1) *I haven't eaten any of the porridge, I haven't eaten the porridge at all*, (2) *I haven't eaten all the porridge*.
 - Emphatic negation resolves the ambiguity in favor of reading (1).
- (15) *Gradable:* I didn't like the bear one bit, all that much at all
Nongradable: I didn't kill the bear *one bit, *all that much at all
- (16) Two ways to strengthen a negation:
- a. QUALITATIVELY: extend it to a more comprehensive domain. GENERALIZERS do this.
 - b. QUANTITATIVELY: extend it to a stricter standard of precision. MINIMIZERS do this.
- (17) GENERALIZERS
- a. Nominals that denote a maximally general class: (*not*) *a thing*, *πρᾶμα* “a thing”, French *personne* ‘a person’.
 - b. Manner adverbs that denote a maximally general class of manners: “in no way”.
- (18) MINIMIZERS:
- a. Nominals that denote a minimal amount or part of something: (*not*) *a red cent*, *γουλιά* “a sip”, *δρoσ(ι)ά* “a dewdrop”, *τριχάρι* “a hair”, *ροσθούρι* “a nostril”,
 - b. Degree adverbs that denote minimal degrees: “(not even) to the smallest degree”.
- (19) Nominal minimizer > degree adverb:
- a. A nominal minimizer can be extended to a wider domain.
 - b. At the maximal extension it can become a degree adverb.
 - c. “Minimal piece” > “minimal quantity” > “minimal degree”.
 - d. I didn't eat *one bit* > I didn't sleep *one bit*.
- (20) Greek *κλωνί* ‘a twig’:
- a. The nominal minimizer is generalized

δὲν ἔχομε κλωνί νερό / (ψωμί)
 not have a twig water (bread)
 ‘we don't have a drop (“twig”) of water / a crumb (“twig”) of bread’
 (Kea, Salvanos 1918)
 - b. . . . and becomes a degree adverb

δέν κοιμᾶται κλωνί
 not sleeps twig
 ‘he doesn’t sleep at all (a “twig”)’ (Kerkyra, *ibid.*)

(21) Historical corollary of (12): strengthening and weakening go hand in hand. The ousting of the plain negatives by the “bleached” emphatic negatives, and the morphological/syntactic formation of new emphatic negatives, constitute a SPIRAL CHAIN SHIFT.

- Reinforcement/strengthening of negation is *not* a response to its weakening. (Contra Willis 2004).

(22) a. An empirical generalization: emphatic negation is always a bipartite structure (possibly discontinuous) consisting of a negative head (clausal negation) plus a focused indefinite.

b. Historical corollary 1: Simple indefinites do not become negative polarity items by themselves (even those which can scope under negation, such as Medieval Greek τινάς).

c. Historical corollary 2: Simple negations do not strengthen by themselves.

- Strengthening is MORPHOSYNTACTIC change, weakening is SEMANTIC change.

3. The transition problem

(23) a. From pragmatics to lexical meaning (this talk)

- How does a non-polarity lexical item with a meaning that allows use in emphatic negation become a polarity item?

b. Loss of compositionality (not this talk)

- EVEN + focused cardinality predicate becomes a weak negative polarity item, e.g., δέν ... καὶ ἂν εἶνα- → δέν ... κανένα-

(24) Ladusaw (1993:442): argument cycle in (25) begins with indefinites becoming scopally restricted.

- Indefinites with minimal descriptive content can be grammaticalized as nonreferential.
- Under negation, nonreferential indefinites which describe minimal units for a domain widen the restriction of the operator, hence strengthen the assertion.
- Consequently, indefinites with little descriptive content which describe minimal elements are ripe for reinterpretation as negative polarity items.

- NPIs are prime inputs to Jespersen’s argument cycle.
- (25)
- a. *not one thing*
 - b. *> not anything*
 - c. *> not nothing* (NPI becomes agreeing negative)
 - d. *> nothing* (agreement lost)
- (26)
- How can we explain the steps in (24)?
 - Scope restriction can’t drive the change because of (22).
- (27) Two approaches to polarity items:
- Licensing approach: polarity items need to be licensed by operators of a particular kind (Ladusaw 1979, Zwarts 1995, Giannakidou 1998).
 - Informativity approach: the distribution of polarity items is tied to informativity (Kadmon & Landman 1991, Krifka 1995, Lahiri 1998, Chierchia 2004).
 - Polarity items introduce alternatives.
 - Rules of compositional interpretation project the alternatives, resulting in alternative propositions.
 - The proposition expressed is semantically stronger or weaker than any of the alternative propositions ($p \subset p^{alt}$ or $p^{alt} \subset p$).
 - Conditions requiring that the proposition expressed be informationally stronger than the alternatives ($c \cap p \subset c \cap p^{alt}$).
- (28) GENERALIZERS: from generalizer use to generalizer meaning
- Emphatic negation indicates that any potential contextual restrictions on the domain are lifted. E.g. from *student of some kind* to *student of any kind*.
 - Thus the largest domain, the universe of discourse U , becomes a relevant domain of quantification.
 - The change amounts to a lexicalization of the alternatives on the indefinite (rather than being introduced compositionally by focus) and a redistribution of the indefinite’s truth-conditional and alternative content.
 - The result is that the universe of discourse is the domain of quantification in the truth-conditional content, while smaller domains are the domain of quantification in the alternatives’ content.
 - Once domain widening becomes part of its meaning, an indefinite is a polarity item.
- (29) Indefinites used as generalizers:

a. truth-conditional content of an indefinite of the form ‘a P ’ wrt some contextually specified domain D :

b. with plain negation:

$$\lambda w. \neg(\exists x \in D)P(w)(x) \wedge Q(w)(x)$$

c. with emphatic negation: larger domains become relevant; alternatives are focus-induced

$$\lambda w. \neg(\exists x \in D)P(w)(x) \wedge Q(w)(x) = p_D$$

(proposition expressed)

$$\{\lambda w. \neg(\exists x \in D')P(w)(x) \wedge Q(w)(x) \mid D' \supset D\}$$

(alternative propositions)

$$\lambda w. \neg(\exists x \in U)P(w)(x) \wedge Q(w)(x) = p_U$$

(assertive effect of emphatic negation)

(30) The common ground:

$\neg p_U$	$\neg p_U$	p_U
$\neg p_D$	p_D	p_D

(31) The effect of plain negation on this common ground:

$\neg p_U$	p_U
p_D	p_D

(32) The effect of emphatic negation on this common ground:

p_U
p_D

(33) Indefinite generalizers of the form ‘a P ’:

a. truth-conditional content:

$$\lambda Q \lambda w. (\exists x \in U)P(w)(x) \wedge Q(w)(x)$$

b. alternatives:

$$\{\lambda Q\lambda w.(\exists x \in D)P(w)(x) \wedge Q(w)(x) \mid D \subset U\}$$

(34) MINIMIZERS in emphatic negation

- Correlation between standards of precision and amounts/degrees: the looser the standard of precision the higher the minimal amount/degree of some activity to count as an activity of a certain type. E.g. how much of something you should have drunk/eaten to be able truthfully and felicitously say that you have drunk/eaten.
- In a context in which a strict standard of precision is relevant, the issue would revolve around minimal amounts/degrees. So a strict standard of precision forces more fine-grained distinctions.
- Moreover, in a context with the expectation that doing something to at least to a minimal degree is more likely than not doing it at all, emphatic negation results in an assertion that leaves the least likely possibility as the only true one.

(35) Assuming $x < y$, relevant set of possibilities under a normal standard of precision:

$\neg p_y$	p_y
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(36) Assuming $x < y$, relevant set of possibilities under a strict standard of precision:

$\neg p_y$	$\neg p_y$	p_y
$\neg p_x$	p_x	p_x

(37) An assertion of emphatic negation with a minimizer requires a common ground as in (36) and results in:

$\neg p_y$
$\neg p_x$