

# Tracking Jespersen's Cycle

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We describe four successive rounds of Jespersen's cycle in Greek and analyze the process as the iteration of a semantically driven chain shift. The contrast between plain and emphatic negation is an easily lost yet necessary part of language, hence subject to repeated renewal by morphosyntactic and/or lexical means.

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## 1 Trajectories of negation

### 1.1 Structural invariance and lexical variation

Certain structural properties of negation in Greek have been stable over three millennia. All dialects at all stages distinguish two types of negation, EMPHATIC and PLAIN. Emphatic negation is always a bipartite structure (possibly discontinuous) that consists of a negative head plus an additional focused indefinite NP or adverb. But in their lexical form the negative expressions vary widely, especially their focused indefinite component. (1) illustrates this paradoxical combination of structural stability and constant lexical innovation. It displays the plain and emphatic versions of 'nothing', 'not any' of the modern Cretan dialect and three of its antecedent stages.

(1)		PLAIN	EMPHATIC
(I)	Ancient Greek	οὐ̃ ... τι	οὐ̃-δε ... ἔν
(II)	Early Medieval Greek	(οὐ)δέν ... τι	δέν ... τί-ποτε
(III)	Greek dialects	δέν ... τίποτε	δέν ... χάν τίποτε δέν ... πράμα ...
(IV)	Cretan	δέν ... πράμα	δέν ... δροσά δέν ... ἀπαντοχή ...

The negation system of other stages and dialects of the language is built the same way. What accounts for this ubiquitous pairing of negators? What causes the high

rate of lexical replacement in this domain? And how can the two be reconciled? The answer to all these questions lies in the semantic grounding of the process known as JESPERSEN’S CYCLE. A first clue to the answer comes from the nature of the synchronic and diachronic relations between the two types of negation.

## 1.2 The typology of negative expressions

Emphatic negation always contains a focused indefinite expression which is drawn from a relatively small stock of items with a characteristic range of meanings. It is either a MINIMIZER (Horn 1989:452, Krifka 1995) or a GENERALIZER; each can be either nominal or adverbial.

A nominal minimizer denotes a negligible number, amount, or part of something, e.g. Classical Greek οὐδέ ἓν “not even one”, Modern Greek dialectal (δέ . . .) δροσ(ι)ά “(not even) a dewdrop”, γουλιά “a sip”, τριχάρι “a hair”, ρουθούλι “a nostril”, κλωνί “a twig”. It strengthens the force of the negation QUANTITATIVELY by making it stricter. In stating “I did not drink (even) a drop”, “I did not find (so much as) a twig” a speaker extends the negation even to the most insignificant amounts, which on the ordinary lenient interpretation of a negation might be exempt from it. Correspondingly, an adverbial minimizer is a degree adverb meaning “not even to the smallest degree”, e.g. *the slightest bit*. It likewise strengthens the force of negation quantitatively by making it stricter.

A nominal generalizer denotes a maximally general type or class, and strengthens the negation QUALITATIVELY, by extending its scope to include everything in that maximal sortal domain (“nothing of any kind”, “nobody whatsoever”, “not in a million years”, “not ever”). Typical examples are Medieval Greek δέν . . . τίποτε “nothing whatever” and Modern Greek dialectal δέ . . . πράμα “not a thing”. An adverbial generalizer is normally a manner adverb meaning “in any way whatsoever”.

Quantitative and qualitative strengthening can even be combined, as in the Pontic/Cappadocian type (*Neg*) . . . *ena še* ‘not one thing’, i.e. ‘not even one item [the least number — quantitative strengthening] of any sort whatsoever [qualitative strengthening]’.

A nominal minimizer can be extended to a wider sortal domain; at the maximal extension it can become a degree adverb. The semantic development is “minimal piece” > “minimal quantity” > “minimal degree”. This development has made adverbs out of English *a bit* and their Greek counterparts such as κλωνί ‘twig’ and ψίχαλο ‘crumb’.

### (2) Nominal minimizer generalized

- a. δὲν ἔχομε κλωνί νερό  
 not have a twig water  
 ‘we don’t have a drop of water’ (literally, ‘a twig of water’) (Kea, Salvanos 1918)

- b. δὲν ἔχομε κλωνί (ψωμί)  
 not have a twig bread  
 ‘we don’t have a crumb of bread’ (literally, ‘a twig of bread’) (*ibid.*)

(3) Final stage: nominal minimizer turned into degree adverb

- a. δὲν κοιμᾶται κλωνί  
 not sleeps twig  
 ‘he doesn’t sleep a wink’ (literally, ‘a twig’) (Kerkyra, *ibid.*)
- b. δε πονῶ ψίχλαλο  
 not hurt crumb  
 ‘I don’t feel pain at all’ (literally, ‘a crumb’) (Macedonia, Hatzidakis 1917)

While emphatic negation may be synchronically formed by the addition of an expression such as *κάν* ‘even’ or *ποτέ* ‘ever’ to an indefinite construed with plain negation, the converse relation does not occur: plain negation is never built from emphatic negation by the addition of some de-emphasizing element. In this precise sense, plain negation is formally UNMARKED and emphatic negation is formally MARKED.

Diachronically, on the other hand, plain negation is usually derived from emphatic negation. Inspection of (1) shows that each plain negation in this particular trajectory is etymologically identical with the emphatic negation of the preceding stage. Indeed, every plain negation of Greek was once an emphatic negation, at least in so far as its origin can be determined.<sup>1</sup>

The generalizations just formulated — that emphatic negation is formed compositionally with a minimizer or generalizer, and never conversely, and that plain negation is diachronically derived from emphatic negation — hold widely for other languages as well. There are numerous examples of emphatic negations changing “by themselves” into plain negations. Whenever we can trace the origin of plain negations in Indo-European, they turn out to be etymologically identical to earlier emphatic ones. This is true of English *not*, *no*, and *nothing*, French *ne* and *non*, Latin *nōn* and *nihil*. The generalization holds not only for clausal negation, but for independent negation as well. *Yes* and *no* were originally reserved for emphatic assertion and denial, and supplanted their plain counterparts *yea* and *nay* in Middle English. Instances of plain negations conversely developing emphatic meanings do not seem to be attested.

### 1.3 The cycle

Observation of such patterns of change in Germanic and Romance negation led Jespersen (1917) to posit a historical process of repeated weakening and reinforcement now known as JESPERSEN’S CYCLE, which he summarized as follows:

<sup>1</sup>That would include  $o\bar{o}(x)$ , if the identification of  $-x\iota$  in Homeric  $o\bar{o}x\iota$  with the Indo-European indefinite  $-k^w i-$  is correct.

... the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and this in 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)

For Jespersen, then, the weakening of the negation is a matter of phonetic reduction, and its strengthening by additional words is motivated partly by the need to maintain the distinction between negation and affirmation, and partly to make the negation more vivid. He suggests that negation tends to be weakly stressed “because some other word in the same sentence receives the strong stress of contrast” and as a result becomes a clitic. The contrast between affirmative and negative sentences being notionally important, when the phonetic attrition of negation causes it to be felt as insufficient, it is reinforced by an added word in order to restore the threatened contrast. Such reinforcement also serves “to increase the phonetic bulk” of the negative (p. 14), and “to make the negative more impressive as being more vivid or picturesque, generally through an exaggeration, as when substantives meaning something very small are used as subjuncts” (p. 15).

The role of phonetic weakening in this hypothetical scenario, however plausible it might seem, is not backed up by any data as far as we know. Our analysis of Greek turned up no support for Jespersen’s assumption that phonological weakening triggers the strengthening of negation. There are also some general reasons to doubt it. For one thing, phonetic weakening is too general a phenomenon to explain the specific properties of this unusual pattern of change. It is a ubiquitous sound change, but it rarely triggers morphosyntactic change directly, let alone cyclic trajectories, which (as Jespersen 1917:4 himself noted) are specially characteristic of negation. And one would like more convincing parallels of phonological weakening processes directly triggering syntactic reanalysis. In attested changes of negative expressions, the causation usually goes in the other direction: phonological reduction of plain negatives may be morphosyntactically conditioned, and, in particular, contingent on their semantic weakening. Negations are commonly observed to split on the basis of differences in function. In English, the clausal negative head *not* and the argument *naught* are etymologically the same, and have diverged according to their morphophonological function, no doubt as a result of associated differences in stress. The same goes for French *ne* ‘not’ and *non* ‘no’, both from *nōn* (< *ne ūnum*). A similar case from Greek is the phonological split of οὐδέν into *δέ(n)* ‘not’ and *υδέ* ‘no’ (= SG ὅχι) in Bova (Calabria) (Taibbi & Caracausi 478). Bova also provides an illustration of a phonological reduction of a negative polarity item in its modifier function, leading to a split between *κανένα*, Fem. *καμμία* ‘someone, anyone’ versus *κάνα*, Fem. *καμμά* ‘some, any’ (Rohlf 1949:122).

Therefore we will assume that the reinforcement of negation by a postverbal indefinite (the “strengthening”) is *not* a response to the phonetic weakening of the head. Instead, we will follow more recent analyses of Jespersen’s cycle in seeking the driv-

ing force of the cycle in pragmatics and semantics.

Emphatic negation tends to increase in frequency due to pragmatically motivated overuse which is characteristic of *inherently bounded evaluative scales*. This rise in frequency at the expense of plain negation has an “inflationary” effect, well attested also in politeness systems, hypocoristics, pejoratives, and scalar adjectives of all kinds (Dahl 2001).<sup>2</sup> Uncontroversially, an obligatory element cannot be emphatic, for to emphasizing everything is to emphasize nothing. Therefore, when emphatic negation rises in frequency to the point where it approaches obligatoriness, it necessarily weakens to regular negation.

The virtue of this account is that it explains the observed directionality of change, for it allows no mechanism by which plain negations could mutate into emphatic negations through normal usage. However, it is still insufficient, for the typological observations of the preceding section imply that some of the changes must be interconnected: they must constitute a CHAIN SHIFT. This is indeed how Jespersen depicts the cycle. He imagines it happening in two phases. The first, which can constitute an iterable chain shift on its own, involves a weakening of the negation plus a compensatory strengthening by means of some added word. The second consists of a reanalysis of the strengthener as the primary exponent of negation (that is, as the negative head).

Let us therefore marry the Jespersenian chain shift idea to the pragmatic/semantic mechanism proposed by Dahl and others. We end up with the following view of its nature and motivation. The contrast that the chain shift maintains is *not* that between affirmation and negation, as Jespersen assumes, but *the contrast between plain and emphatic negation*. And the weakening that undermines the contrast is not phonetic weakening of plain negation, but *semantic weakening of emphatic negation*.

The idea that the first phase of the cycle is a chain shift involving plain and emphatic negation provides the beginning of an answer to the diachronic part of our puzzle. If weakening and strengthening always go hand in hand, then it follows that the contrast between plain and emphatic negation will be maintained at each stage of the language.

In the next section we examine the mechanism behind the change more closely, and address the question how, unlike more familiar chain shifts mechanisms, it generates a circular trajectory. Our answer is based on an analysis of the pragmatics and semantics of emphatic negation, outlined here informally and to be elaborated in another paper.

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<sup>2</sup>As Dahl points out, not every frequent word (and not even every scalar predicate) is prone to undergo “bleaching”, and not all “bleaching” is due to this kind of inflationary effect. We think that some types of semantic weakening are really automatic results of loss of lexical or morphological items in a semantic field (deblocking). For example, *where* did not acquire its new directional meaning through “bleaching” from frequent use, but simply because it automatically took over the meaning of *whither* when that word was lost.

#### 1.4 An interpretation of Jespersen's cycle

To model a chain shift we need at least two things: a principle that requires the maintenance of some contrast, and a process that disrupts the contrast by altering one of the elements that express it. The requirement that the contrast be maintained entails that any neutralization in the relevant domain will be accompanied by some other change that preserves the contrast, or immediately followed by some other change that restores it. Such a sequence of changes constitutes a chain shift.

Chain shifts are usually invoked in phonology, where their status is largely unquestioned (but in reality quite problematic, Gordon 2002). But if chain shifts exist at all, then on general grounds it ought to be possible to make a stronger case for them in morphosyntax, especially in core morphosyntactic categories such as negation. The reason is that many such categories are universal, and their formal expression is highly constrained by principles of grammar. When such a category is lost, it *must* be regenerated, and there are a limited number of possible ways in which it *can* be regenerated.

Another way to put this point is as follows. The principle of contrast maintenance can either require that a particular grammatical or lexical distinction be preserved, or that a particular phonological or grammatical device (say, a given phonemic or featural opposition) should bear some functional load. The changes driven by these two types of contrast maintenance are known as “push-chains” and “drag-chains”, respectively. Jespersen's cycle (at least as we understand it) is both, since the contrast it maintains is both functionally determined and highly constrained in its formal expression.

We have seen that emphatic negations are built morphosyntactically from plain negations, and weaken back to plain negations. This implies two processes.

- (4) a. *Morphological/syntactic strengthening*: A plain negation is emphasized with a focused indefinite.
- b. *Semantic weakening*: The emphatic negation becomes noncompositional, loses its “even” meaning, and becomes a plain negative polarity item.

These processes interact to generate the complex of changes known as Jespersen's cycle.

Strengthening and weakening are functionally antagonistic, in that one adds an expressive resource to the language, while the other eliminates it. Therefore their etiology necessarily differs, and they are also formally quite distinct. Yet, as we shall see, both are grounded in the normal use of scalar evaluative expressions.

Our proposal partly returns to the traditional view that the cycle is driven by the expressive use of language. In contrast to traditional phonology-driven accounts and recent syntax-centered accounts, we treat the cycle as fundamentally a process of semantic change, to be sure with phonological and syntactic consequences.

The Greek data provide an immediate empirical reason for pursuing this approach. The evolution of negation from medieval Greek to the modern dialects involves several

rounds of the cycle *with no accompanying syntactic change whatsoever*, and for that matter with no relevant phonological change either. What does characterize all the changes, however, is an invariant pattern of semantic shifts.

This is of course not to say that the cycle never has syntactic repercussions. The weakening phase of the semantic shift can actually be associated with two kinds of syntactic reanalysis. The focused indefinite, once it becomes a negative polarity item, can become a negation head of its own — the familiar case — or undergo another development which is described here for the first time: it can become a noun or indefinite pronoun acceptable in positive contexts. This happened in four separate Greek dialects (section 3.2). So the syntactic aspect of Jespersen's cycle is quite complex.<sup>3</sup>

Also, the weakening may, but need not, lead to phonological reduction of one or both of its parts, as a result of which it can eventually become monomorphemic again.

In addition to the inflationary mechanism invoked above, the causal explanation of Jespersen's cycle requires a second assumption, which concerns negation systems, and is also independently motivated. This is that any language has the resources to express both both plain and emphatic negation. This is certainly true for Greek: as already noted, all dialects at all times distinguish formally between the two types of negation. Analyses that postulate emphatic negation only for intermediate stages in the trajectory reduce this to a mere accident. As far as they are concerned, the language may or may not have emphatic negation in its repertoire before the change is initiated, and again after it is completed. If a strengthener must always be available, then it follows necessarily that weakening and strengthening must go hand in hand. As soon as a negation is lost, it is renewed by another round of strengthening.

Why might languages “need” both plain and emphatic negation? Probably to serve the very same rhetorical functions that cause it to be overused. At least three main functions of emphatic negation can be identified. The first function of emphatic negation is to mark contradiction of a (possibly implicit) assertion.

- (5) A: Obviously he ate the porridge.  
B: No, he didn't eat the porridge *at all*.

A second function of emphatic negation is to deny a presumption or an expectation.

- (6) A: What did it cost you?  
B: I didn't cost me *a thing*.

Hence it can also convey an implicit expectation; for example, (6) could be used in a context where the cost of the item has not come up in order to convey the idea that the item *could* have cost something.

Third, emphatic negation strengthens a negative assertion by lifting contextual restrictions on an indefinite in the scope of negation or by forcing a ‘totality’ reading

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<sup>3</sup>On the issue of unidirectionality in general, see Kiparsky MS.

on a definite argument of a gradable predicate. A clear instance of this latter function of emphatic negation is aspectual disambiguation, and specifically distinguishing telic and atelic readings of predicates. For example, (7a) is ambiguous between a telic reading and an atelic reading

(7) I haven't eaten the porridge.

- Telic reading: 'I haven't eaten any of the porridge.'
- Atelic reading: 'I haven't eaten all the porridge.' ['... though I might have eaten some of it.']

Adverbial emphatic negation disambiguates the sentence in favor of the telic reading.

(8) I haven't eaten the porridge at all.

We assume that these functions are so basic that any language must have the means to express them.

Supposing that a language must have some means of distinguishing plain and emphatic negation, and that emphatic negative elements may become weakened through normal usage, it follows directly that negation must be subject to the characteristic cyclic course of change that Meillet and Jespersen identified.

We are now in a position to solve another puzzle. Jespersen's cycle counts as a classic instance of grammaticalization. Grammaticalization is considered to be UNIDIRECTIONAL grammatical change (whether trivially by definition, or in a consequence of some deeper principles, Kiparsky MS). How, then, can a CYCLIC trajectory of change be an instance of grammaticalization?

Given what we have said, one answer might be that only one phase of the cycle, the weakening phase, instantiates grammaticalization. It consists of the "bleaching" of an emphatic negative into a plain negative, with loss of compositionality, and typically with phonological reduction as well. In the strengthening phase, the lost expressive resource is formally renewed. But (in terms of the traditional typology of change) this is not grammaticalization but ordinary analogical change. A new emphatic negative is built compositionally in accord with the language's morphological and syntactic rules. *The iteration of reductive grammaticalization and constructive analogy yields a cyclic trajectory.*

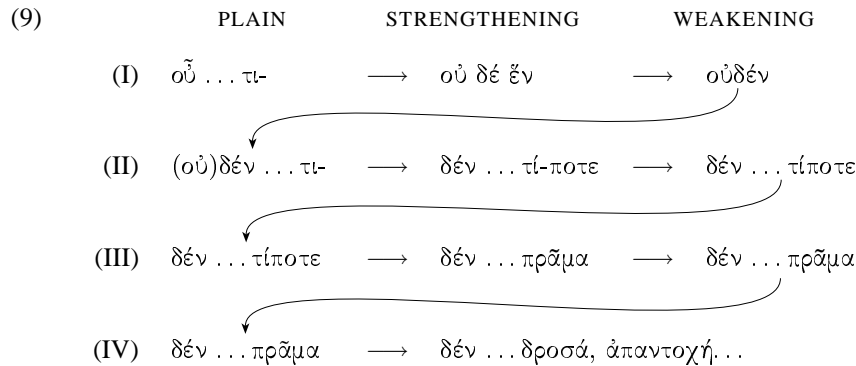
Self-evidently, *all* so-called 'unidirectional' changes must be part of such cyclic trajectories, though possibly of extremely long duration. For, if the inputs of unidirectional change were not renewable, they would no longer exist anywhere, because the change would have taken its course everywhere. Moreover, because of the uniformitarian principle it would be puzzling how they ever could have arisen in any language at any stage.



## 2 Jespersen’s cycle in Greek

### 2.1 Descriptive summary of the trajectories

The documented history of Greek has three completed rounds of the cycle, plus a fourth which is underway in a number of dialects. All consist of a mutually linked semantic strengthening and weakening process; the weakening phase of cycle I is also associated with a syntactic argument-to-head reanalysis. The diachrony of the negation systems in (1) is shown in (9). The first column of arrows in the chart represent the morphosyntactic strengthening by the addition of a focused indefinite, and the second column of arrows represent the corresponding “inflationary” weakenings of the negation’s force. Keep in mind that the weakenings are purely diachronic reanalyses, whereas the strengthenings, in addition to being diachronic innovations, form a synchronic opposition between emphatic negation and plain negation in the grammar.



At stage I, the plain, non-emphatic negation οὐ̃(χ) strengthened to οὐ̃-δέ̃ εἷς (οὐ̃δεῖς) ‘not even one’, and οὐ̃δεῖς in turn lost its emphatic meaning and became a plain negative ‘no-one’. The corresponding neuter οὐ̃δέν came to serve as a clausal negation, at first emphatic (‘not at all’), later simply meaning ‘not’, and becoming phonologically reduced to δέν (see Roberts and Roussou 2003:157-160 for an analysis of this change in the context of their approach to grammaticalization based on minimalist syntax). This cycle was completed by the early medieval period.

At stage II, the plain indefinite τί- is strengthened in negative contexts with ποτέ ‘ever’ in the neuter. In the masculine and feminine, its emphatic counterpart is καὶ ἄν ἕνας, καὶ ἄν μία ‘even one’. Viz. δέν . . . τί ‘not anything, nothing’ → οὐ̃δέν . . . τί-ποτε ‘nothing at all’, δέν . . . τίς/τινάς ‘not anybody, nobody’ → καὶ ἄν ἕνας ‘nobody at all’. The resulting τίποτε and κανένας are then in turn weakened to plain negative indefinites, in fact, to negative polarity items. This development was completed in the medieval period.<sup>4</sup>

<sup>4</sup>It may have been a two-stage process from a strong negative polarity item (an indefinite acceptable only in negative contexts) to a weak negative polarity item (acceptable in other licensing environments, such as antecedents of conditionals or questions).

As emphatic negatives are weakened, new ones are again formed to replace them (stage III). Depending on the dialect, this is done in one of two ways. The negation can be reinforced by the addition of a strengthener such as *κάν* ‘even one’, either bare or added to an indefinite (including *τίποτε* and *κανέννας*):

(10) Stage III: Strengthening by *κάν*

- a. δὲν ἔχω κά(ν) (ψωμί)  
not have at all (bread)  
‘I don’t have any (bread) at all’ (Mani, Blanken 160)
- b. δέ με πονεῖ κα̃  
not me hurts at all  
‘I don’t feel pain at all’ (Mani, Georgacas 106)
- c. κάγγανεννας ‘no-one at all, not a soul’ (Cappadocian, Danguitsis 1943)
- d. κάγκαννας (< *κάν* *κανέννας*) ‘no-one at all’ (Macedonian, Kretschmer 273, Höeg 201)
- e. *κάντίπουτας* = ‘τίποτα ἀπολύτως’ (Naousa, Kontosopoulos 181)
- f. *καδ̃bouδα* = ‘τίποτα ἐντελῶς’ (Samothraki, Kontosopoulos 188)

In Pontic, the renewal of emphasis is achieved just by *ίνας* ‘one’. The result is an interesting reversal where *κανίς*, etymologically ‘even one’, is used for plain negation and the bare *ίνας* ‘one’ is used for emphatic negation.

- (11) a. *κανίς* *k<sup>h</sup>* *έρθεν* ‘nobody came’
- b. *ίνας* *k<sup>h</sup>* *έρθεν* ‘not even one person came’ (emphatic negation, Drettas 281)

The second source of new emphatic negatives at stage III is strengthening by lexical indefinites such as *πράμα* ‘a thing’.

- (12) βρίσκει μιὰν κοπέλλα . . . ποὺ δὲν ἤξερε πρᾶμα  
finds a girl who not knew thing  
‘finds a girl who has no clue’ (Thera, Kontosopoulos 166)

In yet a fourth cycle, some of these emphatic indefinites lose their emphatic character and become weak negative polarity items. The emphatic negation is then renewed by other lexical items. In the Cretan dialect, *πράμα* ‘anything, something’, which was introduced at stage III, becomes a weak polarity item (capable of appearing in questions, see (13)), and is replaced in its emphatic function by words such as *δροσ(ι)ά* ‘dewdrop’. These examples are from the copious inventory of minimizers and generalizers from every stage and dialect of Greek compiled by Andriotis 1940 (pp. 86-87).

- (13) a. Ἐδώκασί σου πρᾶμα; — Ἄπαντοχή!  
give-3Pl you-Dat thing hope  
‘Did they give you anything? Nothing!’ (‘Not a hope!’)
- b. Ἐφαεῖς πρᾶμα; — Δροσά!  
eat-2Sg thing dewdrop  
‘Did you eat anything? Nothing!’ (‘Not a dewdrop!’)

- c. Ἔχετε να φάμε τίβοτες; — Δῶρος!  
 ‘eat-2Pl to eat-1Pl anything present!’  
 ‘Do you have anything for us to eat? Nothing!’ (‘Not even for free!’)

### 3 Strengthening by *χάν-* ‘even’ and *-ποτε* ‘ever’

#### 3.1 Medieval Greek *κανέννας* and *τίποτε*

In Medieval Greek, the inherited plain indefinite *τίς*, *τινάς*, originally ‘someone’, ‘anyone’, begins to be displaced in reference to humans by the new emphatic *κανέννας* ‘(not) even one’ (from *καὶ ἄν ἕνας*). In modern Greek *κανέννας* has taken over, but reflexes of *τίς*, *τινάς* survive dialectally. In this section we document a previously unnoticed intermediate stage of the trajectory in Late Medieval Greek texts. In the following section we examine the survivals of indefinite *τίς* in Calabrian Greek and the remarkable reflexes of *χάν-* ‘even’.

At the stage of medieval Greek represented by such texts as *Makhairas*, the emphatic force of *κανέννας* has been attenuated but not yet wholly lost. Its meaning ‘(not) even one’ has acquired a partitive component and normally refers to some contextually salient group. The translation ‘(not) even one of them’ (German ‘keiner’), is usually appropriate (and indeed that is how Dawkins sometimes renders it). In virtue of this more specialized meaning it contrasts with the more nondescript *τινάς* ‘(not) anyone, no-one’ (German ‘niemand’). The examples in (14)-(15) illustrate the contrast.

(14) *κανέννας* ‘anyone (of some group)’, ‘(nicht) einer/keiner’

- a. καὶ δὲν ἐγλύτωσεν κανέννας  
 and not escaped anyone  
 ‘and not one of them escaped’ (*Makhairas* 16.15, tr. Dawkins)
- b. να ... μὲν ἐλεμονηθῆς κανέναν  
 that not pity-2Sg anyone  
 ‘that you have mercy on no-one of them’ (*Makhairas* 16.1)
- c. καὶ ἀνίσως ... ἀφήσης ζωντανὸν κανέναν  
 and if leave alive anyone  
 ‘and if you leave any one of them alive’ (*Makhairas* 16.5)
- d. οἱ ἄρχοντες ἐσίγησαν κανεῖς λόγον οὐ δίδει  
 the lords fell-silent no-one speech not give  
 ‘the lords fell silent; none of them utters a word.’ (*Belisarios* 153)

(15) *τινάς* ‘(not) anyone’, ‘(nicht) jemand / niemand’

- a. δὲν ἀφῆκεν τινὰν νὰ πάγη εἰς τὸν σουλτάνον  
 not allowed anyone to go to the sultan  
 ‘would allow no one to go to the sultan’ (*Makhairas* 126.4)

- b. τὸ κοῦρσος δὲν εἶναι τινὸς διάφορος παρὰ τοῦ φουσσάτου  
 the pillaging not is to anyone advantageous except to the army  
 ‘pillaging is of advantage to no one except to the army’ (160.36)
- c. μηδὲν ἔχῃ τινὰς φωτίαν  
 that-not have anyone torch  
 ‘so that no one should have a torch’ (362.11)
- d. καὶ δὲν ἐγλύτωσεν τινὰς  
 and not escaped anyone  
 ‘and no one escaped’ (546.4)
- e. νὰ μὴ τὸ βαρεθῇ τινὰς, ἀμμὴ ὅλωνων ν’ ἀρέσῃ  
 so-that not it is-bored-with anyone but to-all pleases  
 ‘so that no-one gets bored with it but everyone likes it’ (Threnos 11)
- f. δὲν πρέπει ἄνθρωπός τινος νὰ σὲ κατηγορήσῃ  
 not should person any to you accuse  
 ‘No person should accuse you’ (Threnos 165)
- g. τινὰς ἀγάπην μετ’ αὐτὸν μὴ βουληθῇ ποίση  
 anyone love with him not want do  
 ‘so that no-one would make peace with him’ (Threnos 459)
- h. καὶ νὰ κρατοῦν τὸ δίκαιον, τινὰς μὴ ἀδικῆται  
 and keep-3PI the just no-one not is-done-injustice-to  
 ‘and they should keep justice so that no-one gets unfairly treated’ (Belisarios 384)

Similar semantic contrasts can be found in the indefinites of other languages, e.g. German *niemand* and *kein, keiner*. These are nominal and adjectival, respectively, and the partitive reading of the adjectival *kein, keiner* is presumably due to an implicit complement that denotes a contextually salient group. It is likely that a similar syntactic distinction is responsible for the difference in meaning between τινὰς and κανέννας.

The contrast applies also to interrogatives such as English *which (of them)* vs. *who*, or German *welcher* versus *wer*, and to regular indefinites, where it seems to correspond to the well-known contrast between ‘partitive’ and ‘nonpartitive’ indefinites. It is therefore interesting that Medieval Greek expressed the contrast formally in all three of these pronoun series, that the distinction was lost in all of them in Modern Greek, and that in each case it was the more specific indefinite that took over.

(16) The intermediate LMG system

indefinite		interrogative	article
κανέννας	‘anyone (of a group)’	ποιός	ἐνας (specific)
τινὰς	‘anyone (at all)’	τίς	∅ (nonspecific)

In Modern Greek, the originally specific indefinites *κανένας*, *ποιός*, and (in most uses) *ένας* have displaced the indifferently specific or nonspecific *τινάς*, interrogative *τίς*, and the null indefinite article.

### 3.2 The liberation of *κανένας*: from ‘nothing’ to ‘something’

In the familiar scenario, when negative polarity items lose the requirement that they must be in the scope of negation, they become negators in their own right. This is the path by which, for example, French *personne* changed from ‘a person’ to ‘no-one’. Greek also offers a few cases of this type, which we discuss in section (3.4) below.

More interestingly, however, the “liberation” of negative polarity items can have another outcome, which to our knowledge has not been described before: they can turn into regular indefinites or nouns. This has happened in four widely separated peripheral dialects of Greek. In Cappadocian, *κανένας* functions simply as a noun meaning ‘person’, the reverse of the development undergone by *πράμα*.

- (17) a. *ιτό πατιδάχ σάλσε δ’ άσκέρια τ, να ήβρουν δεκεινό δο κανείς*  
 this king sent-3Sg the soldiers his to find-3Pl that the person  
 ‘The king sent his soldiers to find that man.’ (Ulagatsh, Dawkins 384)
- b. *ήρτε ένα κανείς*  
 came one person  
 ‘there came a person’ (Ulagatsh, Dawkins 366:2)
- c. *ήτον άλλ’ να κανείς*  
 was other one person  
 ‘there was someone else’ (Ulagatsh, Kesisoglu 1951, cited from Athanasiadis 1976:164)
- d. *έτα κανείς*  
 that person  
 ‘αυτός ό άνθρωπος’ (Axos, Mavroxalividis & Kesisoglu 94)
- e. *πολύ όρτο κανείζ ’ναι*  
 very sincere person is  
 ‘πολύ ειλικρινής άνθρωπος είναι’ (Axos, M&K 114)

In at least some of these Cappadocian dialects, it continues to occur under negation as well.

- (18) *τ όργο μ’ ’ς κανείνα δέν dó χαιρινίδχω*  
 the work mine to no-one not it entrust  
 ‘I entrust my work to no-one.’ (Axos, M&K 182)

In Ukraine and Calabria, *κανένας* is a non-polarity indefinite, either ‘someone’, or more particularly ‘someone specific (but not necessarily known)’, ‘a particular person’. In view of the specific reading of *κανένας* in Medieval Greek documented in the preceding section, it is tempting to see it as an archaism preserved on the margins

of the Greek-speaking territory, rather than an innovation which just happened to take place four separate times.

In the Tauro-Romeic dialect of Mariupol (Ukraine), *kanís* is apparently both a specific indefinite in affirmative contexts, and a weak polarity item under negation. At any rate, Sergievskij (1934: 562) glosses *kanís* as (a) Russian ‘кто-то’ ‘someone (specific but not necessarily known)’, as opposed to ‘кто-нибудь’ and (b) ‘некто’ ‘(not) anyone’ in the scope of overt or implied negation, and cites the examples:

- (19) a. *kanís írtin* ‘someone has come’ (‘кто-то пришёл’)  
 b. *den fénit bðiná-pa kanís* ‘there doesn’t seem to be anyone around anywhere’ (‘нигде никого не видно’)

The uses of *κανέννας* in Calabrian, judging from the examples cited below, are also compatible with the meaning ‘someone specific (but not necessarily known)’.

- (20) a. *kanèna mu ípe* ‘someone told me’  
 b. *írte kammía* ‘some one (fem.) came’  
 c. *jirèguo kanèna* ‘I’m looking for someone’ (Rohlf 1949:122)

In Cretan, *κανέννας* may be a simple positive indefinite (Pitikakis s.a.).

- (21) a. Κιανέννας περαστικός δά πέρασε κι ἤχοψε τά πορτοκάλια  
 some passerby here passed-by and cut the oranges  
 ‘Some passerby must have passed by and cut the oranges.’ (Cretan, Pitikakis)  
 b. ὁ βασιλιάς κατάλαβε ὅτι ὑπάρχει κανείς γέρων  
 the king understood that exists some old-man  
 ‘The king understood that there was some old man.’ (*ibid.* 412)  
 c. ἐάν δέ μοῦ εἶπετε ποιός ἔχει χωσμένον κανένα γέροντα  
 if not me tell-2PI who has hidden some old-man  
 ‘if you don’t tell who (among you) has some old man in hiding’ (*ibid.* 412)

Let us mention in this connection that Cretan also has positive *πρᾶμα* ‘something’ (Pagkalos 1983, 420-1).

- (22) Καί τρῶνε πρᾶμα  
 and eat-3PI something  
 ‘and they eat something’

It is hard to say whether positive *κανέννας* in these dialects derives from the medieval specific indefinite *κανέννας* discussed in the preceding section, or developed from the ordinary modern negative polarity stage. In a language with negative concord such as Greek, the distinction between indefinites of the ‘some’ type and indefinites of the ‘no/any’-type is neutralized in the scope of negation. So a ‘no/any’ indefinite that passes through a negative polarity phase could change to a ‘some’ indefinite.

### 3.3 Continuation of τίς, τινάς ‘someone’

The conservative Italiot dialect of Bova in Calabria has *tíspo* (< τίσποτε) ‘(not) anybody’, ‘nobody’. Even a reflex of the bare unsuffixed pronoun is preserved in the Accusative *tinó* (Rohlf’s 1949:123).

- (23) dópu ti egó e xxoró **tinó** oðóssu  
 since that I not see anyone inside  
 ‘since I don’t see anyone inside’ (Taibbi & Caracausi 411)

In Bova, *tíspo* alternates with *kanéna*, as seen in these two parallel versions of a proverbial saying:

- (24) a. me pórtā ée poránda mi váli **kanéna** ta dástila  
 between door and jamb not-should put anyone the fingers  
 ‘nobody should stick his fingers between door and jamb’ (T&C 374)  
 [‘Tra imposta e stipite non metta *alcuno* le dita.’]  
 b. me pórtā ée poránda, **tíspo** mi váli ta dástilátu  
 between door and jamb anyone not-should put the fingers-his  
 ‘nobody should stick his fingers between door and jamb’ (T&C 374)  
 [‘Tra imposta e stipite non metta *nessuno* le proprie dita.’]

However, there is a syntactic difference between them. In the texts, *kanéna* occurs only under negation, whereas *tíspo* is often found as an independent negation.<sup>5</sup> Thus, the syntax of *tíspo* in Bova differs markedly from that of other negations elsewhere in modern Greek. It is, in fact, essentially that of Classical Greek. When *tíspo* precedes the finite verb, no other negation is required:

- (25) a. **tíspo** pái sto Paradiso me tin garróttsa  
 no-one goes to the Paradise with the carriage  
 ‘nobody enters Paradise in a carriage’ (Taibbi & Caracausi 1959:384)  
 b. ma **tíspo** efáni na mu ta ttsiporéi ðyamerísi  
 but no-one appeared to me them knew interpret  
 ‘but there was nobody who knew how to interpret them to me’ (T&C 444)  
 c. Esú **tísp’** áððo ka emména gapái  
 You no-one other than me love  
 ‘You don’t love anyone other than me’ (T&C 345)

When it follows, the finite verb requires an additional overt negation such as *e(n)*.

- (26) a. **e** sse passéǵǵi **tíspo**  
 not you-Acc surpass anyone  
 ‘and nobody will overcome you’ (T&C 1959:406)  
 b. ton ġeró **en** do xxorí **tíspo**  
 the weather not it sees anyone  
 ‘no-one sees the weather’ (T&C 385)

<sup>5</sup>Other than this syntactic property, *kanéna* and *tíspo* appear to be equivalent. At least we can detect no difference in meaning between them in the texts.

- c. **séntsa** na ton ívvri **tíspo**  
 without that him found anyone  
 ‘without anybody finding him’ (T&C 410)

The rule seems to be that a negative argument that follows a negative head ‘reinforces’ it (negative concord), while a negative argument that follows a negative argument is independent. The pattern in (25)–(26) is familiar from Classical Greek:

- (27) a. οὐκ οἶδεν οὐδεὶς ‘no-one knows’ (Aesch. Ag. 632)  
 b. οὐδεὶς οὐκ οἶδε ‘no-one doesn’t know, everyone knows’  
 c. οὐδεὶς οἶδε ‘no-one knows’

Could this peripheral dialect have preserved a feature of Classical Greek? More likely the syntax of *tíspo* is simply calqued on that of Italian *nessuno*.

- (28) a. *nessuno mi piace* ‘I don’t like anyone’  
 b. *nessuno non mi piace* ‘I like everyone’  
 c. *non amo nessuno* ‘I don’t love anyone’ (\**amo nessuno*).

Although the Italian editors don’t make this point explicit, they surely noticed it because they regularly translate *kanéna* with *alcuno* and *tíspo* with *nessuno* (as in (24) above). These Italian counterparts form a similar syntactic pair: *Chi hai visto?* ‘Who have you seen?’ *Nessuno/\*Alcuno*. ‘Nobody’.

### 3.4 *κά(ν)* as a new strengthener, and as a head

In Mani, Macedonia, and Thrace, *κά(ν)* (< *και ἄν*) ‘even’, ‘at least’ serves as a general strengthener (Blanken 160, Georgakas 106, Andriotis 88).

- (29) a. δὲν ἔχω (ψωμί)  
 not have bread  
 ‘I don’t have any (bread)’ (Blanken 160)  
 b. δὲν ἔχω *κά(ν)* (ψωμί)  
 not have at all (bread)  
 ‘I don’t have any (bread) at all’ (Blanken 160, Georgakas 106)  
 c. δέ με πονεῖ *κά*  
 not me hurts at all  
 ‘I don’t feel pain at all’ (Georgakas 106)  
 d. δὲν τὸν ἀφήχασι νὰ πάρει τὸν ἀνασασμὸ τοῦ *κά*  
 not him let to take-3Pl the breath his at all  
 ‘they didn’t even give him a chance to catch his breath’ (Mani, Kotosopoulos 173)  
 e. *κά*νε γνώση δὲν ἔχει  
 at all understanding not has  
 ‘he has no brains at all’ (Selybria, Andriotis 88)



Related emphatic indefinite NPIs include N.W. Peloponnese *κιᾶς* (Kalavrita etc., Georgakas 107), and the Southern island type *(σ)κιᾶ(ς)* (Crete and Karpathos, Georgakas 106-7, Kontosopoulos 32).<sup>6</sup>

Northern Greek *κά(ν)* is itself in turn combined with other indefinites to form compound emphatic negative polarity items.

- (30) a. *κᾶντίπουτας* = ‘τίποτα ἀπολύτως’ (Naousa, Kontosopoulos 181)  
 b. *καδίβουδα* = ‘τίποτα ἐντελῶς’ (Samothraki, Kontosopoulos 188)  
 c. *κανέμου* ‘τουλάχιστον’ (Alonistaina, Kontosopoulos 172)  
 d. *κάγχανενας* ‘personne!, pas une âme’ (Demirdesi, Danguitsis 1943)  
 e. *κάγκανας* < *και αν κᾶνας* (Macedonian, from *κᾶνας* < *καέννας* < *κανέννας*, Kretschmer 273, Höeg 201)  
 f. *κανιῶ* ‘nothing’ (Aenos, Thrace, Andriotis 88)

This cycle has gone to completion in the Corsican Maniot of Cargèse. Here *κά* has become a particle which normally accompanies *δὲ(ν)*, without emphasis (“sans qu’il subsiste la moindre idée d’un renforcement de la négation”, Blanken 159-161). In short sentences, such as (31a), it is nearly obligatory for most speakers; the emphatic negation is *καθόλου* as in (31b). (Examples from Blanken 159).

- (31) a. *δὲν ἔχω (κά)*  
 not have-1Sg *κά*  
 ‘I don’t have any’ (je n’en ai pas’)  
 b. *δὲν ἔχω καθόλου ἔαιρό*  
 not have-1Sg at all time  
 ‘I have no time at all’ (emphatic)  
 c. *ἡ γλώσσα δὲν ἔχάνετου κά*  
 the language not get-lost *κά*  
 ‘la langue ne serait pas perdue’  
 d. *δὲ γάν’ει κά πολ’υ κρύο*  
 not make-3Sg *κά* very cold  
 ‘il ne fait pas très froid’  
 e. *δὲν ἔναι κά κακός ἄθρωπος*  
 not is-3Sg *κά* bad person  
 ‘ce n’est pas un mauvais type’  
 f. *κά χρεία* ‘pas besoin’  
 g. *ξέρω λιγάι, μὰ κά πολ’ύ* ‘j’en sais un petit peu, mais pas beaucoup’

In the place of *κά* this dialect also uses *ἄρα* ‘τίποτα’ ‘nothing’ (from *ἄραγε?*).

<sup>6</sup>Cretan *(σ)κιᾶ* is further strengthened to *(σ)κιουλιᾶς, μιουλιᾶ* (< *κιᾶ γουλεᾶ*) ‘(not) even (one) sip’ (Georgakas 109-110). Cypriot Greek has bare *ἔν τζαί* (< *δὲν και*). Blanken 161 and Kontosopoulos 1994:24 gloss it as a neutral negation: *ἔν τζαί δίνει μου* = *δὲν μου δίνει*, *ἔν τζαί εἶδα τον* = *δὲν τον εἶδα*. However, our Cypriot informants tell us that it retains its status as an emphatic negation.

- (32) a. δὲν ἔχω ἄρα  
not have-1Sg anything  
'I don't have anything' (Blanken 109)
- b. Ἡ Ἰυναίκα ὅπου δὲν εἶχει ἄρα νὰ κάνη πάει στο περίπατο  
the woman who not has anything to do goes to the walk  
'A woman who has nothing else to do goes for a stroll' (Academy of Athens field notes, cited from Nicholas 534)

The Cargèse use of *κά* may be a French calque. But Blanken 160 notes that the same use has developed independently for the cognate *maká* in Otranto Greek, which has been subject only to Italian influence:<sup>7</sup>

- (33) e plónno **maká**  
not sleep *maká*  
'I'm not sleeping' ('je ne dors pas')

A parallel would be the dialect of Thasos off the coast of Thrace, where *κά(ν)* can function as a one-word emphatic negation 'not at all, not in the least' (Panagiotis Pappas, *voce*).

## 4 Lexical renewal of emphatic negation

### 4.1 Replacement of τίπος, τίποτε

The replacement of *τίποτε* and its cognates by other lexical items is a characteristic of Eastern Greek. *Τίπο(ς)* survives in Farasa, Amisos, and in the Pontic dialects of Of and Sourmena (Oikonomidis 252, Athanasiadis 167).

- (34) a. τίπος τζό ποῖκα σε 'I didn't do anything to you' (Farasa)  
b. δουλ εες 'κέ θέ νά ποίσης τίπος 'You are not going to do any of the chores' (Amisos)  
c. ἡ κάτα τίπο 'κί ἐξέρ' 'the cat knows nothing' (Surmena)

Elsewhere in Eastern Greek it is ousted by a variety of other expressions. Pontic dialects have *δέν*, *τιδέν* 'anything' (Nikopolis *κεῖκι*, Papadopoulos 121) instead of *τίποτε* as an "anaphore *vidée*" (Drettas).

- (35) a. ἐγὼ δὲν ἄλλο 'κι ψαλαφῶ σε  
I nothing else not request you  
'I request nothing else from you' (Argyroupolis, Balabanis 1937:102)
- b. Ἐγνέφ'σεν ὁ ράφτες καὶ ὄντες τερεῖ νὲ χαλὶν νὲ δὲν ἄλλο  
waved the tailor and then sees neither carpet nor nothing other  
'The tailor waved and at that point sees neither carpet nor anything else'  
(Divan Kerasounda, Balabanis 1937:108)

<sup>7</sup>Rohlf's (1930:845) terms *μακά* a "Füllwort der Negation."

Other lexical strengtheners include (36) *ksáj* ‘at all’, (37) *xíč*, *xits* ‘nothing’, ‘at all’, ‘zilch’, ‘never’ (< Turkish *hiç* < Persian *heč*), (38) *díp*, *ǰíp* ‘totally’, and (39) *éna šé* (< Turkish *şey* < Arabic *šayʔ* ‘(any)thing’), *skrap* (Sarakatsan, Höeg 278), *σκράου* (Maced. *Vlasti*, Andriotis 89), and a host of minimizer-derived expressions such as *ένα číj*, *ένα κοκλί*, *ένα νύj*, *ένα κουρτζά*, *ένα τζίγκρα*, *ένα κουτσούj*, *ένα κριζί*, *ένα σταλιά* (Axos, Mavroxalividis & Kesisoglu 78).

- (36) a. *ksáj k<sup>h</sup>-enenkásta* ‘I’m not tired at all’  
 b. *paráðas ksáj k<sup>h</sup>-éxo* ‘I have no money at all’  
 c. *ksáj epíes sin-arðéan* ‘have you ever been to Ardhea?’
- (37) *xíč*, *xits* ‘nothing’, ‘at all’, ‘zilch’, ‘never’ (< Turkish *hiç* < Persian *heč*)
- a. τριζ μέρες χίč χιζüρίς ρέν γαλαjέγι  
 three days zilch holy-man not says  
 ‘for three days the holy man says nothing’ (Silli, Dawkins 288)
- b. χίč ρέ σκώ’νιτι  
 at all not rises  
 ‘he does not rise at all’ (Silli, 300)
- c. χίč να φάγου ψωμί ρέν έχου, να φορώσου ρούχα ρέν έχου  
 at all to eat bread not I have, to wear clothes not I have  
 ‘I have not a piece of bread to eat, I have no clothes to wear’ (Silli, 290)
- d. σογ γόζμο χίč δέ γέλανε  
 in the world zilch not made-laugh  
 ‘nothing in the world made her laugh’ (Sílata, 452)
- e. ἦδουνε άν γρούο, χίč πού’δέ jούδουνε  
 was if cold never that not was-before  
 ‘it was cold, such as never was’ (Dawkins 557, cf. Demirdesi, Danguitsis 1943:119)
- f. *xíč k<sup>h</sup>-e γrká*  
 zilch not-understands  
 ‘il ne comprend absolument pas’ (Pontic, Drettas 402)

Although *díp* ‘totally’ is not a negative polarity item, it functions to strengthen negation in virtue of having wide scope over it.

- (38) a. *aftós ine díp ftoxós* ‘totally poor’  
 b. *díp filótimo den éxi epáno tu* ‘completely lacks *filótimo*’ (Babiniotis 181, cf. Sarakatsan, Höeg 278)  
 c. *δίπ-τίπουτας* (Kozani, Kontosopoulos 182)

As mentioned before, we analyze the type *éna šé* to be a combination of a minimizer and a generalizer:

- (39) a. ἕνα ὅτι μὲ λαλήσῃς  
 one thing not say-2Sg  
 ‘don’t say a thing’ (Ulagatsh, Dawkins 376)
- b. ἕνα ὅτι δὲμ βόρζε νὰ βοίχ’  
 one thing not could-3Sg to do  
 ‘there was nothing he could do’ (Axos, M&K 216)

## 5 Conclusion

Jespersen’s cycle is due to the interleaving of two processes: the strengthening of negation by morphosyntactic means, and its loss of compositionality and weakening (grammaticalization, bleaching). Although they have functionally opposite results, they are not formal converses of each other. One is paradigmatic, the other syntagmatic. An emphatic negative always weakens by itself (it is “bleached”), never in virtue of being combined with some other element. On the other hand, negation is strengthened *only* by combining a simple negative with an indefinite. A simple negative, or a simple indefinite, never becomes an emphatic negative on its own.

Both the weakening and strengthening phases of the change are grounded in the rhetorical function of bounded scalar evaluative expressions. But they have different causes. The weakening of the expressive negation to an ordinary negation goes hand in hand with, and is caused by, increased frequency of use. Its end result is the loss of a necessary expressive resource in the language. The strengthening that renews it is a consequence of the need for this expressive resource in a language. Such alternation between weakening and strengthening processes is an instance of the larger dialectic of production and perception in the economy of language.

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