





# Chapter 1

## Intertwining the negative cycles

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In the synchronic and diachronic typology of negation three so-called “cycles” have been prominent: the Jespersen Cycle, the Negative Existential Cycle and the Quantifier Cycle. This paper refines these notions, sketches what is cyclical about them and shows how they relate to one another. As the Jespersen Cycle, we argue that it crucially involves a negator that is either contaminated by another item or fuses with it. The Negative Existential Cycles comes in three subtypes, two of which can be fit into a more general Jespersen Cycle frame. As the Quantifier Cycle, we argue that the term should be given a new definition and we then show how it is similar to a Jespersen Cycle and feeds into it.

**Keywords:** Generalized Jespersen Cycle, Negative Existential Cycle, Quantifier Cycle, Positive Existential Cycle

### 1 A tale of three Cycles

Both the synchronic and the diachronic typology of standard negation, that is, the negation of a main clause affirmative verbal predicate, have been described and explained in terms of at least two “cycles”, i.e., hypotheses about the nature and the development of negative markers. The “cycle” hypothesis that has been most prominent is, without doubt, the “Jespersen Cycle”. This hypothesis is associated with the Danish Anglicist and general linguist Otto Jespersen, who drew attention to a “curious fluctuation” (Jespersen 1917: 4) in the renewal of negative markers, with one negative marker first weakening, then being strengthened, “generally” by another word, not itself negative, but which in time becomes a negator too and suppresses the original negator. The process is schematized in (1).

(1) The “Jespersen Cycle”

negation is expressed by one negator

→

this one negator is strengthened by another word

→

the “other word” is interpreted as part of the now bipartite negator

→

negation is expressed by one negator again, but it is the word that was previously added to the old negator

This path is indeed a cycle, for the new negator can then also undergo this process. The term “Jespersen Cycle” was introduced by Dahl (1979), in the variant “Jespersen’s Cycle”, with a possessive ’s. Other terms are “negation cycle” (e.g. Schwegler 1983) or “negative cycle” (e.g. van Gelderen 2011, Mithun 2016). The phenomenon was extensively studied even before 1917: Meillet (1912) used it to illustrate grammaticalization in the very paper in which he introduced the term “grammaticalization”. The textbook illustration features French. Specifically, earlier French negated a finite verb with a preverbal *ne*, whereas modern French has this *ne* in the company of a postverbal *pas*, the original and still surviving lexical meaning of which is ‘step’. With this original meaning the reference was to something small, which lent itself into an emphatic negative polarity use. In the context of negation *pas* turned negative polarity into a negation force and lost the emphatic sense. Now colloquial French may negate with only *pas*. (2) is a four stage representation of what happened in French.

(2) The “Jespersen Cycle” in French

*ne*                    ‘not’

→

*ne ... pas*           ‘not even a step’

→

*ne ... pas*           ‘not’

→

*pas*                    ‘not’

The scheme in (2) is, of course, a language-specific illustration. In French, both negators are syntactic elements; the first one is preverbal, and the second one is postverbal (relative to the finite verb) and it results from an emphatic minimizing use of the word *pas*. These properties are not essential, i.e., the negators may be affixes, the order with respect to the verb may be different and the origin

of the new negator need not be a word that means ‘step’ or even a minimizer (the English ancestor to ‘not’ and counterpart to *pas* was a pronoun meaning ‘nothing’). Furthermore, the representations in (1) and (2) are too simple, even for French. Thus (1) and (2) sketch the process in terms of four stages. However, the ‘not at all’ stage could be made explicit and one can add two intermediate stages: a stage in which *pas* is not obligatory yet and another stage in which *ne* is no longer necessary.

The second cycle is the “Negative Existential Cycle”, so named by the first linguist to focus on it, viz. Croft (1991: 6), and later also called “Croft’s Cycle” (e.g. Kahrel 1996: 73). The idea is that a language may develop a special negator for existential clauses like (3).

- (3) *There are black swans.*

The special existential negator may extend its use to standard negation and ultimately replace the original standard negator. The Cycle is summarized in (4).

- (4) The “Negative Existential Cycle”

one negator is used for both standard and existential negation

→

one negator is used for standard negation and another one for existential negation

→

one negator is used for both standard and existential negation, but it is the one that was previously only used for existential negation and so it is a “new” one

There is no textbook illustration and we are not aware of a language in which the full cycle is attested (see also Veselinova 2014). The scheme in (5) takes us to Tuvaluan (Polynesian), based on Veselinova (2014: 1345–1346); the third stage is hypothetical.

- (5) The “Negative Existential Cycle” in Tuvaluan [tv]l

*see* is used both for standard and existential negation

→

*see* is used for standard negation and *seeai* (a fusion of *see* and an existence marker) for existential negation

→

*seeai* is also used for standard negation

Similar to (1), the representation in (4) is a simplification, not least because one can add intermediate stages. The stage between the first and second stage, for example, is the constellation in which existential negation is not the exclusive terrain of the special negative existential negator, because it allows constructions with the standard negator too.

In both cycles the last stage takes us back to the beginning.<sup>1</sup> We are dealing here with one notion of cyclicity. There is a second notion, a wider one, in which it is sufficient that when the language has reached a final stage, it can start a new cycle, but not necessarily with the negator of the last cycle. This is the perspective taken by van Gelderen (2011). It is also the perspective under which yet a third cycle comes up. This is the “Quantifier Cycle” (e.g. Willis et al. 2013: 36), first described as the “Jespersen argument Cycle” by Ladusaw (1993: 438) and subsumed under the Jespersen Cycle by Larrivé (2011). The phenomenon concerns the development of negative indefinites out of constructions with a negator and a non-negative word, via stages in which the latter becomes negatively polar and then negative.

(6) The “Quantifier Cycle”

a clausal negator combines with a non-negative word

→

the non-negative word which the clausal negator combines with becomes a negatively polar indefinite

→

the negatively polar indefinite that the clausal negator combines with becomes a negative indefinite

→

the negative indefinite occurs without the clausal negator

A textbook illustration takes us to French again. French *personne* ‘nobody’ ultimately derives from a word meaning ‘person’, which got restricted to negatively polar contexts. In negative contexts it first needs the support of the clausal negator and may change into a true negative indefinite – a pattern that has come to be known as “negative concord”.<sup>2</sup> In colloquial French, *personne* is negative and can occur without *ne*. A four stage representation is given in (7).

<sup>1</sup>The new first stage is not exactly the same as the old one, though. For French the first single negator stage has *ne* but the next single negator stage starts with *pas*. From this point of view, the Gabelentz term “spiral” (1891: 251), used by Meillet (1912: 394), is a better term.

<sup>2</sup>The term became standard since Giannakidou (1998), although we have to go back to Jespersen once more for an *avant la lettre* occurrence, not this time to Jespersen (1917), but to Jespersen (1922: 352).

(7) The “Quantifier Cycle” in French

<i>personne</i>	‘person’
→	
<i>ne ... personne</i>	‘not anybody’
→	
<i>ne ... personne</i>	‘not nobody’
→	
<i>personne</i>	‘nobody’

Like the earlier sketches of cycles, the sketch in (7) is language-specific and too simple. As to the language-specificness, note that the end stage has a pronoun that is semantically, but not morphologically, negative. This is not necessary. The English word *nobody* underwent a variant of the “Quantifier Cycle” too but *nobody* is morphologically negative.<sup>3</sup> Like the Jespersen Cycle, the “Quantifier Cycle” has led to an abundance of research. Since the “Quantifier Cycle” does not itself create standard negators, we will not focus on it. Importantly, the process shown in (7) is not a cycle in the sense that the fourth stage takes us back to beginning. But negative indefinites do show a real cycle, although in the case of *personne*, we have to look at a wider trajectory, starting from Latin *nemo* ‘nobody’ (cp. [Gianollo 2018a](#): 208).

(8) A “Quantifier Cycle” in Latin and French

Latin	<i>nemo</i> ‘nobody’
	→
Latin to French	<i>nemo</i> disappears, perhaps replaced by <i>nesun</i> ‘not one’, in turn replaced by a construction with a negator and <i>personne</i> ‘not a person’
	→
French	<i>personne</i> ‘nobody’

Here the first and the third stages have a negative pronoun. Curiously, the term “Quantifier Cycle” is not, as far as we know, used for this wider trajectory. Yet something like (8), we propose, shows a better use of this term.

In this paper we aim to improve our understanding of the three Cycles insofar as they tell us something about the development of standard negation. In §2 we focus on the Jespersen Cycle, and in §3 on the Negative Existential Cycle. In §4

<sup>3</sup>The notion of morphological negativity is tricky, cp. [Haspelmath \(1997: 130–133\)](#) on “dunno” indefinites, i.e., indefinites that have a negative component but are not semantically negative in the way *nobody* is.

we aim to come to a generalized model of a Jespersen Cycle. Subsections §4.1 and §4.2 discuss a few cases which illustrate the interaction between the two cycles. §4.3 presents a Positive Existential Cycle, which is another illustration of the interaction of the Cycles, and §4.4 brings all arguments together in a model of a generalized Jespersen Cycle. Section §5 treats the relation between this Cycle and the “Quantifier Cycle”, both the classical version in (6) and (7) and its alternative shown in (8). Our conclusions are presented in §6.

## 2 Refining the notion of the Jespersen Cycle

In this section we show that analyses of the Jespersen Cycle encounter a terminological dilemma due to two definitions, and we suggest a solution. For most linguists, including ourselves, the most crucial stage in the simplified model of the Jespersen Cycle has been the third one. In other words, it is the switch from single to double negation that is crucial. There are two important implications.

First, a final stage with a return to a single negator is not crucial. Instead of this return to a single negator the language may get “stuck” in the doubling phase and never realize the potential of further development. It may also enter a fourth stage with three negators. This is illustrated in (9).

- (9) Mid 20<sup>th</sup> c. Brabantic Belgian Dutch [no ISO code] (Indo-European;  
Pauwels 1958: 454)

Pas op da ge **nie en** valt **nie**!

fit on that you NEG NEG fall NEG

‘Take care that you don’t fall!’

Cross-linguistically the tripling of negation is rare. In Vossen (2016: 344) tripling only shows up in 19 out of 1715 languages investigated, as against 383 languages with doubling and 418 languages with a postverbal negator that could be the result of a classic left to right Jespersen Cycle. However, we don’t know how many of these postverbal negator languages really went through a Jespersen Cycle, nor do we know that these cycles took the classical left to right direction. In any case, in this paper we do not pursue tripling (see Devos & van der Auwera 2013) nor the even rarer quadrupling (only 3 languages in Vossen 2016: 343) or the very special quintupling (no languages in Vossen 2016, and only one in van der Auwera & Vossen 2017: 42).

Second, it is not sufficient for an element to join the first negator to fit into the second stage. This second element has to become a negator too. In Latin the negator *non* is a fusion of the negator *ne* with *oenum* ‘one’ and the latter



does not itself become a negator – this only happens to the univerbation. Thus Jespersen (1917: 14–15) assumes that *ne* was replaced by *non* without a doubling stage. Obviously, there was an intermediate stage with two elements but the second one does not itself become negative (10).

- (10) A cycle in Latin [lat]

*ne*      →      *ne oenum*      →      *non*

Jespersen (1917) sets this trajectory apart from the “curious fluctuation” named after him later.

Sometimes it seems as if the essential thing were only to increase the phonetic bulk of the adverb by the addition of no particular meaning, as when in Latin *non* was preferred to *ne*, *non* being according to the explanation generally accepted compounded of *ne* and *oenum* (= *unum*) ‘one’ (neutr.) (Jespersen 1917: 14–15).

Of course, it is not because Jespersen (1917) didn’t see (10) as a manifestation of a Jespersen Cycle, that we, a century later, are forced to do this too. There are many other things that Jespersen didn’t see and that we now recognize as a type of Jespersen Cycle. Unknown to Jespersen (1917) is doubling with a second element originating from a focus particle ‘also, even’, as with Amharic –*mm*; it is now given a Jespersen Cycle treatment by Sjörö (2015: 305–306, 349–350); Sjörö (2018: 341–343, 388–389) (cp. also Moyse-Faurie & Ozanne-Rivierre 1999: 69 on the Loyalty Islands languages Drehu and Nengone).

- (11) Amharic [amh] (Afro-Asiatic; Fridman, p.c.)

zare    kurs      al-bälla-**mm**  
today breakfast NEG-eat.PST.3M.SG-NEG  
‘He didn’t eat breakfast today.’

Jespersen was also not aware of the fact that negator status could accrue to a subordinator – as argued for the Arizona Tewa former subordinator *dí* by Kroskrity (1984) and explicitly integrated into the Jespersen Cycle by van der Auwera (2010: 83).

- (12) Arizona Tewa [tew] (Kiowa-Tanoan; Kroskrity 1984: 95)

a. he’i sen    na-mən-dí      ‘o-yohk’ó  
that man 3.STAT-go-SUB 1.STAT-be.asleep  
‘When that man went, I was asleep.’

- b. sen k<sup>w</sup>iyó we-mán-mun-dí  
 man woman NEG-3>3.ACT-see-NEG  
 ‘The man did not see the woman.’

Negator status can also befall on the bareness of the lexical verb that goes with a Finnish negative, the so-called “connegative” form, which in dialectal Finnish (Miestamo 2005: 238) – and dialectal Estonian (Tamm 2015: 425–426) – can carry negation all by itself (the fourth stage of a Jespersen Cycle).<sup>4</sup> This is obviously quite different from the classical French type.<sup>5</sup>

Jespersen did not include in his fluctuation hypothesis the repetition of a clausal negator either, though he was aware of it (Jespersen 1917: 72–73). One of his examples is Swedish (13), where the doubling is emphatic.

- (13) Swedish [swe] (Indo-European; Jespersen 1917: 72)  
 Inte märkte han mig inte.  
 NEG noticed he me NEG  
 ‘He didn’t notice me.’

Jespersen (1917: 72) called this “resumptive negation”. However, in the 35 years since Dahl (1979) it has become accepted practice to consider the copying of an identical negator to be a part of a Jespersen Cycle too – and we follow that practice. Somewhat related to this resumptive use – and even called that by Sjörs (2015: 359, 2018: 399) for South Arabian languages – is the integration of a “pro-sentence”, i.e., a construction that corresponds to *No!*.<sup>6</sup> This type was not included in Jespersen’s own account either, but it is now. Example (14) from the

<sup>4</sup>The Uralicist’s term “connegative” may be taken to say that this form of the verb is “not negative in itself” (Miestamo 2005: 82, Wagner-Nagy 2011: 56). It is indeed not morphologically negative, but neither is the French word *pas*, but like French *pas* it has become strongly associated with negation. The association is not complete though, neither in French nor in Finnish: there is still a French word *pas* meaning ‘step’ and the connegative form is often the same as the second singular imperative. Uralicists have not, to our knowledge, considered a connegative construction to illustrate Jespersenian doubling. The fact that in Finnish and Estonian dialects the connegative can mark negation by itself makes clear that a description in terms of a Jespersen Cycle is appropriate.

<sup>5</sup>Note that “the French type” is not only found in French. We find it in Italian dialects and a special case – with a so-called “partitive” element or an element meaning ‘first’ – is found in Vanuatu (Vossen & van der Auwera 2014: 72–74).

<sup>6</sup>Pro-sentences do not only serve as holistic denials. As Veselinova (2013: 111) shows, *not* in *Are you coming or not* is also a pro-sentence, i.e., a “sentence[s] with the same propositional content as the utterance of the preceding context” (Bernini & Ramat 1996: 89). However, for our purposes – and for those of Veselinova, as well as the authors in Hovdhaugen & Mosel (eds.) (1999), for who pro-sentences are important (see §4.2), only the denial uses matter. Schwegler (1988: 30) calls the pro-sentence use an “absolute negator” use.

Bantu language Lifunga shows both a sentence-external pro-sentential and a clause-internal use of a negator.

- (14) Lifunga [bmg] (Atlantic-Congo; Djamba 1996: 143, Devos & van der Auwera 2013: 233)

tɛ na-í-mo-wɛn-ɛ tɛ  
no 1SG-NEG-1-see-PRS NEG  
‘No, I will not see him.’

Given that the term “Jespersen Cycle” now covers quite a few phenomena that Jespersen (1917) did not associate with a French type cycle that would later carry his name, we should return to Latin. Should one take the non-doubling *ne oenum* trajectory to be part of a Jespersen Cycle too? Schwegler (1983, 1988) would, even though his term was not “Jespersen Cycle” but “negation cycle” (cp. also Gianollo 2018a: 180). It is interesting to bring in Greek. The fate of Classical Greek is similar to that of Latin. The modern Greek standard negator is *den* and it derives from *ouden*, composed of the Classical Greek standard negator *ou* followed by a particle *de* ‘even’ and the numeral *hen* ‘one’. The change from *ouden* to *den* is apparently a phonetic one (Willmott 2013: 303) – just like the development of Latin *non* to French *ne*. It is the change from *ou* to *ouden* that is relevant, for it is taken to have happened without doubling.

- (15) A cycle in Classical Greek [grc]

<i>ou</i>	‘not’
→	
<i>ou de hen</i>	‘not even one’
→	
<i>ou de hen</i>	‘not’
→	
<i>ouden</i>	‘not’

Just like for Latin, the question is whether one should call this a Jespersen Cycle. Willmott (2013) stresses the differences between the Greek and French scenarios and decides against a Jespersen Cycle analysis, though she is aware of the similarities. More or less simultaneously, Chatzopoulou (2012), later also Chatzopoulou (2015, 2019), discusses the same data: her analysis is similar, but she prefers to redefine the concept of the Jespersen Cycle, and she explicitly does this so as to include both the Greek and the French scenario.

Since doubling is not the defining characteristic for a Jespersen Cycle for Chatzopoulou (2012), Chatzopoulou (2015, 2019) nor, *mutatis mutandis*, for Schwegler

(1983, 1988), it is important to see what they do consider to be crucial. For them, the defining features are emphasis, whether through doubling or fusion, and the later bleaching. This is a perfectly good definition,<sup>7</sup> but then they don't include scenarios such as the doubling that appears through the reinterpretation of subordination, as in Arizona Tewa, or non-finiteness (the connegative of dialectal Finnish and Estonian). So we are left with a terminological dilemma. A form-based definition of a Jespersen Cycle requires there to be doubling, whether it goes with emphasis or not. A meaning-based account requires emphasis, whether it goes with doubling or not. The embryo of the dilemma is the fact that Jespersen's textbook example of French fits both definitions. Arizona Tewa and Finnish as well as Latin and Greek only fit one definition. The dilemma can be solved in more than one way. One solution is simply to stick to one of two definitions. A second one is to drop the term "Jespersen Cycle" altogether. After all, we now know more about the "curious fluctuation" than in 1917 and Jespersen delivered neither the first nor the best early description. Meillet (1912), for one, beat him, and he was not the first either. In a somewhat obscure paper on Coptic, Gardiner (1904) makes a parallel between *pas* and Coptic *iwn* 'certainly'. Earlier still, in the book that launches the term "sémantique", Bréal (1897: 22) assures us that "everybody knows what happened to the words *pas*, and *point*" [our translation]. But then, the term "Jespersen Cycle" has been around for close to 40 years, everyone more or less knows what it is all about. However, there is an easy way to embrace both the meaning- and the form-based account: a more general definition that allows both accounts. What we then require of a Jespersen Cycle is that it deals with the genesis of a standard negator from a constellation that involves a standard negator and another element ' $\alpha$ ', where  $\alpha$  is either another negator (e.g. in Swedish) or a non-negative element (e.g. a minimizer like in French or a

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<sup>7</sup>We gloss over the problem of describing the nature of emphasis. In the last decade it has been proposed that emphasis has to be replaced or explained by notions of discourse presupposition or activation. Such accounts have been particularly prominent for resumptive negation, as in Brazilian Portuguese (Schwenter 2006) or Palenquero (Schwegler 1991), but they have also been offered for the textbook case of French (Mosegaard Hansen 2009, Larri  e 2010). We offer three considerations. First, in case notions of discourse presupposition or activation are to replace emphasis, this is fully compatible with our insistence that the term "Jespersen Cycle" covers a variety of phenomena, a variety more compatible with a plural "Jespersen Cycles" than with a singular (van der Auwera 2009). Second, it is no less possible that in some cases presupposition and activation will not so much replace emphasis but, to borrow Schwenter's term, "fine-tune" it. Third, accounts downplaying emphasis are found more with resumptive negation, and this fact is interesting. Resumptive negation is a matter of repeating a marker and this could simply serve to make the meaning clearer, which is not the same as making a negation emphatic. This analysis was offered for resumptive negation in Brabantic Belgian Dutch by van der Auwera (2009: 52), with reference to Pauwels (1974: 76).

subordinator like in Arizona Tewa). This constellation can further develop in two directions: (i) the negator and  $\alpha$  fuse, the new element becomes a negator and it may replace the original negator, or (ii) if there is no fusion, then  $\alpha$ , which is either negative from the start or has become negative by contamination<sup>8</sup> from the original negator, could replace this original negator. These developments may be prompted by emphasis or not. This is what we propose – and we will come back to it in §4, after we have discussed the Negative Existential Cycle and we have seen whether the new definition could encompass this too.

### 3 Refining the notion of the Negative Existential Cycle

After its introduction in Croft (1991) and a period where not much happened to it, the Negative Existential Cycle came within the purview of Veselinova (2010, 2013, 2014, 2015, 2016). Veselinova made at least three very important contributions. The first one is an endeavor to check the hypothesis on a wide range of language families. The second one is her finding that the Negative Existential Cycle is rarely completed. The third contribution is her claim that the mere fact that a language uses an existential strategy for both existential and standard negation does not itself constitute evidence for the Negative Existential Cycle yet. Thus in Bulgarian an invariable *njama* ‘not.have’ is used for both existential negation and future tense standard negation.

(16) Bulgarian [bul] (Indo-European; Veselinova 2014: 1333, 2010: 204)

- a. *Njama*                      div-i      kotk-i  
not.have.3SG.PRS wild-PL cat-PL  
‘There aren’t any wild cats.’
- b. *Njama*                      da xod-ja      na kino.  
not.have.3SG.PRS to go-1SG.PRS to movies  
‘I will not go to the movies.’

But the use of *njama* in standard negation is not due to an extension of the use of the existential negator. In Old Church Slavonic the positive future also availed itself of ‘have’ (as one option, [https://lrc.la.utexas.edu/eieol/ocsol/50#grammar\\_1014](https://lrc.la.utexas.edu/eieol/ocsol/50#grammar_1014)). What we see therefore is a decrease in the use of ‘have’ for the future and

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<sup>8</sup>The “contamination” metaphor goes back to at least Bréal (1897: 221–226). It is better than the more sober “reinterpretation” because reinterpretation can happen through a range of language external or internal factors, while “contamination” nicely captures that the original meaning disappears under the influence of another element in the clause, viz. the negator.

a domain expansion of ‘have’ in the realm of expressions of existence (Veselinova 2010: 203–204, but compare Veselinova 2014: 1336–1337, 2016: 157). So on top of the observation that a strategy is used for both existential and standard negation, we ideally have diachronic information on whether the construction originated in existential or in standard negation. This information can be direct (language-internal) or indirect (from comparing related languages) or even just etymological: a negative existential that is a fusion of standard negator and an existential marker and that is used for both existential and standard negation is bound to have started in the existential domain.

In what follows, we focus on a problem with the third stage of the Negative Existential Cycle. This is the stage in which the existential negator, originally restricted to existential negation, has come to be used for standard negation. Let us illustrate it with Tongan (cp. Croft 1991: 12, Veselinova 2014: 1342).

- (17) Tongan [ton] (Austronesian; Veselinova 2014: 1342, Broschart 1999: 101, 104)
- a. 'oku 'ikai ha me'a  
PRS ??? NSP thing  
‘There is not anything.’
  - b. na'e 'ikai ke kata 'a Pita  
PST ??? SUB laugh ABS Pita  
‘Pita didn’t laugh.’ ([It] was not that Pita laugh[ed].)

We have purposely not yet glossed the occurrence of *'ikai* in both examples. Croft’s gloss for the (17a) type of example is ‘NEG.EX’, which makes sense, for the sentence could not be more negative existential. Broschart (1999: 101), Veselinova’s source linguist, provides ‘It is not that there is anything’ as the literal translation. For the example of the (17b) type Croft’s gloss for the negator is ‘NEG(EX)’. ‘NEG(EX)’ is to indicate that we are dealing with a “polysemy between negative existential meaning and verbal negation” (Croft 1991: 12). Since (17b) illustrates verbal negation, one might argue that *'ikai* permits the ‘NEG’ gloss, i.e., the gloss for the standard negator, and ‘NEG’ is in fact the gloss that Veselinova (2014: 1342), following Broschart (1999: 104), offers for (17b). But her literal translation of this sentence ‘[It] was not that Pita laugh[ed]’ (in line again with Broschart 1999: 104) is a little confusing then, for it rather asks for a ‘NEG.EX’ gloss. To solve this problem we suggest that the third stage of the cycle should be conceived of as the “existentialization” of standard negation. Table 1 represents the three analyses, in a three stage format. We use underlining to show that the negators of the third stage have the same form as the NEG.EX of the second stage.

Table 1: Comparison of three analyses (Croft 1991, Veselinova 2014, this paper)

	Croft 1991		Veselinova 2014		this paper	
construction	standard	existential	standard	existential	standard	existential
marker	NEG	NEG	NEG	NEG	NEG	NEG
	→	→	→	→	→	→
	NEG	<u>NEG.EX</u>	NEG	<u>NEG.EX</u>	NEG	<u>NEG.EX</u>
	→	→	→	→	→	→
	<u>NEG(EX)</u>	<u>NEG.EX</u>	<u>NEG</u>	<u>NEG</u>	<u>NEG.EX</u>	<u>NEG.EX</u>

In our view, the third stage has standard negation using an existential negator. What has to happen now – for the cycle to continue – is that the existentialized standard negation gets “de-existentialized”. This is what we arguably see in Spoken Kannada. In this language both types of negation use *illa*, but while this is a free form for existential negation, it is a suffix for standard negation.

(18) Spoken Kannada [kan] (Dravidian; Veselinova 2016: 144, Sridhar 1990: 111, 112)

- a. khaja:neyalli haNa illa  
treasury.LOC money NEG.EX  
‘There is no money in the treasury.’
- b. anil ka:le:jige ho:gu-vud-illa  
Anil college.DAT go-NPST.GER-NEG  
‘Anil doesn’t/won’t go to college.’

Note that we have glossed the free form with ‘NEG.EX’ and the suffix with ‘NEG’, in agreement with Veselinova and Sridhar and they do not provide (18b) with a literal gloss of the type ‘it is not that Anil goes / will go to college’. At the risk of overinterpretation of the glosses, we assume that there is nothing existential about (18b) and that it really just means ‘Anil doesn’t/won’t go to college’. Suffixal *-illa* has thus been de-existentialized. The free form, however, is still existential. This de-existentialization in the domain of standard negation is worthy of a stage of its own. Thus, with application to Kannada, a fourth stage of (19) has suffixal *-illa* as a standard negator and the free form *illa* as an existential negator. In a hypothetical fifth stage, existential negation could avail itself of *-illa*, the standard negator, together with some marker of existence.

the  
single  
quotes  
around  
‘NEG.EX’  
and  
‘NEG’  
do not  
print  
correctly  
on pa-  
perhive

(19)	standard	existential
	NEG	NEG
	→	→
	NEG	<u>NEG.EX</u>
	→	→
	<u>NEG.EX</u>	<u>NEG.EX</u>
	→	→
	<u>NEG</u>	<u>NEG.EX</u>
	→	→
	<u>NEG</u>	<u>NEG</u>

The claim that there are additional stages is a little tricky. Both Croft and Veselinova have in fact included transitional stages in their stage model. These are stages which have both NEG and NEG.EX for either standard or existential negation, but they may not be equivalent: the choice could depend on tense or one option could carry emphasis. These kinds of intermediate stages have to be accepted in the basically five-stage model of (19) as well. Also, it does not follow that every standard negation structure with a lexical verb and something like an auxiliary is a negative existential structure. Finnish is a good example. Example (20) has a negative auxiliary and the so-called “connegative”, but this structure illustrates standard negation. So the negative auxiliary is not a negative existential, though it might originate in one (see Veselinova 2015: 577 for references), and though it is also used for existential negation, it then combines with a ‘be’ verb in the connegative form.

- (20) Finnish [fin] (Uralic; Vilkuna 2015: 476)  
Täällä ei      ole      yhtään kahvi-a.  
here NEG.3SG EX.CNG at.all coffee-PART  
‘There is no coffee here.’

## 4 Towards a generalized Jespersen Cycle

In this section we look at the interaction between the Negative Existential and Jespersen Cycles. First, we discuss to what extent a Negative Existential Cycle can involve Jespersenian doubling and resumption (§4.1). Then we look at a specific claim about East Futuna (§4.2) and we pair the Negative Existential Cycle with a Positive Existential Cycle (§4.3). In §4.4 we offer a generalized Jespersen Cycle, even more general than what we ended up with at the end of §2.



#### 4.1 Negative Existential Cycles with doubling

The proposal for a Negative Existential Cycle came much later than that for a Jespersen Cycle. It is therefore appropriate to check whether any manifestation of the former is in fact a manifestation of the latter, under either the form-based, the meaning-based or the general definition. We will first discuss the original proposal by Croft (1991) and then the detailed studies by Veselinova (2010, 2013, 2014, 2015, 2016).

In Croft (1991) there is no explicit mentioning of the Jespersen Cycle, but the implicit one is very strong and it concerns the French type. A Negative Existential Cycle, so Croft claims, is that a special existential negator may be used in combination with a standard negator. According to him this is one of the two ways in which an existential negator can enter the domain of standard negation. The other way is replacing the standard negator partially or completely (Croft 1991: 9–11).<sup>9</sup> Judging from later work by Veselinova, who only discusses the replacement strategy, the latter would seem to be the more important type of Negative Existential Cycle, but the focus here is on the doubling type.

The reason why, according to Croft (1991: 13–14), an existential negator may combine with a standard negator, is that this combination makes the utterance emphatic. He illustrates this with two examples. One is from the Australian language Mara (Heath 1981: 289).

(21) Mara [mec] (Mangarrayi-Maran; Croft 1991: 14, Heath 1981: 289)

- a. ganugu wunayi  
NEG see.him  
'He did not see him.'
- b. ganugu wunayi mal'uy  
NEG see.him NEG.EX/EMPH  
'He did not see him at all.'

Croft then goes on to say that the emphasis may bleach and that this process "is the same [...] that has occurred in the evolution of the French negative *pas*" (Croft 1991: 14), with reference to the pre-Jespersen account of Meillet (1912) as well to Schwegler (1983, 1988). This counts as an acknowledgment that this kind of Negative Existential Cycle is a subtype of a Jespersen Cycle. More specifically, with (21b) we are in the doubling stage of a Jespersen Cycle. Interestingly, the Mara form for the Negative Existential also serves as a negative pro-sentence, a usage

<sup>9</sup>Partial and complete replacements are counted separately by Croft (1991), so in that way he does not have two but three pathways of intrusion.

The foot-  
notemark  
appears  
after the  
period in  
the para-  
graph  
above

which, as Veselinova (2013: 127) has shown, is cross-linguistically rather frequent. So it is not clear whether the form that doubles is indeed the existential negator as such or the negative pro-sentence. In the latter case Mara joins languages like Lifunga, illustrated in (14), and it is again an illustration of a Jespersen Cycle.

The second example of Jespersenian doubling comes from the Wintuan language Wintu.

- (22) Wintu [wit] (Wintuan; Croft 1991: 10, Pitkin 1984: 197)  
 ?elew-be:skən hara:-wer-mina  
 NEG.EX-YOU.IPFV go-FUT-NEG  
 ‘You were not supposed to go.’

For our purposes, there are two interesting things about the Wintu case.<sup>10</sup> First, the presence of the preverbal negator is said to “reinforce” (Croft 1991: 10) the original negator, but “reinforce” probably doesn’t mean “make emphatic”. The translation in Croft and in the source figures non-emphatic negation. This makes sense in a form-based Jespersen scenario, but no less in a meaning-based one, for Wintu may illustrate what Mara does not show: the bleaching of the emphasis. Second, the source grammarian Pitkin (1984: 197) makes clear that the negative existential also serves as a negative pro-sentence. So, once more, there is a suspicion that it is latter use that is crucial in this process of Jespersenian doubling.

As mentioned already, Veselinova (2010, 2013, 2014, 2015, 2016) does not discuss the Mara–Wintu scenario, and this strongly suggests that it is relatively rare. Croft does not give any other languages either. We do, however, find other candidates for a Jespersenian doubling analysis with a negative existential in the Munda languages Juang (Anderson 2007: 150–151) and Korku (Nagaraja 1999: 64–67, Zide 2008: 279–281), the isolate Urarina and also in the Takanan language Tacana. For example, in Tacana standard negation with a finite lexical verb almost always uses two negators.<sup>11</sup>

- (23) Tacana [tna] (Takanan; Guillaume 2017, 2016)  
 a. Aimue e-juseute-ta=mawe/mue beni=ja  
 NEG FUT-fell-A3=NEG wind=ERG  
 ‘The wind will not fell (the trees).’

<sup>10</sup>Croft (1991: 10) points out that Pitkin (1984) has no example of a negative existential use, which is a bit problematic. Also, the second negator is itself also a negative existential in origin. Croft (1991: 10) argues that it is older than the first one: *?elew* is a separate word, one that is a finite verb furthermore, and the second is morphological. This makes sense.

<sup>11</sup>chapters/Guillaume\_Tacana signals only one case in his corpus with the postverbal negator omitted.

- b. Kwati=mu      aimue tsu'u.  
 firewood=CNTR NEG.EX still  
 'There is no firewood yet.'

The postverbal negator (*mawe/mue*) is the oldest one: it is shorter, bound and phonologically dependent, it has variant forms and occupies a rigid position in the construction (Guillaume 2016, chapters/Guillaume\_Tacana [this volume]). And it is also formally similar to negators in the other Takanan languages. The preverbal negator is an innovation in Tacana only (i.e., it is not found in the other Takanan languages). It is identical to the existential negator and, in our view (van der Auwera & Krasnoukhova 2018) the etymology gives us 'be.without', which suggests that the negative existential use predates the standard negator use. Its presence in standard negation, Guillaume (2016) suggests, was due to emphasis. Interestingly, this form, like in Mara and Wintu, also serves as a pro-sentence (Guillaume 2016, 2017). And even more interesting is the fact that the lexical verb may be non-finite, in which case there is an optional finite auxiliary, and in this construction the newer negator is the sole exponent of negation.

- (24) Tacana [tna] (Takanan; Guillaume 2017)  
 Biame aimue=da dia (a-ta-ina).  
 but NEG=TOP eat AUX.TR-A3-PST.HAB  
 'But (the jaguar) would not eat it.'

We thus have a reasonably standard Jespersen Cycle with arguably emphasis-driven doubling and even with the new negator forbidding the company of the old negator, in one type of construction. And, importantly, the new negator has the form of the existential negator, which is also the negative pro-sentence.

In the isolate Urarina, standard (non-emphatic) negation is encoded by a single postverbal negator, which has different allomorphs depending on person, conjugation class and other factors (Olawsky 2006: 484). However, Urarina has two constructions which are regarded as "emphatic" standard negation. One of these constructions involves the negative existential *nijej* (*ni-ji* 'be-NEG') before the lexical verb that is already marked by a negator (25a). And thus we have doubling. The negative existential use is shown in (25b).<sup>12</sup> A negative reply in Urarina has a

<sup>12</sup>Olawsky (2006) uses two different transcriptions of the negative existential in order to distinguish the meanings; specifically, he notes that the distinction between *nijej* encoding emphasis 'not at all' and the negated copula *ni-ji* encoding negative existence in the transcriptions is "not based on phonological differences, but in order to distinguish the two meanings" (Olawsky 2006: 555, footnote 65). Since there is no difference in phonology, we reproduce the examples using one form *nijej*.

different form: *aji*, composed of an auxiliary *aja* and a negative suffix *-i* (Olawsky 2006: 400).

(25) Urarina [ura] (isolate; Olawsky 2006: 554, 556)

- a. *nii hãu njej beraj-naa najn-ene rai komasaj*  
 that because NEG.EX care.for-INF be.able-NEG.3E POSS wife  
 ‘Therefore, his wife could not look after him at all.’
- b. *nukue seti-aka=ne njei ate taba-j*  
 creek fish-1DU=COND NEG.EX fish be.big- NMLZ  
 ‘When we fished in the creek, there were no big fish.’

Veselinova, following leads by Croft (1991: 21) and Schwegler (1988: 38–39), also discusses the role of the negative pro-sentence, yet not in a scenario of first doubling up a standard negator and later potentially being the sole exponent of negation, but in a scenario of more directly replacing the standard negator. One of the languages brought in to support this is Sino-Russian Pidgin (Veselinova 2014: 1337, 2016: 155–156).<sup>13</sup> In this language the standard negator is *netu*, which is related to Russian *net*. Russian *net* is used both as negative existential and as negative pro-sentence, with the latter use being more prominent than the negative existential use, according to Veselinova (2014: 1337). The idea is that the greater prominence of the pro-sentential use of *net* could explain why it is the related form *netu*, rather than *ne*, that functions as the standard negator in Sino-Russian.

(26) Sino-Russian Pidgin [no ISO; glottolog code: kjac1234] (Pidgin; Veselinova 2014: 1337, Stern 2002: 19)

- naša ego ponimaj netu*  
 1PL 3SG understand NEG  
 ‘We don’t understand him.’

There are two problems with this hypothesis. First, Russian has *netu* too, in stylistically lower speech, but it is only used as an existential one, not as a pro-sentential one. It is easier to assume that Sino-Russian Pidgin borrowed *netu*. Second, even if we grant that the Russian input for the Sino-Russian Pidgin standard negator *netu* is indeed the pro-sentential *net*, it is not clear that it entered Sino-Russian Pidgin standard negation in its pro-sentential role instead of just being a prominent exponent of negation in general. It is interesting to compare

<sup>13</sup>The other one is the Austronesian language Kapingamarangi, but we only know its synchrony. For Sino-Russian Pidgin we do have some relevant diachrony, viz. that of Russian.

Sino-Russian Pidgin with English Creoles. In the overwhelming majority of the English Creoles the typical and sometimes the only standard negator is *no* rather than a form related to *do* combined with *not* (van der Auwera 2017: 140–141). (27) is an example from Ghanaian Pidgin English, nicely contrasting with Ghanaian English in (28).

- (27) Ghanaian Pidgin English [gpe] (Indo-European; van der Auwera 2017: 140, Huber 2012b: 398)  
 de pikin no de spik  
 the child NEG PROG speak  
 ‘The child is not speaking.’
- (28) Ghanaian English (van der Auwera 2017: 140, Huber 2012a: 385)  
 These demonic things .... I *don’t* believe it.

The Ghanaian Pidgin English speakers use *no*, which has the same form as pro-sentential *No!* But what is so attractive about pro-sentential *no* to have it as a standard negator? Is it its pro-sentential semantics or is it just its saliency and – no doubt – frequency as an exponent of negation? We propose the second answer.

#### 4.2 Interaction of the two Cycles in East Futuna?

The negation in Polynesian East Futuna has given rise to a claim on the interaction of the Negative Existential and Jespersen Cycles. The original claim is explicit in Mosel (1999: 18), it is implicit in Moyse-Faurie (1999: 122), and the basic idea is endorsed by Veselinova (2014: 1359–1364). In what follows we start from Veselinova (2014).

In East Futuna an existential negator *le’ai* is made up of a standard negator *le* and an existential element (*i*)*ai*. There is also a reduced form *le’e*. *Le’ai* and another reduced form, *e’ai*, function as pro-sentences and *le’e* has intruded the domain of standard negation,<sup>14</sup> which qualifies the trajectory as an instance of the Negative Existential Cycle.

- (29) East Futuna [fud] (Austronesian; Veselinova 2014: 1362, 1361, Moyse-Faurie 1999: 117, 1997: 98)
- a. e’a e le’e se laisi  
 no TAM NEG.EX INDF rice  
 ‘No, there is no rice.’

<sup>14</sup>Veselinova (2014: 1364) describes the intrusion only for forms with *-se*, but the analysis also contains example (29b), which is a standard negation use without *-se*.

- b. e    le'e    'au   a   Setefano ki   le   fai   o   le   ga'oi  
          TAM NEG.EX come ABS Stefano   OBL DET make POSS DET work  
          'Stefano is still not coming to do the work.'

What is special about East Futuna is that there are also the more complex forms *le'aise* and *le'ese*, which function in the existential domain and also intrude into the verbal domain.

- (30) East Futuna [fud] (Austronesian; Moyse-Faurie 1999: 126, 122, Veselinova 2014: 1361)

- a. ko le   mako ko le   tapaki e   le'aise ko se   mako tefua ma  
      PR DEF dance PR DEF tapaki NSP NEG.EX PR IND dance alone for  
      Futuna  
      Futuna  
      'The tapaki dance is not a special dance for Futuna.'
- b. na   le'aise   kau ano o   mako i   nānafi  
      PST NEG.EX 1SG go   COMP dance OBL yesterday  
      'No, I didn't go dancing yesterday.'<sup>15</sup>

The element *se*, which is added to the simple negators, is an indefinite singular article (Moyse-Faurie 1999: 122).<sup>16</sup> But then there is also reduction, for standard and existential negation allow the complex forms *le'aise* and *le'ese* to reduce to *se*.

- (31) East Futuna [fud] (Austronesian; Veselinova 2014: 1360–1362, Moyse-Faurie 1999: 119, 122)

- a. ... e    se    na'a   ai   se   tosi ...  
          GENR NEG.EX be.there ANAPH INDF book  
          '... there are no books ...'
- b. e    se    tio a   tātou   ki   ke   fatu  
      GENR NEG.EX see ABS 1PL.INCL OBL DEF stone  
      'We do not see the stone.'

<sup>15</sup>The English translation has a pro-sentential *No*, but the East Futuna original does not. The *No* must be meant to show that a negation with *le'aise* is stronger (Moyse-Faurie 1999: 122) than one with *le'ese*.

<sup>16</sup>It is not clear whether the article is indefinite or non-specific. Mosel (1999: 18) and Veselinova (2014: 1363) call it "non-specific". Moyse-Faurie (1997: 45) calls it "non-specific" too, but later in the grammar it is called "indefinite" (Moyse-Faurie 1997: 88).

For Moyse-Faurie and Mosel, the fact that an erstwhile indefinite article now functions as a negator shows that we are dealing with a Jespersen Cycle. For Veselinova (p.c.) there is a Jespersen cycle because the *le'aise* and *le'ese* are taken to carry emphasis, which then got lost together with phonetic substance. But these claims are not obvious. Much depends on what is meant with the notion of Jespersen Cycle and this has to be made explicit. As argued in §2, most linguists take a form-based approach of the Jespersen Cycle and require doubling but in East Futuna there is no doubling. The East Futuna facts are thus similar to the Greek ones. In Greek a complex form *ouden* lost the negative morpheme and the emphasis, and it is the remains of a focus particle and a numeral that now function as a negator. In East Futuna the complex forms *le'aise* and *lé'ese* lost the negative morpheme and the emphasis, and it is the remains of an indefinite article that now function as a negator. As for East Futuna *se* to count as the result of a Jespersen Cycle, one can thus use the semantics-based account, the one that allows both doubling and fusion but requires an emphatic stage, or the more general account, one that requires neither doubling nor emphasis.

Of these two accounts, the general one seems better. The argument for the extended notion has so far been, for both Schwegler and Chatzopoulou, that the second part of the fusion had an emphatic use. This is very clear in Greek as well as in Latin. It is less clear in East Futuna. The *-se* part is an indefinite or non-specific article. The latter is obligatory for noun phrases in the scope of negation and it is therefore “a frequent collocate of the existential negator” (Veselinova 2014: 1348). In the fusion, *se* then “reinforced” the original negator – “reinforce” is the term in Moyse-Faurie (1999: 122) – but it is not clear that it is meant in a semantic sense. According to Mosel (1999: 18), followed by Veselinova (2014: 1363), the reinforcement would indeed be semantic: the reinforcement is to yield emphasis. But note that it is an indefinite article that fuses, and not, for example, the numeral and pronoun *tasi* ‘one’ (Moyse-Faurie 1997: 27, 35, 1999: 121). A similar fusion is reported for Cèmuhî and Paicî (Moyse-Faurie & Ozanne-Rivierre 1999: 63) as well as for Hawaiian (Veselinova 2014: 1348), each time with an indefinite article. For Hawaiian the fusion does not appeal to emphasis: “consequently, *a'ole* [the standard negator] must have become fused with *he* [the indefinite article] as a result of frequent collocation” (Veselinova 2014: 1348). In short, for the East Futuna development of the *se* negator to count as a Jespersen Cycle it cannot be the one embraced by Schwegler and Chatzopoulou. The story of the *se* negator does, however, fit the general definition argued for in §2: the development of a negator is a Jespersen Cycle, if it results from the interaction of two elements, at least one of which is a negator.

### 4.3 A Positive Existential Cycle?

Before we clarify the general concept of a Jespersen Cycle more, it is useful to point out that there is more to the interaction of existence and negation than what has been sketched in the above. First of all, in the Negative Existential Cycle proper, the one without doubling, we have so far seen a negator fusing with something else, typically a positive existential. A fusion of a negator and a positive existential is not, however, the only strategy to make negative existentials, and it does not seem to be the most frequent one. In a worldwide overview [Veselinova \(2013: 137\)](#) points out that languages may recruit negative existentials directly from the lexicon, more particularly from words with a negative content, such as ‘absent’ or ‘lack’.<sup>17</sup> For the 42 languages for which she reports the origin, 25 have this origin vs. 17 that involve fusion. We come back to direct recruitment in §4.4.

Second, we have seen fusion in Latin and Greek Jespersen Cycles. These Cycles are a little different from the French one, in that the element that combines with negation does not itself turn into a standard negator. It is the fusion that turns into a standard negator. This begs the question of whether there could be a cycle in which the positive existential and the negator do not fuse, but in which the latter changes the meaning of the former. What we are after is a constellation in which a negator turns an existential marker into a negator, a new one, with the possibility of ousting the old one. This is precisely what [van der Auwera & Vossen \(2017\)](#) have argued for in their study of negative doubling in the Kiranti languages.

In most of the Kiranti languages there is a preverbal negator with a solid Tibeto-Burman ancestry, viz. *ma*. In the eastern Kiranti languages there is often a postverbal negator with the form *ni* or a similar form. It usually co-occurs with the preverbal *ma* and it has no clear negative etymology.

- (32) Dumi [dus] (Tibeto-Burman; [van Driem 1993: 288](#))  
 i-mu-ʔa                      tida:m-tida:m-mil ryekbo mǝ-tɨl-ni-nǝ  
 their-mother-ERG child-child-PL      three    NEG.PST-raise-3PL-NEG  
 ‘Their mother did not raise the three little ones.’

<sup>17</sup>The development of standard negator out of a privative construction (‘without’), argued for Arawak by [Michael \(2014: 285–288\)](#), could be seen as a subtype. There could furthermore be a third origin, no doubt rare, viz. a word of which the meaning was originally positive but which got contaminated by a negator that later disappeared – the typical Jespersen scenario. At least in Kulina (Arawan; [cul]) the negative pro-sentence, which derives from a negative existential, only utilizes a word that originally meant ‘show’ ([Dienst 2014: 236; p.c.](#)) and which turned negative under the influence of a negator ([Krasnoukhova & van der Auwera 2019](#)).



Forms like *ni*, however, do show up in Tibeto-Burman outside of Eastern Kiranti as various sorts of ‘be’ verbs (Lowes 2006), as in Meithei (Chelliah 1997: 249–250, 297), with an ascriptive use in (33a) and an existential one in (33b).

(33) Meithei [mni] (Tibeto-Burman; Chelliah 1997: 297)

- a. phurit-tu ə-ŋəw-pə-ni  
shirt-DIST ATT-white-NMLZ-COP  
‘That shirt is the white one.’
- b. əy-nə phi ə-du ləŋ-thok-ləbə-ni  
I-CNTR cloth ATT-DIST throw-out-having-COP  
‘(It is that) I have thrown out that cloth.’

In van der Auwera & Vossen (2017) it is argued that the *ni* was gradually reinterpreted as a negator. The semantics motivating the reinterpretation is that the negative proposition was followed by an emphatic *so it is* phrase. This lost the emphasis and got contaminated with negative meaning, first doubling the earlier negator with a potential of doing the negative work on its own. Given that it is a positive ‘be’ verb that will become a negator, one could call it as “Positive Existential Cycle”.<sup>18</sup> And given that it involves a progression from single to double and back to single negation, it is no less of a Jespersen Cycle.

The case for a Positive Existential Jespersen Cycle does not only rest on the analysis of Kiranti *ni*. Within Kiranti itself there is more evidence, the clearest case being a negative past verbal suffix *yuk/yukt* (Doornenbal 2009: 163), which co-occurs with a negative prefix and which derives from a copula (Doornenbal 2009: 276) and still is one (Doornenbal 2009: 119). Outside of Kiranti, candidates for a Positive Existential Jespersen Cycle are the Oceanic language Lewo spoken in Vanuatu (Early 1994a: 425–426, 1994b: 79–80) and the languages of the Awju group (Wester 2014: 127–140) as well as Kaugel (Head 1976: 152–153), spoken in New Guinea.

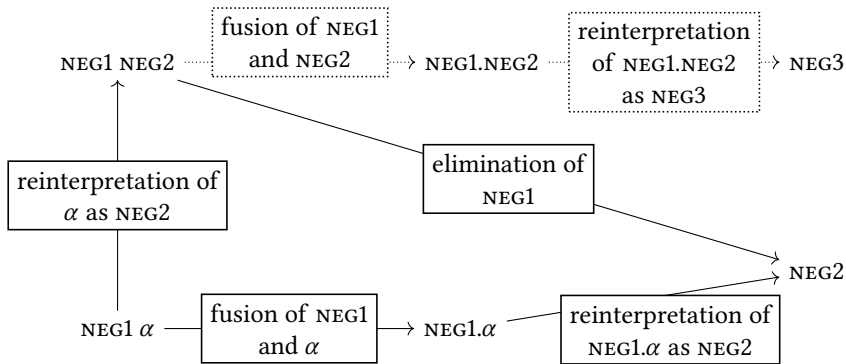
#### 4.4 A generalized Jespersen Cycle

We are now ready to return to the most general conception of the Jespersen Cycle. The idea is that a standard negator may find itself co-occurring with something ‘ $\alpha$ ’ and then either fuse with it or contaminate it with negativeness. If  $\alpha$  is itself

<sup>18</sup>The term is a bit misleading. The Positive Existential Cycle is still negative in the sense that it produces a new negator. The term identifies the source as a positive existential, just like the term “Negative Existential Cycle” identifies the source as a negative existential.

a negator, the same or another one, we get doubling. In case  $\alpha$  is not a negator, there are two alternatives with respect to trajectories leading to a standard negator. Either the standard negator turns  $\alpha$  into another negator (i.e., the standard negator contaminates  $\alpha$  with negativeness) and we get doubling, or there is fusion. The first trajectory, the doubling-after-reinterpretation, is the more restricted form-based Jespersen Cycle. There may be emphasis and bleaching (as in French) or not (Arizona Tewa). In principle, there is nothing preventing the new standard negators to fuse and the result may then be a third negator. We do not know, however, of any such cases and we use dotted lines in the representation in (34).<sup>19</sup> The second trajectory, the one involving fusion of the negator and  $\alpha$ , has two outcomes, depending on the nature of  $\alpha$ . If  $\alpha$  is an existential verb, we get a (subtype of the) Negative Existential Cycle. If  $\alpha$  is a minimizer – the Latin and Greek case – we get the more restricted meaning-based Jespersen Cycle. The scenarios are represented in (34).

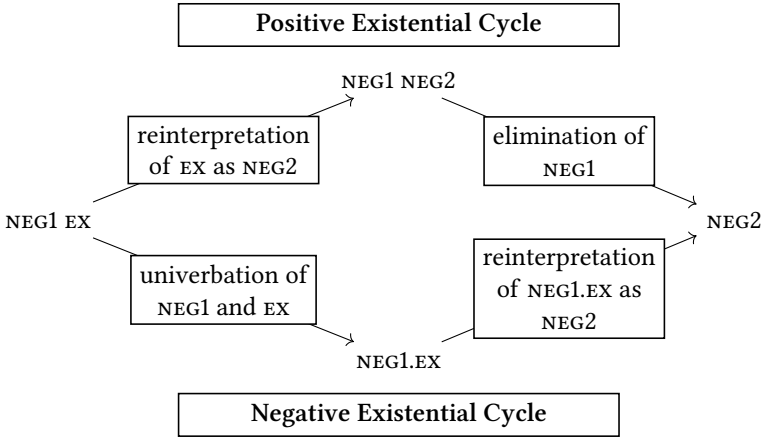
(34)



Note that the figure in (34) includes the end stages with one new negator, but we do not require a language to have reached it for us to claim that the language is involved in a Jespersen Cycle: the language may get stuck in an intermediate stage or the end stage may show tripling. In that sense (34) does not say enough. In another sense, it may say too much, for not every type of  $\alpha$  has been attested with both a reinterpretation and a fusion scenario. When  $\alpha$  is an existential marker, we do have both scenarios, i.e., a Positive Existential Cycle for reinterpretation and a Negative Existential Cycle for fusion. The two scenarios are schematized in (35).

<sup>19</sup>Fusion of standard negators is attested (Vossen 2016: 18 on the Austronesian languages Lewo and Nese; Devos et al. 2010 on the Bantu language Kanincin), but only in cases of tripling and quadrupling.

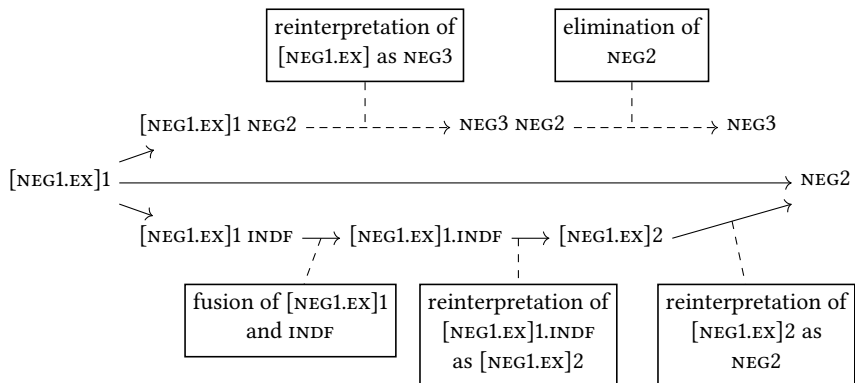
(35)



For most  $\alpha$ 's, however, only the reinterpretation scenario has been attested. Thus, in Arizona Tewa the subordinator *dí* turned into a negator through the influence of the negator *we*, but we haven't seen a language in which an original negator like *we* is adjacent to a subordinator like *dí* and delivers a new negator *wedí*. So in this sense (34) says too much. But in another sense, (34) – or (35) for that matter – does not say enough. For one thing, neither (34) nor (35) show that a language may have negator doubling followed by tripling (and even quadrupling and quintupling); these complications were already excluded from the paper in §1. For another thing, we do not expand the simple 3 stage model of a classic French style Jespersen Cycle into a model with more stages, nor do we include the five stages of the Negative Existential Cycle, represented in (19) in the above. However, we need to come back to the Mara, Wintu, Tacana and East Futuna cases. They are also not provided for in (34) or (35) yet. Like in these simpler scenarios, Mara, Wintu, Urarina, Tacana and East Futuna show doubling and fusion. In Mara, Wintu, Urarina and Tacana the negative existential combines with a standard negator, it may become a standard negator too with a further potential to oust the old standard negator. For East Futuna, the negative existential combines with something else, viz. an indefinite article. They fuse and combine to form a new negative existential and later a new standard negator. In (36) the middle lines show the simple Negative Existential Cycle; the ones on the top represent Mara, Wintu, Urarina and Tacana and the ones below represent East Futuna.

Finally, these schemas do not exhaust the paths that languages make use of to make negators. First, a negator may arise not only through the influence of

(36)



a negator that is already in place, whether through contamination or fusion. It may be borrowed or calqued from other languages – and to the extent that what is borrowed or calqued is negative doubling, distinguishing this from a Jespersen scenario can be difficult (cp. [van der Auwera & Vossen 2015](#)). Second, we have also assumed that the negator that will fuse or contaminate and thus yield a new negator is a standard negator. In the cases discussed in the literature, this seems to be the case, but what could prevent a standard negator from arising from, say, a contamination of a minimizer through a non-standard negator like a derivational negator? Third, a negator may also be recruited directly from the lexicon (cp. [van der Auwera 2010: 74](#)). The source will be a word with negative content and the outcome could in principle be a standard negator, although we cannot give a good example (cp. [van der Auwera 2010: 75, 90–91](#)): the literature (e.g. [van Gelderen 2011: 292–339](#)) only shows cases which yield special negators, such as prohibitives or negators of relative, focus or cleft constructions ([Givón 1973: 917](#)) or, to wit, existential negators. As mentioned already, in [Veselinova's](#) (2013: 137) cross-linguistic survey of the origin of existential negators, the majority of languages for which the origin is known derive from a negative word and not from a fusion of the standard negator and some existential marker. For these negative existentials the dynamics described by Croft and Veselinova, and in §3 of this paper, are just as valid as for the negative existentials that derive from fusion. And, importantly, these Negative Existential Cycles are not part of Jespersen Cycles, for the simple reason that they do not involve two things, at least one of which is a standard negator. The Negative Existential Cycle may thus serve inside the generalized Jespersen Cycle in the sense that we get from one standard negator to another one with fusion, but it need not.

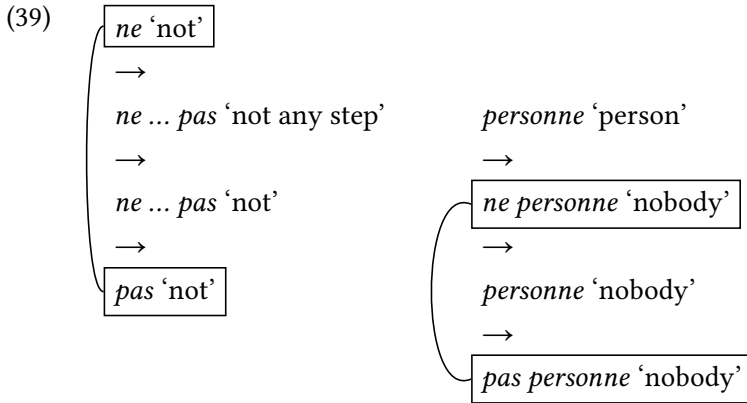
## 5 The “Quantifier Cycle”, similarities and links

We now turn to the “Quantifier Cycle”, not for a full analysis but for describing the similarities and the links with the cycles that yield standard negators. As the introduction of the “Quantifier Cycle” as a “Jespersen Argument Cycle” by Ladusaw (1993: 438) already suggests, the “Quantifier Cycle” and the classical Jespersen Cycle are very similar. What Ladusaw had in mind was the similarity between French *pas* and *personne*, shown in (37) in a four stage format (cp. Gianollo 2018a: 263, 2018b).

(37)	<i>ne</i> ‘not’	<i>personne</i> ‘person’
	→	→
	<i>ne ... pas</i> ‘not any step’	<i>ne ... personne</i> ‘not any person’
	→	→
	<i>ne ... pas</i> ‘not’	<i>ne personne</i> ‘nobody’
	→	→
	<i>pas</i> ‘not’	<i>personne</i> ‘nobody’

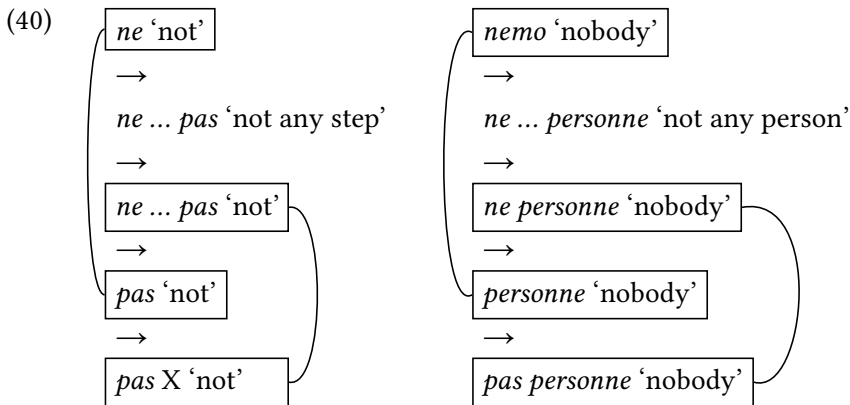
A first similarity is that both French *pas* and *personne* were once polarity neutral nouns – these uses prevail until today – and they both turned into negative polarity expressions on their way to becoming negative expressions (a process finished for *pas*). Second, these reinterpretations are mirrored by fusions. Different from French *pas*, Latin *non* involved fusion. Likewise, different from French *personne*, English *nobody* involved fusion. Third, the third stage is in both cases a kind of doubling, i.e., classical Jespersenian doubling for standard negation and so-called “negative concord” for the negative indefinites. Fourth, in both cases the doubling can get undone. Fifth, the undoubling stage need not be a final stage. *Pas* can be the beginning of a new Jespersen Cycle and we are back at stage 1. For the pronouns there is cyclicity too, but in the version of the Cycle shown in (37) we go back to the preceding stage: a standard negator is added and we return to negative concord. Interestingly, in the well-known cases of Canadian French and Brabantic Belgian Dutch (e.g. van der Auwera & Van Alsenoy 2016: 499) the standard negator that is added now is not the one that fell in disuse. (38) is an example from Canadian French, in the literature since at least Muller (1991: 262–263).

- (38) Canadian French [no ISO code] (Indo-European; Muller 1991: 262)
- |                                 |           |            |                 |          |
|---------------------------------|-----------|------------|-----------------|----------|
| ... y                           | a         | <b>pas</b> | <b>personne</b> | en ville |
|                                 | there has | NEG        | nobody          | in town  |
| ‘[...] there is nobody in town’ |           |            |                 |          |



(39) shows the cyclicity based on the modelling of (38).

But this representation can be improved. As already argued in §1, if we add Latin *nemo* ‘nobody’, there is more cyclicity. Furthermore, if we do not include a stage with only the lexical component *personne* ‘person’, the similarity becomes more transparent still (the Jespersen Cycle does not have a stage with just *pas* ‘step’ either). We add *X* as the as yet unfulfilled “doubler” of *pas*. Of course, the



motivation to redouble for *personne* is not the complex Jespersen Cycle trajectory. A plausible explanation, we find, is the one offered by Haspelmath (1997: 203), echoing Heidolph (1970: 99): standard negation is clause-level negation and when it is marked on a participant there is a tendency to remedy this construction and to add a standard negator. So this is a significant difference between

the two cycles. There are more differences. First of all, the doubling illustrated by Canadian French is not the only additional stage in the “Quantifier Cycle”. In another scenario, the negative indefinite may trade its negativity for negative polarity. This is taken to have happened to e.g. French *nul* ‘no (one)’ (see [Catalani 2001](#): 113–114, [Buridant 2000](#): 135–137, [van der Auwera & Van Alsenoy 2011](#): 327, [Gianollo 2018a](#): 211–213) and *jamais* ([Mosegaard Hansen 2012](#)), as well as in Jamaican Creole. (41) is an Old French non-negative example, culled from a fable by Marie de France by [Buridant \(2000: 167\)](#). (42) shows two Jamaican Creole examples, taken from *Di Jamiekian Nyuu Testament* (2012) and discussed in [van der Auwera & De Lisser \(2019\)](#).

- (41) Old French [fro] (Indo-European; [Brucker 1998](#): 118)  
 Si **nuls** l’en veut doner lüer ...  
 If anyone him wants give reward  
 ‘If anyone wants to bribe him ...’
- (42) Jamaican Creole [jam] (Indo-European)  
 a. [...] **nobadi** we kil **nobadi**, dem a-go go a kuot ous [...]   
     nobody REL kill anybody 3PL PROG-PROSP go to court house  
     ‘... anybody who kills anybody is going to go to court [...]’ (*Matthew*  
     5: 21)  
 b. Bot muo dan **notn** els, Gad gud an kain tu wi.  
     but more than anything else God good and kind to 1PL  
     ‘But more than anything else, God is good and kind to us.’ (*James* 4: 6)

In yet another scenario, the negative indefinite loses a marker of negativity. This has been argued by [van der Auwera et al. \(2006\)](#) for a small area within Brabantic Belgian Dutch in which the negative indefinite *niemand* ‘nobody’ of the negative concord pattern in (43a) has lost its initial nasal, thus resulting in *iemand*, the positive indefinite (‘someone’).

- (43) Brabantic Belgian Dutch [no code] (Indo-European)  
 a. Ik heb **niemand** **nie** gezien.  
     I have nobody NEG seen  
     ‘I have seen nobody.’  
 b. Ik heb **iemand** **nie** gezien.  
     I have somebody NEG seen  
     ‘I have seen nobody.’

All in all, the differences between the standard Jespersen Cycle and the Quantifier Cycle are substantial<sup>20</sup> and, we propose, this is mirrored by the fact that not that many languages seem to have undergone both the Quantifier and Jespersen Cycles. Or, put differently, Jespersenian doubling probably seldom co-occurs with negative concord (Van Alsenoy & van der Auwera 2014, Van Alsenoy 2014: 182–195).<sup>21</sup> But in languages like French and English, the two cycles do co-occur. In both English and French we see that a new standard negator is recruited from the set of negative indefinites and the resulting pattern is a doubling pattern, not unlike the negative concord of the negative indefinites. In Latin and Greek the new standard negator also derives from a negative indefinite, but this time it does not come from a doubling pattern but from one in which the negative indefinite is not accompanied by a standard negator.<sup>22</sup> We also see that when doubling disappears in standard negation, negative concord disappears as well, and one may assume that the loss of the old standard negator in one construction influences its loss in the other pattern.<sup>23</sup>

## 6 Conclusion

In this paper we aimed to increase the understanding of each of the three Negative Cycles individually and of the links between them. We focused on the interaction between the Jespersen and the Negative Existential Cycles. We argued for a wide definition of the Jespersen Cycle, which solves the currently existing terminological dilemma. The new definition allows elements not only to be contaminated by negators, and thus become negators themselves, but also to fuse with negators and thus also make new negators. Fusion can also yield negative existentials, and to that extent the Negative Existential Cycle is part of a Jespersen Cycle, as are the instances where Negative Existential Cycles allow negator doubling. We integrated a Positive Existential Cycle, i.e., a scenario in which an

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<sup>20</sup>No wonder that Larrivé (2011), whose notion of Jespersen Cycle is narrower than ours but which subsumes the “Quantifier Cycle”, concludes that what is going on is too diverse to continue using the term “Jespersen Cycle”.

<sup>21</sup>In Van Alsenoy’s sample of 179 languages only 6 languages have both Jespersenian doubling and negative concord (Van Alsenoy 2014: 187).

<sup>22</sup>Different from Latin, the Greek indefinite that became a standard negator had negative concord, but it was the non-strict type, and it is from the preverbal concord-free use of the negative indefinite that the standard negator must have developed (Chatzopoulou 2012: 294–295).

<sup>23</sup>There is no claim here that the two processes are in sync or it is invariably the same process that leads. Thus Ingham (2011: 152) argues that in Anglo-Norman the old negator disappears in indefinites before it does in standard negation, but Jäger (2013: 176) holds the opposite view for Middle High German.



existential marker does not fuse with a negator but is contaminated by it. Finally, we described the similarities and differences between Jespersen and Quantifier Cycles and the way “Quantifier Cycle” output can be inserted into a Jespersen Cycle. We also proposed a more enlightening model of what goes in the “Quantifier Cycle”.

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## Abbreviations

1	1 <sup>st</sup> person	EMPH	emphatic
3	3 <sup>rd</sup> person	ERG	ergative
3>3	3 <sup>rd</sup> person agent + 3 <sup>rd</sup> person patient	FUT	future
A	agent	GENR	general tense-aspect-mood
ABS	absolutive	GER	gerund
ACT	active	HAB	habitual
ANAPH	anaphoric	IPFV	imperfective
ATT	attributive	INCL	inclusive
AUX	auxiliary	INDF	indefinite
CNG	connegative	INF	infinitive
CNTR	contrastive	LOC	locative
COMP	complementizer	M	masculine
COND	conditional	NEG	negation
COP	copula	NMLZ	nominalizer
EX	existential	NPST	non-past
DAT	dative	NSP	non-specific tense-aspect
DEF	definite		
DET	determiner	OBL	oblique
DIST	distal	PART	partitive
DU	dual	PL	plural
E	E-type inflection class	POSS	possessive

PR	presentative	SUB	subordinator
PROG	progressive	TA	tense-aspect
PROSP	prospective	TAM	tense-aspect-mood
PRS	present	TOP	topic
PST	past	TR	transitive
SG	singular	V	verb
STAT	stative		

## List of languages

Amharic [amh]	German, Middle High German [gpe]
Arizona Tewa [tew] <sup>24</sup>	Greek, Classical [grc]
Awju [ahh] <sup>25</sup>	Greek, Modern [ell]
Bulgarian [bul]	Hawaiian [haw]
Cèmuhî [cam]	Juang [jun]
Drehu[dhv]	Kannada [kan]
Dutch, Brabantian Belgian <sup>26</sup>	Kanincin [rnd]
Dumi [dus]	Kapingamarangi [kpg]
East Futuna [fud]	Kaugel [ubu]
English [eng]	Korku [kfq]
English, Ghanaian <sup>27</sup>	Kulina [cul]
English, dialectal <sup>28</sup>	Latin [lat]
Finnish [fin]	Lewo [lww]
Finnish, dialectal <sup>29</sup>	Lifunga [bmg] <sup>31</sup>
French [fra]	Mara [mec]
French, Anglo-Norman [xno]	Meithei [mni]
French, Canadian <sup>30</sup>	Nese <sup>32</sup>
French, Old [fro]	Nengone [nen]

<sup>24</sup> Arizona Tewa seems not to have its own ISO 639-3 code. The ISO code given here is the one for “Rio Grande Tewa”, which is at least a variety of Arizona Tewa. However, we do have geographic coordinates for Arizona Tewa: Latitude: 35,84; Longitude: -110,38 (source: Glottolog).

<sup>25</sup> Awju is a group of 4 languages. We mention the group in the text, not an individual language. Here we give an ISO code of just one of four languages.

<sup>26</sup> No ISO code, glottolog code: brab1243.

<sup>27</sup> No ISO code.

<sup>28</sup> No ISO code.

<sup>29</sup> No ISO code.

<sup>30</sup> No ISO code.

<sup>31</sup> Ethnologue gives Lifunga as one of the dialects of Bamwe [bmg]. There seems to be no separate ISO-code for Lifunga, so we give the ISO-code for Bamwe here.

<sup>32</sup> No ISO code; glottolog code: nese1235.

Sino-Russian Pidgin<sup>33</sup>  
 Swedish [swe]  
 Tacana [tna]  
 Tongan [ton]

Tuvaluan [tv]  
 Urarina [ura]  
 Wintu [wit]

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<sup>33</sup>No ISO code; glottolog code: kjac1234.

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