

A Cross-linguistic Study of Expletive Negation

Abstract

The grammars of Romance languages are famous for including what is traditionally called expletive negation (EN): a negator can occur despite contributing nothing to the polarity of the proposition denoted by the clause it occurs in. This phenomenon is attested in many other languages in the world although most of the literature on this topic only mentions a few contexts that trigger EN. In this paper, we first offer a near-exhaustive list of EN-triggering contexts collected from four genetically-unrelated languages (French, Mandarin, Zarma-Sorai, and Arabic). We then analyze the meaning of all EN-triggering contexts and explain why they are able to trigger EN cross-linguistically. We suggest that EN is the result of a fossilization of cognitive pressures that are at play even in languages without “grammatically licensed” EN. We offer performance data that support this hypothesis and show that English speakers occasionally produce sentences containing EN in the same semantic contexts as in French, Mandarin, Zarma-Sorai, and Arabic. Comparing the “incorrect” English performance data, Romance grammatically licensed EN data, and EN data from other languages which might fall in between, we discuss the possible universality of the EN-triggering contexts.

1 Introduction

The grammars of Romance languages are well-known for licensing *expletive negation* (EN, henceforth), i.e. the occurrence of a negator that is grammatically licensed without contributing anything to the polarity of the proposition which contains it, as illustrated in the French example in (1).

(1) French
J'ai peur qu'il (ne) pleuve
I.have fear that.it NEG rain.SBJV
demain.
tomorrow
'I fear that it will rain tomorrow.'

From a logical point of view what is feared by the speaker in (1) is the proposition that it will rain tomorrow, whether or not the negator

'ne' is present. A similar phenomenon is attested in other Romance languages such as Romanian, Catalan, and Spanish.

This paper presents the results of a cross-linguistic study of expletive negation and shows first that: (1) expletive negation is attested in many languages, (2) the contexts licensing expletive negation in languages where it is “robust” are almost identical. We then propose a semantic explanation for the range of contexts that license expletive negation and hypothesize that expletive negation, when registered in the grammar of a language, is the conventionalization of cognitive pressures imposed by the simultaneous activation of both a proposition and its negative counterpart. We support this hypothesis via a corpus study that shows that expletive negation can intrusively arise even in languages reported not to have expletive negation (e.g., English) in the very same contexts where grammatically licensed expletive negation occurs.

2 A cross-linguistic survey of expletive negation

In traditional logic, negation can be seen as a function which changes the polarity of the proposition over which it has scope. However, natural language negation does not always encode this logical function. A seemingly logically vacuous negator can be found in various sentences, e.g., rhetorical questions, biased questions, negative concord, exclamatives, concessive conditionals, requests and interrogative complements. In the linguistic literature, many authors (Abel, 2005; Epinal, 1992/2000/2007; Makri, 2013; Portner & Zanuttini, 2000; Yoon, 2011) use the term expletive negation to cover all these cases. In this paper, we use the term expletive negation (EN) to refer only to the occurrence of a logically vacuous negator that is licensed by the meaning of a verb, adposition, or adverb that take a proposition as argument. Our restricted use of the term is motivated by the semantic licensing condition on expletive negation we discuss below.

Our survey of grammars and other reference works shows that expletive negation is attested in many language families: Indo-European (Italic, Germanic, Hellenic, Balto-Slavic, and

Indo-Aryan branches), Uralic (Hungarian and Finnic branches), Afro-Asiatic, Austroasiatic (Vietic branch), Niger-Congo, Altaic, Sino-Tibetan, Austronesian, Trans-New Guinea, and a few language isolates, such as Basque, Korean, and Japanese.

But, expletive negation is not always “robust,” at least according to our sources, as it may be licensed in only one or two contexts. To get a better sense of the contexts where EN occurs (and why it occurs across languages), we examined the contexts where expletive negation can be found in four languages where it is “robust,” i.e., occurs in many different contexts, Arabic (Afro-Asiatic), Chinese (Sino-Tibetan), French (Indo-European), Zarma-Sorai (Songhai). Table 1 lists all the contexts where expletive negation is found in these four languages.

	Context	Language
1	X fears P	F,M,Z
2	X worries P	F,M,Z
3	there is danger P	F,M,Z
4	X doubts P	F,(*M),Z,A
5	X denies P	F,M,Z,A
6	X regrets P	M,Z
7	X criticizes P	M,Z
8	X complains P	M,Z
9	X blames P	M,Z
10	X forgets P	M,Z,A
11	X delays P	M,Z,A
12	X misses P	(*F),(*M),Z,A
13	X refuses P	M,Z,A
14	X gives up/stops P	M,Z,A
15	X avoids P	F,M,Z,A
16	X prevents P	F,M,Z,A
17	X forbids P	F,M,Z,A
18	Q before/untils P	F,M,Z,A
19	a long time since P	F,?M,Z,A
20	X almost P	F,M,Z,A
21	Q-er than P	F,?M,Z,(*A)
22	Q without P	F,(*M),(*Z),A
23	Q unless P	F,Z,A

Table 1. Near-exhaustive EN-triggering contexts (using English as a semantic metalanguage) in Arabic (A), French (F), Mandarin (M) and Zarma-Sorai (Z)

These contexts expand on the list of EN-triggering contexts mentioned in the literature, but are not necessarily exhaustive. They cover,

though, all the semantic fields that may trigger EN we found to be attested across languages in our survey. All the example sentences we collected for each context were either provided by a native speaker or collected from web resources. All efforts were made to ensure that sentences retrieved via Google were written by native speakers. The contexts listed in Table 1 are meant to cover concepts that roughly correspond to their English glosses. In some cases, a single lexical item in one of the languages covers several of the contexts, while in other cases several near-synonyms may exemplify a single context. The asterisk before some languages’ initials indicates that the reason why EN is not attested for the particular context in that language is due to language-internal morphosyntactic factors (e.g., the complement clause takes a form that prevents the addition of a negator, as for the ‘doubt’ context in Mandarin). It might be that there is no fixed lexical/phrasal way of expressing some EN-triggering concepts in a language (like the ‘without’ concept in Mandarin and Zarma-Sorai). It might also be that a context only takes an entity as its argument rather than a proposition (like ‘than’ in Arabic and ‘miss’ in Mandarin). The question mark before two contexts for Mandarin (‘a long time since P’ and ‘Q-er than P’) indicates that sentences that include EN sound like speech errors to some native speakers, despite the fact that they are attested in corpora. Finally, contexts 4-5 (*doubt* and *deny*) only license EN in negative or interrogative contexts in French according to prescriptive grammars, a restriction that does not apply to the other languages and which we do not attempt to model here.

3 A semantic analysis of the EN-triggering contexts.

What is remarkable in Table 1 is the fact that, overall, expletive negation is licensed in quite similar contexts across these genetically unrelated languages. This raises two questions: (1) what is common to these contexts? (2) why is it that these contexts license EN? To answer both questions, we first propose a semantic analysis of the contexts which license EN. We propose the following condition on the occurrence of EN.

Semantic licensing condition on EN

(2) An EN can only occur in a context OP(p) if OP(p) entails “not p” at some subset of indices (henceforth, reference indices).

We let *OP* stand for both one-place operators, but also for the denotation of verbs of mental attitude or saying (following Heim 1992), as well as the comparative or temporal relations like ‘before’ or ‘until.’ Indices in (2) cover both sets (or sequences) of time intervals and possible worlds (as in Montague 1970). We explain the import of (2) below on the contexts mentioned in Table 1.

For contexts 1-3, the relevant reference indices are the worlds that correspond to X’s desires, as fears, worries, and the like are defined relative to one’s desires. In those desire-compatible-worlds, “not p” is true: What we fear (worry about, ...), “p”, is not true in those worlds. Note that, in some languages, the (expletive) negator found in these contexts is the negator also used in other contexts where desire is entailed or presupposed, like the Mandarin ‘bié’, which is also used in imperative contexts. For contexts 4-5, the relevant reference indices are the worlds that correspond to X’s beliefs. Contexts 4-5 illustrate the need to include the notion of reference indices in (2). Predicates such as ‘believe’ or ‘assert’ never license EN because there is no reference world they semantically evoke where “not p” is entailed to be true. For contexts 6-9, the reference indices are the worlds that correspond to X’s behavioral standards (what X thinks “should” be the case). If X regrets p, “p” is not true in the worlds corresponding to what X thinks should be the case. For contexts 10-14, the reference index corresponds to w_0 : If X forgets p, then “not p” is entailed to be true in w_0 . But, “p” is true in those worlds in which X would have done what she was supposed to do. The reference indices include w_0 for contexts 15-17, but also the worlds consistent with X’s desires. For contexts 18-19, the reference indices correspond to the time intervals that are *before*, *until*, and the like, where “not p” is true; “p” is true at later (earlier) times. We extend the notion of reference index to cover contexts 20 and 21. In this case, like in contexts 10-17, the reference index corresponds to w_0 : “not P” corresponds to “Y is *not* Q to some degree t to which X is Q” is entailed in w_0 for context 20 and “not P” is true in w_0 if *almost P* is true for context 21. The reference index in context 22 is

also w_0 (although, the worlds in which “p” is true are not the same as those where “p” is true for *almost P*). Finally, the reference indices for context 23 are the worlds in which the conditional’s protasis is true. We summarize the various reference indices where “not p” is true in Table 2.

	Context	[Not P] is true
Type I	X fear P; X worry P; there is danger P	In possible worlds consistent with X’s desires
Type II	X doubt P; X deny P	In possible worlds consistent with X’s beliefs
Type III	X regret P; X criticize P; X blame P; X complain P	In possible worlds consistent with X’s behavioral standards
Type IV	X doubt P; X deny P; X forget P; X delay P; X miss P; X refuse P; X give up/stop P; Q without P; X almost P; Q-er than P	In the real world
Type V	X prevent P; X avoid P; X forbid P	In all possible worlds consistent with X’s desires and the real world
Type VI	Q before/until P; a long time since	At intervals of time before (after) the main clause’s RT
Type VII	Q unless P	In the worlds in which the conditional’s protasis is true

Table 2. Contexts and the evoked reference indices where “not p” is true

4. Why do speakers produced expletive negators?

The previous section argued that EN is only licensed in contexts where “not p” is entailed to be true at some subset of indices (what we call reference indices). This hypothesis explains what is common, semantically, among the contexts that license EN and why there is much communality in the contexts where EN occurs across languages (especially in the four languages we examined in detail). But why do speakers produce EN? Our hypothesis is that because “p” and “not p” are both entailed to be true in two distinct sets of indices (worlds, times), the contexts listed in Table 1 activate both “p” and “not p” in speakers’ minds and this is why EN sometimes occurs. Consider the meaning of ‘fear’ and similar predicates, which entails that “not P” is true in all possible worlds corresponding to X’s desires. When one is using these predicates, two sets of worlds are activated. One set only contains all the worlds where X’ fears or worries are true and “p” denotes the content X fears. But the other set contains all worlds which correspond to X’s desires (the reference indices for ‘fear’) where “not p” is true. Because both sets of worlds are activated during sentence production, “not p” as well as “p” is activated. If the activation of “not p” is strong enough or the entailed “not p” not inhibited enough on particular occasions, a semantically vacuous negator (with respect to the embedded argument of ‘fear’) will surface. Similarly, the meaning of the predicate ‘regret’ entails that “not p” is true in all possible worlds corresponding to X’s behavioral standards. In all the possible worlds where X’s regrets are true, “p” is true and denotes the content X regrets; but in all the possible worlds consistent with X’s behavioral standards, “not p” is true. As both “p” and “not p” are activated, on occasion, the activation of “not p” will reach a threshold that triggers the verbalization of the negation. This competing activation of “p” and “not p,” more generally, is why, we claim, speakers will on occasion produce an expressive negator in contexts which entail “not p” at some subset of indices and why, over time, this occasional presence of an EN has become conventionalized in some languages.

Our hypothesis that the presence of grammatically licensed ENs is the conventionalization of the activation of both “p” and “not p” makes an interesting prediction,

namely that even in languages supposedly without EN, EN should surface on some occasions. This is because the cognitive pressures that lead to the production of an expletive negator only depend on the meaning of the operator OP in (2) and therefore should apply to any language, in principle. We tested this prediction through a corpus study of English. English descriptive grammars never mention the existence of EN, and prescriptive grammars reject sentences such as ‘*refuse not to surrender*’ (meaning: *refuse to surrender*). Native speakers, though, do produce such sentences as the following examples illustrate.

(3) Type II context:

I only got 30 mins of horrible squeezing massage, but I still gave her a tip and I **regret** that I **shouldn’t** so they know how bad is their service and maybe their choosing people depend on the service they ask for but still and they have that option of 45 mins foot massage and 15 mins body for \$21 and I gave \$5 tip.

(Eros B, from Yelp, retrieved from:

<https://www.yelp.com/biz/fu-kang-health-center-torrance-2>)

(4) Type III context:

@joangrande @realDonaldTrump he also denied that he didn’t mock a disabled reporter. There is proof of him doing this. He’s such a liar.

(Ashley, from twitter, retrieved from:

<https://twitter.com/ashleyfaith22/status/788924237503311876>)

(5) Type V context:

Both the Jordan boys and girls golf teams entered the MRC Championships on Monday with large leads, and only a monumental collapse would prevent them from not winning the conference title. That collapse didn’t happen. In fact, both teams extended their lead as they cruised to the titles.

(Todd Abeln, The kings of MRC golf, retrieved from:

http://www.swnewsmedia.com/jordan_independent/news/sports/the-kings-of-mrc-golf/article_486d5714-b771-521a-a824-c81a4a901259.html)

Examples of expletive negation are harder to find for the Type I context. Example (6) is such an example, but interestingly includes the adverb *hopefully*. The inclusion of *hopefully* supports our claim that expletive negation results from the evocation of two sets of

possible worlds, in this case the worlds consistent with the speaker's worries and the worlds consistent with his desires and hopes. The production of the adverb *hopefully* reflects the concurrent activation of the set of worlds consistent with the speaker's hopes and desires.

(6) Type I context:

"It was a bit painful but the shock, once that wore out I really felt it. I was just **worried** that **hopefully** there **wasn't** a break in there and lucky enough there was no fracture, just a dislocation," Moa said.

(Chris Kennedy, retrieved from:

<https://m.nrl.com/hard-work-behind-roosters-injury-breeze/tabid/10874/newsid/88902/default.aspx>)

In fact, for every context shown in Table 1, we found corpus examples of sentences that include 'expletive negation.' To distinguish English examples from the more entrenched Romance examples, we call such sentences *intrusive EN* examples, as the expletive negators seem to intrude on people's grammar.

In fact, intrusive EN examples are attested even in languages where EN is grammatically licensed. French '*ne*' on its own is restricted to grammatically licensed EN, since '*pas*' (or other N-words) is required to encode logical negation in modern French. But, some of the contexts listed in Table 1 that do not seem to grammatically license EN in French, nonetheless license intrusive EN (although quite rarely, it seems), as (7), among other examples, illustrates.

(7) French

Vous	avez	oublié	de	ne pas
you	have	forgotten	of	NEG
nommer		Jacques Stephen Alexis,		
nominater		PN		
un	grand	des	grands	savants.
one	great	of.the	great	savant

'You have forgotten to nominate Jacques Stephen Alexis, one of the greatest savants.'

(Retrieved from:

http://www.radiotelevisioncaribes.com/nouvelles/haiti/gonaives_justice_marche_contre_la_corruption.html

Similarly, whereas Arabic does not seem to license EN in contexts 1-3 or 6-19, one can find examples of intrusive EN for these contexts as (8) shows.

(8) Arabic

xaif	en-ja-allah	ma	fi
afraid.1ST.IPFV	hopefully	NEG	there.is
tahafum		fi	el-ʕadm.
fracture		in	DET-bone

'I am afraid (hopefully) there is (no) fracture in the bone.'

5. Conclusion

This paper shows that EN is much more widespread than previously assumed. Furthermore, our study of four genetically unrelated languages shows that the range of contexts where one finds EN is similar across languages.

To explain the occurrence of EN in similar contexts, we provide a semantic and production model of EN. According to this model, some operators entail "p" at some indices and "not p" at another set of indices. Because of the meaning of these operators, both "p" and "not p" are activated and it is this concurrent activation of two contradictory propositions that leads speakers to produce an EN when the activation of "not p" exceeds the threshold necessary for verbalization.

Our model predicts that even in languages that are reported to not license EN, EN should sometimes occur in the very same contexts we listed in Table 1. A corpus study of colloquial English suggests that this is the case: We found examples of what we call *intrusive EN* for all contexts listed in Table 1. We also found examples of intrusive EN for contexts that do not grammatically license EN in languages like French and Arabic.

Finally, our model makes a strong claim, as it assumes a universal set of EN-triggering contexts. Whether we can maintain such a strong claim depends on whether we can show that if EN is not attested, either grammatically or intrusively, in one of the contexts listed in Table 1 in a certain language, there are some language-internal reasons for this absence. Furthermore, as is, our model predicts that contexts should be equally likely to trigger EN. But, this does not seem to be true of either grammatical or intrusive EN. For example, our English corpus study yielded many examples of intrusive EN for some of the contexts listed in Table 1 and very few for others. We are currently exploring why this is the case.

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