



**HAL**  
open science

# Turning negative: Micro-steps from Negative Polarity Item to Negative-Word

Pierre Larrivé

► **To cite this version:**

Pierre Larrivé. Turning negative: Micro-steps from Negative Polarity Item to Negative-Word. Language Sciences, 2021. hal-03232730

**HAL Id: hal-03232730**

**<https://hal.science/hal-03232730>**

Submitted on 24 Apr 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial 4.0 International License

## Turning negative: Micro-steps from Negative Polarity Item to Negative-Word

Pierre Larrivé

Laboratoire CRISCO (EA 4255)  
Département des Sciences du Langage  
UFR Humanités et Sciences Sociales  
Université de Caen Normandie  
Normandie Université  
Esplanade de la Paix  
CS 14032  
14032 Caen cedex 5  
France

Pierre.Larrivee@Unicaen.fr

### 0. Abstract

This paper revisits the debate as to whether n-words such as English *nobody*, French *personne* and Italian *nessuno* are indefinites or intrinsically negative. Intrinsic negative value is diagnosed by use in the three contexts of fragment answers, double negation and constituent negation. Are these criterial contexts involved in a predictable way through the development of future n-words? The question is answered by a detailed study of Polarity Sensitive Items (PSI) that are potentially ambiguous between n-word and negative polarity item (NPI) in four different languages (Finnish, French, American English and Italian). An ordered relation is found from negative fragment answers, that can be evoked by strong NPIs, to double negation and constituent negation, that are communicated by intrinsically negative n-words. Having identified micro-steps into n-word status, the paper demonstrates that n-words are not mere indefinites, and must have an intrinsic negative value.

**Keywords:** NPIs, n-words, diachronic evolution, grammaticalization cline, Finnish, French, English, Italian, vulgar minimizers

## Turning negative: Micro-steps from Negative Polarity Item to Negative-Word

### 0. Abstract

This paper revisits the debate as to whether n-words such as English *nobody*, French *personne* and Italian *nessuno* are indefinites or intrinsically negative. Intrinsic negative value is diagnosed by use in the three contexts of fragment answers, double negation and constituent negation. Are these criterial contexts involved in a predictable way through the development of future n-words? The question is answered by a detailed study of Polarity Sensitive Items (PSI) that are potentially ambiguous between n-word and negative polarity item (NPI) in four different languages (Finnish, French, American English and Italian). An ordered relation is found from negative fragment answers, that can be evoked by strong NPIs, to double negation and constituent negation, that are communicated by intrinsically negative n-words. Having identified micro-steps into n-word status, the paper demonstrates that n-words are not mere indefinites, and must have an intrinsic negative value.

**Keywords:** NPIs, n-words, diachronic evolution, grammaticalization cline, Finnish, French, English, Italian, vulgar minimizers

### 1. Introduction

Since the 1970's, a debate has been raging as to the nature of n-words<sup>1</sup> such as English *nobody* on the one hand and French *personne* and Italian *nessuno* on the other. The debate bears on whether such n-words are i. indefinites that inherit their negative value from the clausal context, ii. intrinsically negative expressions that enter concord relations, or iii. ambiguous between the two (see Giannakidou and Zeijlstra 2017 and references therein<sup>2</sup>). The options arise from the contrasts provided by the following illustrations.

- (1) Nobody got the virus.
- (2) *Personne n'a eu le virus.*
- (3) *Nessuno ha avuto il virus.*
  
- (4) Nobody got no virus. (= / = (1))
- (5) *Personne n'a eu aucun virus. (= (2))*
- (6) *Nessuno ha avuto nessun virus. (= (3))*
  
- (7) Jack got no virus.
- (8) *Jacques n'a eu aucun virus.*
- (9) \* *Giacomo ha avuto nessun virus.*

---

<sup>1</sup> "N-word" standardly refers to items other than the clausal negatives that can communicate a negative value in a fragment answer. The new term "Negative Concord Item" has been coined by some to avoid confusion with the homonymous racist expression. However, the former applies to the French and Italian items, and not to the English ones, that in the standard variety do not enter concord relations. Another term must then be used for the English n-word type, usually "negative quantifier" (see Zeijlstra 2020) (although confusingly "negative quantifier" is sometimes used for the French and Italian n-word type as well, e.g. Willis 2011). As this distinction appears undesirable to us for the very reasons presented in this paper, we retain the old expression, which should not be seen as support for racism in any shape or form.

<sup>2</sup> In this paper, given the extent of the bibliography on the subject, references are largely restricted to those published this century, forerunners being discussed in Giannakidou & Zeijlstra (2017), Giannakidou (2020, 2000) and Horn (2001a), among many others.

Referring to the standard variety of each language, use of two negatives with a single clausal negative interpretation is excluded in (standard) English (4), but allowed in French and Italian. This distinction has led some to suspect that the latter are of a different kind from the former, and pattern like Negative Polarity Items (NPIs)<sup>3</sup> such as *anybody*. Furthermore, whereas a postverbal negative is legitimate in English (7), it needs licensing by a preverbal one in Italian (compare (6) and (9)), much like NPIs would. From the perspective of English, it would be tempting to say that Romance n-words are not the real negative thing, but only some kind of indefinites.

However, negative status is suggested by at least three diagnoses<sup>4</sup> identified in the literature (e.g. Larrivé 2011). These are fragment answers, double negation and constituent negation. A fragment answer with a negative reading can be expressed by the three identified n-words,

- (10) – Who got the virus?  
 – No one.
- (11) – Qui a eu le virus ?  
 – Personne.
- (12) – Chi ha avuto il virus ?  
 – Nessuno.

and could not be by a NPI like *anything*. This would suggest that the item is the sole locus of the negative reading. Giannakidou argues that the negative reading comes not from the item itself, but from the elided negative marker that would become visible if the full sentence were restored (e.g. the preverbal *ne* that would be found in the full answer *Personne n'a eu le virus* in (11)) (see Weir 2020; Moscati 2010: 100ff for a general discussion of the technicalities of negative elision; for data from Hungarian supporting Giannakidou, see Puskas 2002). However, no such negative marker is found with the Italian preverbal n-word in (12).<sup>5</sup> Likewise for the Arabic negative determiner *wala*, meaning that nothing else can account for its negative value as noted by Lucas (2009: 210). Also, if elided negative material could license the fragment answer, then such an answer could contain a NPI expressing negation on its own (Iordachioai 2009: 91), and no such NPI fragment answers are found. If an elided negation could influence the interpretation of an answer, this should be possible in any fragment answer, and it is not: the response “– A snake” to “– What did you see?” never means “I didn’t see a snake” (Watanabe 2004). The balance of argument is therefore in favor of intrinsic negative value (see also Espinal and Tubau 2016). The conclusion may not be so clear in other fragment contexts such as coordination, gapping, participial constructions and comparatives (Herdan 2009, Iordachioaia 2009: 237ff). Comparatives for instance allow both negative and indefinite readings of n-words (Lucas 2009: 2010ff).

- (13) It’s better than nothing. (Having this is better than having nothing.)  
 (14) It’s better than nothing before. (This is better than any other thing we’ve seen before.)

---

<sup>3</sup> “Negative Polarity Items” refers to indefinites whose distribution or interpretation is tied to contexts such as negation, question and conditionals.

<sup>4</sup> Other contexts have been adduced, particularly modification by *almost*, but such modification is not conclusive, because its ungrammaticality depends not on NPI status of the modified term, but on the incompatibility between *almost* and clausal negation: consider *\*I didn’t see almost anyone* vs. (?) *Without seeing almost anyone*.

<sup>5</sup> A reviewer remarks that if Italian preverbal n-words had a different status from the post-verbal ones, only the former would be expected as negative fragment answer, which is not the case: *Nessuno* is equally acceptable as an answer of either *Chi ti ha visto?* ‘Who saw you?’ or *Chi hai visto?* ‘Who did you see?’.

Double negation has early on been identified as an environment which argues in favor of negative status of n-words. In the following elicitations:

- (15) *Nobody* “did nothing”. (= Everybody did something)
- (16) *Personne* “n’a rien fait”.
- (17) *Nessuno* “non ha fatto niente”.

the double negation must come from each of the two n-words (among others, Larrivé 1995, Puskas 2002, Alonso & Guerzoni 2004, Mathieu 2004, Baunaz & Cattaneo 2005, Iordachioaia 2009: 94-96). The argument is strengthened when the double negative reading is induced by a fragment answer (Espinal & Tubau 2016, Garzonio 2019).

- (18) – So, who did nothing?  
– Well, no one really. (= Everybody did something)

Fălăuș & Nicolae (2016) suggest that this may be due to the fact that as strong NPIs, the relevant Romanian n-words in double negation configurations can license a negative. This of course is equivalent to saying the n-words have an intrinsic negative value.

Finally, an intrinsic negative value can be argued for with constituent negation uses. The term is used here<sup>6</sup> to refer to the local scope of a negative, that does not bear on the predicate (Haegeman 2000, Kato 2000, Collins & Postal 2014). A traditional illustration going all the way back to Klima (1964) is *Mary would be happy with no job*: putting aside the clausal scope interpretation in which Mary is not happy whatever the job, the constituent scope induces the reading where Mary would be quite happy even if she had no job. Typical contexts of constituent scope are provided by the following illustrations.

- (19) a. He is working for nothing. (= in vain)
- b. I’m left with nothing.
- c. They’re fighting about nothing.
- d. It is destroyed to nothing.

Patently, the negative reading of the n-word cannot be blamed on a clausal marker, since concord with a clausal marker is impossible for a constituent scope negative. Constituent scope is sometimes dismissed as relating to formulaic expressions (Svenonius 2002, De Clercq 2013: 142, Franco, Kellert, Mensching & Poletto 2016), which does not explain why it would be available across languages. Penka (2001) suggests that the n-word remains licensed by a covert operator situated inside the prepositional phrase, but this is a stipulational move – if such an operator were available, it should allow NPIs (such as *He is working for anything* with the same reading as *nothing*), which are not found. Constituent negation is thus a significant problem for an indefinite approach of n-words (Déprez 2018).

---

<sup>6</sup> There is considerable confusion about the use of the term “constituent negation”. It may be used to refer to a negation with clausal scope that syntactically attaches to a specific constituent (see den Dikken 2019, Garzonio 2016).

- a. He wrote not two but three letters of complaints to Tesco. (see Déprez 2018)
- b. Not everybody is up for parachute jumping. (see Etxepare & Uribe-Etxebarria 2016)
- c. Not speaking a foreign language is a disadvantage. (Iordachioaia 2009: 199)

However, it is not clear that the negative in these sequences does not scope over a predicate. It is specifically the local scope, that does not affect a predicate, as in (19), that we designate here with the expression “constituent negation”.

Other behaviors separating n-words from NPIs have to do with position. In languages like English, French and Italian, NPIs cannot normally precede the negative that licenses them, as illustrated by the following.

- (20) Nobody said anything  
(21) \* Anybody said nothing.

Thus, n-words can indeed license NPIs. They also engage in focus effects:

- (22) Nobody wrote daily to Margot. (= They wrote all right, but not daily)  
(23) Nobody knows everything. (= Everybody knows something, but not everything)

Let us consider these criterial contexts in a comparative perspective. We know that diachronically, many n-words were previously NPIs: In the medieval period, *personne* ‘nobody’ was an indefinite comparable to *anybody* (Larrivée & Kallel 2020 and references therein). We know that the evolution into the former from the latter relates to use in a bridging context, an environment where items are ambiguous between two readings that therefore allow reanalysis with the new interpretation (Heine 2002). The bridging context from NPI to n-word is strong polarity environments (in the (in)direct dependence of a clausal negation or *without*): Larrivée & Kallel (2020) show that this is the context where French NPIs are distributed at notable rates (over 50% in their corpus) just before acquiring a majority of n-word uses. According to Heine (2002), the acquisition of the new reading is actuated by occurrence in switch contexts, that are compatible only with the new interpretation. Whether such switch contexts are represented by fragment answer, double negation and constituent negation is a question that arises. A further question is whether there is any ordering between these criterial contexts. In the same way that there is an ordered passage from weak NPIs to strong NPIs to n-words, one could imagine that this transition is structured by micro-steps e.g. from use in fragment answers, to double negation, and then constituent negation. These questions are examined in this paper, which is organized in the following way. First, we look at one series of Polarity Sensitive Items (PSI)<sup>7</sup> in Finnish, that look very much like NPIs, and investigate how native speakers react when confronted with uses of PSIs from other languages in the presumed switch contexts. Second, the effective diachronic evolution of one strong NPI in French is examined, showing that not all criterial uses are available to all items, implying an ordered pathway. Finally, the full pathway is illustrated by (some of the) rude PSIs in contemporary American English and Italian. The conclusion is that PSIs used in the criterial contexts must be analyzed as bearing their own negative value at least in these contexts, which are precisely the contexts responsible for the historical acquisition of n-word status.

## 2. A PSI set in Finnish

Finnish is famous for marking clausal negation via a specialized verb (Miestamo 2011; Vilkuna 2015: 458, her examples (1a,b))

- (24) Vauva nukku-u  
Baby sleep-3SG  
‘The baby is sleeping.’  
(25) Vauva ei nuku  
Baby NEG.3SG sleep.CNG

---

<sup>7</sup> Put forward by Giannakidou (1998), the term “Polarity Sensitive Items” is used as a hyperonym of both NPIs and n-words, when the particular status remains to be determined.

‘The baby is not sleeping.’

Polarity Sensitive Items divide into three paradigms according to Haspelmath (1997: 292ff). The “mainly negative” one is formed with the interrogative augmented with *kaan* glossed as “not even”. It therefore fits squarely into the category of Polarity Sensitive Items formed on a *wh*, as in Hindi, Japanese and Korean (Cheng & Giannakidou 2013, Giannakidou & Cheng 2006). Representative item *mittä-än* ‘nothing’ is found with negation and n-words, in comparatives, in conditionals and under the command of lexical negatives (Haspelmath 1997: 294).

- (26) Kuka-an ei kerto-nut minulle mitä-än  
 who-indef NEG tell-PAST.PTCP I:on when-INDEF  
 Nobody told me anything.
- (27) Ilmasto on täällä miellyttävä-mpi kuin missä-änmuuakka Euroopa-ssa  
 climate is here pleasant-COMP than where-INDEF Europe-INESS  
 Here the climate is more pleasant than anywhere in Europe.
- (28) Jos minä tästä mitään opin, niin sen että...  
 If I about-this what-INDEF learn-PAST(1SG) so be-PR(3SG) because  
 ‘If I’ve learned anything from this, it’s that...’
- (29) Epäilen että poika varast-i mitä-än.  
 I:doubt that boy steal-PAST(3SG) what-INDEF  
 I doubt that the boy stole anything.

These contexts are typically those in which Negative Polarity Items are found. Items such as *Mitä-än* “are not free-standing negative pronouns but convey negation only together with a negative licenser” (Vilkuna 2015: 469). Thus, in fragment answer, the negative verb is required.

- (30) Missä sinä ol-i-t? – E-n missä-än.  
 Where you be-PST-2SG Neg-1SG where=CLT  
 Where were you? – Nowhere. (Vilkuna 2015: 469)

The general situation should mean that negative uses are unavailable<sup>8</sup> for these PSI in Finnish. To explore this expectation, a translation experiment was set. Twelve advanced Finnish learners of French were asked to translate ten French sentences without any further instruction. Two sentences – 3., 8.– had a polarity use with a direct equivalent in Finnish. Eight however

<sup>8</sup> In the standard register. There are however contemporary uses in vernacular registers where these items are used without an antecedent licenser (Kotilainen 2007; for a similar case in Brazilian Portuguese, see Schwenter, Dickinson & Lamberti 2019). Examples are cited by Vilkuna, such as the following

- a. – Huijaa-t  
 cheat-2SG  
 You’re cheating.  
 – Mä mi-tä=ä huija.  
 I what-PAR=CLT cheat.CNG  
 I’m not! (Vilkuna 2015 : 481)

Alsenoy & van der Auwera note that “there are also examples involving indefinites, e.g., *paskat sä mitään tiedä* (shit.PL you what.PAR.INDEF know.CNG) ‘Shit, you don’t know anything at all.’ Though it seems tempting to analyze the indefinites as negative here, this example of the so-called “aggressive mood”, which is restricted to substandard Finnish and to specific emphatic contexts, is probably comparable to utterances like the English “The hell I will!”” (2015: ft 16). On these rude expressions, more below.

represented the criterial negative contexts – fragment answer in 1., 5. and 6., double negation in 4. and 10., and constituent negation in 2., 7. and 9. – that are not available in Finnish.

1. – Qu'est-ce que tu as fait finalement pour ton anniversaire ? – Rien du tout.  
– What did you do for your birthday? –Nothing at all.
2. Je le surprends souvent en train de parler à personne.  
I often surprise him speaking to nobody.
3. Si jamais tu retrouves ce roman, dis-le-moi  
If ever you find this novel again, tell me.
4. Proust n'a pas rien écrit sur le souvenir, voyons !  
Come on! Proust didn't write nothing about memory !
5. – Qui est-ce que tu as vu le week-end dernier ? – A peu près personne.  
–Who did you see masy week-end? –Practically nobody.
6. – Où est-ce que Luc va pour ses vacances ? – Nulle part, il reste à la maison.  
–Where is Luke going for his holidays? Nowhere, he's staying at home.
7. Ecoute, franchement, tu travailles pour rien.  
Listen, frankly, you're working for nothing.
8. Elle était plus heureuse cet été-là qu'à aucun moment de sa vie.  
She was happier that summer than at any moment in her life.
9. Luc habite au milieu de nulle part.  
Luke lives in the middle of nowhere.
10. Jamais Modiano n'a rien écrit, il a toujours maintenu une activité littéraire.  
Never has Modiano written nothing, he has always maintained a literary activity.

Contexts unavailable to Finnish PSIs should be problematic for the informants. And indeed they were. The polarity uses in 8. and 3. presented no difficulties, and the fragment answers in 1., 5. and 6. were as expected translated with a negative verb. More revealing were the constituent uses and double negation cases. The constituent uses gave way to avoidance of the PSI, where “talking to no one” in 2. was translated by “talking to himself” and “talking alone”, with 2 metalinguistic comments indicating that a PSI couldn't be used; and “working for nothing” in 7. translated as “unnecessary”. Such avoidance manifested itself for 9. in the answer of 1 informant who suggested “in the wilderness” for “in the middle of nowhere”, which however due to influence from English has a literal translation “keskellä ei-mittään” used by all other informants. The double negation cases in 4. and 10. gave way to two translations and one metalinguistic comment indicating a Negative Concord reading of the original; of those who understood the double negation reading, 3 offered metalinguistic comments regarding the difficulty to translate, 2 others avoided “nothing” altogether, 1 transformed “write nothing” by unambiguously local scope expression “without writing”, and 5 directly provided the positive version of (4) (for a similar strategy of producing the equivalent positive sentence in double negative contexts, see Li, Borràs Comes & Espinal 2019).

The situation of PSIs in the standard register of Finnish is that they are essentially NPIs. The translation experiment set here shows that criterial contexts of double negation and constituent negation that indicate intrinsically negative PSIs cause considerable problems to informants. Therefore, there is a qualitative difference between double negation and constituent negation on the one hand, and fragment answers on the other. Fragment answers are not available for PSI on their own in the standard registers, but there are indications (see footnote 8) that such a use is developing. In the next section, another instance of a qualitative difference between these contexts is illustrated by the diachronic evolution of a further PSI.

### 3. A strong NPI in French



English *at all* is a straight Negative Polarity Item. Its distribution comprises a fair few of the standard contexts listed in Giannakidou (1998)'s table of polarity environments.

		<i>any</i>	<i>shenme</i>	<i>Kanénas/rato</i> NPI	Greek FCI <i>otidhipote</i>
a.	Negation, n-word	OK	OK	OK	*
b.	Questions	OK	OK	OK	OK
c.	Antecedent of conditional	OK	OK	OK	OK
d.	Restriction of <i>every/all</i>	OK, FC	OK	OK	OK
e.	DE quantifiers (e.g. <i>few</i> )	OK	OK	OK	OK
f.	Modal verbs (e.g. <i>may</i> )	OK, FC	OK	OK	OK
g.	Nonveridical verbs (e.g. <i>hope</i> )	OK, FC	OK	OK	OK
h.	Imperatives	OK, FC	OK	OK	OK
i.	Habituals	OK, FC	OK	OK	OK
j.	<i>Before</i> -clauses	OK	OK	OK	OK
k.	Future	OK	OK	OK	OK
l.	Affirmative past	*	*	*	*

Table 1. Negative polarity environments

Restrictions are however found in Free-Choice environments (noted FC in the table) and in the future.

- (31) He didn't find work at all. (a.)
- (32) Nobody found work at all. (a.)
- (33) Did she find work at all? (b.)
- (34) If somebody found work at all, it must be her. (c.)
- (35) Everyone who found work at all that week was considered employed. (d.)
- (36) Few people find work at all in Little Horton. (e.)
- (37) ?? He may find work at all. (f.)
- (38) ? I hope that he found work at all. (g.)
- (39) ?\* Find work at all. (h.)
- (40) ?\* One finds work at all in Little Horton. (i.)
- (41) Before she was at all able to find work, she had to change fields. (j.)
- (42) \* He'll find work at all. (k.)
- (43) \* She found work at all yesterday. (l.)

Greater restrictions still are displayed by French equivalent *du tout*. It is not only excluded from FC environments, but also from weak polarity contexts (anything other than the strong contexts in the scope of clausal negation and *without*), as shown by the elicitations below that are straight translations of the English examples above.

- (44) Il n'a pas du tout trouvé de travail. (a.)
- (45) ? Personne n'a du tout trouvé de travail. (a.)
- (46) ?\* A-t-elle du tout trouvé du travail ? (b.)
- (47) ?\* Si quelqu'un a du tout trouvé du travail, ça doit être elle. (c.)
- (48) \* Tous ceux qui ont du tout trouvé de travail cette semaine-là étaient considérés en emploi. (d.)
- (49) \* Peu de gens trouvent du tout du travail à Little Horton. (e.)
- (50) \* Il pourrait du tout trouver du travail. (f.)
- (51) \* J'espère qu'il a du tout trouvé du travail. (g.)

- (52) \* Trouve du tout du travail. (h.)  
 (53) \* On trouve du tout du travail à Little Horton. (i.)  
 (54) \* Avant d'être du tout capable de trouver du travail, elle a dû changer de domaine. (j.)  
 (55) \* Il trouvera du travail du tout. (k.)  
 (56) \* Elle a trouvé du travail du tout hier. (l.)

So unlike English *at all* that is available in some of the weak ((33)-(43)) and in the strong ((31)-(32)) polarity contexts, it is in strong polarity contexts that French *du tout* is found (Burnett & Tremblay 2012), and in fact only in a subset of those will do: that is, the direct scope of *without* or a clause-mate negator, to the exclusion of their indirect scope.

- (57) sans qu' il ait du tout trouvé du travail  
 without that he have-SUBJ-3PS at all find-PRTC of work  
 without him finding work at all
- (58) Ce n'est pas du tout vrai qu'il a trouvé de travail.  
 It's not true at all that he found work.
- (59) \*Sans qu' il soit vrai  
 without that 3PS-NOM be-SUBJ-3PS true 3PS found work.  
 qu'il ait trouvé du tout du travail.  
 that he have-SUBJ-at all find-PRTC at all of work  
 without it being true that he found work at all
- (60) \* Ce n'est pas vrai qu'il a trouvé du tout du travail.  
 It's not true that he found work at all.

The strong NPI goes one step further than other NPIs, strong or otherwise, in that it can introduce negation on its own in a fragment answer, at least in contemporary literary French (Detges & Waltereit 2002: 187, Detges 2003, van der Auwera et van Alsenoy 2016, among others). Thus, in the following :

- (61) – A-t-il travaillé?  
 – (Pas) du tout.

the answer is a negative, even without a clausal negator. As far as I know, this is not available in English.

- (62) – Did he work?  
 – \*(Not) at all.

However, as with English *at all*, *du tout* does not on its own lead to double negation readings. The following never mean that someone has always had work, unlike with a clausal negative such as *Never has he not worked at all*.

- (63) Never has he worked at all. (NC, \*DN)  
 (64) Jamais il (n') a travaillé du tout. (NC, \*DN)

Neither does it give rise to constituent negation uses.

- (65) \* He has worked for \*(nothing) at all.  
 (66) \* Il a travaillé pour \*(rien) du tout.

Thus, *du tout* is a strong polarity item that has a fragment answer use typical of n-words. This is not purely idiosyncratic: the Quebec French equivalent *pantoute* has the same behavior, and so do items in other Romance languages – such as *de loc* in Romanian (Cristescu 2016). These fit the diachronic pattern identified by Larrivée & Kallel (2020) following which items that are to be n-words have a majority of strong polarity uses.

Whether such a pattern applies to *du tout* is investigated here. The data used is from the literary database *Frantext*, because of the abundance of the material that it offers over several centuries. The expectation was that if it follows the pattern of other NPIs, *du tout* would initially be found mostly in weak polarity contexts, then in strong ones, before the first negative uses in fragment answers arise.

All occurrences were extracted for the period from the 16<sup>th</sup> century to the present. The first 100 occurrences at the beginning of each 50 year period from 1550 was manually examined for reading. A further 100 occurrences was later considered from 1625, as it seemed to be the point of change. The examination revealed four main cases, and a few irrelevant sequences where “du tout” reflects a string other than the polarity expression (below, “tout” is a modifier of the following noun, not relating directly to “du”)

(67) L' ange du tout-puissant (1656)  
The angel of-the all-powerful

A literal reading ‘of the whole’ is attested occasionally throughout the corpus.

(68) le commencement est la moytié du tout (1552)  
the beginning be-PT-3PS the half of-the all  
The beginning is half of the whole

The one that is most represented in the earlier period is the high degree reading (also found as a precursor use of English *at all*, Horn 2001b: 182)

(69) je cuide les autres du tout insensez (1553)  
1PS-NOM believe-PR-1PS the-PL other-PL of-the all senseless  
I believe others to be completely senseless

It tends to co-occur with items of a lexical negative polarity, as *senseless* in the example above. The weak polarity contexts are in fact exceedingly rare.

(70) Deuroit empescher  
Should-PST-3SP stop-INF  
  
qu' elle ne se conuertist du tout en eau. (1603)  
that 3PSF-NOM NEG REFL convert-SUBJ-3PS of-the all in water

(It) should prevent that it converts in any way into water.

This contrasts with the abundance of later uses in strong polarity environments, which represents the majority of cases from 1650.

(71) sans du tout l' oster aux branches, (1603)  
Without of-the all 3PS-ACC remove-INF at-the-PL branch-PL  
Without removing it at all from the branches.

- (72) il n' est point du tout hors de saison (1630)  
 3PS-NOM NEG be-PR-3S not-at-all of-the all out of season  
 It isn't at all out of season.

The number of occurrences of the four uses per period is provided in the table below, which also gives the number of cases ambiguous between the literal and high degree readings, and that of other, irrelevant occurrences.

	Literal	Ambiguous between literary and high degree	High degree	Weak negative polarity	Strong negative polarity	Irrelevant cases	Totals
1550-	4	2	75	1	16	2	100
1600-	3	2	73	2	20	0	100
1625-	1	1	53	2	37	5	100
1650-	4	1	2	0	74	19	100
1700-	16	1	0	0	83	0	100
1750-	14	0	0	1	85	0	100
1800-50	9	0	0	0	91	0	100
	51	7	203	6	407	26	700

**Table 2.** Historical evolution of readings of French *at all*, in numbers

The historical evolution therefore goes from a majority of positive high degree uses until 1625, shifting to a majority of strong negative polarity uses from 1650.<sup>9</sup> The strong polarity context is mostly with an antecedent clause-mate clausal negator, and there is an overrepresentation of emphatic *point* 'not at all', as in example (72): 3 in 1550, 17 in 1625, 34 in 1650, 46 in 1700, 55 in 1750 and 23 in 1800. This suggests that an emphatic reading may relate to NPis specialized in strong polarity contexts, as suggested by Giannakidou (2010).

The point of this investigation was to establish whether there is a detectable pattern of evolution leading to use as fragment answer on the part of a PSI. The first occurrences of the item in a fragment negative answer is in 1807.

- (73) – Vous n'avez pas été tenté d'apprendre l'italien ? interrompit Oswald.  
 – Non, du tout, reprit le comte d'Erfeuil, cela n'entraîne pas dans le plan de mes études.  
 (Stael, 1807, *Corinne ou l'Italie*)  
 – You weren't tempted to learn Italian? Oswald said, interrupting  
 – No, at all, continued the Earl of Erfeuil, this did not figure in my study plan.

Fragment answers thus appear when the NPI has a majority of uses in strong polarity environments. This suggest that usage in strong polarity contexts is a condition to expressing negative fragment answers. Such fragment answers are qualitatively different from either double negation or constituent uses, which are not available for the studied item. Thus, negative fragment answers would be the first step on the way to acquiring n-word status. With this in mind, we move to the next section, to discuss items that have a larger range of criterial uses.

<sup>9</sup> One expectation that is however contradicted by results is that there is but very few occurrences of *du tout* in weak polarity environments. These occurrences are mostly at the beginning of the development, and essentially disappear once the expression has a majority of its uses in strong polarity contexts. Why there is no early period with a substantial proportion of weak polarity uses may be related to the degree adverbial origins of *du tout*.

#### 4. American and Italian rude PSIs

It has been noted that in the relevant registers, English has various rude expressions<sup>10</sup> that function as PSIs. American English<sup>11</sup> expressions listed by Postal (2004: 159) are *beans*, *crap*, *dick*, *didley*, *didley-poo*, *didley-squat*, *fuck-all*, *jack*, *jack-shit*, *jack-squat*, *piss-all*, *poo*, *shit*, *shit-all* and *squat*. Interestingly for our purpose, these “vulgar minimizers”<sup>12</sup> display dual behavior<sup>13</sup> of NPIs and n-words.

- (74) Olmstead didn't say dick about the new dean. (2004: 159, ex. 2a)  
(75) Olmstead knows fuck all about Botswana. (2004: 159, ex. 2b)

An analysis is proposed by Postal (see also 2014, 2017). In his terminology, “Type A”, illustrated by the *didn't say dick* case, behaves like a straight NPI, in being under the command of a clausal negative that precedes it. The distribution of “Type Z”, illustrated by *knows fuck all*, appears comparable to that of a n-word. However, the comparability seems rather superficial to Postal. Differences are found with respect to the polarity of tag questions, *don't think* parentheticals, choice of *either* rather than *too*, continuation by *not even*, concurring negative answers, negative fronting and licensing of NPIs.

- (76) Olmstead knows (nothing/ \* squat) about Botswana, does he?  
(77) Olmstead knows (nothing/ \* squat) about Botswana, I don't think.  
(78) Olmstead knows (nothing/ \* squat) about Botswana and Rufus knows (nothing/ \* squat) either.  
(79) Olmstead knows (nothing/ \* squat), not even the name of the capital of Botswana.  
(80) Olmstead knows (nothing/ \* squat). –No, I guess not.  
(81) (Nothing/ \* squat) does he know about anyone here.  
(82) Olmstead knows (nothing/ \* squat) about anyone.

To account for this, the representation of items in Type Z uses is proposed to depart from that of n-words. Inspiration is drawn from Déprez for whom fully negative items result from the lexical element raising to a high position in the DP (Déprez 2000) which is left empty by NPIs in which the lexical element is lower down in the structure. It is proposed that vulgar minimizers are headed by a non-realized determiner “zero”. Thus, *squat* would be represented as [DP [zero] + [N squat]]. This view seems essentially supported by De Clercq (2011), for whom the vulgar minimizers pattern with the semantic negation expressed by “zero” rather than with a n-word. The reader can verify that *zero* and *squat* are equally problematic in the following.

- (83) Samantha cares (nothing / \* squat / \* zero) about Burmese cats, does she?  
(84) Samantha cares (nothing / \* squat / \* zero) about Burmese cats, I don't think.

---

<sup>10</sup> That belong to the swearword category (interjective uses of nominals referring to a situation: *Ah shit!*), rather than to the insult group (uses of nominals relating to a referent: *What a dick(head)!*), although as we will see below, Italian draws on the latter.

<sup>11</sup> It is that variety that judgements in this section reflect, and no attempt will be made here to cover other varieties of English.

<sup>12</sup> Whether these are actually minimizers is a question raised by Floricic & Milioni (2019). In view of the difficulty of using *even* (?\* *They know not even jackshit about the central bank*, vs. *They know not even the least bit about the central bank*), doubts are permitted. This point I leave to future research.

<sup>13</sup> A similar phenomenon pointed out by a reviewer is *I could care less* as an equivalent of *I couldn't care less*. However, the equivalence seems restricted to this sequence, which of course is a clause rather than a lexical expression.

- (85) Samantha cares (nothing / \* squat / \* zero) about Burmese cats, and Sandra cares (nothing / \* squat / \* zero) either.
- (86) Samantha cares (nothing / \* squat / \* zero) about Burmese cats, not even champagne ones.
- (87) Samantha cares (nothing / \* squat / \* zero) about Burmese cats. –No, I guess not.
- (88) (Nothing / \* squat / \* zero) does Samantha care about Burmese cats, I must say.
- (89) Samantha cares (nothing / \* squat / \* zero) about any cat, really.

If the difference between *squat* and *nothing* hangs on the determiner position being filled by a covert *zero* element, then the expectation is for the position to remain unrealized. Postal points out that a sequence such as \* *He knows no squat about Botswana* is ungrammatical. Unsurprisingly, this correlation does not necessarily extend to other languages. Italian vulgar minimizers displays a similar duality to the English ones (Floridic & Milioni 2019, Giorgi & Poletto 2019)<sup>14</sup>. Type A uses are widely available, as illustrated by internet examples that all express ignorance:

- (90) Non ho capito un piffero / un tubo / un cazzo  
 NEG have-PR-1PS understand-PTCP a dick  
 I haven't understood jackshit
- (91) <sup>G</sup> Scusa, Ga ma non ho capito un piffero.
- (92) <sup>G</sup> Ho una professoressa che spiaga malissimo e non ho capito un tubo delle rette nel piano cartesiano.
- (93) <sup>G</sup> sono arrivata quasi a 40 anni e non ho capito un cazzo della vita.

Associated to the emphatic speech of youth, Type Z are also attested (though I have not found *piffero*)

- (94) Ho capito un piffero / un tubo / un cazzo  
 I have understood jackshit
- (95) <sup>G</sup> Ho fatto una piccola ricerca...e ho capito un tubo.
- (96) <sup>G</sup> del resto siete sempre stati su marte perché hai capito un cazzo ops scusate politicamente parlando ...

In either case, the items occur with an indefinite article. It can occur with a n-word determiner

- (97) <sup>G</sup> Non c'è nessun disco. Non ho nessun cazzo di disco.

---

<sup>14</sup> These two studies also report structures such as the following.

- a. Cosa cazzo / diavolo / \*tubo fai?  
 What the fuck are you doing?

There seems to be a disjunction between rude expressions adjoined to a *wh* and those used as PSIs. There is no article in the former; and the article in equivalent contexts in English (*What the fuck does he know?*) is not legitimate in PSI uses (*He knows (\* the) shit*).

The cross-linguistic representation of rude expressions adjoined to *wh* appears significant. A vivid Polish illustration is cited by Kehayov (2009).

- b. On myśl-i, Œe jest chuj wie jak mądry.  
 he think-3SG that be.3SG dick know.3SG how smart  
 'He thinks he is so smart (lit. 'He thinks he is dick knows how smart').

See the work by den Dikken & Giannakidou (2002).

The determiner position is thus unavailable for a covert operator. Minimally, Italian vulgar minimizers cannot be represented as American English ones.

The identified duality of uses is related by Horn (2001b) to the general evolution of negation, from a licensed NPI to a n-word used without concord. The evolution does not necessarily affect every item at the same pace. It might be that the distinction between n-word and vulgar minimizers as diagnosed on the basis of the behavior of *squat* only applies to *squat* but not to other items. This is what a quick look at the usage as reported by the *Corpus of Contemporary American English* demonstrates. Leaving aside highly polysemous items such as *dick* (35498 occurrences) and *jack* (94 037), and qualitative cases such as the following

- (98) Spain's Treasury held a bond auction – and fuck-all was it nasty:
- (99) it was a fuck-all of a day, mike.
- (100) And everything went shit-all from there
- (101) Ain't never seen anyone so shit-all stupid as you driving off that road.

the uses as Type A or Type Z of various items<sup>15</sup> listed by Postal is quantified in the table below.

	NPI	N-word	Fragment	Totals
<i>didley</i>	1	2	0	3
<i>fuck-all</i>	7	36	8	51
<i>jackshit</i>	7	7	2	16
<i>jack-squat</i>	2	1	0	3
<i>piss-all</i>	1	1	0	2
<i>shit-all</i>	2	2	0	4
<i>squat</i>	66	28	6	100
Totals	86	77	16	179

Table 3. Rude PSIs in the COCA corpus, in numbers

Each category is illustrated in turn.

Type A uses

- (102) with Virginia and Florida breaking for Obama, Ohio won't matter didley.
- (103) But other than that, we ain't changing' fuck-all.
- (104) and you cant do jack-shit about it. and neither can the powerless hyperpower.
- (105) To pretend to know that the President " doesn't know jack-squat about economics " is horribly pretentious,
- (106) You don't know piss-all, really
- (107) I don't know shit-all about them
- (108) What's interesting is no one says squat about Dublin Core

Type Z

- (109) Obama change did didley squat.
- (110) You reap what you sow, darling, and you've sown fuck-all.
- (111) Fucking demorats have done jackshit in speaking out against Syria, Iran, Libya or any other Obama nation.

---

<sup>15</sup> Where the term in the table include their derivatives. Despite its polysemy, *squat* was looked at to provide a comparative basis; the examination was conducted on the first 500 occurrences out of the 2000+ of singular noun 'squat'.

- (112) they've said pretty much jack-squat about what we can expect t
- (113) Regan did sweet piss-all
- (114) Emmett knew shit-all about pens and horses and dirt
- (115) HONORING OUR RUBBER-STAMP CONGRESS, WHOSE MEMBERS HAVE FOUND PLENTY OF TIME TO DO SQUAT

#### Fragments

- (116) and what do you have to show for it? Zip, nada, fuck-all.
- (117) Yeah, but what are they gon na find? Fuck-all.
- (118) What're you doing to help her, huh? Jackshit, that's what.
- (119) I know shit about video games. Jackshit, even.
- (120) you know what our chances are of winning a Nobel? –Zero. –Squat.

The attestations call for a few remarks. On the one hand, the investigated forms appear relatively infrequent in a half-a-million word corpus, which is probably due to the taboo nature of (component parts of) the expressions. This makes it all the more remarkable that the collocation with verb *to know* represents 44 occurrences, nearly one in four. Uses is dominant in object position (Horn 2001b: 327, footnote 31), although not exclusive.

#### Complement of a noun

- (121) Jackie snorted. The king of nothing. The king of fuck-all.
- (122) know what your promise is worth to me? Huh? Fifty per cent of fuck-all!
- (123) X plus fuck-all equals X.
- (124) a world where the facts don't add up to a Grand Unified Theory of jackshit.

#### Indirect object

- (125) Poise and concision in debate answers counted for fuck-all,
- (126) people as you'd phrase it have to live under constant threat of death with fuck-all support from the likes of you?
- (127) earning \$10-50,000 pay 15% in income taxes for that healthcare. Ours pay about.... squat.
- (128) A divorce decree or settlement doesn't count for squat with a creditor.

#### Adverbial

- (129) Do nt keer fuck-all about the damn hoss.

#### Determiner

- (130) So you have fuck-all evidence of a campaign for his job despite the smoking gun of internal emails.
- (131) CQC in MGS3-4 made fuck-all sense,
- (132) What about burgers? There's fuck-all meat in them

#### Subject

- (133) and the fuck-all they know about Libertarian ideals gets spoon-fed to them by the likes of Randi Rhodes
- (134) and the vocal is, yet again, puking out demonical and bipolar emotion like fuck-all matters.
- (135) No wonder fuck-all Americans got a passport.
- (136) But fuck-all has worked the way I wanted.



The last two categories point out to the difference between *fuck-all* and *squat*. The former precedes the verb, a use that characterizes n-words; it is normally not found with NPIs, and indeed it is not attested with the latter item. *Fuck-all* has a preponderance of Type Z, n-word uses. *Squat* has a clear majority of Type A, NPI-like uses. The proportion of fragment uses of *fuck-all* is more than twice as much as with *squat*. This latter item is attested in the subordinate of a negative main-clause, which is only available for NPIs and excluded for n-words.

- (137) Don't pretend for a second that conservatives or pubs give SQUAT about those Americans that were killed anymore than you accuse Dems of not caring.

The suggestion is therefore that the lack of parallelism between Type Z and n-word *nothing* is actually due to the fact that *squat* is simply less advanced than *fuck-all* on the way to negative status. The following shows that *nothing* finds parallelism to *fuck-all*

- (139) Olmstead knows (nothing / fuck-all / \* squat) about Botswana, does he?  
 (139) Olmstead knows (nothing / fuck-all / \* squat) about Botswana, I don't think.  
 (140) Olmstead knows (nothing / fuck-all / \* squat) and Rufus knows (nothing / fuck-all / \* squat) either.  
 (141) Olmstead knows (nothing / fuck-all / \* squat), not even the capital of Montenegro.  
 (142) Olmstead knows (nothing / fuck-all / \* squat). –No, I guess not.  
 (143) (Nothing / Fuck-all / \* squat) does he know about anyone here.  
 (144) Olmstead knows (nothing / fuck-all / \* squat) about anyone.

Let us run the items through the tests that we have used before, fragment answer, double negation and constituent negation. Fragment answers are displayed by the three surveyed items with more than ten occurrences (*fuck-all*, *jackshit*, *squat*). Double negation is more contentious. Postal finds that unlike *nothing*, *squat* does not yield a double negation interpretation in the following.

- (145) No professor favors NOTHING. (= favored some)  
 (146) No professor favors SQUAT. (≠/≠ favored some)

However, the following elicitations seem acceptable to the various native speakers that I have consulted.

- (147) -The problem is you did squat / fuck all.  
 -I did NOT do ?squat / fuck all.  
 (148) -Jane understands squat / fuck all about drones.  
 -Come on now, Jane may not be the brightest crayon in the box, but she doesn't "understand squat / fuck all".

As before, we find that in this context, *fuck-all* is better accepted than *squat*. Finally, regarding constituent uses, they are well attested with both items, although *fuck-all* seems more frequent.

- (149) a. I'm left with fuck all in the end.  
 b. They are both working for fuck all at the moment  
 c. Dr. Girlfriend and Dr. Sodbury have been fighting about fuck all  
 (150) a. I'm left with squat in the end.  
 b. They are both working for squat at the moment  
 c. Dr. Girlfriend and Dr. Sodbury have been fighting about squat

A greater range of negative uses is communicated by *fuck-all* than by *squat*, suggesting a closer parallelism between (some of the) rude PSIs and straight n-words than has been initially envisaged.

What with the Italian versions? The same variation in range is displayed between items. Whereas *cazzo* is generally accepted in all criterial contexts, *tubo* may or may not, and *piffero* tends to be rejected. Fragment negative answers are acceptable for all, and double negation as well as constituent negation induce more restrictions. There are variance in the judgement of speakers especially where double negation is concerned, but this may well be due to the markedness of the configuration (Larrivée 2015). In any case, the view that *cazzo* is the more advanced term of the paradigm (« quello il cui grado di grammaticalizzazione è più avanzato. »), as per Floricic & Milioni (2019), seems correct.<sup>16</sup>

The exploration of vulgar minimizers was here conducted on synchronic data – a diachronic investigation being difficult for the obvious sociolinguistic reason that strong taboo expressions are unlikely to make it in print before the 1970s, as proved by a perusal of the *Corpus of Historical American English*. The English and Italian items nonetheless support the pathway of variation and change observed in the previous sections. First, use as fragment answer is accessible to vulgar minimizers because they have a notable proportion of uses in strong polarity contexts. Second, only minimizers that have a majority of n-word uses such as *fuck-all* and possibly *cazzo* communicate double negation and constituent negation in a more generally accepted way. The consequence of these observations in relation to those in previous sections is articulated in the conclusive discussion below.

#### 4. Conclusive discussion: so what?

This article identifies diagnostics that determine when Polarity Sensitive Items are of the NPI or of the n-word type. Arguments are further provided that n-word PSIs have an intrinsically negative value, as shown by the ability to communicate negation in fragment answer, double negation and constituent negation. In a sequence such as

- (151) – What did you work for?  
– For nothing in the end.

there is no other potential source of the negative reading than the n-word with constituent scope in the fragment answer. Such uses are out for PSI with an indefinite value.

But so what? Why does it matter whether an item has a negative value or whether it inherits it from some clausal operator, overt or covert, that could simply be stipulated even when it is not plausibly there? Well, it matters because it has an impact on the analysis of the negation system. Think of the typologist looking at an exotic language. Is an item that is routinely occurring after the main clausal negative marker an indefinite licensed by it, or a negative concurring with it? The answer will tell us whether we are looking at a language with negative items, and whether these items enter concord relations. And it has an impact on the theoretical appreciation of a language, and of languages. For Hedde Zeijlstra, n-words have an (uninterpretable) negative feature, which must be licensed by a clause-mate item/operator with an interpretable negative feature. However, no discernable operator can be observed in some of the cases that we have analyzed, notably in constituent negation. Hence the idea that the

---

<sup>16</sup> A case similar to *cazzo* is French *que dalle* ‘nothing’, which while not being rude (the literal meaning is not transparent), is of lower registers, and has a similar ability to expression preverbal negation without concord (*Que dalle il a fait*, lit. ‘Nothing at all he did’), to be used as a negative fragment answer, as constituent negation, with a similar disparity among speakers regarding the double negation reading (? *J’ai PAS fait que dalle*, lit. ‘I did NOT do nothing’). Thus, the evolution path of *cazzo* is not exceptional.

negative value is introduced by the n-word itself. One consequence is that the negative value of the n-word is independent from its participation in concord relations. An n-word is a negative, and it may or may not concord, as illustrated in examples (1)-(9) above.

The criterial environments of negative value are shown to organize in a pathway of variation and change, as demonstrated by looking at Finnish, French, American English and Italian data. The first micro-step is fragment negative answers. Fragment negative answers can be expressed by items with a majority use in the bridging context of strong negation (under the command of clausal negation or *without*). This is demonstrated by the history of the French strong NPI *du tout* 'at all' and possibly by the contemporary uses of PSIs in vernacular Finnish. The second step is double negation and constituent negation. These can be communicated by full-blown n-words, as shown by rude PSIs, and are inaccessible to mere NPIs, as shown by French *du tout* and Finnish PSIs. These therefore constitute switch contexts in the sense of grammaticalization: items that display these uses must be analyzed as n-words by learners. What is not clear is whether there is an implicational order between double negation and constituent negation. While rude PSIs in Italian and American English can express constituent negation, there is variance as to whether they enter double negation. Clearly, while significant work has been accomplished here, more is required to define the exact shape of the pathway into negativity.

### Acknowledgement

I am grateful to Paul Postal and David Willis for discussions; to Rea Peltola and her contacts for information about Finnish; to Silvia Ballaré, Franck Floricic, Chiara Gianollo, Alda Mari and Cecilia Poletto for their input on the Italian data.

### References

- Alonso Ovalle, Luis & Elena Guerzoni. 2004. Double negatives, Negative Concord and metalinguistic negation. Mary Androni, Erin Debenport, Anne Pycha & Keiko Yoshimura (Eds). *The proceedings of CLS 38.1: The main session*. Chicago: Chicago Linguistic Society. 15-31.
- Baunaz, Lena & Andrea Cattaneo. 2005. French n-words: Against an indefinite analysis of *personne*. *Generative Grammar in Geneva*, 4, 45-91.
- Burnett, Heather & Mireille Tremblay. 2012. An Extra-Strong NPI? *Pantoute* in Québec French. *UCLA Working Papers in Linguistics* 17, 35-42.
- Cheng, Lisa S., & Anastasia Giannakidou. 2013. The non-uniformity of wh-indeterminates with free choice and polarity in Chinese. G. Tsoulas and K.-H. Gil (Eds), *The nature of quantification and crosslinguistic variation*, Oxford: Oxford University Press, 123-154
- Collins, Chris & Paul M. Postal. 2014. *Classical NEG Raising*. Chapter 3. Cambridge: MIT Press.
- Collins, Chris & Paul M. Postal. 2017. *NEG Raising and Serbo-Croatian NPIs*. *Canadian Journal of Linguistics* 62,3, 339-370.
- Cristescu, Mihaela. 2016. Negative fragment answers in Romanian. Rodica Zafiu et al. *Actele celui de al XV-lea Colocviu Internațional al Departamentului de Lingvistică: Perspective comparative și diacronice asupra limbii române*. Bucharest. 43-49.
- De Clercq, Karen. 2013. *A unified syntax of negation*. PhD dissertation, Ghent University.
- De Clercq, Karen. 2011. Squat, zero and no/nothing: Syntactic negation vs. Semantic negation. *Linguistics in the Netherlands* 28,1, 14-24.
- den Dikken, Marcel. 2019. 'Not': Not Non-projecting. *Argumentum* 15, 504-533.
- den Dikken, Marcel & Anastasia Giannakidou. 2002. From Hell to Polarity: "Aggressively Non-D-Linked" Wh-Phrases as Polarity Items. *Linguistic Inquiry* 33,1, 31-61.

- Déprez, Viviane. 2018. A lexicalist account of *negation* and *negative concord* in Mauritian. Viviane Déprez & Fabiola Henri (Eds), *Negation and Negative Concord: The view from Creoles*. Amsterdam/ Benjamins. 69–100.
- Déprez, Viviane. 2000. Parallel (a)symmetries and the internal structure of n-words. *Natural Language and Linguistic Theory* 18, 253-342.
- Detges, Ulrich & Richard Waltereit. 2002. Grammaticalization vs. Reanalysis: a Semantic-Pragmatic account of functional change in Grammar. *Zeitschrift für Sprachwissenschaft* 21, 2, 151–195.
- Detges, Ulrich. 2003. La grammaticalisation des constructions de négation dans une perspective onomasiologique, ou: la déconstruction d'une illusion d'optique. Peter Koch & Andreas Black (Eds), *Kognitive romanische Onomasiologie und Semasiologie*. Tübingen: Niemeyer. 213-233.
- Espinal, Maria Teresa, Urtzi Etxebarria & Susagna Tubau. 2018. Two types of NPIs. The case of Basque and English. Presentation, workshop *The constellation of polarity sensitive items*, 51st Annual Meeting of the Societas Linguistica Europaea, Tallinn, August 29 2018.
- Espinal, & Susagna Tubau. 2016. Interpreting argumental n-words as answers to negative wh-questions. *Lingua*, 177, 41-59.
- Etxepare, Ricardo & Myriam Uribe-Etxebarria. 2016. Context-Sensitive aspects of constituent negation. Ángel J. Gallego & Roger Martin (Eds), *Language, syntax, and the natural sciences*. Cambridge: MIT Press. 77-98.
- Fălăuș, Anamaria & Andreea C. Nicolae. 2016. Fragment answers and Double Negation in strict Negative Concord languages”. Mary Moroney, Carol-Rose Little, Jacob Collard & Dan Burgdorf (Eds), *Proceedings of SALT 26*. Linguistic Society of America, 584-600.
- Florici, Franck & Georgia Milioni. 2019. *Un cazzo, un cavolo, un cacchio, un corno, un tubo, ecc. come termini di polarità negativa ?* MS, Université de Toulouse. 24 pages.
- Franco, Irene, Olga Kellert, Guido Mensching & Cecilia Poletto. 2016. *On (negative) indefinites in Old Italian*. Presentation at DGFS, Universität Konstanz.
- Garzonio, Jacopo. 2019. Negative Concord in Russian: An Overview. *Studi e ricerche* 20, 175-189.
- Garzonio, Jacopo. 2016. Not even a crumb of negation: on *mica* in Old Italian. MS, Padua.
- Giannakidou, Anastasia. 2020. Negative concord and the nature of negative concord items. Viviane Déprez & Maria Teresa Espinal (Eds), *The Oxford handbook of negation*. Oxford : Oxford University Press. 458-479.
- Giannakidou, Anastasia. 2010. The dynamics of change in Dutch *enig*: From nonveridicality to strong negative polarity. *Natural Language and Linguistic Theory*, 28:4.861-875.
- Giannakidou, Anastasia. 2006. N-words and negative concord. Martin Everaert & Henk van Riemsdijk (Eds). *The Blackwell companion to syntax*, Volume 3. Oxford: Blackwell. 327-391.
- Giannakidou, Anastasia. 2000. Negative... concord? *Natural Language and Linguistic Theory* 18, 457-523.
- Giannakidou, Anastasia. 1998. Polarity sensitivity as (non)veridical dependency. Amsterdam: Benjamins.
- Giannakidou, Anastasia & Lisa S. Cheng. 2006. (In)Definiteness, polarity, and the role of wh-morphology in Free Choice. *Journal of Semantics* 23, 135-183.
- Giannakidou, Anastasia & Hedde Zeijlstra. 2017. The Landscape of Negative Dependencies: Negative Concord and N-Words. Martin Everaert & Henk van Riemsdijk (Eds). *The Wiley Blackwell companion to Syntax*. Wiley.
- Giorgi, Alessandra & Cecilia Poletto, Towards a grammar of Aggressive Expressions. Presentation at SLE, Universität Leipzig.

- Haegeman, Liliane. 2000. Negative preposing negative inversion, and the split CP. Laurence R. Horn & Yasuhiko Kato (Eds). *Negation and polarity*. New York: Oxford University Press. 21-61.
- Haspelmath, Martin. 1997. *Indefinite pronouns*. New York: Oxford.
- Heine, Bernd. 2002. On the role of context in grammaticalization. Ilse Wischer & Gabriele Diewald (Eds), *New reflections on grammaticalization*. Amsterdam and Philadelphia: Benjamins. 83-101.
- Herdan, Simona. 2009. Licensing Negative Fragments and the Interpretation of Comparison Pascual José Masullo, Erin O'Rourke, Chia-Hui Huang (Eds), *Romance Linguistics 2007: Papers from the 37th Linguistic Symposium*. Pittsburgh. 157-172.
- Horn, Laurence R. 2001a. *A natural history of negation*. Stanford: CSLI.
- Horn, Laurence R. 2001b. Flaubert triggers, squattative negation and other quirks of grammar. Jack Hoeksema, H. Rullman, V. Sanchez-Valencia & Ton van der Wouden (Eds). *Perspectives on negation and polarity items*. Amsterdam: John Benjamins. 173-200.
- Iordachioaia, Gianina Nicoleta. 2009. *Negative Concord with Negative Quantifiers: A Polyadic Quantifier approach to Romanian Negative Concord*. PhD dissertation, Universität Tübingen.
- Kato, Yasuhiko. 2000. Interpretative asymmetries of negation. Laurence R. Horn & Yasuhiko Kato (Eds). *Negation and polarity*. New York: Oxford University Press. 62-87.
- Kehayov, Petar. 2009. Taboo intensifiers as polarity items: Evidence from Estonian. *STUF - Language Typology and Universals Sprachtypologie und Universalienforschung* 62,1-2, 140-164.
- Klima, Edward. 1964. Negation in English. J. A. Fodor & J. J. Katz, J. J. (Eds.), *The Structure of Language: Readings in the Philosophy of Language*. Englewood Cliffs, N. J.: Prentice-Hall.
- Kotilainen, Lari. 2007. *Konstruktoiden dynamiikkaa*. Ph.D. dissertation, University of Helsinki.
- Larrivé, Pierre. 2015. The markedness of double negation. Pierre Larrivé & Chungmin Lee (Eds), *Negation and polarity. Experimental perspectives*. Cham : Springer. 175-198
- Larrivé, Pierre. 2011. Is there a Jespersen cycle? Pierre Larrivé & Richard P. Ingham (Eds), *The Evolution of Negation: Beyond the Jespersen Cycle*. Berlin & New York: Mouton de Gruyter. 1-22.
- Larrivé, Pierre & Amel Kallel. 2020. The empirical reality of bridging contexts. Strong polarity contexts as the transition between NPIs and n-words. *Journal of Historical Linguistics* 10,3, 427-451.
- Li, F., J. Borràs Comes, M. Teresa Espinal. 2019. Mismatches in the interpretation of isolated negative expressions in Mandarin Chinese. *Journal of Pragmatics* 152, 28-45.
- Lucas, Christopher. 2009. The development of negation in Arabic and Afro-Asiatic. PhD dissertation, University of Cambridge.
- Mathieu, Eric. 2001. On the nature of French N-words. Corinne Iten & Ad Neeleman (Eds.), *UCL Working Papers in Linguistics* 13, 319-352.
- Miestamo, Matti. 2011. A typological perspective on negation in Finnish dialects. *Nordic Journal of Linguistics* 34,2, 83-104.
- Miestamo, Matti, Anne Tamm & Beáta Wagner-Nagy. 2015. *Negation in Uralic Languages*. Amsterdam: Benjamins.
- Moscato, Vincenzo. 2010. *Negation Raising Logical form and linguistic variation*. Cambridge: Cambridge Scholars.
- Penka, Doris. 2011. *Negative indefinites*. Oxford: Oxford University Press.
- Postal, Paul. 2004. The structure of one type of Americal English Vulgar Minimizer. Paul Postal (Ed), *Skeptical linguistic essays*. New York: Oxford University Press. 159-172.

- Puskas, Genoveva. 2002. Negative licensing contexts and the role of n-words. Kenesei István Katalin É.Kiss & Peter Siptár (Eds), *Approaches to Hungarian*. Budapest: Akadémiai Kiado. 81-106.
- Schwenter, Scott A., Kendra Dickinson & Luana Lamberti. 2019. Pragmatic strenght and (Lack of) negative concord. Poster, 93<sup>rd</sup> annual meeting, Linguistic Society of America.
- Svenonius, Peter. 2002. Strains of negation in Norwegian. *Working Papers in Scandinavian Syntax* 69, 121–146.
- Van Alsenoy, Lauren & Johan van der Auwera. 2015. Indefinite pronouns in Uralic languages. Matti Miestamo, Anne Tamm & Beáta Wagner-Nagy (Eds). *Negation in Uralic Languages*. Benjamins. 517-546.
- van der Auwera et van Alsenoy 2016
- Vilkuna, Maria. 2015. Negation in Finnish. Matti Miestamo, Anne Tamm & Beáta Wagner-Nagy (Eds). *Negation in Uralic languages*. Amsterdam: Benjamins. 457-486.
- Watanabe, Akira. 2004. The genesis of Negative Concord. *Linguistic Inquiry* 35,4, 559–612.
- Weir, Andrew. 2020. Negative fragment answers. Viviane Déprez & Maria Teresa Espinal (Eds), *The Oxford handbook of negation*. Oxford : Oxford University Press. 441-457.
- Willis, David. 2011. Negative polarity and the Quantifier Cycle: Comparative diachronic perspectives from European languages. Pierre Larrivé & Richard P. Ingham (Eds), *The Evolution of Negation: Beyond the Jespersen Cycle*. Berlin & New York: Mouton de Gruyter.
- Zeijlstra, Hedde. 2009. On French negation. *Proceedings of BLS* 35, 447-458.
- Zeijlstra, Hedde. 2004. *Sentential Negation and Negative Concord*. PhD Dissertation, University of Amsterdam.
- Zeijlstra, Hedde. 2020. Negative quantifiers. Viviane Déprez & Maria Teresa Espinal (Eds), *The Oxford handbook of negation*. Oxford : Oxford University Press. 426-440.