

Neg-words: what they are and what they are not and what follows from this.

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Abstract:

This paper is concerned with neg-words that are usually defined by their occurrence in NC constructions. The common definition of neg-words has several weaknesses: for example, it does not allow to define NC in a non-circular way or it cannot explain why DN is possible in many NC languages. Therefore, an alternative definition is proposed in this paper: Neg-words are indefinite pronouns (or adverbs) that contain a negative morpheme, or indefinite pronouns (or adverbs) that have replaced such an indefinite pronoun (or adverb). Defining neg-words in this way has several advantages: it allows a non-circular and precise definition of NC, it can also explain why DN is also possible in NC languages (therefore, the term negative quantifier can be dispensed with), and it allows an alternative typological classification of NC and non-NC languages to the usual one in which NC and DN languages are contrasted. According to the view expressed here, non-NC languages are languages without neg-words (as defined here) and they cover a group of languages to which 80% to 90% of all languages belong. In addition, I analyze neg-words as Heimian indefinites with an interpretable neg-feature. This explains the wide range of uses of neg-words from weak indefinites (the default case) to negated existential quantifiers to universal quantifiers that scope over negation.

Key words: neg-words, NCI, negative quantifier, NC, DN, **nall*

1 Introduction

In theoretical syntax and semantics as well as in typology, there has been a great amount of research on negation and negative expressions. The focus was often on examining whether and how several negative expressions harmonize with each other. This led to the distinction between negative concord (NC) languages and non-NC languages or double negation (DN) languages, respectively, depending on how negative words (neg-words) are interpreted. The crucial difference is that in NC languages, more than one neg word (including the negative particle) still results semantically in a single negation, whereas in non-NC/DN languages, multiple occurrences of neg-words are ungrammatical or they cancel each other out. The distinction between NC- and non-NC-languages relies on a proper definition of neg-words. As explained in section 2, the common definition (mostly based on Giannakidou 2006) is mainly based on distribution, while meaning or morphology play only a minor or no role at all. This definition has several weaknesses, as it cannot explain, for example, why DN also occurs in NC languages and what distinguishes NC languages from actual non-NC languages and not only from so-called DN languages (a language type that is typologically irrelevant).

In this paper, I will propose an alternative definition of neg-words based on their morphological make-up (section 3). Neg-words are understood here as indefinite pronouns and adverbs containing a negative morpheme (like *no-* in English *nobody* or *nowhere*) or as suppletive forms that have replaced the original neg-words (like French *personne* that has substituted Latin *nemo* 'nobody', cf. Mosegaard Hansen 2018). Only such a definition allows

to make generalizations and to draw conclusions especially with respect to the diachrony and typology of negative expressions which remain unnoticed in the usual definition based on their distribution (as explored in section 4). I would therefore like to propose to restrict the term neg-words to words that are neg-words according to the definition given in section 3.

The paper is organized as follows: in sect. 2, I present the common definitions of neg-words, NC, and DN, and discuss their shortcomings; in sect. 3, I propose an alternative definition of neg-words, and in sect. 4, I present empirical and theoretical arguments in favour of this alternative definition as a simple and much more adequate explanation of the points that remain unclear in the conventional definition; in sect. 5 I propose a theoretical analysis of neg-words according to which they are Heimian indefinites with an interpretable neg-feature and which explains why they can generate both NC and sometimes DN readings.

2 Neg words, NCIs and negative quantifiers

There are different types of expressions associated with negation at the morphological, syntactic or semantic level in the world's languages. A prominent type are so-called n-words (as originally termed by Laka 1990), nowadays called neg-words (e.g., by Giannakidou 2006) or NCIs (i.e., *Negative Concord Items*, cf. Giannakidou 2020) which are defined by Giannakidou (2006) and others on the basis of two criteria:

- (1) An expression α is an n-word iff:
 - (i) α can be used in structures that contain sentential negation or another α -expression, yielding a reading equivalent to one logical negation; and
 - (ii) α can provide a negative fragment answer (i.e., without the overt presence of negation).

The first criterion is a distributional one: only expressions that occur in NC-constructions are neg-words. The second adds a semantic property because neg-words, although they seem not to be semantically negative when occurring with the neg-particle or other neg-words, seem to be so when occurring alone in negative fragment answers. The definition in (1) is therefore based on the distribution of these expressions and their (albeit contradictory) semantics. According to the definition in (1), Ital. *nessuno* and French *personne* 'nobody' are neg-words that fulfill both criteria, but Germ. *niemand* and Engl. *nobody* do not count as neg-words because they are not allowed in NC-constructions. Interestingly, dialectal versions of Germ. *niemand*, for example Bavarian *neamd*, count as neg-words because they are licit in NC-constructions (cf. Weiß 1998a, 1998b, 1999, 2002a, 2002b) – the same holds for *niemand* in older stages of the German language where we find NC (cf. Jäger 2008). Such a split can also be observed in English: while *nobody* is not a neg-word in Standard English, it is one in dialects (see, e.g., Anderwald 2002 on NC in English dialects).

As Giannakidou & Zeijlstra (2017: 7) explicitly state, the definition in (1) does not refer to morphological aspects. Although many neg-words have an initial *n-* that goes back to a negative particle of the form *ni/ne* – as German *niemand* 'nobody' (< OHG *ni+io+man*, cf. Jäger 2008: 200) –, there are also neg-words without an *n-* (like French *personne* 'nobody') or with an *n-* that did not originate in a negative particle (like Spanish *nada* 'nothing' going back to Latin *res nata*, Herburger 2023: 563), and some n-words are even wh-based (e.g., in Japanese and Korean). A definition based on the morphological criterion that neg-words

contain a negation obviously does not seem appropriate: “Negative morphology is clearly not a prerequisite for n-word status” (Giannakidou 2000: 262) (but see sections 3 and 4 for arguments in favour of this conclusion being misleading).

However, the definition in (1) has some shortcomings. First of all, it assumes a somewhat contradicting semantic behavior of neg-words. Whereas criterion (i) requires that at least not all neg-words are semantically negative in NC constructions because then they would cancel out each other, they have negative force in fragment answers according to criterion (ii). According to Giannakidou & Zeijlstra (2017: 7), “n-words behave similarly to negative quantifiers in Germanic (e.g., English *nobody*, Dutch/German *niemand*) with respect to criterion” (ii) (see also Watanabe 2004).¹

Additionally, as mentioned above, negative indefinites as Standard German *niemand* or Standard English *nobody* are not considered as neg-words because they do not fulfill criterion (i). If they occur in constructions with more than one negative expression, they yield ungrammatical constructions or a double negation (DN) reading. Therefore, they must be semantically negative in all contexts and not only in fragment answers (as neg-words/NCIs are). They are often called negative quantifiers to distinguish them from neg-words/NCIs (Giannakidou & Zeijlstra 2017). However, this distinction between neg-words (or NCIs) and negative quantifiers runs into difficulties at least for two reasons. First, when considering negative expressions such as Bavarian *neamd* ‘nobody’ or *nix* ‘nothing’, we observe that they are both at the same time. Being licit in NC constructions, they should be classified as neg-words (or NCIs) that, surprisingly, can trigger an DN reading in other constructions (cf. 2a. vs. b).

- (2) a. wai-a mid nix ned zfrim is (NC reading)
 because-he with nothing not satisfied is
 ‘because he is not satisfied with anything’
 b. wai-a ned mid nix zfrim is (DN reading)
 because-he not with nothing satisfied is
 ‘because he is not satisfied with nothing’

On the other hand, even negative quantifiers in DN languages like Standard German pose a problem for this distinction. As mentioned above, they are assumed to yield ungrammatical constructions or a DN reading, if they occur in constructions with more than one negative expression. Sometimes, however, they behave like neg-words and do not cancel out each other, cf. the Standard German examples in (3a, b, c).

- (3) a. Niemand hat mehr Respekt vor niemanden
 Nobody has more respect before nobody
 ‘No one has respect for anyone anymore’
 (Georg Zimmermann, SZ-Interview, 21.7.2023, S. 23)
 b. Dann braucht niemand vor Niemanden gerettet werden
 Then needs nobody from nobody saved become
 ‘Then nobody needs to be saved from anybody’
 (Zeit Online, <https://www.zeit.de> › ... › Politik › Schlagzeilen, 15.11.2019)
 c. Keiner ist sich für nichts zu schade (M. Reif, quoted after Weiß 1998: 172)

¹ Giannakidou (2020: 460), however, claims that the definition in (1) does not presuppose that NCIs are semantically negative. Note that the definition of NCIs in Giannakidou (2020) is identical with the definition of neg-words in Giannakidou (2006) or Giannakidou & Zeijlstra (2017).

Nobody is too good for nothing
'Nobody is too good for anything'

According to Zeijlstra (2010), these are not cases of NC, but of (as he calls it) emphatic multiple negation (EMNE). Zeijlstra (2010: 40ff.) claims that NC and EMNE differ in certain respects, but his arguments are not convincing, at least not if applied to German. He proposes, for example, that the negated expressions form a complex constituent (called EMNE) that is subject to strict adjacency conditions. Such an analysis is highly implausible for the German examples in (3a-c) because both neg-words are not adjacent and they are part of clearly different constituents. In (3a), for example, four words intervene between the negated expressions and the second one is deeply embedded in the object DP *Respekt vor niemanden* (lit. 'respect for nobody'), whereas the first one is the subject of the sentence. It is impossible for subject and object to form a constituent together. Furthermore, it is not only the first element of the EMNE that may carry stress (as Zeijlstra 2010 claims it is in Dutch). At least in (3b, c), it could also be the second negative element that gets the stress. Moreover, sentences like (3a, b, c) can have an emphatic reading, but do not have to. In this respect, they are similar to NC constructions in a non-strict NC language like Bavarian where the presence of the negative particle in addition to neg-words often goes hand in hand with emphasis. So, it seems that EMNE in Standard German does not fundamentally differ from NC constructions in dialectal German.²

In typology, morphological negative words (be they negative quantifiers or NCIs) often do not count as a distinct type of expressions, too. Haspelmath (2013) explicitly refuses to distinguish between words corresponding to English *nobody* (etc.) and words corresponding to English *anybody* (etc.):

“Note that the definition of *negative indefinite pronoun* that is used here does not make reference to any kind of "inherent" negative sense. Some linguists feel that English *nobody* is "inherently negative", while *anybody*, which co-occurs with predicate negation (as in *I did not see anybody*), is not "inherently negative" [...] However, in this chapter no such distinction between two types of "inherently negative" and "not inherently negative" indefinites is made, because it is unclear which criteria should be used to identify them systematically.”

Haspelmath (2013) adds a third criterion to the two criteria of Giannakidou's (2006) definition of neg-words/NCIs: the occurrence in non-negative contexts. According to this criterion, Modern Greek *kanénas* 'anybody, nobody' that counts as neg-word/NCI (cf. Giannakidou & Zeijlstra 2017) shares with English *anybody* the occurrence in non-negative contexts. Haspelmath's (2013) reasoning is apparently as follows: since *kanenas* shares properties with both the neg-word *nobody* and the NPI *anybody*, these two should also have similarities and all three should therefore be of the same type of expression. In Haspelmath's (2013) analysis, *nobody* and *anybody* are both negative indefinite pronouns. It should be clear that such a classification is even less convincing than the one resulting from the definition in (1) – so I will not go into it further below.

² Of the four differences between NC and EMNE that Zeijlstra (2010: 40) identifies, only one applies to German, too: EMNE is not productive - but this is not a structural difference and explainable under the assumption that (Standard) German lost NC due to normative pressure (Weiß 2004a, b).

3 Neg-words: An alternative definition

As we have seen in sect. 2, indefinite pronouns and adverbs that contain a negative morpheme and occur in NC-constructions do not count as a separate type of negative expressions. Only negative indefinite pronouns and adverbs that do not allow NC are of a separate type called negative quantifiers. According to this typology, Bavarian *neamd* 'nobody' is a neg-word (just like Modern Greek *kanénas* 'anybody, nobody' that does not contain a negative morpheme), whereas Standard German *niemand* 'nobody' is a negative quantifier. As we also have seen in section 2, this is an unsatisfactory situation because the arguments brought forth for this analysis are not convincing. Especially, the usual definition of neg-words falls short and can do nothing to explain the following key points:

- Indefinite pronouns and adverbs that contain a negative morpheme are sometimes NCIs and sometimes negative quantifiers.
- Non-negative NCIs never yield DN, negative NCIs do.
- Proper nature of NC (i.e., the occurrence of multiple morphological negations yielding a single negation)
- Typological rarity of DN-languages.
- Languages without NCI and without negative quantifiers.
- Under the usual definition of NCIs, the universal absence of **nall* is nothing special, since the lexicalization of the combination of negation and existential quantifier is also nothing special.

Therefore, I would like to propose an alternative definition that allows us to treat the above-mentioned points in a more satisfactory way. The definition is given in (4):

- (4) Neg-words are words (i.e., indefinite pronouns and adverbs) containing a negative morpheme or words that replaced such words containing a negative morpheme.

Note that the definition in (4) does not assume that neg-words are semantically negative,³ it only refers to the morphological make-up of the expressions. Neg-words according to the definition in (4) correspond more or less to Payne's (1985: 204f.) so-called inherently negative indefinites (INQs) which are lexicalized "negations of the existential quantifier", that is consisting of a negation and an indefinite pronoun/adverb corresponding to the existential quantifier.

According to the definition in (4), there are two types of neg-words: (i) words containing a negative morpheme, and (ii) words that replaced words containing a negative morpheme.

(i) words containing a negative morpheme

Many neg-words in Germanic, Romance, and Slavic languages belong to this type. Often, these neg-words consist of three parts: a negative particle, a free-choice or polarity morpheme, and an indefinite pronoun or generic noun (Jäger 2008: 200). In German,

³ Therefore, I have nothing to say about the second criterium of definition (1), i.e., that neg-words "can provide a negative fragment answer". There are several analyses for negative fragment responses (cf. Weir 2020), so it is not clear how this fact can be used for a definition of neg-words. Note that the analysis of neg-words as Heimian indefinites in section 5 can account for this possibility.

niemand ‘nobody’ goes back to OHG *nioman* which consists of the three parts *ni* ‘not’ + *io* ‘ever’ + *man* ‘man, person, human’, and *nichts* ‘nothing’ to OHG *niowiht* consisting of *ni* ‘not’ + *io* ‘ever’ + *wiht* ‘thing, being’ (Jäger 2008: 200). In Italian neg-words, the negative part could go back to the negative connector *nec* ‘not even’ which semantically contains a negative polarity item or the polarity item is expressed by *ipse* ‘just, actual’. For example, the neg-word *nessuno* ‘nobody’ developed from Latin *n(ē) ips(e) ūnus* ‘not even one (person)’ (Zingarelli 2010, s.v. *nessuno*) and *niente* ‘nothing’ from medieval Latin *nēc ěnte(m)* ‘not even one thing’ (Zingarelli 2010, s.v. *niente*). According to Gianollo (2021: 14f.), *even* being a scalar focus particle (Krifka 2007) originally marked emphasis. She observed for Ancient Greek that *even*-type neg-words concur with an older type that only consists of a negation and an indefinite or wh-pronoun and finally replaced them. Slavic neg-words are of this older type. Russian *nikto* ‘nobody’, for example, developed from Protoslavlic **nikъto* that contains the negative particle **ni-* ‘not’ and the pronoun **kъto* ‘who’ (cf. Reconstruction:Proto-Slavic/*nikъto*).

(ii) words that replaced words containing a negative morpheme

Most of the languages that have neg-words that contain a negative morpheme do also have neg-words without a negative part. In Spanish, *nada* ‘nothing’ goes back to Latin *res nata* (Herburger 2023: 563), and in French, *personne* ‘nobody’ to Latin *persona* ‘person’ (FEW, s.v. *pĕrsōna person*). These words seem to be counter-evidence for the proposal that neg-words containing a negative morpheme form a particular type of words. However, this is only apparently so because all these words have replaced older neg-words containing a negative morpheme. For example, in French, the pronominally used noun *personne* has grammaticalized into a neg-word that substituted Latin *nemo* ‘nobody’ (cf. Mosegaard Hansen 2018). In other cases, an NPI-item replaced a neg-word. In OHG, for instance, there were three indefinite determiners (Jäger 2008: 201ff.): an n-indefinite *nihein* ‘no’, an NPI-indefinite *dehein(ig)* ‘any’, and an PPI-indefinite *ein* ‘a’. This tripartite system was reduced to a bipartite system because the n-indefinite has been replaced by the NPI-indefinite (note that *dehein* developed into NHG *kein* ‘no’).

It is interesting to see that languages with neg-words according to the definition (4) can differ considerably in terms of the number of the two types of neg-words. In German, for example, all neg-words with the exception of *kein* ‘no’ belong to type (i), whereas in some Romance languages neg-words of type (i) were replaced by type (ii) almost completely (as in French, where *nulle part* ‘nowhere’ < Lat. *nulla parte* ‘no place’) and *nul* (‘no(ne)’ < Lat. *nullum* ‘no(ne)’) are the only neg-words of type (i), see Mosegaard Hansen 2013: 68). Interesting languages in this respect are Greek and Persian: both languages originally had neg-words of type (i) (see Gianollo 2021 for Old Greek, and Cantera & Redard 2023 for Avestan) which were replaced completely by non-negative NPIs/NCIs (see Giannakidou 2006 for Greek, and van der Auwera & Koohkan 2022 for Persian). Judging from the fact that Persian allows DN constructions (see section 4.1), but Greek does not (Giannakidou & Zeijlstra 2017), it seems that Greek has developed from a NC-language to a non-NC-language, whereas Persian still is a NC-language.

Most languages that have neg-words according to the definition (4) are Indo-European languages and for these we have diachronic evidence for how neg-words emerged originally. The first neg-words obviously were combinations of negation and indefinite or wh-pronouns only (as is still the case with Slavic neg-words). In some languages, these ‘simple’ neg-words were replaced by more complex ones that contain an additional part going back

quantifiers. Weiß (1998: 219) already mentions the sentence in (6c) as evidence that in Bavarian, a German NC dialect, neg-words can produce a DN reading.

- (6) a. nessuno (*non) ha parlato
nobody not has talked
'nobody has talked'
- b. Nessuno non ha telefonato
nobody not has called
'Everybody called'
- c. daß koa Mensch nie kema is, kansd aa ned song
that no human being never come is, can-2sg either not say
'That no-one never came, you cannot say either'

DN-readings for NC-languages have also been reported for Dutch, French, Spanish, Afrikaans (De Swart and Sag 2002; De Swart 2010, Biberauer & Zeijlstra 2012), Catalan (Deprez et al. 2015), Romanian (Fălăuş 2007; Iordăchioaia 2009), and Hungarian (Puskás 2012) (see De Swart 2020 for an overview). Analyses that assume that neg-words/NCIs bear an uninterpretable Neg feature (as Zeijlstra 2004 or Breitbarth & Jäger 2018) cannot explain this double behavior of neg-words in NC-languages.

In addition to DN-readings, the quantifier-nature of NCIs is also visible in the fact that single and double negative construction can have different semantic interpretations in non-strict NC-languages. Bavarian, for example, is such a non-strict NC language (Weiß 1998a, 1998b, 1999), that is, sentences with a neg-word are grammatical with and without the negative particle *ned* 'not', cf. (7a, b):

- (7) a. wai koa Beispiel ned bekannt sa muaß
because no example not known be must
- b. wai koa Beispiel bekannt sa muaß
because no example known be must
'Because no example must be known'

(7a, b) are both not only grammatical, they also can have the same meaning, namely the one given in (8a). To obtain reading (8a) for (7b), one has to assume that the negative particle is covertly present, but deleted at PF, and *koa* 'no' is an NCI just like in (7a) (see Weiß 1998a, 1998b, 1999 for more details of this analysis). The interesting thing is now that (7b) can have a second meaning, namely the one given in (8b) where *koa* 'no' is a negative quantifier. Note that this interpretation is not available for (7a).

- (8) a. $\neg \square (\exists x) [\text{Beispiel}(x) \wedge \text{bekannt}(x)]$
'It is not necessary that an example is known.'
- b. $\neg (\exists x) [\text{Beispiel}(x) \wedge \square \text{bekannt}(x)]$
- b'. 'There is no example that must be known.'

Neg-words in NC-languages seem to be of an ambiguous nature: they are sometimes NCIs and sometimes negative quantifiers. This holds for neg-words in Romance and Germanic languages, whereas Slavic neg-words obviously only allow NC-readings (see, however, Garzoni 2019 for possible marginal cases of DN in Russian).

As mentioned above, Persian is a NC-language where the original neg-words containing a negative morpheme were replaced by neg-words without a negative morpheme. Nevertheless, today's 'negationless' neg-words can also produce a DN reading, cf. (9a vs. b, Farbod Khouzani, p.c.). Note that NC and DN are created by placing different stress on the neg-word *hičči* 'nothing': in case of NC, the first syllable gets the stress, and in case of DN the second one (Farbod Khouzani, p.c.).

- (9) a. Mohem nist či beh-eš mi-di, Peter bâ **HIČČI** râzi ne mi-še.
 Important NEG.is what to-him IMP.give.2SG, Peter with nothing NEG
 IMP.become.3SG
 'No matter what you offer him, Peter is satisfied with nothing.'
- b. Bâjad ye čiz-i beh-eš be-di, čon Peter qat'an bâ hičči
 It.shall a thing-INDEF to-him SUBJ.give.2SG, because Peter certainly with
 nothing
 râzi ne mi-še.
 satisfied NEG IMP.become.3SG
 'You have to offer him something, because Peter is certainly not satisfied with nothing.'

To summarize so far, neg-words in NC-languages often show a dual nature: besides their unmarked use as NCIs in NC-constructions, they can be used as negative quantifiers, too. Their quantifier nature becomes evident in three contexts: i) some of them are not compatible with the negation particle when occurring in subject position (e.g., Italian *nessuno* 'nobody' in 6a above); ii) single and multiple negative constructions in non-strict NC-languages (can) have different meanings (e.g., in Bavarian, cf. 7 and 8 above); iii) neg-words can produce DN readings (cf. 6b, c, 9a, b above). Neg-words in Germanic and Romance NC-languages in particular show this double behavior, but as the example of Persian shows, it can also be found outside the two language branches. Slavic neg-words, however, seem to be a very systematic and robust exception because they are obviously only allowed in NC-constructions and do never produce DN-readings (but see Garzoni 2019 for possible exceptions).

4.2 Non-negative NCIs never yield DN, negative NCIs often do.

As we have seen in sect. 4.1, neg-words according to definition (4) are able to produce a DN-reading in many NC-languages (though not in all). This is in clear contrast to neg-words/NCIs that only fall under the definition in (1), but not under the definition in (4). Japanese and Korean neg-words/NCIs belong to this category (Giannakidou 2020: 460). In Japanese, for example, neg-words/NCIs consist of a *wh*-pronoun and the particle *mo* which is a focus particle meaning 'even' (Watanabe 2004: 561, 597). According to Watanabe (2004: 560), Japanese neg-words/NCIs "never allow double negation within a single clause". The Japanese neg-words/NCIs are similar to the *um*-indefinites in Malayalam (see section 4.5 below) because both have to be licensed by negation. The only difference is that, according to Watanabe 2004, Japanese neg-words are possible in elliptical answers (i.e., they fulfil criterion ii in definition 1), which is not the case for the *um*-series in Malayalam. In this respect, they are similar to Greek NCIs which also can be used in elliptical answers (and which also never allow DN, cf. Giannakidou & Zeijlstra 2017). If neg-words are defined as in

(1), the contrast between non-negative NCIs that never yield DN and negative NCIs that often do is unexpected and inexplicable in principle. However, from the definition in (4) follows the dual nature of neg-words as NCI and negative quantifiers without further assumptions (see section 5 for more details).

4.3 Proper nature of NC (i.e., the occurrence of multiple morphological negations yielding a single negation).

Usually, NC is defined as “co-occurrence of several neg-markers in one clause that is interpreted as a single semantic negation” (Breitbarth & Jäger 2018: 198, fn. 44) or as “combination of two or more negative expressions [...] that] yield a single semantic negation” (Maldonado & Culbertson 2021: 1402). Interestingly, what is meant by neg-markers or negative expressions is not explained in detail or even defined. However, as long as terms such as neg-marker or negative expression are not properly defined, the usual definition of NC is actually worthless. If you don't know what neg-markers and/or negative expressions are, you don't know what NC is.

The only type of negative expressions for which an explicit definition exists are neg-words/NCIs.⁴ However, because neg-words/NCIs are defined by their occurrence in NC constructions (see definition 1 above), they cannot be used to define NC. This would be circular, but obviously does not prevent some researchers from doing so. Giannakidou (2000: 458ff.) first defines NC using neg-words as a defining characteristic (i.e., containing “sentential negative markers (NM), which contribute logical negation \neg , and so-called n-words (Laka 1990)”), and then uses NC to define neg-words (“Because of the fairly heterogeneous nature of n-words, it is impossible to provide a definition of them less general than saying that ‘n-words occur in NC structures and can be associated with negative meaning’.”). In a similar way, Driemel et al. (2023: 1) define (strict-)NC languages as using “sentences containing both a sentential negation marker (henceforth negative marker) and a negatively marked indefinite, a so-called ‘Negative Concord Item’ (NCI).” Although they do not define the term NCI, they presumably use the term in the sense of Giannakidou (2020), who defines NCIs by their occurrence in NC constructions (see sect. 2 above) – which makes Driemel et al.'s definition of NC circular, too.

The definition of neg-words in (4), however, offers a way out of the dilemma. It can be used to define NC because, unlike the usual definition in (1), it does not refer to NC. NC could then be defined as co-occurrence of the sentential negation marker with one or more neg-words (i.e., neg-doubling) or the combination of two or more neg-words (i.e., neg-spread) that yield a single semantic negation where neg-words are defined (i) as words containing a negative morpheme, or (ii) as words that replaced words containing a negative morpheme. Defining NC in this way avoids any circularity. This shows that it is perfectly possible to define neg-words and NC precisely without arguing circularly - contrary to Giannakidou's (2000) claim quoted above. As a consequence, however, some languages that count as NC-languages according to definition (1) would lose their NC-status, e.g., Japanese, Korean, and, probably, Modern Greek.

⁴ There is another type of negative expressions that is defined, namely negative quantifiers, but they are defined as non-occurring in NC constructions, so they are not suitable for the definition of NC. The same holds for *negative polarity items* (NPIs) as English *any*.

4.4 Typological rarity of DN-languages.

Zeijlstra (2004 and subsequent work) established the distinction between NC and DN languages. NC-languages possess neg-words/NCIs according to definition (1), whereas DN-languages have negative quantifiers that can express negation on their own. Homeric Greek, for example, is an DN-language because neg-words “do not co-occur with the negative marker” (Gianollo 2021: 2). For a language to be a DN-language it is obviously not necessary that two negative expressions cancel each other out, but it is sufficient that a sentence can be negated by negative quantifiers alone. The difference between DN and NC languages “seems to be an instance of parametric variation” (Zeijlstra 2010: 39), which implies that the difference between the two types is deeply rooted in the grammatical system. Zeijlstra (2011: 136) proposes that it is the (non-)availability of negative heads: only in NC-languages, the negative particle is a head (Neg^o), whereas it is phrasal in DN-languages.

However, there are two main arguments against this assumption. Firstly, NC and DN often occur in the same language. As explained in section 4.1, DN constructions are also possible in many (if not most) NC languages. It therefore seems implausible that NC and DN are parameterized options, because these languages would then have to have both values at the same time. The second counterargument arises from the fact that pure DN languages are very rare and are predominantly limited to the standard varieties of the respective languages. Zeijlstra (2010: 38) mentions “Dutch, German, Danish and Swedish [to which English could be added, ... whereas most] other Indo-European languages, amongst which all Slavic and Romance languages, do not exhibit DN.” As mentioned in sect. 4.1, DN has since been found in several Romance languages, leaving only the Germanic languages as serious candidates for proper DN-languages. Among these languages, the standard varieties are DN-languages, but the dialects are often (though not always) NC-languages (that is, showing both NC and DN).

This certainly applies to the West Germanic languages English, German, and Dutch. In the Standard varieties of these languages, NC has been lost, while it has been retained (at least partly) in the dialects (for English cf. Anderwald 2002, for German cf. Weiß 2017 or Moser 2019, 2021, for Dutch Barbiers et al. 2009: 53-54). In Weiß (2002b), it is argued for an analysis of Standard languages like English or German as ‘hidden’ NC-languages. Driemel et al. (2023: 41, fn. 3) reject this analysis for German (and Dutch) with the argument that “German and Dutch varieties are not dominated by NC dialects”. For German, they refer to Jäger (2008: 180) who states that “it appears exaggerated to claim that most present-day dialects of German are NC languages”. However, recent research on negation in German dialects has shown that many dialects still exhibit NC in the form of negative spread and/or negative doubling (Moser 2019, 2021). The claim, “German [...] varieties are not dominated by NC dialects”, is therefore demonstrably false and German is a ‘hidden’ NC-language according to this criterion.

Considering further that the development of standard languages is not entirely the result of natural language change (characterized by the fact that it is ‘learned’ solely through first language acquisition), but is also strongly influenced by normative ideas (see Weiß 2001, 2004a, 2004b, 2005a, 2005b; Adger & Trousdale 2007; Weiß & Strobel 2019), one should not overestimate the non-occurrence of NC in these standard varieties. NC in particular has been a feature that has always caught the eye of writers trained in Latin. For example, Otfrid von Weissenburg, the first German writer known by name, was already aware of this difference between German and Latin in the 9th century (see Weiß 1998a: 170, fn. 4; Breitbarth & Jäger 2018: 200). It therefore seems inappropriate to postulate DN languages as a distinct

language type. Moreover, even in DN languages such as Standard German, NC occurs (cf. the examples in 3 in section 2), so that DN languages can hardly be a separate language type.

4.5 Languages without NCI and without negative quantifiers.

The major typological split usually made is that between NC- and non-NC/DN-languages, that is, between languages with neg-words/NCIs and languages with negative quantifiers (see, among many others, Giannakidou 2006, 2020, Giannakidou & Zeijlstra 2017, Poletto 2020). However, most languages of the world do not belong to one of these types because they possess neither neg-words/NCIs nor negative quantifiers (see Weiß 2002a for an overview).⁵ Such a language without neg-words (as defined in 4) is, for example, Malayalam, a Dravidian language spoken in the south of India. In Malayalam, indefinites consist of an interrogative stem and three suffixal ‘indefinite markers’ (Weiß 2002a). The suffix *-oo* is used in positive sentences as in (10a-b), the suffix *-enkilum* in NPI-contexts, as for example in the conditional in (11), and the suffix *-um* in the scope of negation, cf. (12). As can be seen, there is no indefinite corresponding *no*-indefinites in English.⁶

- (10) a. innale aar-oo foon ceyt-irunnu
 Yesterday who-oo phone did-PERF
 ‘Yesterday someone phoned’
 b. innale ñaan aar-e-oo kaNDu
 yesterday I who-ACC-oo saw
 ‘Yesterday I saw someone’
- (11) aar-kk-enkilum ent-enkilum wee-Nam enkil, ...
 who-DAT-enkilum what-enkilum want-OPT if, ...
 ‘if anyone wants anything, ...’
- (12) innale ñaan aar-e-um kaND-illa
 yesterday I who-ACC-um saw-not
 ‘Yesterday, I did not see anybody’

The major typological split seems to be between NC and non-NC languages based on the definition of neg-words in (4). Therefore, the two major typological groups with regard to indefinites in the scope of negation consist of languages that possess neg-words according to definition (4) and languages without such neg-words. On the other hand, the common distinction between neg-words/NCIs as defined in (1) and negative quantifiers can contribute

⁵ This also the conclusion drawn by van der Auwera & Van Alsenoy (2016) who investigated a sample of 179 languages with respect to the form in which indefinites occur in negated sentences and whether they occur together with the negation. Only 19% show the pattern ‘verbal negator plus negative indefinite’. Note since van der Auwera & Van Alsenoy (2016) use the term ‘negative indefinite’ in a comparably broad sense as Haspelmath (2013), the number of NC-languages as defined in this paper is probably significantly smaller again. But even if we take this broader definition as a basis, four out of five languages are not NC languages (and DN-languages neither).

⁶ In van der Auwera & Van Alsenoy’s (2016) sample there is one Dravidian language, Brahui, which is classified as NC-language. Since in Malayalam, *um*-indefinites are restricted to negative sentences, it would count as NC-language in van der Auwera & Van Alsenoy’s (2016) system, too. In my system, however, it is not an NC language because *um*-indefinites are not neg-words according to definition (4).

nothing to explain this typological split (indefinites like the *um*-series in Malayalam are just NPIs like the *any*-series in English, cf. Weiß 2002a). Note further, since these indefinites occur only in the scope of negation, they count as negative indefinites according to Haspelmath's (2013) and van der Auwera & Van Alsenoy's (2016) definition, that means that they cannot explain this typologically fundamental distinction either. For typologists, it apparently also makes no difference how indefinite pronouns are marked in the scope of negation - whether with a negative morpheme or with something else. The distinction proposed here between languages with and without neg-words (according to the definition in 4) results in a typologically relevant classification that can also explain why and in which languages DN is possible. This follows neither from the common definition of neg-words in syntax nor from the usual assumptions in typology.

Additionally, the usual split between NC and DN languages is a rather artificial one for two reasons: first, DN languages as a distinct type are restricted to standard languages and, second, many NC languages do allow for DN readings, too (cf. section 4.1 above). The only real split typologically relevant is that between NC- and non-NC-languages based on the definition of neg-words in (4) (and, of course, within NC-languages, there is an additional split between strict and non-strict NC languages, cf. Giannakidou 1997 and many others).

4.6 Under the usual definition of NCIs, the universal absence of **nall* is nothing special, since the lexicalization of the combination of negation and existential quantifier is also nothing special.

As have been noted for several times (see, e.g., Payne 1985, Horn 1989, Löbner 1990, Jacobs 1991, Dahl 1993, Weiß 1998a, 1999), there is an astonishing asymmetry concerning the lexicalization of negative indefinites. There seems to exist no language at all that exhibits “one—word lexical item[s] with or without negative morphology [...] to express [...] the negation of a universal” (Horn 1989: 254). That means that neg-words according to definition (4) only developed from indefinites that semantically correspond to the existential quantifier, but never from indefinites that semantically correspond to the universal quantifier. Note that there are forms like OHG *nalles* (< *ni* + *alles*), that is, lexicalizations formed from a universal quantifier and a negation, but they never mean ‘not all’, but ‘not at all’ (Weiß 1998, 1999, Jäger 2008). Additionally, there are forms like German *nimmer* that look like a combination of negation plus *immer* ‘always’, but are in fact a contraction of *nicht mehr* ‘not more’ (Kluge 2002: 653). The lack of lexicalized negated universal quantifiers seems therefore to be universal.

This is an astonishing lexical gap, but only if we assume the definition of neg-words in (4). If we would take the definition in (1), neg-words containing a negative morpheme (i.e., lexicalized negated existential quantifiers) are no particular class of expressions that could be contrasted to (the lack of) lexicalized negated universal quantifiers. Without neg-words as defined in (4), the lack of **nall* would pose no greater problem that deserves an explanation. Remember that the definition in (1) cancelled the principal difference between indefinites containing a negative morpheme and indefinites without it, so it is not surprising that there is no research on why some languages have negated indefinites like *nobody* or *nothing*, but many do not (cf. section 4.5). The same lack of interest in the universal lack of **nall* could be expected if we see neg-words through the eyes of the definition in (1). However, if we assume the definition in (4), then the fundamental asymmetry in the lexicalization of

negated forms between existential and universal quantification becomes clear, as does the need for an explanation for this.⁷

5. Analysis

The prevailing view on neg-words (according to the definition in 1) is that they are not quantifiers and that their neg-feature is uninterpretable. The first view (i.e., not being quantifiers) follows from the assumption that neg-words are not negative quantifiers (see section 2 above) and the second view is explicitly expressed by Weiß (2002b, 2002c) Zeijlstra (2004 and subsequent work), Jäger (2007), Penka (2011), Breitbart & Jäger (2018), Giannakidou and Zeijlstra (2017), Chianollo (2020, 2021), and many many others.

However, as we have seen in the preceding sections, neg-words in many NC-languages show a dual nature: they are (weak) indefinites in the unmarked case, which can also be used as negative quantifiers. Therefore, there are two points that are in need of an explanation:

- i) Double nature of neg-words: (weak) indefinites and quantifiers
- ii) Neg-feature: is it interpretable or uninterpretable?

With respect to the first point, one obvious option is to resort to assumptions about indefinites in general, which were developed in the context of the *Discourse Representation Theory* (DRT) (Kamp 1981, Heim 1982, Diesing 1992). In Weiß (1998a, 1998b, 1999, and subsequent work), it was proposed to apply Diesing's (1992) *mapping hypothesis* to explain the dual nature of neg-words as defined in (4). Neg-words are semantically weak indefinites in the first place, that is, NOBODY is just like SOMEBODY.⁸ In DRT, weak indefinites are not quantifiers, but only introduce a variable that must be bound by an implicit existential quantifier in the nuclear scope (a procedure called existential closure): in (13b) the variable x introduced by the indefinite NP *a llama* (in 13a) is "existentially" closed.

- (13) a. Alma owns a llama
b. $(\exists x) [\text{llama}(x) \wedge \text{own}(\text{Alma}, x)]$

The same procedure can be applied to negated sentences like (14a). (14a) is the negated version of (13a) and a most appropriate paraphrase for (14a) is therefore: 'it is not the case that Alma owns a llama'. The negation that is morphologically present in the neg-word *no* is interpreted as sentence negation, whereas the remaining indefinite part of *no* undergoes the same interpreting as the indefinite article in (13a).⁹ (14b) differs from (13a) only in that it contains a sentence negation; the interpretation of the indefinite, on the other hand, is completely identical.

⁷ There is not really much research on this topic, but see Horn (1989) for a pragmatic explanation and Weiß (1998a, 1999) for a syntactic explanation of the *nall-gap*.

⁸ NOBODY stands for English *nobody*, German *niemand*, Italian *nessuno*, French *personne* etc. The same holds for SOMEBODY.

⁹ The sentence negation binds the event-variable e (cf. Weiß 2002a for further details). This is omitted here for the sake of simplicity, because it is irrelevant in our context.

- (14) a. Alma owns no llama
 b. $(\neg \exists x) [\text{llama}(x) \wedge \text{own}(\text{Alma}, x)]$

The ‘negative quantifier’ (or neg-word as defined in 4) *no* in (Standard) English behaves like its non-negative counterpart *a* as far as the indefinite part is concerned, whereas the neg-part is interpreted as sentence negation. The fact that the negative and the indefinite part of neg-words are interpreted in different positions in the sentence is a particular feature of some Standard languages that possess ‘negative quantifiers’ (or neg-words as defined in 4), but do not allow NC.¹⁰ In NC-languages, the sentence negation is expressed overtly by a negative marker – in (15a) *ned* ‘not’ – and the negative indefinite *koan* ‘no’ is interpreted just like the non-negative counterpart *einen* ‘a’.

- (15) a. Da Beda hod koan Menschn ned kennd (Bavarian)
 The Peter has no man not known
 b. $(\neg \exists x) [\text{man}(x) \wedge \text{know}(\text{Peter}, x)]$

Diesing’s (1992) *mapping hypothesis* explains the default use of neg-words without any additional assumptions specific to neg-words. But how can we explain their use as quantifiers? DRT also offers a possible explanation for this. In (16a), the indefinite DP *koa Beispiel* ‘no example’ is used as a negative quantifier ($\neg \exists$) that binds a variable *x* in its restrictor and not in the nuclear scope (cf. the contrast to 13b and 14b). The neg-word in (16a) is equivalent to a negated existential quantifier (16b) or to a universal quantifier that takes scope over negation (16c) (concerning the equivalence of 16b and 16c cf. von Kutschera & Breitkopf 1971: 80).

- (16) a. wai koa Beispiel bekannt sa muaß (Bavarian)
 because no example known be must
 b. $\neg \exists(x) [\text{Beispiel}(x)] [\square \text{bekannt}(x)]$
 b’. ‘There is no example that must be known.’
 c. $\forall(x) [\text{Beispiel}(x)] [\neg \square \text{bekannt}(x)]$
 c’. ‘For every example holds that it does not have to be known.’

As we have seen, neg-words are Heimian indefinites that show a dual nature: in the default case, they are (non-negative) indefinites introducing a variable that gets existentially closed in the nuclear scope; however, they can also be used as negative quantifiers and then bind a variable in the restrictor. And if we additionally consider (17c), i.e. the possibility that the negated existential quantifier is logically equivalent to a universal quantifier that has scope over negation, then we can understand why neg-words have so far undergone such different analyses from universal quantifiers to weak indefinites (cf. Tubau 2008: ch. 1 for an overview). The analysis as Heimian indefinites can explain all these usages.

A further difference between the non-quantifier use and the quantifier use of neg-words is that in the first case, the neg-feature on the neg-words is not included in the calculation of the sentence meaning in NC languages, but it is in the second case. This difference is best

¹⁰ Weiß (2002b) argues for an analysis of Standard languages like English or German as ‘hidden’ NC-languages where it is a covert negative marker and not the negative quantifier that introduces the negative force on the sentential level (see also section 4.4).

captured I would like to propose by an Agree-account (as Weiß 2002b, Zeijlstra 2004 and many others have claimed), but not in the usual sense of feature deletion via Agree (see below). In minimalist syntax, features come as interpretable or uninterpretable ones (Chomsky 2000, 2001). Considering the different interpretations of the neg-feature in (15) and (16), one is tempted to assume that neg-words in NC constructions have an uninterpretable neg-feature and, as negative quantifiers, an interpretable one. The problem with this assumption is that we are then forced to assume that *koa* ‘no’ in (15) and (16) are two different lexemes, since one and the same lexeme cannot have two contradictory features at the same time. And, furthermore, we are forced to assume two lexemes for all neg-words in NC-languages where DN is attested (cf. sect. 4.1) – I don't think that would be a very plausible and attractive assumption.

Sometimes it is assumed for neg-words in negative fragment answers that a covert neg-operator is present, which is responsible for the negative meaning. Under this assumption, there is no semantic difference between the use of neg-words in NC constructions and in negative fragment answers – in both cases, the neg-word has an uninterpretable neg-feature (see, e.g., Zeijlstra 2008, Fălăuș & Nicolae 2016). However, this is not a possible solution, because it cannot explain the different meanings of (7a) and (7b) above where the neg-word *koa* ‘no’ (in *koa Beispiel* ‘no example’) is an Heimian indefinite in the NC-construction (7a), but (could also be) a negative quantifier in (7b). If one assumes a covert operator that is responsible for the negative force (7b), then no difference in meaning would be expected between (7a) and (7b). But it does exist, as we have seen. Moreover, this analysis cannot explain the DN readings of neg-words in NC languages without additional assumptions.

If we want to avoid the assumption of two lexicon entries for the respective lexemes (as neg-words and as negative quantifiers), then a possible way out of this dilemma is to abandon the concept of the uninterpretability of features completely or to interpret ‘uninterpretable’ as ‘should not be interpreted’. In both cases, there is no categorial difference between interpretable or uninterpretable features, but we have only interpretable ones. Frampton & Gutmann (2006), Pesetsky & Torrego (2007), Preminger (2014), and Polinsky (2016), among others, have already suggested doing without uninterpretable features. Following these researchers, I assume “that Agree is a feature-sharing operation uniting separate feature occurrences (on a goal and a probe) into a single shared formal object” (Polinsky 2016: 189). That means that the neg-feature of neg-words is not deleted if it enters into an Agree relation with the negation marker, but forms a “feature bundle” (Polinsky 2016: 189) with its neg feature. As a consequence, all neg-features are interpreted as a single negation. NC can therefore be explained just as well with this approach as with the assumption that features are deleted by Agree. However, the approach proposed here has the advantage that it can also explain why DN occurs in NC-languages or why neg-words are interpreted negatively in fragment answers without additional assumptions. In these cases, the neg-features enters in no Agree relation with another item, so it is its own neg-feature alone that contributes to the meaning.

Consider the difference of NC and DN constructions in Bavarian as illustrated in the examples in (2a, b) above, repeated here as (17a, b): if the neg-word precedes the negative particle (cf. 17a), both agree via spec-head agreement and form a feature bundle that yields an NC reading; however, if the neg-word remains in its VP-internal base position (cf. 17b), it cannot enter into an agree relation with the negative particle and no feature bundle is formed and both negative expressions (i.e., neg-word and negative particle) are interpreted as negative canceling each other out.

- (17) a. wai-a mid nix ned zfrim is (NC reading)
 because-he with nothing not satisfied is
 'because he is not satisfied with anything'
- b. wai-a ned mid nix zfrim is (DN reading)
 because-he not with nothing satisfied is
 'because he is not satisfied with nothing'

In Bavarian (as well as in other German dialects), the structural constellation enabling Agree is spec-head agreement (Weiß 2002b). But that is not the only structural possibility. In Italian, for example, neg-words follow the sentence negation, i.e., they must be c-commanded by it in order to enter into an agree relation with it. If, on the other hand, the neg-word precedes the negation particle and c-commands it, then a DN reading is produced (Poletto 2020: 34).

6. Conclusion

So-called neg-words have long been the focus of syntactic research. They are usually defined by their occurrence in NC constructions, whereby either neg-words themselves or undefined terms such as negative indefinites or negative expressions are used to define NC. The common definition of neg-words has several weaknesses: for example, it cannot explain why DN is possible in many NC languages. Therefore, an alternative definition is proposed in this paper: Neg-words are indefinite pronouns (or adverbs) that contain a negative morpheme, or indefinite pronouns (or adverbs) that have replaced such an indefinite pronoun (or adverb). According to this definition, Italian *nessuno* and French *personne* (both meaning 'nobody') are both neg-words, whereas Japanese *dare-mo* 'nobody' is not. Defining neg-words in this way has several advantages: it allows a non-circular and precise definition of NC, it can also explain why DN is also possible in NC languages (therefore, the term negative quantifier can be dispensed with), and last but not least it allows an alternative typological classification of NC and non-NC languages to the usual one in which NC and DN languages are contrasted. However, since DN languages are mostly limited to a few standard languages, this type is actually irrelevant for typology. According to the view expressed here, non-NC languages are languages without neg-words (as defined here) and they cover a group of languages to which 80% to 90% of all languages belong. The usual classification into NC vs. non-NC/DN languages, on the other hand, ignores the vast majority of languages. Furthermore, I analyze neg-words as Heimian indefinites with an interpretable neg-feature. This explains the wide range of uses of neg-words from weak indefinites (the default case) to negated existential quantifiers to universal quantifiers that scope over negation.

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