SYNTACTIC VS. SEMANTIC NEGATION

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Abstract

In this paper I investigate the relation between Negative Concord (NC) and the syntactic status of negative markers. I will show that (basing myself on three different empirical domains) Jespersen's original bidirectional generalization between these two phenomena should be replaced by a unidirectional one: whenever a language has a negative marker that is a syntactic head, the language exhibits NC; languages that only exhibit Double Negation lack a negative head. I will analyze NC as a form of syntactic agreement. This means that only NC languages have a functional projection NegP. Moreover, this means that n-words in Negative Concord languages cannot be regarded as semantically negative and that not in every language the negative marker itself is the phonological realization of a negative operator. I will conclude my paper by showing that this analysis predicts the correct readings of multiple negative expressions, including those that formed problems for previous analyses of NC.

1   Introduction

Negative Concord (NC) has been a problem for compositionality for a long time. In this paper I will show that the solution for NC can be found in the syntactic status of negative markers that participate in NC relations. The analysis of the status of negative markers provides a framework in which NC naturally falls out as a form of syntactic agreement. I will also argue that n-words in NC languages are semantically non-negative, and the combinations of these two assumptions predicts the correct readings of multiple negative expressions, including those that formed problems for previous analyses of NC.

In section 2 I will discuss four different instances of Negative Concord, and I will argue that one particular instance (Emphatic Negation) does not count as 'true Negative Concord.'

In section 3, I will discuss the correspondence between Negative Concord and the syntactic status of the negative marker in three different empirical domains: Dutch diachronic variation, Dutch dialectological variation and cross-linguistic variation. I will argue that Jespersen's (1917) original bidirectional generalization should be replaced by a unidirectional one.

In 4.1 I will present a syntactic analysis for negative markers and argue that only negative heads require the presence of a functional projection NegP, whereas negative adverbs are base-generated in a lower position in the clause and do not necessarily require the presence of a NegP. The result of this analysis is that it is possible to connect NC to he presence of a NegP. In 4.2 I will argue that n-words are semantically non-negative, but that they are semantically marked for negation and that this also may hold for negative markers in several NC languages. In 4.3 I will show that NC can be analyzed as agreement between a negative operator and negative elements that are only marked for negation in the syntax.

2   Negative Concord

In this section I will introduce one of the two topics in this study of negation: Negative Concord. Negative Concord (NC) is the name for the phenomenon that multiple negative

elements in the syntax only yield one negation in the semantics[1]. Although many different subclasses of Negative Concord have been defined in the literature (cf. Den Besten 1989, Van der Wouden 1994, Giannakidou 2000 a .o.) I will restrict myself to four different instances of NC.

(1)   a.   **Strict Negative Concord**: N-words are not allowed to occur by themselves, but have to be accompanied by a single negative marker.
      b.   **Non-strict Negative Concord**: N-words are not allowed to occur by themselves, but should be accompanied by a single negative marker, except when the n-word is a preverbal position. Then it never co-occurs with a negative marker.
      c.   **Paratactic Negation**: a verb or preposition with a negative connotation in a main clause selects an n-word in its complement (clause), that does not contribute any negation of its own.
      d.   **Emphatic Negation**: One negative element enforces another negative element.

Whereby the following definitions hold:

(2)   a.   **Negative markers**: elements that denote that a sentence (or constituent) is under the scope of negation. Examples are French *ne* and *pas*, Italian *non*, Czech *ne-* and Dutch *niet*.
      b.   **N-words**: elements that are only under well-defined conditions equivalent to a negative quantifier. Examples are French *rien* or *personne*, Italian *nessuno* or Czech *nikoho* (after Laka 1990).
      c.   **Negative elements**: the set of negative markers, n-words and negative quantifiers

Examples of these four instances in (1) are in (3)-(6).

(3)   a.   Milan *nikomu ne*volá.   Czech
           Milan n-body neg-call
           'Milan doesn't call anybody'
      b.   Dnes *nev*olá *nikdo*.
           Today neg-calls n-body
           'Today nobody is calling'
      c.   Dnes *nikdo ne*volá.
           Today n-body neg-calls
           'Today nobody is calling'

(4)   a.   Gianni *(*non*) ha telefonato a *nessuno*   Italian
           Gianni neg has called to n-body
           'Gianni didn't call anybody'
      b.   *(*Non*) ha telefonato *nessuno*
           Neg has called n-body
           'Nobody called'
      c.   *Nessuno* (**non*) ha telefonato
           N-body neg has called
           'Nobody called'

(5)   a.   J'ai *peur* qu'il *ne* vient   French
           I am afraid that he neg comes
           'I am afraid that he comes'
      b.   Il est *autre que* je *ne* croyais
           He is different than I neg believed.SUBJ
           'He is different than I thought'

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[1] Cf Van der Wouden (1994) and Giannakidou (1997, 2000) for their definitions that are only slightly different.

    c. Il vient *sans personne*
       He comes without n-body
       'He comes without anybody'

(6)   a. Hij heeft nergens geen zin in   Dutch
       He has n-where no lust in
       'He doesn't feel like anything at all'
    b. Hij gaat nooit niet naar school
       He goes n-ever neg to school
       'He never ever goes to school'
    c. Ik vind dat niks niet leuk
       I find that n-thing neg nice
       'I don't like it at all'

In (3) we see that the negative marker *ne* is prefixed to the finite verb in all examples. In (4) the negative marker (which is not a prefix but a separate word), is only allowed in negative sentences, if it is not preceded by an n-word in subject position. Given that the negative marker can co-occur with a negative subject in a lower position, it is not due to the fact that the *nessuno* is a subject, but due to the position of *nessuno* in the clause in (4) that the occurrence of the negative marker is forbidden.

Whereas (3) and (4) are examples that denote the traditional notion of Negative Concord, the phenomenon in (5) is different, because the concord relation is not clause-internal, and the first element in the concord relation, is not a negative element. It is known from the literature (Van der Wouden 1994) that Paratactic Negation only takes place in three different kinds of environments: after verbs with a negative connotation (such as *fear, doubt, forbid*), after prepositional operators with a negative connotation (such as *unless, before, without*) and comparative environments. These are contexts that also allow for licensing Negative Polarity Items (NPI's). Paratactic Negation is a subcategory of Negative Concord since it is only possible in languages that exhibit Strict or Non-strict NC[2].

Emphatic Negation is a special subclass of NC. It shows similarities with other classes of NC, due to the fact that the cancellation of two negatives does not take place, but it is far more restricted in its distribution than the other kinds. First, the reading is idiomatic in the sense that the semantic negation is strengthened, whereas standard NC yields an unstrengthened negation. Secondly, Emphatic Negation is subject to very strict locality conditions: Emphatic Negation can only occur if the two negative elements are (almost) adjacent.

(7)   a. Hij gaat *nooit niet* naar school   Dutch
       He goes n-ever neg to school
       'He never ever goes to school'
    b. NOOIT gaat hij NIET naar school
       N-ever goes he neg to school
       'He always goes to school'

(8)   *Niemand* vertelde mij (*gisteren) *niks*[3]   Dutch
       N-body told me (yesterday) n-thing
       'Nobody told me anything at all (yesterday)'

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[2] For a more fine-grained classification of environments in which Paratact Negation may occur, cf. Van der Wouden 1994

[3] The sentence with *gisteren* ('yesterday') included is not ungrammatical, but cannot yield the emphatic negative reading anymore. This sentence gets a Double Negation reading.

Moreover emphatic negations are forbidden when the negative marker precedes an n-word, or when the negative marker gets additional stress. Those constructions only yield a Double Negation reading.

(9)   a.   Hij gaat *nooit NIET* naar school   Dutch
            He goes n-ever neg to school
            'He does never NOT go to school'
    b.   Hij gaat *niet nooit* naar school
            He goes neg n-ever to school
            'He sometimes (=not never) goes to school'

Finally, Emphatic Negation is different from the other subclasses of Negative Concord, because it only occurs in languages that do not exhibit any other Negative Concord (like Dutch or German varieties). Languages that standardly use negative concord lack Emphatic Negation.

From the fact that Emphatic Negation does not occur in any standard Negative Concord language it follows that an explanation for Emphatic Negation is different from an account that explains any of the other NC instances[4]. In the rest of this paper I will provide an analysis that accounts for Strict and Non-strict Negative Concords and for Paratactic Negation. I argue that Emphatic Negation should be treated as idiomatic expressions that are lexically stored.

3   The syntactic status of Negative Markers

I will argue that the key to a solution for the puzzle of NC lays in another phenomenon: the syntactic status of the negative marker (i.e. the marker that expresses sentential negation). Languages vary with respect to syntactic status of negative markers. Some languages express sentential negation by means of a negative affix on the finite verb; other languages express negation by means of a negative particle in that is the head of its own functional projection and other languages use a negative adverb in order to express sentential negation.

In this section I investigate the relation between the syntactic status of the negative marker (in informal terms) in three different empirical domains: Dutch diachronic variation, Dutch dialect variation, and typological variation. I will show that the Dutch diachronic development of negation reflects the general development of negation as first described by Jespersen 1917. For every different phase in this development, I will investigate whether this variety of Dutch exhibits NC or not. On the basis of the diachronic development of negation and its correspondence to NC Jespersen (1917) drew a generalization that has been adopted by Haegeman & Zanuttini (1996) and Rowlett (1998). After that I will investigate whether this generalization holds for different Dutch dialects (based on an investigation of 267 Dutch dialects) and for a set of 30 mostly Indo-European languages. I will show that Jespersen's original bidirectional generalization between NC and the status of the negative marker does not hold and should be replaced by a unidirectional relation. This unidirectional generalization will form the input for my syntactic and semantic analysis.

3.1   Dutch diachronic variation

Jespersen (1917) describes the development of negation as follows:

> The history of negative expressions in various languages makes us witness the following curious fluctuation; the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and in its turn may be felt as the negative

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[4] Emphatic Negation is also widely spread under English varieties. However, their distribution is freer and its occurrence is more frequent. I will take English as a language that substandardly allows for Negative Concord.

proper and may then in course of time be subject to the same development as the original word. [Jespersen 1917]

This development has been known as 'the Jespersen Cycle' and can be formalized as in (10). In (10) the diachronic development of the negation is described as a process that takes place in several phases. Dutch negation underwent the Jespersen starting from Phase I or II (given the small amount absence of fragments of Old Dutch this is hard to say) until Phase V, which is the way that Standard Dutch expresses sentential negation.

(10)   *The Jespersen Cycle*

PHASE I   Negation is only expressed by an obligatory negative marker attached to $V_{fin.}$

PHASE II   Negation is expressed by an obligatory negative marker attached to V_{fin} and an optional negative adverb.

PHASE III   Negation is obligatory expressed by both a negative adverb and a negative marker attached to $V_{fin.}$

PHASE IV   Negation is obligatory expressed by a negative adverb and an optional extra negative marker attached to $V_{fin.}$

PHASE V   Negation is only expressed by an obligatory negative adverb.

PHASE VI   The negative adverb becomes also available as a negative marker attached to $V_{fin.}$ Negation is expressed by either one of them.

PHASE VII=I   Negation is only expressed by an obligatory negative marker attached to $V_{fin.}$

Only few fragments are left over from Old Dutch. The only fragment form the 9th century that is still present is a translation of Latin psalm texts. This fragment, the Wachtendock Psalm texts, has met much scepsis throughout the years, as the translation is very literal and thus it could not provide any proper insight in the Grammar of Old Dutch (Hoeksema 1997). However, close observation of the texts shows that the translator added negative markers that were absent in the original Latin texts (11). Moreover, through this adding of negative markers, the translation in Old Dutch shows NC, whereas Vulgate Latin is not a negative Concord language (12). Thus, this is in fact proper evidence that Old Dutch is a Negative Concord language.

(11)   *Ne* reslag thu sia[5]   Old Dutch
       Neg kill you them
       'You don't kill them'

(12)   *nequando* obliviscantur populi mei   Vulgate Latin
       that *nohuuanne ne* fargetin folk mîn   Old Dutch
       that n-ever neg forget.FUT my people
       'that they will never forget my people'

Middle Dutch has been well investigated and proven to be a Phase III language. Most negative expressions in Middle Dutch have both a preverbal negative marker and a negative adverb (13). Moreover Middle Dutch exhibits NC (14).

(13)   a.   Maer dat *en* mach *niet* sijn[6]   Middle Dutch
            But that neg may not be
            'But that may not be (the case)'

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[5] Wachtendock Psalms 58.12
[6] Cf. Burridge 1993.

b.   dat sie *niet en* predicten
     that they not neg-preach
     'that they didn't preach'

(14) a.   *Nyemant en* moet upten kerchoeve hout zaghen   Middle Dutch
          No-one neg must on-the churchyard wood saw
          'No one should saw wood on the churchyard'
      b.   *Niemen en* had mi *niet* gesien
          No-one neg had me neg seen
          'Nobody has seen me'

During the 17th Century, the Dutch preverbal negative marker became only optionally available (15). Therefore 17th Century Dutch counts as a Phase IV language. 17th Century Dutch still exhibits NC (16).

(15) Ghy (*en*) sult *niet* dooden[7]   1653 Dutch
     You (neg-)shall not kill
     'You shall not kill'

(16) Hy vreesde Herkles knods *noch* Samsons vuisten *niet*[8]   1637 Dutch
     He feared Hercules' truncheon nor Samson's fists neg
     'He feared neither Hercules' truncheon nor Samson's fists'

Finally the Dutch preverbal negative marker completely disappeared and Modern Dutch, being Phase V, expresses sentential negation by means of only a negative adverb. Note that Modern Dutch, contrary to previous stages of the language, lacks NC. Two negations in one proposition cancel each other out and yield an affirmative.

(17) a.   Jan loopt *niet*   Standard Dutch
          John walks neg
          'John doesn't walk'
      b.   dat Jan *niet* loopt
          that John neg walks
          'that John doesn't walk'

(18) a.   dat Jan *niet* met *niets* tevreden was   Standard Dutch
          that John neg with n-thing content was
          'that John was not pleased with nothing'
      b.   dat Jan *niemand niets* geeft
          that John n-body n-thing gives
          'that John gives nobody nothing'

This development of Dutch in line with Jespersen's observation of other languages. Jespersen noticed a relation between the status of the negative markers and the occurrence of NC (19).

(19) Every language that has a negative marker that is attached to the finite verb is a NC language. Every language that lacks a negative marker that is attached to the finite verb is not a NC language

This bidirectional relation is known as Jespersen's generalization. In the following paragraphs I will show that this generalization is too strong however and should be replaced.

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[7] Grammatica Leupenius 1653
[8] Vondel: Gysbrecht (Act V)

3.2   Dutch dialectal variation.

In this paragraph I will evaluate Jespersen's generalization against the observation of 267 different dialects that have been investigated for the Syntactic Atlas of Dutch Dialects (SAND)[9]. Dutch dialects also vary with respect to the expression of sentential negation. West Flemish e.g. is known to be a language that still optionally allows an extra preverbal negative marker. Therefore West Flemish counts as a Phase IV language. West Flemish is also known to be a NC language (Haegeman 1995). In (21) all negative elements yield only one (sentential) negation.

(20)   a.   Valère (*en*) meet *nie* 's oavens   West Flemish[10]
              V. (neg) eats neg in the evening
              'V. doesn't eat in the evening'
        b.   da Valère 's oavens *nie* (*en*) eet
              that V. in the evening neg (neg) eats
              'that V. doesn't eat in the evening'

(21)   a.   da Valère me *niets* ketent *(en)* was   West Flemish
              that V. with n-thing content (en) was
              'that V. was not pleased with anything'
        b.   da Valère *niemand niets (en)* geeft
              that V. n-body n-thing (neg) gives
              'that V. does not give anyone anything'
        c.   da Valère *nooit* van *niemand nie* ketent *(en)* was
              that V. n-ever of n-body neg content (neg) was
              'that V. was never pleased with anyone'

However, West Flemish does not always yield NC. In cases in which the n-word appears to the right of the negative marker *nie*, a DN reading is yielded. The occurrence of two possible negative markers allows West Flemish, depending on the configuration of negative elements, to yield both NC and DN readings. This cannot be the result of different registers of West Flemish, as one sentence may contain both NC and DN relations. The sentence in (22)b contains three negative elements, but its semantics has only two negations. This is unexpected from Jespersen's generalization: the first clause appears to be too strong.

(22)   a.   da Valère *nie* van *niemand* tevreden (*en-*)was[11]   West Flemish
              that V. neg of n-body content (neg-)was
              'That V. wasn't pleased with nobody'
        b.   da Valère *nooit nie* van *niemand* tevreden was
              that V. n-ever neg of n-body content was
              'hat V. was never pleased with nobody'

Jespersen's prediction that all phase IV dialects of Dutch exhibit NC is born out. The following table shows that from all 20 dialects that still have a preverbal negative marker, 18 dialects clearly exhibit NC, and the results are unclear for the other two cases.

(23)   *Results from SAND-project*:

Dialects with en/ne	NC	No NC	Unclear
20	18	0	2

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[9] Syntactic Atlas Dutch Dialects (cf. Barbiers 2000): Current project investigating 250 different Dutch dialects at Universities of Amsterdam, Leiden, Ghent, Antwerps and the Free University Brussels and Meertens Institute.
[10] Data from Haegeman 1995
[11] Cf. Haegeman 1995, 1998

A second observation that is not in line with Jespersen's generalization is the fact that there exist several dialects, especially in the southern parts of the Netherlands and Flanders, that lack a preverbal negative marker, but still exhibit NC. This is a crucial counter example against the second clause of Jespersen's generalization.

(24)   Jan loopt *niet*   Southern dialects
        John walks neg
        'John doesn't walk'

(25)   Er wil *niemand niet* dansen   Southern dialects
        There wants n-body neg dance
        'Nobody wants to dance'

Before drawing a new generalization, I will first discuss the data from the typological empirical domain.

3.3   Cross-linguistic variation

The distinction between the different Jespersen Phases forms a proper tool to classify languages with respect to their way of expressing negation. This makes it possible to evaluate Jespersen's generalization for languages that can be classified in different Phases of the Jespersen Cycle. The following table shows the relation between the Jespersen Phase of language and the question whether the language exhibits NC, DN, or both.

(26)   *Jespersen Cycle, Negative Concord and Double Negation*

Variety/language	Jespersen Phase	NC	DN
Italian	I	+	-
Spanish	I	+	-
Portuguese	I	+	-
Romanian	I	+	-
Polish	I	+	-
Czech	I	+	-
Slovenian	I	+	-
Bulgarian	I	+	-
Russian	I	+	-
Serbo-Croatian	I	+	-
Greek	I	+	-
Hungarian	I	+	-
Hebrew	I	+	-
Turkish	I	+	-
Berber	I	+	-
Catalan	II	+	-
Standard French	III	+	+
West Flemish	IV	+	+
Colloquial French	IV	+	+
Quebecois	V	+	?
Yiddish	V	+	+
Bavarian	V	+	+
Standard English	V	?	+
Standard Dutch	V	-	+
German	V	-	+
Swedish	V	-	+
Danish	V	-	+

Norwegian	V	-	+
Icelandic	V	-	+
Colloquial English	VI	+	+

Based on this large set of data, one cane safely conclude that Jespersen's generalization should be replaced by the following generalization:

(27)   Whenever a language has a preverbal negative marker that is attached on V_{fin}, it exhibits NC. Whenever a language exhibits DN, it is has an adverb as negative marker.

4   Analysis

The generalization in (27) forms the input for a syntactic and semantic analysis. The following two questions will be answered in this section: (*i*) What is the syntax status and position of negative markers in Jespersen Phase I-VI? (*ii*) What is the semantic status of n-words and negative operators in NC and DN languages?

4.1   The syntax status of negative markers

It has been argued that negative markers that attach to V_{fin} are synactic heads (X°) (Haegeman 1995, Hageman & Zanuttini 1996, Rowlett 1998): e.g. preverbal negative markers block movement of prepositions or clitics. From the Head Movement Constraint (Travis 1984) it directly follows that these preverbal markers are negative heads.

(28)   a.   Jean *la* fait manger à Paul[12]   French
              John it makes eat to Paul
              'John makes Paul eat it'
        b.   *Jean *la* fait *ne* pas manger à Paul
              John it makes neg neg eat to Paul
              'John makes Paul not eat it'

(29)   a.   Gianni *li* vuole vedere   Italian
              John him wants see
              'John wants to see him'
        b.   *Gianni *li* vuole *non* vedere
              John him wants neg see
              'John wants not to see him'

Another argument is presented by Merchant (2001), who shows that negative heads cannot form adjunctions with XP's like *why*.

(30)   a.   *Giati dhen?   Greek[13]
        b.   *Perque non?   Italian
        c.   *Pochemune?   Russian
              Why neg

Application of these tests to the negative markers that are attached to V_{fin} proves that all these markers are syntactic heads X°. Likewise, negative markers that do not block movement of

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[12] The example is from Richard Kayne.
[13] This test and these data are from Merchant (2001). The test shows that whenever the word for 'no' (as opposed to yes) is phonologically distinct from the negative marker, the 'why not' test distinguishes x° markers from XP markers. The XP may adjoin to another XP, not to an X°. The way of saying 'why not' in languages with a negative head marker is by using the respective word for 'no' (as in yes/no).

other heads and that allow for *why* adjunction are not X° and therefore should be XP's. This is the case for all negative adverbs:

(31) a. dat Jan *niet* naar huis gaat   Dutch
          that John neg to home goes
          'that John doesn't go home'
      b   Jan gaat *niet* naar huis
          John goes neg to home
          'John doesn't go home'

(32) a. om Jan *inte* köpte boken   Swedish
          that John neg bought books
          'that John didn't buy books'
      b. Jan köpte *inte* boken
          John bought neg books
          'John didn't buy books'

(33) a. Why *not*?   English
      b. Warum *nicht*?   German
      c. Hvervor *ekki*?   Icelandic
      d. Pourquoi *pas*?   French
          Why neg?

Now the new generalization can be reformulated in syntactic terms:

(34) Whenever a language has a negative marker X°, it exhibits NC. Whenever a language exhibits DN, a negative adverb XP is required.

Ever since Pollock (1989) it has been assumed that the negative head corresponds to the head Neg° of a functional projection NegP (either it is base-generated in Neg° or ot forms an agreement relation with this projection). This projection is dominated by TP and dominates vP (following from the fact Negative Polarity Items (NPI's) are not allowed in subject position). Negative adverbs are base-generated in a vP adjunct position (cf. Zanutinni 2001). This follows e.g. from heavy pronoun imperatives in French in which *ne* is not allowed, but *pas* is. This would be impossible if *pas* was not base-generated in a lower position than NegP.

(35) (**Ne*) regarde moi *pas*   French
      Neg watch me neg
      'Don't watch me'

Thus languages without a negative head do not require a NegP (but may have one), languages with a negative head do. This leads to the following hypothesis about the connection of NC with the presence of a NegP.

(36) Every language that exhibits NC expresses negation by means of a functional projection NegP. Languages without NC lack a functional projection NegP.

It is known that functional projections are only required to establish syntactic agreement relations. Hence, if NC is the result of the presence of a NegP (or vice versa), NC must be a form of (multiple) negative agreement. This means that NC is the results of multiple elements carrying uninterpretable [uNEG] features (cf. Ura 1996, Chomsky 1999) that check these feature against a single negative operator hosted in NegP.

4.2   Semantics of n-words and negative markers

The semantic status of n-words has been subject of long debate throughout the '90's. Basically, two approaches have been formulated. According to one approach (Zanuttini 1991,

Haegeman & Zanuttini 1996,) n-words are inherently (i.e. semantically) monadic negative quantifiers that through some process of factorisation and absorption melt together in one polyadic quantifier. De Swart & Sag (2002) provide a semantic framework for this proposal. This approach however has problems analysing the Paratactic Negation sentences as in which non-negative verbs or prepositions (with a negative connotation) license the presence of n-words in their complement.

(37)   a.   En lugar de intendar *nada*   Spanish[14]
            In stead of trying n-thing
            'In stead of trying anything'
       b.   Prohibieron que saliera *nadie*
            Forbade.3PL that went.out n-body
            'They forbade that anybody went out'

Examples like these, and the fact that even under polyadic quantification the loss of negation has not been explained from a compositional point of view, led to another approach that takes n-words to be non-negative NPI's that are licensed by some abstract negation that is triggered by their own presence (Laka 1990, Ladusaw 1992, Giannakidou 1997, 2000). However such an analysis fails to account for the occurrence of fragmentarian answers, which are allowed for n-words, but are not allowed for fragmentarian answers (38). Moreover, n-words cannot be licensed by a negation in a higher clause, whereas NPI's can be licensed clause boundary (39). Finally contrary to NPI's n-words are allowed to occur in subject position, whereas this is not allowed for NPI's (40).

(38)   A quién viste? A *nadie* / *A un alma   Spanish
       To whom saw.2SG? To n-body / to a single soul (NPI)
       'Who did you see? Nobody / a single soul'

(39)   *Dhen* lipame [$_{CP}$ pu piglosa *KANENAN/$^{\sqrt{}}$kanenan*]   Greek
       Neg regret.1SG that hurt.1SG n-body/anybody
       'I don't regret that I hurt anybody'

(40)   a.   *Nikdo ne*prisel na vecirek   Czech
            N-body neg-came to party
            'Nobody came to the party'
       b.   *Petnik by za to nebyl dan
            A.nickel.NPI would for it neg.be given
            'A nickel wouldn't be paid for it'

Since the dichotomy between inherently negative and NPI like non-negative n-words seems too strong and the act that NC is a form of syntactic agreement, I argue that n-words are semantically non-negative, but syntactically negative. This means that words can be seen as semantically non-negative Heimian indefinites or existential generalized quantifiers, that carry an uninterpretable [NEG] feature that has to be eliminated throughout the syntactic derivation (41) (cf. Ladusaw 1992, Giannakidou 1997 for similar proposals).

(41) $[[\text{n-P}]] \rightsquigarrow P'(x)_{[uNEG]}$ or $[[\text{n-P}]] \rightsquigarrow \lambda Q.\exists x[P'(x) \& Q(x)]_{[uNEG]}$

One question remains open: what is the semantic status of negative markers? Are they also non-negative markers of negation, or are they the phonological realization of negative operators. Given that all operators have to roof n-words, I argue that in languages in which n-words cannot precede the negative marker, the negative marker is the negative operator. These languages are the so-called Non-strict NC languages, like Italian. In languages like

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[14] Data from Herburger 2001

Czech, in which n-words are allowed to occur in a position in front of the negative marker, the negative marker cannot be the negative operator itself and has to be semantically non-negative. The negative marker in these languages is nothing but the phonological realization of the [uNEG] feature.

4.3   Interpreting negative structures

Now we can explain NC from a syntactic point of view: NC is a form af agreement between a negative operator and non-negative elements such as n-words and in strict NC languages also negative markers. This checking of [uNEG] features can only take place if a NegP is present that contains a negative operator. In those languages that lack NC, there are no n-words, but only true negative quantifiers, and since in those languages that negative marker is never roofed by an n-word (since n-words only exist in NC languages) the negative marker in a DN language is a negative operator itself. Since there are no [uNEG] features to eliminate, there is no NegP required to do so. Therefore NegP does not exist in DN languages. This explains why all languages with a negative head Neg° are NC languages.

Hence there are two ways of expressing negation in natural language: semantic negation, whereby all negative elements are semantically negative; or syntactic negation, whereby negative elements are syntacically marked for negation, and these elements all check there [uNEG] feature against a single negative (c)overt operator.

Now I will explain how this analysis predicts the correct readings of negative sentences in the different languages. As all negative elements are [uNEG] in Czech, negation is realized by a covert negative operator $Op\neg$, hosted in Spec,NegP (42a). All negative elements check their [uNEG] feature against this operator that is an interpretable [iNEG] feature (42b). In case of n-words in preverbal subject position, $Op\neg$ forms a compound with the n-word and this compound is a negative quantifier (42c).

(42)   a.   Milan *ne*vidi   Czech[15]
           Milan neg-sees
           Milan does not see
           [$_{NegP}$ $Op\neg$ Neg° [$_{vP}$ Milan nevidi$_{[u\text{NEG}]}$]]

       b.   Milan *ne*vidi *ni*koho
           Milan not-sees n-body
           'Milan does not see anyone'
           [$_{NegP}$ $Op\neg$ Neg° [$_{vP}$ Milan *ni*koho$_{[u\text{NEG}]}$ nevidi$_{[u\text{NEG}]}$]]

       c.   *Nikdo ne*prisel na vecirek
           N-body neg-came to party
           'Nobody came to the party'
           [$_{NegP}$ [$Op\neg$+Nikdo$_{[u\text{NEG}]}$] ne$_{[u\text{NEG}]}$ prisel na vecirek]

In Italian, all n-words are licensed by the [iNEG] of *non*, which is the negative operator (43a-b). In the case of movement of an n-word to a subject position, *non* can no longer license these n-words. Therefore an abstract operator is introduced that forms a compound with the highest n-word. Obviously *non* cannot be included in this sentence, since then the sentence would contain two negative operators (43c).

(43)   a.   Gianni *non* ha telefonato   Italian
           G. neg has called
           'G. has not called'
           [$_{Neg°}$ non$_{[i\text{NEG}]}$ [$_{vP}$ Gianni ha telefonato]]

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[15] For typographic reasons diacritics have been left out in all Czech examples.

    b.   Gianni *non* telefonato a *nessuno*
        G. neg calls with nobody
        'G. doesn't call with anybody'
        [$_{Neg°}$ non$_{[iNEG]}$ [$_{vP}$ a nessuno$_{[uNEG]}$ Gianni telefonato]]

    c.   *Nessuno* (*non) ha telefonato a *nessuno*
        N-body has called to n-body
        'Nobody called anybody'
        [$_{NegP}$ [$Op_{\neg}$ + Nessuno $_{[uNEG]}$] [$_{vP}$ ha telefonato a nessuno$_{[uNEG]}$]]

French expresses negation by means of an [iNEG] *pas* that raises to Spec,NegP, from which it takes scope (44a). In the case that another n-word is involved the negation comes from an abstract operator that forms a compound with the raised n-word (44b). However, if *pas* and *rien* co occur in the sentence the trace of *pas* precedes *rien* and therefore blocks the agreement relation between NegP and *rien*. Hence a second operator is needed to eliminate *rie*n's [uNEG] feature and a DN reading is yielded (44c).

(44)   a.   Jean *ne* mange *pas*   French
           John neg eats neg
           'John doesn't eat'
           [$_{NegP}$ pas$_{[iNEG]i}$ Neg° [$_{vP}$ t$_i$ Jean ne-mange$_{[uNEG]}$]]

      b.   Jean *ne* mange *rien*
           John neg eats nothing
           'John doesn't eat anything'
           [$_{NegP}$ [$Op_{\neg}$+rien$_{[uNEG]i}$] Neg° [$_{vP}$ t$_i$ Jean ne-mange$_{[uNEG]}$ t$_i$]]

      c.   Jean *ne* mange *pas rien*
           John neg eats neg nothing
           'John doesn't eat nothing' = 'John eats something'
           [$_{NegP}$ pas$_{[iNEG]i}$ Neg° [$_{vP}$ t$_i$ Jean ne-mange$_{[uNEG]}$ [$_{NegP}$ $Op_{\neg}$ Neg° [$_{VP}$ rien$_{[uNEG]}$]]]]

West Flemish is similar to French, except that the negative marker *nie* is [uNEG]. Hence negation is expressed by an abstract negative operator, that checks all [uNEG] features (45a-b). However, if *nie* intervenes between NegP and an n-word, locality constrictions (Chomsky 1999) block the NC relation between the negative operator and the n-word (45c). The only way to escape this is to move over *nie* to a position that falls within the same phase. Then the NC relation is allowed (45d).

(45)   a.   (da) Valère *nie en*-eet   West Flemish
           (that) V. neg neg-eats
           '(that) V. doesn't eat'
           [$_{NegP}$ $Op_{\neg}$ Neg° [$_{vP}$ nie$_{[uNEG]}$ Valère en-eet$_{[uNEG]}$]]

      b.   (da) Valère niets en-eet
           (that) V. n-thing neg-eats
           '(that) V. doesn't eat anything'
           [$_{NegP}$ $Op_{\neg}$ Neg° [$_{vP}$ niets$_{[uNEG]}$ Valère en-eet$_{[uNEG]}$]]

      c.   (da) Valère nie niets en-eet
           (that) V. neg n-thing neg-eats
           '(that) V. doesn't eat nothing'
           [$_{NegP}$ $Op_{\neg}$ Neg° [$_{vP}$ nie$_{[uNEG]}$ Valère [$_{NegP}$ $Op_{\neg}$ Neg° [$_{VP}$ niets$_{[uNEG]}$ en-eet$_{[uNEG]}$]]]]]

      d.   (da) Valère niets nie en-eet
           (that) V. n-thing neg neg-eats
           '(that) V. doesn't eat anything'
           [$_{NegP}$ $Op_{\neg}$ Neg° [$_{vP}$ niets$_{[uNEG]}$ nie$_{[uNEG]}$ Valère en-eet$_{[uNEG]}$]]

In Bavarian, negation is also expressed by means of an abstract negative operator and n-words are [uNEG] and therefore they need to be in an checking relation with NegP. In this respect Bavarian is similar to West Flemish (only there is no optional negative head marker.)

(46) a. S'Maral woid an Hans ned hairadn   Bavarian
          The'Mary wanted the Hans neg marry
          'Mary didn't want to marry Hans'
          [$_{NegP}$ $Op_\neg$ woid [an Hans [$_{vP}$ ned$_{[NEG]}$ S'Maral hairadn]]]
      b. daβ'ma koana ned furtgehd
          that'me n-body neg leaves
          'that nobody is leaving'
          [$_{NegP}$ $Op_\neg$ koana$_{[uNEG]}$ ma [$_{vP}$ ned$_{[uNEG]}$ furtgehd]]

Finally, in Dutch there is no NegP and negation is expressed semantically: every negative element corresponds to a negation in the semantics and in the case of two negative elements a DN reading is yielded.

(47) a. (dat) Jan *niet* eet   Standard Dutch
          (that) John neg eats
          '(that) John doesn't eat'
          [Jan [$_{vP}$ niet$_{[iNEG]}$ eet]]
          $\neg$eat(**j**)
      b. (dat) Jan *niets* eet
          (that) John not eats
          '(that) John eats nothing'
          [Jan [$_{vP}$ [$_{QP}$ niets$_{[iNEG]}$] eet]]
          $\neg\exists x.[eat(\textbf{j},x)]$
      c. (dat) Jan *niet niets* eet
          (that) John neg nothing eats
          '(that) John doesn't eat nothing'
          [Jan [$_{vP}$ niet$_{[iNEG]}$ [$_{QP}$ niets$_{[iNEG]}$] eet]]
          $\neg\neg\exists x.[eat(\textbf{j},x)] \leftrightarrow \exists x.[eat(\textbf{j},x)]$

Apart from these correct predictions, this analysis also accounts for the problems that have been raised with the other approaches of NC (37)-(40). Paratactic Negation can be analyzed as feature checking against a negative operator that is lexically decomposed into a negative operator (carrying [iNEG]) and a postive counter part.

(48) *Prohibieron* que saliera *nadie*   Spanish
      Forbade.3SG that went.out n-body
      'They forbade that anybody went out'
      [$_{vP}$ prohieberon$_{[iNEG]}$ [$_{CP}$ C°$_{[uNEG]}$ [saliera [$_{vP}$ nadie$_{[uNEG]}$]]]]

Fragmentarian answers are accounted for by PF movement of the n-word after ellipsis of the entire sentence, containing a negation that checks the n-words [uNEG] feature. Since NPI's have to be licensed at surface structure, PF movement of NPI's is not allowed.

(49) A quién viste? A *nadie*   Spanish
      To whom saw-you? To n-body
      'Who did you see? Nobody'
      [$_{FocP}$ nadie$_{i[uNEG]}$ [$_{NegP}$ <no$_{[iNEG]}$ vió a t$_i$>]][16]

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[16] This account is similar to the account presented Giannakidou (2000) and in Merchant (to appear).

Finally, the fact that NPI's can be licensed by a negation in a higher clause and n-words cannot follows immediately from the clause-bounded conditions on feature checking (C counts as a phase boundary, cf. Chomsky 1999).

(50)   *[$_{NegP}$ $Op_\neg$ Dhen$_{[n\text{-}uNEG]}$ lipame [$_{vP}$ [$_{CP}$ pu piglosa *KANENAN*$_{[uNEG]}$]]]   Greek
        Neg regret.1sg that hurt.1sg n-body

5   Conclusions

This analysis predicts correctly the interpretation of negative sentences in a large set of languages. Moreover it solves several problems that have been raised by former approaches of Negative Concord and it accounts for the differences between Strict and Non-strict NC languages. The relation between the syntactic status of negative markers and the occurrence of NC is explained, and replaces the incorrect bidirectional relation that has been proposed by Jespersen (1917) and adopted by Haegeman & Zanuttini (1996) and Rowlett (1998).

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