Negative Concord in multiple negative constituent configurations in Ukrainian: A minimalist approach

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Abstract

This study provides a minimalist account of derivation and interpretation of Ukrainian multiple negative constituent configurations, which have a Negative Concord (NC) reading. I argue that negative constituents, i.e., n-words, are Negative Quantifiers rather than Negative Polarity mechanisms, and provide an analysis of the mechanisms for checking their uninterpretable [NEG] features against the interpretable [NEG] features of the negative particle in structures with different word order. This analysis led me to the conclusion that both the operations Move/Move F and the operation Attract can adequately account for the considered Ukrainian data, while fitting into the economical mechanism of the Minimalist Program. However, I relied on the analysis of feature checking via the operations Move/Move F in the course of my further discussion on two approaches to interpretation of multiple negative constituents in NC languages. In this discussion, I used Ukrainian data to argue for the approach proposed by Brown (1999), which relies on the notions of indefinites as variables, feature deletion, copies, and reconstruction, as opposed to the approach proposed by Haegeman & Zanuttini (1991) and Haegeman (1995), which relies on the notion of Negative Absorption. Finally, I discovered that while differing in many respects from some NC languages, like Italian and West Flemish, Ukrainian NC configurations are derived and interpreted in the same way as those in other Slavic languages, namely Russian and Serbian/Croatian.

1. Introduction

The aim of this paper is to analyse Ukrainian data exhibiting Negative Concord (NC) in the framework of the Minimalist Program and argue for the previous analysis of NC provided by Brown (1995) for Russian. In order to achieve this aim I will fulfill the following tasks: (i) discuss the alternative approaches to treatment of *n*-words (as Negative Polarity Items, on the one hand, and as Negative Quantifiers, on the other hand) and provide evidence from Ukrainian in favour of one of the approaches (treatment of *n*-words as Negative Quantifiers); (ii) investigate which of the two alternative approaches to feature checking (the operation Agree or the operations Move/Move F) can better account for the derivation of Ukrainian NC structures which demonstrate different word order patterns; and (iii) discuss the alternative approaches to interpretation of Ukrainian constructions exhibiting NC (one based on the notion of Negative Absorption and another one based on the notions of indefinites as variables, as well as notions of feature deletion, copies, and reconstruction) and argue for one of these approaches. Ultimately, I argue that *n*-words are Negative Quantifiers, not NPIs. The above mentioned tasks will be accomplished, respectively, in sections 2, 3 and 4 of this paper. A summary of the most important conclusions will be provided in section 5. Where necessary, I will make references to other languages, such as Italian, Russian, Serbian/Croatian, and West Flemish to support some of the proposed arguments or clarify some notions.

To my knowledge, the foremost work on negation in Slavic languages has focused on Serbian/Croatian (Progovac 1994) and Russian (Brown 1999). Therefore, the analysis of another representative of a Slavic language family – Ukrainian – from the perspective of the Minimalist Program is a valuable contribution to the current discussion of NC.

2. Nature of *n*-words in Ukrainian

In Ukrainian, multiple occurrences of negative constituents in a clause express a single negation, i.e. Ukrainian exhibits Negative Concord, as shown in 1^1 .

(1) *Vona nikomu ničoho *(ne) rozpovidaje.*She no-who no-what not tell.
'She does not tell anyone anything.'

This phenomenon is also observed in a number of other Slavic languages (cp. with Russian in 2 and Serbian/Croatian in 3).

(2) Ja nigde *(ne) rabotaju.
I no-where not work.
'I do not work anywhere.'

(3) Marija *(ne) voli ni(t)ko-ga.
Mary not loves no-who.

Mary not loves no-who. 'Mary does not love anyone.'

(Progovac 1994:3)

In this paper, I use the working definition for negative constituents, or *n*-words, suggested by Giannakidou (2006:328) in 4.

¹ The Ukrainian examples provided in this paper are mine.

(4) **N-word**:

An expression α is an *n*-word iff:

- a. α can be used in structures containing sentential negation or another α -expression yielding a reading equivalent to one logical negation; and
- b. α can provide a negative fragment answer.

In the case of Ukrainian, Russian and Serbian/Croatian, *can* in definition 4 can be substituted by *must*, i.e., in these languages *n*-words are strong, since they must be licensed by a clausemate negation, represented by an overt negative clitic *ne*, which is the head of NegP, as demonstrated in 1 for Ukrainian, 2 for Russian and 3 for Serbian/Croatian.

Ukrainian *n*-words do not occur in non-negative polarity environments, as shown in 5 for a Yes/No question. The sentence in 5 will be grammatical with overt clausemate sentential negation represented by *ne*, and then it only has the reading of a presumptively negative question: 'Did no one knock?'

(5) *Nixto stukav? No-who knocked? 'Has anyone knocked?'

All Ukrainian n-words are morphologically negative: they have the prefix ni-. This can be explained by the fact that negative constituents in Ukrainian are formed by adding the negative prefix ni- to a wh-element, as demonstrated in 6.

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    a. ni- + xto 'who' → nixto 'no one';
    b. ni- + de 'where' → nide 'nowhere';
    c. ni- + koly 'when' → nikoly 'never'.
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In the literature, there has been an interesting debate regarding the status of *n*-words: they have been argued to be Negative Polarity Items, or NPIs, (Ladusaw 1980, Progovac 1994, Giannakidou 2006) or Negative Quantifiers, or NQs, (Haegeman & Zanuttini 1991, Haegeman 1995, Brown 1999). Moreover, due to the fact that negative constituents often exhibit the behaviour of both NPIs and NQs, they have also been characterized as underspecified in Van der Wouden & Zwarts (1993), i.e. it has been acknowledged that *n*-words may be ambiguous between negative and non-negative meanings. In this paper, however, I will focus on differences between the treatment of negative constituents as NPIs and NQs and attempt to provide evidence for each of these approaches below.

NPIs require some triggering environment in order to occur. According to Brown (1999), a canonical NPI licenser is clausemate negation for certain types of NPIs known as strict NPIs, i.e., English *any*-pronouns, as shown in 7. Here, the NPI *anything* is licensed by the negative particle *not*. However, certain (non-strict) NPIs can occur in other polarity environments as well, including superordinate negation, Yes/No questions, conditionals or adversative predicates, i.e., the Italian negative constituent *nessuno* in 8. Here, *nessuno* does not occur in negative polarity environment, but is licensed by the Yes/No operator. As shown in 5 above, this is not true for Ukrainian, i.e., the Yes/No operator does not license Ukrainian *n*-words.

- (7) I do not see anything.
- (8) Ha telefonato nessuno? Has called no one 'Has anyone called?'

(Brown 1999:21)

Negative Quantifiers, on the other hand, are considered to be inherently negative, having independent negative force and expressing negation without any other overt negative element present. Typical NQ behaviour is seen in certain configurations with sentential negation, as shown in 9, or elliptically, as an answer to a question, as in 10, both with an English no-NQ.

(9) I have said **nothing**.

(Brown 1999:22)

(10) 'Who did you see?' 'No one.'

(Brown 1999:23)

Another piece of evidence in support of treating n-words as NQs comes from West Flemish. Brown cites Haegeman & Zanuttini (1996) and provides the example in 11, where the negative constituent negates a clause of its own.

(11) da Valère niemand kent that Valère nobody knows 'that Valère doesn't know anybody'

(Brown 1999:23)

In this paper, I will follow Haegeman & Zanuttini (1991; 1996), Haegeman (1995), Haegeman & Zanuttini (1996) and Brown (1999) assuming that *n*-words are NQs. Below I provide the evidence from Ukrainian to show that in certain contexts *n*-words behave like NQs. First, Ukrainian *n*-words can carry negative force on their own when used in elliptical expressions, as in 12.

(12) 'Komu ty rozpoviv?' 'Nikomu.' whom you told no-whom 'Who did you tell?' 'No one.'

Second, according to Brown (1999), NQs can be modified by certain adverbs, such as *almost*, but NPIs cannot. In Ukrainian, the *n*-word *ničoho* 'nothing' can be modified by *majže* 'almost', as demonstrated in 13.

(13) Ja ne jila majže ničoho.
I not ate almost no-what.
'I ate almost nothing.'

In this section, I have provided some description of *n*-words and their properties in Ukrainian, as well as explained the differences in treating negative constituents as, on the one hand, NPIs or, on the other hand, NQs. Since negative constituents often exhibit the behaviour of both NPIs and Negative Quantifiers, it is difficult to support only one side in the ongoing debate regarding the status of *n*-words. However, taking into account the data considered, I argue that Ukrainian *n*-words are NQs.

3. Feature checking in Ukrainian NC structures

According to Brown (1999), in certain languages that exhibit NC, every *n*-word has an uninterpretable [NEG] feature, while the negative particle, which presents the sentence negation, has an interpretable [NEG] feature. I assume that Ukrainian is one of those languages. In order for a derivation to converge, it must meet the condition of Full Interpretation. This principle states that no uninterpretable feature can remain at the point where derivation enters the semantic component. Such features must be erased by the checking operation against the matching interpretable features. In this section, I will analyse feature checking in Ukrainian NC constructions, which display different word order, by means of two alternative mechanisms: the operations Move/Move F and the operation Agree.

The Ukrainian NC constructions that will be considered below demonstrate the following word order: an object/objects represented by an n-word/n-words preceding the main verb (as in 14), following it (as in 15) or both preceding and following the main verb (as in 16 or 17).

- (14) Ja nikomu ničoho ne rozpovidala. I no-who no-what not told. 'I have not told anyone anything.'
- (15) Ja ne rozpovidala nikomu ničoho. (emphatic)
 I not told no-who no-what.
 'I have not told anyone anything.'
- (16) Ja nikomu ne rozpovidala ničoho. (emphatic) I no-who not told no-what. 'I have not told anyone anything.'
- (17) Ja ničoho ne rozpovidala nikomu. (emphatic) I no-what not told no-who. 'I have not told anyone anything.'

Importantly, the NC reading of Ukrainian sentences is not affected by word order permutations. However, the examples in 15–17 differ from that in 14 in that they are

emphatic, since the object/objects following the main verb is/are emphasized in Ukrainian. Thus, if one was to render Ukrainian examples in 15–17 into English, they would have to emphasize respectively *nikomu ničoho* in 15, *ničoho* in 16 and *nikomu* in 17 with the help of intonation. Such emphatic constructions are mostly used in colloquial speech and are aimed at stressing the importance of the emphasized object.

3.1. Structure of Ukrainian NegP and its place in a sentence structure

I assume, following Brown (1999), that sentential negation requires a negative phrase (NegP) as an independent functional category. As it has been stated above in this paper, empirical evidence suggests that Ukrainian requires the head of NegP to be overt (the negative particle ne as a proclitic on the verb), as n-words cannot be licensed without it.

According to Brown (1999), it is the negative particle which is the scope-bearing item and which assigns the negative force to the sentences. Negation is expressed by an abstract interpretable feature in the sublabel of Neg^0 , which being overtly realized as *ne* constitutes the Negation Phrase, as shown in 18.

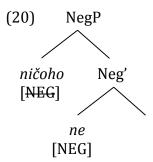
(18) Structure of NegP



(Brown 1999:26)

The Spec position will be created only when it is necessary to host some overtly raised element that contains a feature relevant for checking in its sublabel, such as the feature [NEG] of the *n*-words, as demonstrated in 20 for the Ukrainian example in 19.

(19) *Ja ničoho ne xoču.*I no-what not want. 'I don't want anything.'



Progovac (1994) observes that in Serbian/Croatian the negative particle *ne*, which expresses negation in a sentence, cliticizes to the left of the first finite verb form, whether it is an auxiliary or a main verb. This is demonstrated by the grammatical sentences in 21 and 22, in which the negative particle precedes, respectively, an auxiliary and a main verb, as well as by the ungrammatical examples in 23 and 24, in which *ne* cliticizes to the right of the finite verb form.

(21) *Milan neće pobeći.*Milan not-will run-away
'Milan will not run away.'

(Progovac 1994:34)

(22) Milan **ne** poznaje Mariju. Milan not knows Mary 'Milan does not know Mary.'

(Progovac 1994:35)

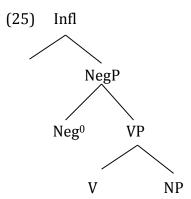
(23) *Milan će ne pobeći.

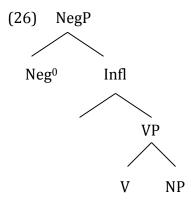
(Progovac 1994:34)

(24) *Milan poznaje **ne** Mariju.

(Progovac 1994:35)

Progovac (1994) concludes: the data in 21–24 suggest that, at least at S-Structure, negation in Serbian/Croatian is either in Infl or above Infl. In the former case, one could assume that it originates in a NegP below Infl (as shown, for example, in 25), and then moves with the verb to Infl. In the latter case, a NegP would be generated above Infl (as shown, for example, in 26).





The Serbian/Croatian data in 21–24 can be paralleled by Ukrainian examples in 27–30 below. This gives me the grounds to assume that syntactic structures including Ukrainian NegPs are the same as the ones shown to be adequate for Serbian/Croatian in 25 and 26.

- (27) Ivan ne bude bihty.

 Ivan not will run

 'Ivan will not run.'
- (28) *Ivan bude ne bihty
- (29) Ivan ne znaje Halju. Ivan not knows Halja 'Ivan does not know Halja.'
- (30) *Ivan znaje ne Halju.
- 3.2. Feature checking via Move/Move F in Ukrainian Object-Verb, Verb-Object and Object-Verb-Object NC configurations

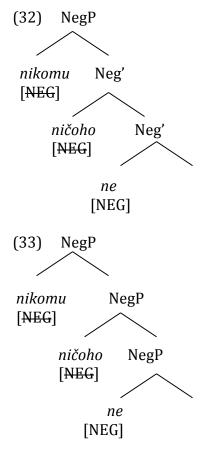
The [NEG] features in Ukrainian examples with multiple negative constituents can be checked in the following ways: (i) the [NEG] feature of the negative constituent raises to [SpecNegP] to check itself against the [NEG] feature of the Neg 0 and pied-pipes the negative constituent, so that it undergoes overt movement, (ii) the negative constituent with its [NEG] feature raises to adjoin to NegP, which results in a two-segment NegP being created, and (iii) the n-word remains in situ, so that only its uninterpretable [NEG] feature raises to adjoin to a head X^0 , and a new zero-level maximal projection is created. These alternatives are demonstrated in the following analysis of double-object constructions demonstrating different word order patterns in 31, 34, and 36 with their syntactic trees represented respectively in 32–33, 35, and 37.

(31) Ja nikomu ničoho ne rozpovidala.

I no-who no-what not told.

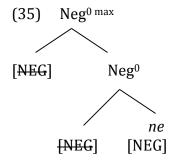
'I have not told anyone anything.'

In 32, the feature checking becomes possible due to creation of Spec positions that are occupied by the *n*-words *ničoho* and *nikomu* as they raise to create checking configurations with the negative head *ne*, which has the appropriate interpretable [NEG] feature. However, 33 demonstrates an alternative syntactic tree for 31, in which the feature checking is possible due to adjunction to NegP. In this case, the *n*-words *ničoho* and *nikomu* raise to adjoin to the maximal projections NegP, as a result of which two-segment NegP projections are created.



Now let us consider an example in 34, where the *n*-words remain *in situ*.

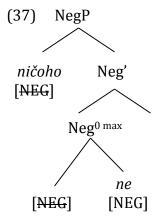
(34) Ja ne rozpovidala nikomu ničoho. (emphatic)
I not told no-who no-what.
'I have not told anyone anything.'



Here, the feature checking is possible due to adjunction of the [NEG] to the negative head (as demonstrated in 35). The feature [NEG] has been abstracted from its host negative constituent *ničoho*, as well as *nikomu*, and moved covertly for checking. This allows the postverbal *n*-words *ničoho* and *nikomu* to remain *in situ*.

The example in 36 with the corresponding syntactic tree in 37 presents the case in which the direct object moved, while the indirect object remained *in situ*. As seen from 37, the [NEG] feature of the *n*-word remaining *in situ* is checked by means of adjoining this feature to the Neg⁰, and the [NEG] feature of the overtly moved object is checked by means of raising the object to the Spec position of NegP. The feature checking mechanism would be the same for the Indirect Object – Verb – Direct Object configuration.

(36) *Ja ničoho ne rozpovidala nikomu.* (emphatic) I no-what not told no-who 'I have not told anyone anything.'



3.3. Feature checking via Agree in Ukrainian Object–Verb, Verb–Object and Object–Verb–Object NC configurations

The Ukrainian data analysed in 3.2 can be accounted for by a syntactic feature-checking operation, introduced by Chomsky (2000), which eliminates the 'feature-movement' part of Attract. This approach treats the relationship between the [NEG] feature of the negative particle ne and the n-word like an agreement relationship and checks these features under c-command:

(38) **Agree**

An interpretable feature F on a syntactic object Y is checked when Y is in a c-command relation with another syntactic object Z which bears a matching feature F.

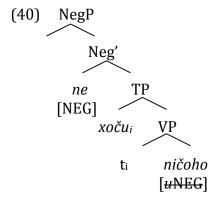
(Adger 2003:134)

Under this approach, locality and Last Resort conditions on feature movement are appropriately translated as requirements on the matching relation between a probe (a head with uninterpretable features) and a goal (an element with matching interpretable features). A given probe examines its c-command domain in search of a goal in order to have its uninterpretable features deleted for LF purposes and specified for morphological purposes. A goal is accessible to a given probe only if there is no intervening element with the relevant set of features, i.e. the relativised minimality holds.

To illustrate how this operation works, let us consider the Ukrainian example in 39 with its syntactic tree in 40, in which the object follows the verb.

(39) *Ja ne xoču ničoho.* (emphatic) I not want no-what.

'I do not want anything.'



Here, the n-word $ni\check{c}oho$ has an uninterpretable feature [uNEG], while the negative particle ne has an interpretable feature [NEG]. The n-word with its [uNEG] probes its c-command domain in search of a suitable goal and finds it in the Neg 0 (represented by the particle ne with its [NEG]). Importantly, it is local, i.e. there is no intervening element with a [NEG] feature. Upon matching through Agree, the [uNEG] feature of the n-word is checked and deleted.

Sentences like the one in 41, which presuppose multiple [NEG] feature checking, seem to pose a problem for the operation Agree. In this case, for example, the goal *ne* (represented as X in 42) is inaccessible to the probe *ničoho* (Z in 42) because of the intervening probe *nikomu* (Y in 42), which possesses the relevant uninterpretable feature [*u*NEG]. This configuration, violating relativized minimality, is schematically presented in 42. What is more, we can assume that once the probe enters into an Agree relation with the goal, the goal becomes inactive, and therefore unable to subsequently check features of another probe.

- (41) *Ja ne rozpovidala nikomu ničoho.* (emphatic) I not told no-who no-what. 'I have not told anyone anything.'
- (42) X ... Y ... Z [NEG] [*u*NEG] [*u*NEG]

However, [NEG] feature checking in 41 can be accounted for if we assume the theory of Multiple Agree proposed by Hiraiwa (2000) in 43. The cases discussed by Hiraiwa (2000) involve a single probe and multiple goals, however, Citko (2011) suggests and proves that the opposite is also possible: that Agree between two probes and one goal should also be allowed.

(43) Multiple Agree

Multiple Agree (multiple feature checking) with a single probe is a single simultaneous syntactic operation; Agree applies to all the matched goals at the same derivational point derivationally simultaneously.

(Hiraiwa 2000:69)

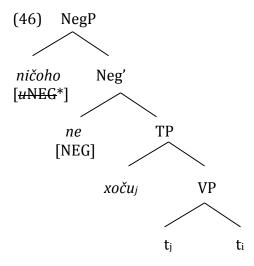
Likewise, according to Citko (2011), Multiple Agree with a single goal is a single simultaneous syntactic operation and Agree applies to all the matched probes at the same derivational point derivationally simultaneously. Thus in 41, the probes *nikomu* and *ničoho* agree with the goal *ne* simultaneously, in a single syntactic operation. Therefore, the goal is active and accessible to both probes.

Now let us consider examples in which overt movement of an *n*-word takes place. In this case, we need to take into account not only interpretability of features, but also their strength. The most obvious property of strength is that it triggers movement operations to take place. In the schematic derivations below, feature strength is represented as an asterisk after the uninterpretable feature:

(44) a.
$$X[uF^*]$$
 ... $Y[F] \rightarrow X[uF^*]$ $Y[F]_i$... t_i b. $X[F]$... $Y[uF^*] \rightarrow X[F]$ $Y[uF^*]_i$... t_i

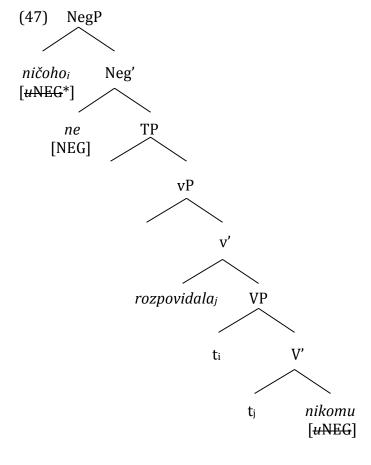
The Ukrainian example in 45 illustrates the scheme in 44b. Here, *ne* and *ničoho* are heads with matching features [NEG]. The operation Agree takes place between the [NEG] features, since the feature on *ničoho* is uninterpretable and needs to be checked. Moreover, [NEG] on *ničoho* is strong, which means that the checking has to take place locally, rather than at a distance. This triggers the operation Move, which then places *ne* and *ničoho* in a local relation, leaving behind the trace *ničoho*. As a result, the syntactic structure in 46 is derived.

(45) Ja ničoho ne xoču. I no-what not want. 'I don't want anything.'



On the other hand, in examples that do not involve overt movement of the n-word, like in 39 above, the [NEG] feature of the negative constituent is weak. As a result, operation Move does not take place in such instances. The meaning of the sentence in 39 differs from the one in 45 in that it is emphatic. Thus, I can conclude that the weak feature of the n-word in NC sentences in Ukrainian influences the reading of a sentence, making it emphatic.

Finally, I will analyse a double object NC construction in (47) below.



In 47, the direct object precedes the verb, while the indirect object follows it. Here, the n-word nikomu with its weak [uNEG], after probing its c-command domain in search of a suitable goal, finds the goal in the Neg $^{\circ}$, represented by the particle ne. Upon matching through Agree, the [uNEG] feature of the n-word is deleted. At the same time, in the same syntactic operation, the probe $ni\check{c}oho$, which has a strong [uNEG] feature, examines its c-command in search of a goal and finally moves to be checked locally against the matching [NEG] feature of ne. The [uNEG] of $ni\check{c}oho$ is deleted after checking.

To conclude this section, it should be mentioned that both Move/Move F and Agree operations discussed here account for the Ukrainian data. Moreover, they both are suitable for the economical mechanism of the Minimalist Program. However, in order to argue for Brown's analysis of Russian multiple negative constituents' interpretation, which is partly based on operations Move/Move F and on which I will focus in the following section, I will support the former account (the one relying on operations Move/Move F). Importantly, the analyses outlined above can be employed when analysing Russian data as well as Ukrainian, since I have not identified any structural differences in multiple negative constituent constructions between these two languages.

4. Interpretation of Multiple Negative Constituents in Ukrainian

As it has been mentioned above, multiple occurrences of negative constituents in a clause express a single negation in Ukrainian. There are two approaches to interpretation of multiple negative constituents in NC languages: one relying on the notion of Negative Absorption (discussed by Haegeman & Zanuttini (1991) and Haegeman (1995)) and another one – relying on the notions of feature deletion, copies and reconstruction (discussed by Heim (1988) and Brown (1999)). These approaches will be analysed below.

4.1. Negative Absorption Approach

According to Haegeman & Zanuttini (1991) and Haegeman (1995) in order to ensure that multiple instances of n-words in a single clause express only one instance of negation once they have risen to satisfy the Neg-Criterion², they must undergo the process known as 'negative absorption'. Giannakidou (2006) explains that negative absorption allows any number of n-words and the sentential negation (SN) to merge into one semantic negation, as shown in 48. Here, multiple negative quantifiers amalgamate into a single negative quantifier.

(48) Negative absorption rule:

 $[\forall x \neg] [\forall y \neg] [\forall z \neg] \rightarrow [\forall x, y, z] \neg$

(Giannakidou 2006:334)

This, according to Haegeman (1995) and Zanuttini (1991), accounts for why multiple instances of n-words in NC languages do not give rise to a reading of Double Negation (DN), where each negative constituent is interpreted as independently negative.

² Haegeman & Zanuttini (1991:244) define Neg-Criterion as a condition, according to which (a) each NegX⁰ must be in a Head-Spec relation with a negative operator; and (b) each negative operator must be in a Spec-Head relation with a NegX⁰.

However, in the literature, the notion of negative absorption has been deemed highly questionable. For example, Brown (1999), taking into account the postulation of negative absorption on par with wh-absorption, presumes that Hornstein's (1995) claim that wh-absorption is superfluous, and therefore incompatible with the Minimalist program, can be extended to negative absorption. One of the ways in which negative absorption is superfluous, according to Brown (1999), is that it must take place only after negative constituents have risen to [Spec, NegP] in order for the presence of multiple *n*words to be construed as a single instance of negation. However, the presence of [Spec. NegP] is not obligatory, according to the Minimalist program. Giannakidou (1998, 2006) and Acquaviva (1997) also dismiss negative absorption, but for another reason: they reject the assumption that NC and multiple wh-dependencies are instances of the same phenomenon, stating that in fact there are significant asymmetries between the two and, as a result, it is inappropriate to introduce the notion of negative absorption as a parallel to wh-absorption. Giannakidou (2006) adds that by invoking the special rule of negative absorption, whose role appears to be particular to NC, one only further establishes the anomalous character of NC, rather than accounting for it using a mechanism for which there is independent evidence in the grammar. Furthermore, according to Ladusaw (1992). the notion of absorption also causes problems for compositional semantics, which, however, is beyond the scope of this paper.

4.2. Minimalist Approach by Brown (1999)

Brown (1999) dispenses with the need for negative absorption by proposing a minimalist analysis that exploits the notion of indefinites as variables developed by Heim (1988) and the notion of feature deletion and traces as copies put forth by Chomsky (1995). In this section, I will support Brown's analysis with the help of Ukrainian data.

Following Heim (1988), Brown (1999) proposes that each n-word is semantically composed of a feature [NEG] taking scope over a non-specific indefinite whose semantic content is determined by the XP denotation of its wh-stem. For example, nixto 'none' is semantically equivalent to [NOT an x, x a person] (see 49 for more examples of semantic structure of Ukrainian n-words).

(49) Semantic structure of Ukrainian *n*-words

#	<i>N</i> -word	Semantic structure
1.	nixto	[NEG] [x a PERSON]
	no-who	
	'none'	
2.	niščo	[NEG] [x a THING]
	no-what	
	'nothing'	
3.	nide	[NEG] [x a PLACE]
	no-where	
	'nowhere'	
4.	nikoly	[NEG] [x a TIME]
	no-when	
	'never'	

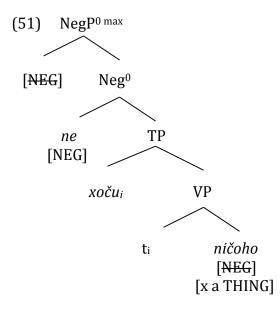
5.	nijak	[NEG] [x a WAY]
	no-how	
	'in no way'	

As discussed in section 3, Brown (1999) suggests that in the process of a derivation containing instances of multiple negation, either the entire negative constituent raises to check the [NEG] feature, or the abstract feature [NEG] covertly raises to adjoin to the head of NegP for checking. Once checked, the [NEG] feature is deleted. Brown (1999) proceeds with her analysis by stating that once the [NEG] feature of the n-word has been deleted, the still present [NEG] feature of Neg $^{\circ}$ is interpreted as negative closure of events, i.e. the sentential negation, and the n-words are interpreted as indefinites in the domain of existential closure, i.e. the VP.

I have schematically represented this procedure by providing the syntactic tree in 51 for the Ukrainian example in 50. Here, *ničoho* 'nothing' remains *in situ* at Spell-Out, and only its abstract feature [NEG] raises covertly to adjoin to Neg⁰ to be checked against its interpretable [NEG] feature. Once the uninterpretable [NEG] feature is checked, it is deleted (the [NEG] feature of the lower copy is also deleted, since it is not needed there for checking purposes). This leaves the *wh*-stem *in situ* representing the non-specific indefinite: [x a THING]. The negative closure of events in this sentence is induced by the still present [NEG] feature of Neg⁰. The syntactic structure in 51 can be represented by the logical formula paraphrased in 52.

(50) Ja ne xoču ničoho.

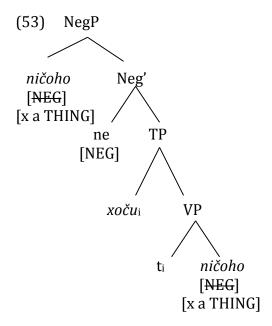
I not want no-what. 'I do not want anything.'



In example 51, there is no event of wanting, such that there is a thing x and I want x.

The Ukrainian example in 52, unlike one in 50, involves an overt movement of a negative constituent. As demonstrated in the syntactic tree in 53, the *n*-word *ničoho* raises to [Spec, NegP] and leaves behind a copy in its base-generated position.

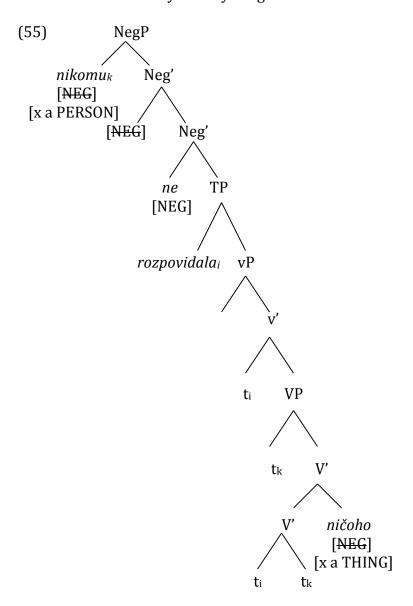
(52) *Ja ničoho ne xoču.*I no-what not want.
'I do not want anything.'



Both copies at some pre-deletion point in the derivation have the following semantic structure: [NEG] [x a THING]. The [NEG] feature of the lower copy deletes, since it is not required there for checking purposes. The higher [NEG] feature then checks itself against the interpretable [NEG] feature of the Neg $^{\circ}$ and is itself deleted. The lower copy, as an indefinite, represents a variable bound by existential closure (here, [x a THING]). Brown (1999) notes that it can also be viewed as a type of post-Spell-Out reconstruction. The n-word raises to have its uninterpretable [NEG] feature checked in a Spec-head relation with the [NEG] feature of the Neg $^{\circ}$, but the remaining indefinite is a variable that needs to be bound. Therefore, the moved constituent is forced by LF interpretability to reconstruct to its base-generated position inside the VP and receive the proper existential interpretation.

In a similar way, multiple *n*-words can raise overtly or remain *in situ*. In any case, their [NEG] features are checked and deleted, and their copies *in situ* are interpreted as indefinites in the domain of existential closure. Let us consider the double-object construction in 54, in which the objects are represented by *n*-words. As shown in 55, in this case the direct object *ničoho* remains *in situ*, only its [NEG] feature raising to be checked, while the indirect object *nikomu* raises overtly to [Spec, NegP]. Once the uninterpretable feature [NEG] of the *n*-word *ničoho* has been checked, it is deleted, leaving the *wh*-stem *in situ* representing the non-specific indefinite: [x a THING]. At the same time, after the uninterpretable [NEG] feature of the raised *nikomu* is checked, it deletes, and its lower copy, whose [NEG] feature had also been deleted, represents a variable bound by existential closure: [x a PERSON]. The negative closure of events in this sentence is induced by the still present [NEG] feature of Neg⁰.

(54) *Ja nikomu ne rozpovidala ničoho.* (emphatic) I no-who NEG told no-what. 'I have not told anyone anything.'



By making use of feature deletion and traces as copies, one dispenses with the need for negative absorption. The feature [NEG] of an *n*-word is deleted for independent reasons, leaving no superfluous [NEG] features, while reconstruction back to its VP internal position allows the lower copy to be interpreted as an existential. The string of existential quantifiers in instances of multiple negative constituents with the overt negative head *ne* receives the reading of a single negation in NC languages. One particular advantage of this approach introduced by Brown (1999) is that it accounts for the data, unifying the intuitions of negative absorption with the economical mechanism for feature deletion in the Minimalist program.

5. Conclusion

In this paper, I contributed some insights into the current discussion on negation by analysing Ukrainian data that exhibits the Negative Concord (the phenomenon of multiple negative constituents expressing only one instance of negation). I believe that my findings and conclusions can provide valuable evidence in support of some of the previous analyses and counter-evidence against the others.

Firstly, after the discussion on the nature of Ukrainian *n*-words and approaches regarding their status, I concluded that they are Negative Quantifiers rather than Negative Polarity Items, i.e. that *n*-words in Ukrainian are inherently negative, interpreted universally, having independent negative force and capable of expressing negation without an overt trigger. However, it should be acknowledged that negative constituents may be ambiguous between negative and non-negative meanings and they often exhibit the behaviour of both NPIs and NQs.

Secondly, I discussed the derivation of Negative Concord sentences in Ukrainian from the perspective of two alternative approaches to feature checking (the operation Agree and the operation Move/Move F). Attention has been paid both to sentences in which features of the *n*-words underwent movement, and those in which the negative constituents themselves underwent overt movement, as well as to both single- and double-object constructions. In the course of the analysis, I discovered that both approaches can adequately account for the considered Ukrainian data and fit into the economical mechanism of the Minimalist Program.

Thirdly, I analysed two approaches to interpretation of multiple negative constituents in NC languages: one relies on the notion of Negative Absorption, while another one relies on the notions of indefinites as variables, feature deletion, copies and reconstruction. In the course of this discussion I used Ukrainian data to argue for the latter approach, i.e. the analysis of NC interpretation provided by Brown (1999). I concluded that the approach which I supported is more capable of satisfying the requirements of the Minimalist Program, as it accounts for all the data without using any superfluous stipulations of the alternative approach.

Finally, by comparing the interpretation of sentences with multiple negations in Ukrainian to those in other languages, I discovered that in the context of Negative Concord reading Ukrainian shares many properties with other Slavic languages, namely Russian and Serbian/Croatian. On the other hand, it differs in many respects from other NC languages, like Italian and West Flemish.

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