

## A Review of *Syntax of Negation*, L. Haegeman (1995)

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### 1 The Main Proposal

The central proposal argued for by the author in “The Syntax of Negation” is the *NEG-criterion*.

- (1) NEG-criterion
  - a. A NEG-operator must be in a Spec-head configuration with an  $X^0$  [NEG];
  - b. An  $X^0$  [NEG] must be in a Spec-head configuration with a NEG-operator.

Haegeman assumes, initially, the functional definition of operator given in (2).

- (2)
  - a. NEG-operator: a negative phrase in a scope position;
  - b. Scope position: left-peripheral  $A'$ -position [Spec,XP] or [YP,XP].

Later, she discards the functional definition of operators given in (2) in favor of an intrinsic definition combined with Brody’s (1993) expletive-operator representational chains, which will be discussed in more detail in §3. Adopting Brody’s (1993) expletive-operator representational chains and his enriched S-structure enables Haegeman to state that the NEG-criterion applies at S-structure universally.

The NEG-criterion can be seen as an instance of the more general AFFECT-criterion (Haegeman 1992) which states that affective operators have to be in a Spec-head relationship with an affective  $X^0$  and vice-versa. Other instances of the AFFECT-criterion include the WH-criterion (May 1985; Rizzi 1990b), the Focus-criterion (Brody 1990; Aboh 1993), and the Clitic-criterion (Sportiche 1992).

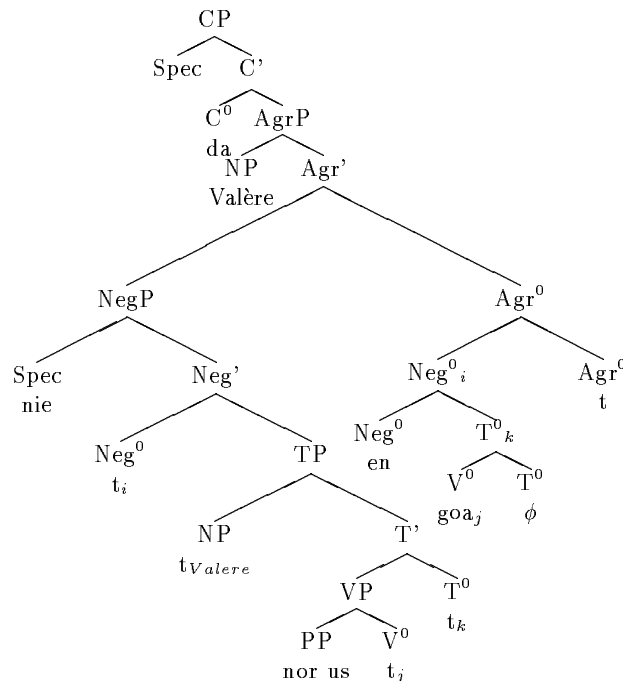
In §2 and §4, we present Haegeman’s discussion of a language with obligatory NEG-movement: West Flemish. In §3, we present the discussion of languages without obligatory NEG-movement: English and Italian. In §5 and §6, we raise and discuss some questions and problems.

## 2 West Flemish

The first case which the author considers is that of West Flemish (WF). WF is a Germanic language whose basic structure is similar to that of Dutch and German. However, unlike either Dutch or German, WF has bipartite negation like French. The first component of clausal negation is the adverb *nie* which is the counterpart of Dutch *niet* and German *nicht*. It has a fixed position in the middle field and unlike other negative adverbs, it cannot occupy the sentence-initial position. The second component of clausal negation is marked by the negative clitic *en* which can appear on the verbal complex in finite clauses. This clitic is rather archaic and its presence is neither necessary nor, in isolation, sufficient to make a sentence negative. Haegeman argues convincingly that *en* and not *nie* should be treated as the realization of the  $Neg^0$  in WF. She proposes that *nie* occupies the specifier of  $NegP$  and that  $NegP$  dominates  $TP$  in WF. Thus the structure in (4) is assigned to (3).

- (3) da Valère woarschijnlijk nie nor us en-goat  
 that Valère probably not to home en-goes  
 ‘that Valère probably does not go home.’

(4)



Haegeman assumes that  $V^0$  moves to  $T^0$ , to pick up the tense inflection, to  $Neg^0$  to pick up the negative clitic *en* and finally to  $Agr^0$  to pick up the agreement features. Haegeman makes  $NegP$  head-initial to account for *en* being a prefix on the verb. However, it is unclear if this works. Even if adjunction is not uniformly

to the left, adjunction to the head of a head-initial XP is usually taken to be left-adjunction. Then the expected ordering is verb-neg, and not the attested neg-verb. This neg-verb ordering also appears in French and Italian. Moreover, if *en* is a clitic, as Haegeman herself assumes, it is mysterious why it is structurally between Agr<sup>0</sup> and T<sup>0</sup>, considering the fact that clitics usually do not intervene between inflectional materials structurally or otherwise.

Haegeman shows that negative constituents in WF, such as *niemand* ‘no one’, *niets* ‘nothing’, or *nooit* ‘never’ are negative quantifiers and not Negative Polarity Items. In West Flemish, if more than one negative constituent occurs in a clause, or if a negative constituent occurs with the negative adverb *nie*, their negative forces do not cancel out each other but instead combine to give one negative reading. This phenomena is known as Negative Concord (NC). However, the NC reading is not available in all configurations. In certain configurations, the negative NPs cancel out each other giving a double negation (DN) reading as in the sentence *Nobody saw nothing*. Haegeman connects the structural constraints on the availability of NC interpretation to the satisfaction of the NEG-criterion.

The data from WF provides strong evidence for the NEG-Criterion and Haegeman uses it to motivate, on a parallel with *Wh*-movement, NEG-movement. The overtness of NEG-movement in WF shows that in WF, the NEG-criterion applies at S-Structure.

- (5) a. da ze nie [<sub>AP</sub> ketent [<sub>PP</sub> me euren kado]] (en)-was  
 that she not contented with her present en-was  
 ‘that she was not contented with her present.’
- b. da ze [<sub>PP</sub> me niets]<sub>i</sub> [<sub>AP</sub> ketent t<sub>i</sub>] (en)-was  
 that she with nothing contented en-was  
 ‘that she was not pleased with anything.’
- c. \*da ze [<sub>AP</sub> ketent [<sub>PP</sub> me niets]] en-was  
 that she contented with nothing en-was
- d. \*da ze [<sub>AP</sub> ketent t<sub>i</sub>] en-was [<sub>PP</sub> me niets]<sub>i</sub>  
 that she contented en-was with nothing

In (5a), the negative operator *nie* is in a Spec-head configuration with the trace of the Neg head *en* and both clauses of the NEG-criterion are satisfied. In (5b), the negative operator [<sub>PP</sub> *me niets*]<sub>i</sub> is in a Spec-head configuration with the trace of the Neg<sup>0</sup> *en* and vice-versa satisfying the NEG-criterion. The constructions in (5c, d) are ungrammatical because the second clause of the NEG-criterion is violated, which says that Neg<sup>0</sup> must be in a Spec-head configuration with a negative operator. In (5c, d), the Neg head *en* does not have a negative operator in its specifier.

Note that *en* is not necessary. In the cases without *en*, it is assumed that there is a covert Neg head, which, like *en*, has to be licensed by a negative constituent in its specifier.

Haegeman gives further evidence for the overtness of NEG-movement in WF. Cf. (6). In addition to demonstrating that NEG-movement in WF is overt, (6) shows that the NEG-criterion cannot be satisfied by traces of neg operators in WF.

- (6) a. Niets<sub>i</sub> en-peinzen-k da Valère t<sub>i</sub> keut  
 nothing en-think-I that Valère know  
 ‘I think that Valère knows nothing.’
- b. \*K’en-peinzen-k da Valère niets keut  
 I-en-think-I that Valère nothing knows
- c. \*Niets<sub>i</sub> peinzen-k [<sub>CP</sub> da Valère [<sub>NegP</sub> t<sub>i</sub> en-keut]]  
 Nothing think-I that Valère en-knows

In (6a), *niets*, which is an argument of the embedded clause moves to the initial position where it satisfies both clauses of the NEG-criterion. In (6b), *en* violates the second clause of the NEG-criterion resulting in ungrammaticality. The ungrammaticality of (6c) is more interesting. On its way to the matrix clause, *niets* passes through the [Spec, NegP], at which point both clauses of the NEG-criterion are satisfied. Further movement, as in (6c) results in ungrammaticality. Haegeman takes this to show that the chain of the moved operator *niets* cannot satisfy the NEG-criterion and that an approach in terms of feature checking cannot replace a criteria-based approach (the issue pertaining to criteria vs. feature checking approach will be discussed in more detail in §5.3).

Here, we note the asymmetry of the role the trace of the Neg head *en* plays and the trace of the neg operator plays in application of NEG-criterion. As attested by (5), the trace of the Neg head can satisfy the NEG-criterion. However, Haegeman claims that the trace of the neg operator cannot satisfy the NEG-criterion based on the examples in (6). Why there should be this asymmetry remains unexplained.

Next, Haegeman discusses the phenomenon of NC in WF. She argues that NC is a by-product of the NEG-criterion. In WF, when more than one negative phrase/adverb is in a Spec-head configuration with Neg<sup>0</sup>, their negative forces do not cancel out each other, but combine to give a single negative force. This process is similar to the process of *Wh*-absorption in which multiple *wh*-words combine to give a single question interpretation. The examples in (7) show that the NC interpretation is only available if the negative constituents are all in a Spec-head configuration with Neg<sup>0</sup>. Haegeman, originally, proposes that all the negative constituents adjoin to each other. However, later she revises this proposal to the effect that it is sufficient for a negative constituent to be in a specifier of an ‘extended projection’ of Neg<sup>0</sup> in order to satisfy the NEG-criterion, and enter into NC with other negative constituents (see §4 for discussion on ‘extended projections’).

- (7) a. da Valère [<sub>PP</sub> van niemand]<sub>i</sub> nie [<sub>AP</sub> ketent t<sub>i</sub>] (en)-was  
 that Valère of no-one not pleased *en*-was  
 ‘that Valère was not pleased with anyone.’ (NC)
- b. da Valère nie [<sub>AP</sub> ketent [<sub>PP</sub> van niemand]] (en)-was  
 that Valère not pleased of no-one *en*-was  
 ‘that Valère was not pleased with no one.’ (DN,\*NC)
- c. da Valère an niemand niets gezeid (en)-oat  
 that Valère to nobody nothing said *en*-had  
 ‘that Valère had not said anything to anyone’ (NC)

- d. \*da Valère nooit [<sub>AP</sub> ketent [<sub>PP</sub> van niemand]] (en)-was  
 that Valère never pleased of no-one en-was  
 ‘that Valère was never pleased with no one.’

In (7a), *van niemand* has scrambled out of its base position as the complement of *ketent* and moved into a position to the right of *nie* where it satisfies the NEG-criterion and both *nie* and *van niemand* are in a Spec-head configuration with Neg<sup>0</sup>. Consequently a NC reading is available. *Van niemand* does not scramble in (7b) to an extended specifier position of Neg<sup>0</sup>. The NC reading is therefore not available. Both negative expressions contribute their own negation to the sentence which results in a DN reading. NC can also take place between two negative constituents in the absence of *nie*, as (7c) shows. When an appropriate Spec-head configuration does not obtain, the NC reading is no longer available, as in (7d). The contrast between (7b), which lacks an NC reading but still has a DN reading, and (7d), which is ungrammatical, is, however, not explained by Haegeman nor does it follow from the NEG-criterion.

Haegeman goes on to discuss negation in infinitival clauses in WF. The Neg head *en* can never surface overtly in infinitival clauses in WF. Despite this, Haegeman convincingly argues that the evidence from NEG-movement and NC shows that a NegP has to be postulated for infinitivals also. The behavior of negation in VP topicalization, Verb Projection Raising, and participial constructions is also discussed. Questions relating to the overt realization of *en* are also raised.

In the fourth chapter, Haegeman discusses negation in West Germanic and Romance languages. Of the languages that she discusses, German, Dutch, and Afrikaans behave like WF in that they have overt NEG-movement. Unlike WF, German and Dutch lack an overt Neg head and do not have NC. Haegeman’s analysis for WF accounts for the negation facts in these languages. In §3, we present the discussion on English and Romance languages.

### 3 Languages without Obligatory NEG-movement

Haegeman, subsequently, discusses languages without obligatory NEG-movement such as English, Italian, French, Spanish, and Portuguese. Positing that the NEG-criterion applies at different levels in a language and that the NEG-criterion applies at different levels across languages is unattractive. Haegeman proposes that the NEG-criterion applies universally at S-structure. However, negative sentences without overt NEG-movement, such as *I have nothing*, seem like immediate and obvious counterexamples. To avoid such a problem, Haegeman needs a system that can capture the relationship that would exist at LF, given LF-movement, at S-structure. Therefore, she adopts Brody (1993)’s enriched S-structure and expletive operator chains.

#### 3.1 Brody’s (1993) Expletive Operator Chain

Haegeman extends to negation Brody’s (1993) account of *Wh*-movement in terms of operator chains. All *wh*-elements are involved in a chain formation at S-structure.

In cases where the *wh*-phrase has moved to [Spec, CP], the head of the chain is a contentive element, which is a contentive operator, and in cases of *wh*-phrase in situ, the head of the chain is an expletive element, which is an expletive operator. For instance, the multiple question in (8a) can be represented as in (8b).

- (8) a. When did you buy what?  
 b.  $OP_j$  when<sub>*i*</sub> did you buy what<sub>*j*</sub> t<sub>*i*</sub>

*When<sub>*i*</sub>* and t<sub>*i*</sub> form a chain in which the head of the chain is a contentive element, and *OP<sub>*j*</sub>* and *what<sub>*j*</sub>* form an expletive chain in which the head of the chain is an expletive element.

### 3.2 English

Under Haegeman's (1995) system, negative sentences formed with *not* and those formed with overt NEG-movement instantiate the satisfaction of the NEG-criterion at S-structure.

- (9) a. John does not eat chocolate.  
 b. On no account will I go there.  
 c. \*On no account, I will go there.

In (9a), *not* is in [Spec, NegP], and the NEG-criterion is satisfied at the NegP level. In (9b), the sub-aux inversion is triggered by the NEG-criterion. (9b) has a NegP with non-overt Neg<sup>0</sup>. The auxiliary verb picks up the [NEG] feature in Neg<sup>0</sup> on its way up to C<sup>0</sup>. As a result, the negative operator *on no account* is in a [Spec, CP] and a head carrying the feature [NEG] is in C<sup>0</sup>, and the NEG-criterion is satisfied. (9c) is ungrammatical because the negative operator *on no account* is not in a Spec-head relation with a head carrying the feature [NEG].

To account for negative sentences that have a post verbal negative constituent, as in (10), Haegeman (1995) adopts the notion of expletive operator chains proposed by Brody (1993).

- (10) a. John said nothing.  
 b. He could find peace nowhere.

Haegeman proposes that there is a non-overt expletive operator in [Spec, NegP]. This operator has to be identified by association with overt material. The non-overt operator is identified by forming a representational chain with the overt negative constituent in the base position. The NEG-criterion is satisfied by virtue of a Spec-head relation between the negative head and the negative operator chain. For instance, (10a) has a functional category NegP which encodes sentential negation, and a covert expletive operator in [Spec, NegP], as schematized in (11).

- (11) John [<sub>NegP</sub> OP<sub>*i*</sub> [<sub>Neg</sub> 0] said nothing<sub>*i*</sub>]

The expletive operator is identified by forming a representational chain with the negative constituent *nothing*. The NEG-criterion is satisfied at S-structure by virtue of the Spec-head relation between the negative head and the expletive operator chain.

The presence of a contentive Neg head leads us to expect *do*-support, on analogy with sentences which have an overt Neg head, such as *John didn't go to Paris*. This absence of *do*-support is not discussed making the assumption that there is a covert contentive head in sentences like (11) less than convincing.

By appealing to the notion of expletive operator chain, Haegeman is able to argue that NEG-criterion must uniformly apply at S-structure. However, the question of the optionality of NEG-movement remains to be addressed. That is, in some cases, NEG-criterion is satisfied by virtue of an overt movement of a negative constituent and in other cases, NEG-criterion is satisfied without the overt movement of a negative constituent. Why there should be this optionality is mysterious to us.

### 3.3 Italian

Haegeman provides a detailed analysis of the syntax of negation in Italian. The analysis of negation proposed for Italian carries over to Spanish and Portuguese and with a little modification, to French.

In Italian, pure sentential negation is expressed by the negative marker *non*, which Haegeman assumes to be a head, following Acquaviva (1993), Belletti (1990, 1992) and Zanuttini (1989, 1991).

- (12) Gianni non telefona a sua madre.  
 Gianni non telephones to his mother  
 'Gianni does not call his mother.'

Haegeman assumes that there is a non-overt negative operator in [Spec, NegP] in sentences with bare negation, such as (12). This operator is a contentive operator which is identified and licensed by the overt realization of the negative head *non* in Neg<sup>0</sup>. The NEG-criterion is satisfied by virtue of the Spec-head relation between the covert negative operator and the negative head *non*. As evidence for postulating a negative operator in sentences with a bare negative head, Haegeman provides sentences that exhibit inner island effects.

- (13) Perché<sub>i</sub> non hai detto [che Gianni è partito t<sub>i</sub>]?  
 why non have you said that Gianni is left  
 'Why did you not say that Gianni has left?'

Note that the long construal of *perché* is not available in (13). Under Rizzi's (1990a) Relativized Minimality account, the antecedent-government relation between *perché* and its trace in the lower clause is blocked by the intervening null operator in [Spec, NegP].

Sentential negation can also be expressed by one or more negative constituents. When there is a post-verbal negative constituent and no pre-verbal one, *non* must be present.

- (14) Gianni \*(non) telefona a nessuno.  
 Gianni non telephones to nobody  
 ‘Gianni does not call anyone.’

The NEG-criterion is satisfied by a non-overt negative operator in [Spec, NegP]. Haegeman assumes that the non-overt operator is an expletive operator which forms a representational chain with the post-verbal negative constituent.

Italian exhibits NC. For sentences with two post-verbal negative constituents, Haegeman suggests that each negative constituent forms a representational chain with its own expletive operator. The expletive operators may be adjoined to [Spec, NegP]. Haegeman provides the representation in (15b) for the sentence in (15a).

- (15) a. Gianni non dice niente a nessuno.  
 Gianni non says nothing to nobody  
 ‘Gianni does not tell anyone anything.’  
 b. Gianni non<sub>k</sub> dice [<sub>NegP</sub> OP<sub>i</sub> OP<sub>j</sub> [<sub>Neg</sub> t<sub>k</sub>] niente<sub>i</sub> a nessuno<sub>j</sub>]

Haegeman claims that the absorption of negative operators takes place, and the whole sentence ends up with one negation.

When a sentence has a pre-verbal subject negative constituent, *non* must be excluded, as in (16a). *Non* is marginally allowed when the pre-verbal negative constituent is not a subject, as in (16b).

- (16) a. Nessuno (\*non) telefona a Gianni.  
 nobody non telephones to Gianni  
 ‘No one calls Gianni.’  
 b. A nessuno Gianni (\*??non) telefona.  
 To nobody Gianni non telephones  
 ‘Gianni does not call anyone.’

As for the sentences with a pre-verbal negative subject, Haegeman argues that the negative subject in [Spec, AgrSP] is the negative operator. She assumes that NegP is projected and that the Neg<sup>0</sup> has a non-overt negative head. The non-overt negative head moves to AgrS. The NEG-criterion is satisfied by virtue of a Spec-head relation between the negative subject in [Spec, AgrSP], and the negative head which has incorporated to AgrS<sup>0</sup>, which therefore has both *A* and *A'* properties (we discuss the properties of mixed positions in §4).

When non-subject negative constituents are preposed, the negative head *non* can be overt, as shown in (16b). But it is always the case that *non* is incompatible with a pre-verbal negative subject, as shown in (16a). Haegeman argues that the asymmetry in the overt realization of the negative head *non* can be explained if the sentences with non-subject negative constituents have a covert negative operator in [Spec, NegP], whereas the sentences with pre-verbal negative subject doesn't. In the former case, the head *non* is required to identify the covert negative operator in [Spec, NegP]. But in the latter case, there is no identification requirement for the negative subject. Since Neg<sup>0</sup> is not required to license a non-overt operator, it must,



by an economy argument, remain non-overt. However, this analysis still doesn't explain the fact that the negative head is optional in sentences with a preposed non-subject negative constituent. Moreover, this analysis does not carry over elegantly to English, predicting that *John saw nothing* should be ungrammatical for the same reason that the corresponding Italian sentence is ungrammatical.

## 4 Extended Projections

Returning to the discussion of the syntax of negation in WF, Haegeman assumes that a ditransitive sentence includes the following structure.

$$(17) \quad [AgrSP \dots [AgrIOP \dots [AgrDOP \dots [NegP \dots ]]]]$$

Recall that WF is an NC language. It is assumed that multiple negative constituents which have moved out of the VP undergo absorption. Syntactically, multiple NEG-movement is achieved either via a multiple adjunction to NegP, or by a multiple adjunction to [Spec, NegP]. This predicts that multiple negative constituents should not be separated by a non-negative constituent. But closer examination of WF data reveals that this is not the case. That is, the negative constituents which satisfy the NEG-criterion and undergo the absorption leading to NC are not necessarily adjacent. Two negative constituents may be separated by non-negative constituents, as in (18).

- (18) a. da Valere nooit Marie dienen boek nie getoogd en eet  
           that Valere never Marie that book not shown en has  
           ‘that Valere never showed Marie that book’
- b. da Valere niemand da geld nie gegeven en eet  
           that Valere nobody that money not given ne has  
           ‘that Valere did not give anyone the money’

In order to account for such data, Haegeman proposes that NEG-criterion is satisfied in the extended projections of NegP. That is, the domain of Neg<sup>0</sup> is upwardly extended to the level of the clause. So, the Spec-head relation can be attained between a head and its local specifier and also between a head and the specifier of a dominating projection. This means that AgrIOP and AgrDOP are extended projections of Neg<sup>0</sup> in (17). For instance, in (18a), *nooit* is adjoined to [Spec, AgrIOP] and it has an extended Spec-head relation with the negative head. In (18b), *niemand* is in [Spec, AgrIOP] and it has an extended Spec-head relation with the negative head.

The next question has to do with examples like (18b). In (18b), the negative constituent *niemand* is in [Spec, AgrIOP], which is known to be an *A*-position. But the negative constituent is an operator, so it should have an *A'* status. Then what is the status of [Spec, AgrIOP] in (18b)? Haegeman proposes that a position can have a mixed status by virtue of the intrinsic features of the content of the position and the related head. Hence, *niemand* in (18b) has an *A*-status because it is in a

Spec-head relation with a head that has Agr features. It also has  $A'$ -status because it is in an extended Spec-head relation with a head that has [+NEG] feature.

This chapter also includes a general discussion on the contrast between A-positions and  $A'$ -positions and the notion of a mixed position. This idea was originally proposed by Webelhuth in his 1990 dissertation, something that is not noted anywhere in this book.

The final chapter of the book has a discussion on the contrast between sentential negation and local negation. Haegeman tentatively proposes that the NEG-criterion can be satisfied not only at the clausal level but also constituent internally.

## 5 General Review

We think that this book covers a lot of ground and makes a contribution to the field's understanding of negation. It is an ambitious work that seeks to unify the various systems of negation seen in the world's languages, such as bipartite negation, adverbial negation, and negation as a head to a single system involving a local relationship between the Specifier and the head of the NegP. The constraints on Negative Concord are captured elegantly within this system. In what follows, we discuss some questions that arose in our minds after reading this book.

### 5.1 Empirical coverage

The evidence for the NEG-criterion that we found most convincing came from languages with overt NEG-movement such as WF, German, Dutch, and Afrikaans. By proposing LF movement or by using a system such as Brody's operator chains, it was possible to make the other languages discussed, such as Italian, French, Spanish etc. satisfy the NEG-criterion but the independent evidence was not conclusive. We tried to imagine what a counterexample to the NEG-criterion would look like in a language that lacked overt NEG-movement of the WF kind but could not come up with any. This is, however, not fatal – if there is enough evidence on universalist grounds for a particular phenomena, lack of overt evidence for it in a language family does not lead us to conclude its absence from the language family, *wh*-movement being a case in point. Also, note that while the cross-linguistic evidence for the NEG-criterion seems to be weak, the evidence for NEG-movement seems to be quite strong, e.g. with respect to inner island effects, parasitic negation in Italian, etc. The discussion on parasitic negation in Italian is presented in §5.2.

### 5.2 Expletive-Operator Chains vs. LF

Haegeman uses Brody's operator chains extensively. The usage of these allows her to show that the NEG-criterion applies uniformly (in a language) and universally at S-structure. The theory-internal motivation for the proposal that NEG-criterion applies at S-structure is that WH-criterion applies at S-structure in the languages that are discussed. Both the WH-criterion and the NEG-criterion are instantiations of AFFECT-criterion. If the NEG-criterion applied at LF, then this would mean

that the level of application of the various instantiations of the AFFECT-criterion would be arbitrarily diversified.

However, at first glance, Brody's S-structure (which Haegeman uses) seems to be, basically, an enriched S-structure, which is barely different from LF as we know it. It is not clear what the empirical differences are between such a theory and a theory which makes use of LF. Also saying that the NEG-criterion applies at S-structure, when in fact the S-structure being talked about is Brody's enriched S-structure, is not substantially different from NEG-criterion applying at LF. The one case that Haegeman offers as empirical evidence for Brody's operator chains and the NEG-criterion applying at S-structure is from parasitic negation in Italian.

- (19) a. \*Non faccio questo [per aiutare nessuno].  
           non I-do this to help nobody
- b. Non faccio niente [per aiutare nessuno].  
           non I-do nothing to help nobody
- c. \*Nessuno fa questo [per aiutare nessuno].  
           nobody does this to help nobody
- d. \*A nessuno ho parlato [per aiutare nessuno].  
           to nobody I have talked to help nobody

Haegeman refers to a negative constituent which is licensed by another post-verbal negative constituent as a 'parasitic negative constituent.' This is illustrated in (19b). The negative head *non*, a pre-verbal negative subject nor a preposed negative constituent is inadequate. The phenomena that the negative constituent in the adjunct is dependent on the post-verbal negative element in the matrix clause is similar to how parasitic gaps are dependent on real gaps.

Haegeman assumes that the parasitic negative constituent is a negative operator at S-structure and has to enter into a chain with an expletive negative operator and that this chain is licensed if there is a parallel chain of the same type at S-structure. For instance, in (19b), *nessuno* forms a chain with an expletive operator in [Spec, NegP]. This chain is licensed by the parallel chain formed by *niente* and another expletive operator in [Spec, NegP]. In (19d), the parasitic negative constituent *nessuno* in the adjunct clause is not licensed because the chain formed with this negative constituent does not have a parallel chain of the same type at S-structure. According to Haegeman, if the NEG-criterion applied at LF, all the negative operators will be subject to the NEG-criterion in a uniform way. That is, they would either move to [Spec, NegP] from the base-generated position or reconstruct to [Spec, NegP] from a preposed position. Then, there would be no way to account for parasitic negation effects unless derivational history of the negative operators is taken into account.

However, even this case (Cf. (19b)), seems to be more of an example of an S-structure condition, (such as the overt c-command condition on NPI-licensing in English) than clinching evidence for operator chains.

### 5.3 Criteria vs. Feature-checking

Another theoretical issue raised by Haegeman is whether an approach in terms of feature-checking, as in Minimalism, can replace an approach in terms of criteria. Haegeman argues that criteria cannot be equated with checking formalism and gives (6) from WF as evidence. She claims that under the checking approach we would expect (6c) to be grammatical because we would expect the negative constituent to check off the [NEG] feature on  $\text{Neg}^0$  and then move on to the higher clause. She takes the ungrammaticality to show that the trace of a negative constituent in WF cannot satisfy the NEG-criterion. However, there may be alternative explanations for this ungrammaticality. It has been noted that overtly  $A'$ -moved constituents get ‘frozen in place’ for further  $A'$ -movement once the  $A'$  feature which originally caused them to move have been checked. For example, \* *What John wonders Bill ate* is presumably bad for the same reason. Something of this sort may be at work here. More generally, feature checking is a powerful and fairly general mechanism which seems to be able to do what the various criteria are supposed to do without any further stipulation. Therefore, any departures from it should be supported by robust empirical evidence.

### 5.4 The definition of Operator

The definition of operator that Haegeman uses is unsatisfactory to us. According to Haegeman, a constituent has intrinsic features that makes it an operator. Operators have to obey the NEG-criterion. On the other hand, when a negative constituent does not obey the NEG-criterion, Haegeman claims that it is not an operator because it does not have intrinsic features. The question is what are the intrinsic features and how to independently tell whether they are present. Since this question is never quite answered, the definition of operator remains circular. It should be noted, however, that Haegeman is not alone in being unable to define operatorhood. It is an interesting question that still awaits a solution.

### 5.5 Double Negation Readings

When a sentence has a DN reading, it could presumably have more than one reading, depending on the scope of the negative constituents with respect to each other. However, it is not the case that all possible readings are available. For instance,

- (20) Nobody saw nothing.
- a.  $\forall x \exists y [x \text{ saw } y]$
  - b. \* $\forall y \exists x [x \text{ saw } y]$

Haegeman does not discuss the unavailability of (20b). This fact does not follow from the NEG-criterion and presumably, a superiority based account is needed.

## 5.6 The availability of Negative Concord

The conditions on the availability of Negative Concord in a language are not discussed. German and Dutch seem to offer conditions similar to those found in WF, i.e. they both have NEG-movement yet they lack NC. It is puzzling why Haegeman does not explore the possible connection between the ‘structural height’ of negation and the availability of NC. Evidence for the ordering between NegP and TP is offered only for WF and Italian. In these languages, NegP dominates TP. These languages have NC. Examining languages with no NC, like Standard German and languages with NC, like Bavarian German, for the relative height of NegP with respect to TP would have been interesting. An apparent exception like English, where NegP can be argued to be above TP, but which still lacks NC could become more understandable by noting that many non-standard dialects of English have NC. The absence of NC in Standard English could be connected to the strong stigmatization of NC.

## 6 Questions raised

Finally, we will very briefly discuss some interesting problems that Haegeman brings up, but doesn’t quite solve. These questions pertain to the positioning and overt realization of Neg heads. Languages vary in whether the Neg head has to be always overt, optionally overt, or obligatorily covert. For example, Neg<sup>0</sup>, realized by *en* in WF, is obligatorily covert in infinitivals and optionally overt in finite clauses. Similarly, the Neg head in Italian, *non*, has to be covert when the subject is a pre-verbal negative constituent, has to be overt when a sentence has a post-verbal negative constituent and no pre-verbal one, but is optional otherwise. Haegeman discusses individual solutions for these cases but these solutions are, as she herself notes, not very satisfying and the problem awaits further research.

The second problem has to do with placement of the Neg<sup>0</sup> with respect to the verbal stem and inflectional material. Assuming, as Haegeman does, universal ordering of functional projections, namely AgrSP > NegP > TP > AgrOP > VP, we would expect the ordering V-AgrO-T-Neg-AgrS. Instead the ordering, at least in French, WF, and Italian seems to be Neg V-... Assuming that the Mirror Principle applies and that adjunction is always left-adjunction, this is mysterious.

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