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The NEG-Criterion and Negative Polarity Licensing in Hindi and English*

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本研究では、英語・ヒンディー語における否定対極表現(NPI)を取り上げ、英語では許されない、NPIが主語として現れるという現象が何故ヒンディー語では許されるのか、その非対称性の理由を考察し、最近の生成文法理論による統語的説明を与える。具体的には、ヒンディー語と英語におけるNPIの認可がS構造においてのみ起こるという仮説とHaegeman (1995)で提案されたNEG基準に基づき議論する。また、この仮説がWH基準、AFFECT基準からも支持されることを示す。さらに、本研究の議論がすべての自然言語においてNPIが一律にS構造でのみ認可される可能性を支持することを示す。

1 NPIs IN HINDI AND ENGLISH

It is well-known since Klima (1964) that negative polarity items like *any* must occur in conjunction with a negative element:¹⁾

- (1) a. John did not see anyone.
- b. *John saw anyone.

Furthermore, it is generally assumed that the NPI must be in the syntactic scope of the negative operator at S-structure and LF, where scope is interpreted as c-command. This provides the standard account for the contrast

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¹⁾ There are some other possible triggers for NPIs, like *if*, *all*, *before*, etc., but I shall not consider these. Some studies (e.g., Linebarger 1987) reduce the foregoing triggers to what might be called abstract, pragmatic negation.

in (2):

(2) a. *Anyone did not come.
 b. John did not see anyone.

Hindi, however, neutralizes this subject-object contrast:

(3) a. koi-bhii nahii aaya (thaa)
 anyone NEG came-3-SG-M was-3-SG-M
 'No one came.' [lit., 'Anyone did not come.']

 b. raam-ne kisii-ko-bhii nahii dekhaa
 Ram-ERG anyone-ACC NEG saw-3-SG-M
 'Ram did not see anyone.'

This poses a challenge to the foregoing standard assumption and constitutes the crux of the problem addressed here.

It is worth establishing that the *bhii*-marked forms are indeed NPIs and not negative quantifiers like *no one* or the French equivalent *personne*. First, the putative NPIs must occur with the negative element *nahii*; removing this negation from the forms in (3) yields unacceptability. This, however, still leaves the possibility that *bhii* is a negative quantifier participating in negative concord with *nahii*, just as in the French *Personne ne disait rien*, literally 'No one said nothing,' where the two negatives *personne*, 'no one' and *rien*, 'nothing' jointly express a single negation. This is ruled out, though, by tests provided in Haegeman (1995:129-30). First, true negative quantifiers can be modified, e.g., *almost no one* or the French equivalent *presque personne*. *Bhii* rejects such modification:

(4) *takriiban koi-bhii nahii aaya tha
 almost anyone NEG came-3-SG-M was-3-SG-M
 [lit., 'Almost anyone did not come.']}

Furthermore, negative quantifiers can occur on their own as negative answers to questions, as in *Who came?... No one*. *Bhii*-marked items cannot do this:

(5) kon aayaa ... *koi-bhii
 who came-3-SG-M anyone
 [lit., 'Who came? ... Anyone.']}

In sum, *bhii* is clearly a marker of NPIs in Hindi, and the lack of subject-object contrast in (3) cannot be explained away by calling a *bhii*-marked element a negative quantifier.

2 THE NEG-CRITERION AND NPIs IN HINDI AND ENGLISH

To date, the only syntactic analysis of the aparallelism between the English data in (2) and the Hindi forms in (3) is provided by Mahajan (1990). He proposes that the c-command condition on NPIs applies at both LF and S-structure in English, while in Hindi it holds only at LF. While this approach has the merit of elegance and simplicity, I propose to consider an even simpler approach suggested by the work of Haegeman (1995). Her treatment of the syntax of negation facilitates an analysis of NPI licensing that refers universally to only S-structure (1995:111). Basically, an NPI is licensed if it participates in a Spec-head relation with Neg. Haegeman calls this licensing condition the NEG-CRITERION and defines it as follows.

THE NEG-CRITERION

- (a) An $X^0[\text{NEG}]$ must be in a Spec-head configuration with a NEG operator.
- (b) A NEG operator must be in a Spec-head configuration with an $X^0[\text{NEG}]$.
 NEG-operator: a NEG phrase in a scope position.
 Scope position: a left-peripheral A'-position (i.e., XP -adjoined or Spec).

(Haegeman 1995:163)

I intend to account for the aparallelism between (2) and (3) by showing that Hindi subjects participate in Spec-head relations with Neg, while English subjects cannot. To this end, I propose that Hindi and English have different NegP structures, from which the differences in NPI-licensing properties may be

seen to follow.

2.1 THE STRUCTURES OF HINDI AND ENGLISH NEGP

Let us begin with the assumptions about the constituency of negation. The phrasal status of Hindi negation has been investigated by Mahajan (1988), who concludes somewhat tentatively that negation is a non-projecting category. I propose examining an alternative line of thought that originates with the work of Pollock (1989). In the course of articulating the structure of the IP, Pollock introduces the notion of NegP as the projection of a negative element. Specifically, he proposes that the underlying structure of the French negation sequence *ne . . . pas* is $[\text{NegP} [\text{Spec pas}] [\text{Neg ne}]]$. Pollock's results underscore the availability of two structural positions in which negative forms may reside, and subsequent research has exploited this. For instance, Haegeman assumes that *not* is in the Spec of NegP for English.²⁾ This follows from the need to keep the head of NegP vacant, in order to accommodate movement of auxiliaries through that position in the derivation of declarative sentences and of negative inversion data (1995:180–7).

In the spirit of Pollock and Haegeman's approach, I shall adopt a projected NegP structure for Hindi, and I shall situate the negative element *nahī̄* in its head. That *nahī̄* occupies the head of NegP and not its Spec is suggested by the fact that *nahī̄* bears a tense feature, a property associated with heads. The correlation of *nahī̄* with tense is clear in view of its complementary distribution with *naa*, another Hindi negative marker. In tensed, indicative clauses, only *nahī̄* is allowed, while in any untensed or subjunctive environment only *naa* is permitted:

²⁾ Actually, Haegeman makes a different assumption about the contraction *n't*, stating that it lies in the head of NegP (Haegeman 1995:189). I reject this notion. Though I shall not pursue that matter here, I believe the concerns that lead Haegeman to her conclusion can be handled in other ways. Furthermore, Haegeman has the following comment to make (personal communication) about my claim regarding *n't*: "In more recent work (in preparation) I have actually also developed the idea that *not* is Spec NegP and that *n't* is also Spec NegP".

(6) TENSED, INDICATIVE CLAUSES

raam-ne roṭii {nahii/*naa} khaaii thii
 Ram-ERG bread eaten be
 'Ram had not eaten bread.'

(7) VERBAL NOUNS

raam-ka roṭii {*nahii/naa} khaa-naa mujhe pasand nahii
 Ram-GEN bread eating me-DAT like NEG
 'I don't like Ram's not eating bread.'

(8) POLITE IMPERATIVES

kripyaa dhumra paan {*nahii/naa} kiijiye
 please cigarette-smoking do-POLITE
 'Please don't smoke.'

(9) UNTENSED ASPECTUAL CORRELATIVE CLAUSES

raam-ne phuul {*nahii/naa} tor rahii larki se baat ki
 Ram-ERG flowers break CONT girl with speech did
 'Ram spoke with the girl who was not plucking flowers.'

(10) (TENSED) SUBJUNCTIVE CLAUSES

raam cahtaa hai ki vo kaam {*nahii/naa} kare
 Ram-NOM want be that he work do-SUBJ
 'Ram wants him not to work.'

If one then adopts Haegeman's proposal for the structure of English NegP, one is left with the structural contrast in (11):

(11) a. Hindi NegP

[_{NegP} Spec [_{Neg} XP [_{Neg} nahii]]]

b. English NegP

[_{NegP} [_{Spec} not] [_{Neg} [_{Neg} OP_{NEG}] XP]]]

I will show that the Hindi structure in (11a) allows subject NPIs to raise through [Spec, NegP] on their way to [Spec, TP], while the English structure in (11b) does not allow this option, accounting for the contrast between (2) and (3).

2.2 NPI-LICENSING AND SUBJECT RAISING

I assume that Hindi subjects behave as follows with respect to raising — the details are illustrated in (12).

(12) Derivation for (3) — note the chain (*koi-bhii*, *t''*, *t'*, *t_i*)

[_{TP} [Spec *koi-bhii*] [_T [_{NegP} [Spec *t''*] [_{Neg} [_{AuxP} [Spec *t'*] [_{Aux} [_{VP} [Spec *t_i*] [_V *t_i*]]]]]]]] [_{Neg} *nahii*]]] [_T [*aaaya*, *thaak*]]]]

First, I adopt the VP-internal subject hypothesis. From [Spec, VP] the subject must raise to [Spec, AuxP] to have its agreement features checked. Ultimately, it must raise to [Spec, TP] for D-feature checking, thereby satisfying the Extended Projection Principle. Now, should the subject be an NPI, it must also satisfy the NEG-criterion, i.e., it must participate in a Spec-head relation with Neg. The optimal way for the subject to become a part of such a Spec-head relation is by raising to [Spec, NegP] from [Spec, AuxP] on its way to [Spec, TP]. In so doing, the chain headed by the subject, (*koi-bhii*, *t''*, *t'*, *t_i*), contains a trace in [Spec, NegP] position, i.e., *t''*, thereby establishing the Spec-head relation with Neg.³ Felicitously, this type of raising through [Spec, NegP] is facilitated by the Hindi NegP in (11a), because the [NEG] feature in Spec attracts (Chomsky 1996) NPIs. Subject NPIs are thus allowed in Hindi.

I now turn to some residual aspects of the tree in (12). First, the articulated structure of IP is determined by the following selection relations: T selects NegP, and Neg selects AuxP or VP. The tree in (12) also features verb movement — note the traces *t_k* and *t_i* in this connection. This movement takes place in two steps. First, Aux attracts the feature [+tense] on V, because it is the closest feature that can enter into a checking relation with the [+tense] feature of Aux (Chomsky 1995:297). The result of this attraction is the

³ I shall refer to a chain such as (*koi-bhii*, *t''*, *t'*, *t_i*) as a PRIMARY NPI CHAIN; such a chain is characterized by (a) having an overt NPI as its head; and (b) by being created by movement; it is a derivational chain. A primary NPI chain is to be distinguished from a SECONDARY NPI CHAIN, to be described later in greater detail, which is characterized in that (a) it has a non-overt element as its head; and (b) it is not created by movement; it is a representational chain.

adjunction of V to Aux, i.e., [*aayaa, tha*]. Similarly, T subsequently attracts the V-Aux complex, again due to the presence of a [+tense] feature. This raises the issue of a relativized minimality-type violation, since the V-Aux complex is attracted past Neg; recall that Neg has a [+tense] feature, which one might expect to intervene in the attraction relation. This potential problem can be overcome in more than one way. One solution, not pursued here, is to say that the negative *nahii* attracts the Aux complex and the Neg plus Aux complex is then attracted to T. Another solution, which I adopt in this paper, is to distinguish between CHECKER and CHECKEE features (Bobaljik 1995). The [+tense] feature of Neg is a checkee, which gets checked off and disappears when NegP is selected by T. However, the [+tense] feature of T, which is a checker, is assumed to be multiple (Bobaljik 1995) and hence does not disappear. Thus, while no [+tense] feature remains on Neg to attract the V-Aux complex, the [+tense] feature on T is still present. Accordingly, the V-Aux complex moves up to T past Neg.⁴⁰ Having sorted out these residual details, let us return to the main argument regarding raising of subjects. First, I assume that [Spec, NegP] is an A-position in Hindi and an A'-position in English. As for English, Rizzi (1990:116) has demonstrated that “[the NegP] projection has an A' spec”. This conclusion is based on the “inner island” effects originally observed by Ross (1983). These are exemplified in (13):

- (13) a. It is for this reason that I believe that John was fired.
- b. *It is [for this reason], that I don't believe that John was fired *t*.

(cf. Haegeman 1995: 75)

In (13b), the “long construal” of the phrase *for this reason* is not possible in the presence of negation. Rizzi (1990:17-18), quoted in Haegeman (1995:75), accounts for this in the following terms:

If negation qualifies as a typical A'-binder (an A'-specifier), the inner island

⁴⁰ Nothing hinges on the adoption of this particular account of verb raising. For instance, the relativized-minimality account espoused by del Prado and Gair (1994) could be substituted to achieve the same effects.

effect can be reduced to the ECP through relativized minimality: if a non-theta-marked element is extracted from the domain of negation, it will be unable to antecedent-govern its trace because of relativized minimality, and an ECP violation will result . . .

In contrast, one may argue that Hindi [Spec, NegP] is an A-position, because the foregoing inner-island effects are absent. Consider parallel data from Hindi:

(14) a. [is kaaran], mai̯ samajhtaa hūñ ki̯ raam t, nikaalaa gayaa
 this reason I believe am that Ram fired went
 ‘It is for this reason, that I believe that Ram was fired t.’
 b. [IS KAARAN], mai̯ nahii̯ samajhtaa ki̯ raam t, nikaalaa gayaa
 this reason I NEG believe that Ram fired went
 ‘It is for this reason, that I don’t believe that Ram was fired t.’

In (14b), the long construal is possible (with the qualification that *is kaaran* receive phonological stress). From this it follows that, unlike in the English example discussed above, the relativized minimality effect does not operate; this in turn entails that negation in Hindi, and hence [Spec, NegP], is an A-position.⁵⁾ Since [Spec, NegP] is an A-position, the movement of the subject through it on its way to [Spec, TP] is legal, as opposed to the English case in which the movement of a subject through a [Spec, NegP] position to [Spec, TP] would be A'- to A-movement and hence illegal. This is the basic account for the fact that English disallows subject NPIs, as in (2a).

In the case of English, there are two possible configurations for a sentence (such as (2a)) involving a subject NPI. One is shown in (15).

(15) Illicit derivation with a trace

$[\sub{T_P} [\sub{Spec} \text{ anyone}_i] [\sub{T} [\sub{T} \text{ did}]] [\sub{NegP} [\sub{Spec} t'_i]] [\sub{NegP} [\sub{Spec} \text{ not}]] [\sub{Neg} [\sub{Neg} [\text{NEG}]]] [\sub{VP} [\sub{Spec} t_i]]]$

⁵⁾ I am grateful to Yoko Yumoto for directing my attention to the problem of justifying the difference in status of Hindi and English [Spec, NegP], and to Liliane Haegeman for indirectly pointing out the possibility of the inner island effect asymmetry between Hindi and English as providing evidence for the A-position status for Hindi [Spec, NegP].

[_{VP} *come*]]]]]]]

Here, since the canonical specifier position [Spec₁, NegP] is filled with *not*, assuming Koizumi's (1995) layered specifier analysis, an adjoined specifier position [Spec₂, NegP] would have to house the trace of the NPI subject *anyone* as it raises past NegP to [Spec, TP] to satisfy the EPP. Now, apart from the fact, discussed above, that any movement through [Spec₂, NegP] to [Spec, TP] would be an illegal A'-to A-movement, I propose that the negation feature in the head of NegP has to be checked against the negation feature of a *primary* NPI chain (see footnote 3) in the canonical specifier position. This primary nature of the canonical specifier position is motivated by the discussion in Koizumi (1995:142) where the adjoined specifier position is shown to be a somewhat marked position. In (15), since the primary NPI chain cannot occupy the canonical specifier position, the derivation is ruled out.

A second possibility for the example at hand is as shown in (16)

(16) Illicit derivation with OP

[_{TP} [Spec *anyone_i*] [_T [_T *did*] [_{NegP} [Spec₂ OP_i]] [_{NegP} [Spec₁ *not*]] [_{Neg'} [_{Neg} [NEG]]] [_{VP} [Spec *t_i*]
[_{VP} *come*]]]]]]]

Here, the subject NPI could be argued to form a representational chain (discussed further on, but see footnote 3) whereby the head of the chain is an operator OP_i. However, the tail of the chain, *anyone_i* would then have to raise over to [Spec, TP], which, if nothing else, destroys the representational chain structure due to movement of the tail of the chain.⁶ Hence this possibility is also ruled out.

2.3 NPI-LICENSING FOR NON-SUBJECTS

Having discussed clausemate subject NPIs, I must now complete this

⁶ This constraint is a specific instance of a general principle of relation preservation discussed in Watanabe (1991b:101):

A relation established at a certain point in the derivation must be maintained throughout.

analysis with a characterization of the mechanism at work in licensing NPIs in non-subject positions. Developing ideas proposed by Haegeman (1995:180-186, 231ff.), I propose an account based on the notion of representational chains. This relies on a distinction between primary and secondary chains, as discussed by Brody (1995:41-42), for example. A primary NPI chain, I claim, is headed by an overt NPI element; thus, a chain like *(koi-bhii, t'', t', t)*, which arose as a result of raising in the foregoing discussion of subject NPIs, is primary. In contrast, a secondary NPI chain has a non-overt head, and since the principles of grammar will not allow traces as heads of chains, this position has to be occupied by SCOPE-MARKING OPERATORS. A representational chain is always secondary, so I am proposing an analysis in which NPIs can participate as non-heads in chains of the form $(OP_i, \dots, NPI_i, \dots)$. The OP_i will then function as a scope marker. Such a representation could satisfy the Neg-Criterion if the operator were situated in $[\text{Spec}, \text{NegP}]$.

If one sets about applying the analysis outlined above to English data like (2b), one runs into an immediate problem, given the NegP structure set down in (11b). Since $[\text{Spec}, \text{NegP}]$, the canonical specifier position, holds *not*, there is no place for the desired operator. To remedy this, we can call upon the notion of layered specifiers developed, for example, by Koizumi (1995). Thus, one might have a structure like (17):

$$(17) [\text{NegP} [\text{Spec}_2 OP] [\text{NegP} [\text{Spec}_1 \text{not}] [\text{NegP} [\text{Neg} [\text{NEG}]] \text{XP}]]]$$

On this assumption, (2b) might be analyzed with the structure in (18).

(18) Derivation for (2b)

$$[\text{TP} [\text{Spec} \text{John}] [\text{T} [\text{T} \text{did}] [\text{NegP} [\text{Spec}_2 OP_i] [\text{NegP} [\text{Spec}_1 \text{not}] [\text{NegP} [\text{Neg} [\text{NEG}]] [\text{VP} [\text{V} \text{see}] [\text{NP} \text{anyone}_i]]]]]]]$$

Note that the NPI *anyone* is indeed in a Spec-head relation with NEG; however, now the relation is mediated with the operator OP_i , the head of a secondary NPI chain, whereas in the treatment of Hindi subject NPIs a trace in a primary NPI chain served in this capacity.

Given the present proposal for licensing NPIs via representational chains,

one now has an explanation for the generalization mentioned in Section 2 that English NPIs are c-commanded by *not*. As a scope marker, the OP that establishes the Spec-head relation with Neg must c-command the NPI. Now, given the layered NegP in (17), the c-command domain of OP is the subtree rooted in the lower NegP. However, the NPI cannot be in Spec_i, since that position is occupied by *not*. It follows that the NPI must be somewhere in the subtree rooted in Neg', which happens to be the c-command domain of *not*. Thus, the generalization that English NPIs are c-commanded by *not* follows as an epiphenomenon from the NEG-criterion, the structure in (17), and the representational chain analysis.

We now turn to Hindi object NPIs. In Hindi, certain objects demonstrably must raise in order to facilitate agreement with the verb. For instance, in (19), the verb *dekhii* 'saw' agrees with the feminine plural object *kitaabē* 'books' but not with the man's name *raam*:

(19) raam-ne kitaabē dekhii
 Ram-erg books saw-3-PL-F
 'Ram saw (the) books.'

To handle object agreement, one must posit raising to [Spec, VP] (and [Spec, AuxP], if one is present) in order for the object's agreement features to be checked off.

For Hindi object NPIs, the licensing closely mirrors that for subjects, given Koizumi's (1995) assumption of layered specifiers. As an example, consider a case where the object position is filled by an NPI:

(20) raam-ne kuch-bhii nahii khaayaa thaa
 Ram- ERG anything-3-SG-M NEG ate-3-SG-M be-3-SG-M
 'Ram had not eaten anything.'

The derivation for (20) is shown in (21).

(21) Derivation for (20)

$$\begin{aligned}
 & \left[_{\text{TP}} \left[_{\text{Spec}} \text{raam}-\text{ne}_i \right] \left[_{\text{T}} \left[_{\text{NegP}} \left[_{\text{Spec}} \text{kuch}-\text{bhii}_j \right] \right] \left[_{\text{Neg}} \left[_{\text{AuxP}} \left[_{\text{Spec2}} t''_i \right] \right] \left[_{\text{AuxP}} \left[_{\text{Spec1}} t''_j \right] \right] \left[_{\text{Aux}} \left[_{\text{VP1}} \right. \right. \right. \right. \\
 & \left. \left. \left. \left. \left[_{\text{Spec2}} t'_i \right] \left[_{\text{VP1}} \left[_{\text{Spec1}} t_i \right] \right] \left[_{\text{VP2}} \left[_{\text{DP}} t_j \right] \left[_{\text{V}} t_k \right] \right] \right] \left[_{\text{Aux}} t_i \right] \right] \right] \left[_{\text{Neg}} \text{nahi} \right] \right] \left[_{\text{T}} \left[\text{khaayaattha} \right] \right] \right]
 \end{aligned}$$

The subject NPI *raam ne* raises through [Spec₂, AuxP], reaching [Spec, TP] in accordance with the EPP. The object NPI *kuch bhii* raises from its base position, [DP, VP₂], via [Spec₂, VP₁] and [Spec₁, AuxP] to a canonical specifier position [Spec₁, NegP]. As a consequence, the trace of the object NPI is in the canonical specifier of NegP and is therefore licensed by the NEG-criterion by virtue of being in a Spec-head relation with Neg. Although the details of verb movement are shown in (21), its description is omitted since this has already been discussed.

This completes my analysis of subject and object NPI-licensing in Hindi and English in terms of the NEG-criterion. Next, we turn to the correlation between interrogatives and negation in Hindi and English and the theoretical implications of this.

3 THE NEG- AND WH-CRITERIA IN HINDI AND ENGLISH

3.1 NEGATION, INTERROGATIVES, AND THE AFFECT-CRITERION

The licensing condition relating to negatives has already been shown to be the NEG-criterion. Now, the NEG-criterion is discussed in the literature as an instantiation of a more general AFFECT-CRITERION. Furthermore, another instantiation of the AFFECT-criterion is the WH-CRITERION. It follows that if both Hindi and English turn out to be accountable in terms of the WH-criterion, then both may be said to conform to the more general AFFECT-criterion, since they would then conform to the NEG- as well as the WH-criteria. I shall show that, given the assumptions of this paper, both Hindi and English submit to the unique licensing condition, the AFFECT-criterion, thereby accounting for the data presented in this paper in a minimally simple way.

First, consider the behavior of *wh*-elements in Hindi and English. Hindi *wh*-

movement mirrors the case of Japanese in that there is no overt movement of the *wh*-element. The Hindi and Japanese sentences contrast with English, in which overt *wh*-movement does occur:

(22) a. raam ne kis-ko maaraa
 Ram-ERG whom-ACC hit
 ‘Whom did Ram hit?’

b. Taro ga dare-o butta
 Taro-NOM whom-ACC hit
 ‘Whom did Taro hit?’

c. Whom, did John hit *t*?

One analysis of *wh*-items is Watanabe's (1991a), according to which Japanese has overt movement of an abstract interrogative operator OP to [Spec, CP]. If Watanabe's account is along the right lines, then Hindi also has overt movement of an abstract operator. That is, the [Spec, CP] of the Hindi example (22a) and the Japanese example (22b) will have the configuration [_{CP} [_{Spec} OP] [_cWH]]. In contrast, the [Spec, CP] of the English example (22c) will have the configuration [_{CP} [_{Spec} *Whom*] [_cWH]]. According to Watanabe, the variation between Japanese and English reduces to whether or not the abstract interrogative operator OP can be separated from the *wh*-associated phrase (Haegeman 1994:47-49). In Japanese, OP can be separated, but in English it cannot. If we adopt Watanabe's analysis, then the same applies for the Hindi-English contrast: in Hindi, unlike in English, the abstract interrogative operator OP can be separated from the *wh*-associated phrase (Haegeman 1995:47-49).

Now, note that in both configurations, the *wh*-element, OP and *whom* respectively, is in a Spec-head relation with the WH-feature bearing head, C. This relation has in fact been formalized into a licensing condition on *wh*-items; this is the previously mentioned WH-criterion:

(23) *Wh*-Criterion (Rizzi forthcoming)

- a. A *wh*-operator must be in a Spec-head configuration with an X^0 with the feature [WH]

- b. An X^0 with the feature [WH] must be in a Spec-head configuration with a *wh*-operator.

Furthermore, as mentioned earlier, the NEG- and WH-criteria generalize to the AFFECT-criterion:

(24) AFFECT-criterion (Rizzi forthcoming)

- a. An AFFECTIVE operator must be in a Spec-head configuration with an [AFFECTIVE] X^0
- b. An [AFFECTIVE] X^0 must be in a Spec-head configuration with an AFFECTIVE operator.

Since English has been shown to conform to the AFFECT-criterion by Rizzi, one may conclude that both Hindi and English are subject to this licensing condition, and that NPI licensing in Hindi and English derives from a much more general constraint, the AFFECT-criterion, which constrains licensing of affective elements like NPIs and *wh*-items.

Next, we turn to the licensing of NPIs by interrogatives and *wh*-items. In English (Haegeman 1995:70-71) and Hindi, both sentential negation and interrogatives license NPIs:

(25) a. Did you see anything?
 b. You did not see anything

(26) a. kya tum-ne kuch-bhii dekhaa
 Q-MARKER you-ERG anything see-PAST-PERFECT-SG-M
 'Did you see anything?'
 b. tum ne kuch-bhii nahii dekhaa
 you-ERG anything NEG see-PAST-PERFECT-SG-M
 'You did not see anything.'

This correspondence, whereby NPIs are licensed by both negative and interrogatives, implies that a single licensing condition may be operational in both kinds of clauses. I claim that the licensing condition in question is the AFFECT-criterion. If I am right, then this licensing mechanism, the AFFECT-

criterion, would have to account for the licensing of NPIs by *wh*-elements as well as by interrogatives. Let us first look at NPI licensing by *wh*-elements.

That *wh*-items license NPIs in both subject and object positions in Hindi and English is clear from the following data:

(27) a. aajkal koi-bhii kis-ko dekhtaa hai
 these days anyone whom-ACC sees is
 'Who does anyone look at these days?'
b. aajkal kon kuch-bhii dekhtaa hai
 these days who anything sees is
 'Who looks at anything these days?'
c. Who did anyone see *t*?
d. Who *t* saw anyone?

These data are accounted for by the primary and secondary NPI chain distinction as discussed earlier. The examples in (27) are accounted for by the presence of secondary NPI chains whose heads are in a Spec-head relation with the head C which bears a [+AFFECTIVE] feature:

(28) a. OP, aajkal koi-bhii, kis-ko dekhtaa hai
 b. OP, aajkal kon kuch-bhii, dekhtaa hai
 c. OP, Who did anyone, see *t*?
 d. OP_i Who *t* saw anyone,?

Since the expletive OP is in a Spec-head relation with the head C, the AFFECT-Criterion is satisfied and the NPIs are licensed. Recall that in the case of secondary NPI chains the expletive OP must c-command the NPI it is co-indexed with. This follows from the definition of chains and from the fact that OP_i is a scope marker. This c-command constraint then rules out sentences such as the following:

Here, the scope marker OP does not c-command the NPI and therefore does not form a legitimate secondary NPI chain with it.

Furthermore, it is self-evident that interrogatives as in (25a) and (26a) can also license NPIs by a similar mechanism: a scope marker OP in an adjoined specifier position of CP would form a Spec-head relation with the head C which contains a feature [+AFFECTIVE], and would thereby satisfy the AFFECT-criterion.

To conclude, in this section I have shown that the AFFECT-criterion, a generalization of the NEG- and WH-criteria, can account for the licensing of NPIs by *wh*-items and interrogatives. Consequently, a single licensing condition is shown to account for diverse data.

4 CONCLUSION

In this paper, I have shown that an asymmetry in Hindi and English subject NPI licensing and object NPI licensing in these two languages are accountable for by means of (a) the NEG-criterion, and (b) a distinction between primary and secondary NPI chains.

Secondly, I have demonstrated that the fact that NPIs are licensed by *wh*-elements and interrogatives in Hindi and English is accountable for in terms of a generalization of the NEG-criterion, the AFFECT-criterion. As a result, diverse data in these two languages can be unifiedly accounted for by means of a single licensing principle.

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REFERENCES

Bobaljik, Jonathan David. 1995. *The syntax of verbal inflection*. Cambridge, MA: MIT dissertation.

Brody, Michael. 1995. *Lexico-logical form: a radically minimalist theory*. Cambridge, MA: MIT.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.

del Prado, Zelmira Núñez, and James Gair. 1994. The position of negation in Bengali: an account of synchronic and diachronic variation. *Cornell Working Papers in Linguistics*, 12. 127–153.

Haegeman, Liliane. 1995. *The syntax of negation*. Cambridge: Cambridge University Press.

Klima, Edward S. 1964. Negation in English. *The structure of language*, ed. by Jerry A. Fodor and Jerry F. Katz, 246–323. New Jersey: Englewood Cliffs, NJ.

Koizumi, Masatoshi. 1995. *Phrase structure in minimalist syntax*. Cambridge, MA: MIT dissertation.

Linebarger, Marcia C. 1987. Negative polarity and grammatical representation. *Linguistics and Philosophy*, 10. 325–387.

Mahajan, Anoop Kumar. 1988. Word order and negation in Hindi. Cambridge, MA: MIT, ms.

Mahajan, Anoop Kumar. 1990. LF conditions on negative polarity licensing. *Lingua*, 80. 333–348.

Pollock, Jean-Yves. 1989. Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry*, 20. 365–424.

Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.

Rizzi, Luigi. forthcoming. Residual verb second and the wh-criterion. *Parameters and functional heads, essays in comparative syntax*, ed. by Adriana Belletti and Luigi Rizzi. Oxford: Oxford University Press.

Ross, John Robert. 1983. Inner islands. Cambridge, MA: MIT, ms.

Watanabe, Akira. 1991a. S-structure movement and wh-in-situ. Cambridge, MA: MIT, ms.

Watanabe, Akira. 1991b. Wh-in-situ, subjacency, and chain formation.
Cambridge, MA: MIT, ms.