

Features, Concord, Quantification.
*Licensing of conjunctive quantifiers and its
implications.* *

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1 Introduction

The use of *wh* or *indeterminate* pronouns in the formation of quantificational expressions in a wide variety of the world's languages is well documented¹- indeed several papers in the present volume deal directly with aspects of the use of such pronouns in quantificational contexts -. The following sentences from Japanese, Korean, and Malayalam exemplify some of the well known patterns that we have in mind.

- (1) Korean: **Nwukwu-to** ku-uy email-ey dap-haci anh-ass-ta
who-CONJ he-GEN email-to reply-do NEG-PAST-DE
'Nobody replied to his email'
- (2) Japanese: Taka-wa **nani-mo** yoku tabe-na-katta
Taka-TOP what-CONJ well eat-NEG-PAST
'Taka ate nothing well'
- (3) Malayalam: Anili **aar-e-um** kant-illa
Anili who-ACC-CONJ saw-NEG
'Anili met nobody'

Clearly, the elements in bold are morphologically complex. One of the objectives that has been pursued at various degrees of vigor and depth with

*A very early version of this paper was presented at the Conference Strategies of Quantification in York in July 2004, portions of the material presented here were also presented at seminars in York, and at the Workshop on Nominalisations, QP, and the structure of DP, in Saarbrücken in December 2005. We are grateful to all these audiences for their thoughtful comments. Especially we would like to thank Anastassia Giannakidou, Lisa Cheng, Angelika Kratzer, and Akira Watanabe for discussions that led us to rethink much of the material. As usual, for any remaining errors the authors blame each other.

¹For a typological survey see Haspelmath (1997).

respect to these elements is the compositional derivation of their quantificational semantics from the morphological pieces that constitute them. At first sight these morphological pieces are the indeterminate pronoun,² and the suffix *mo*, *to*, *um* above.³ Just about everything about these elements has been at one time or another controversial. Thus, whether the indeterminate has a denotation akin to that of a *wh* pronoun (Shimoyama, 2001; Kratzer and Shimoyama, 2002; Kratzer, 2005), a simple restricted variable (i.e. a Kamp-Heim type indefinite) Nishigauchi (1990), or a property, whether the suffix is a focus particle (Watanabe, 2004), a conjunctive operator (Gil, 1995), or a distributive quantifier (Watanabe, 2005), and finally whether these elements form a constituent or not (i.e. they are sisters),⁴ you name it, it's been said. Rather than directly adding to this prolific literature we would like to consider these quantificational elements from a slightly different point of view. Specifically, although the derivation of their quantificational force has been a focal point of the investigation into the nature of these elements and of the processes that create them, the fact that consistently across languages certain combinations of indeterminate pronouns with operators result in polarity sensitive items (we use the term polarity sensitive as the broadest possible term to encompass NPIs and NCIs) has been less of a concern.⁵ ⁶ In this connection the behaviour of the quantifiers formed with the conjunctive morpheme is most surprising. Distributional patterns are more restrictive in this case. In Korean, Japanese and Malayalam at least a *ind*+CONJ composite - which is interpreted universally - has a constrained distribution. Most studies that acknowledge this state of affairs have generally focused on the licensing of such items in negative contexts. However, as we will show in section 2 this characterisation is too restrictive as certain non-negative contexts allow the appearance of such items.

So, in this paper we want to ask the following question:

- (4) Why does the combination *wh/indet*+CONJ always yield an item whose distribution is restricted mainly to negative contexts.

Furthermore, one would also like to ask what are the mechanisms that account for licensing of these elements, and more specifically, to the extent that a syntactic mechanism needs to be invoked (perhaps along the lines of Watanabe (2004), or as suggested in passing by Kratzer (2005)) what are

²Although we will refer in the text to these pronouns as indeterminates, we will often gloss them in examples as the corresponding *wh* pronoun for clarity of exposition.

³These are, of course, only a small subset of the relevant suffixes.

⁴This possibility is variously explored in Gill and Tsoulas (2005) and in a different way in Watanabe (2005).

⁵This is of course not always the case as Gill *et al.*'s (2004) study of the Korean *wh+disjunction* quantifier shows. The latter seems to have no restrictions in its distribution.

⁶Watanabe (2004) is an exception. We discuss in detail his approach in section 3.1.

the features involved and what are the implications of postulating this type of *substantive* uninterpretable features for the theory of grammar.⁷

The paper is structured as follows. In section 2 we present the basic data and offer some initial discussion on the possible locus of polarity sensitivity. Section 3 we discuss the analysis of *ind*+CONJ as negative concord items with special reference to Watanabe's (2004) analysis. Our analysis and its syntactic implementation is presented in section 4. In section 5 we discuss the implications of our approach for the notion of feature interpretability and licensing. Section 6 concludes the paper.

A point of terminology is in order here before we proceed. There is a certain terminological uncertainty surrounding the proper way to refer to these items. On the one hand what we call indeterminate pronouns are expressions homophonous to *wh* words. However, we will use the term *indeterminate* following Kuroda (1965) who is in turn following the Japanese traditional grammarians. On the other hand in the literature dealing with the languages under investigation the morphemes that we call *conjunction denoting morphemes* or *conjunctive operators* have, with very few exceptions, Gil (1995), Jayaseelan (2001), Gill *et al.* (2003; 2004), usually been called *quantificational particles* or *quantifiers*. These elements do have a conjunctive or additive meaning too. A question that as far as we are concerned remains open is whether their participation in quantificational structures is the result of their conjunctive meaning. We have, elsewhere, suggested that it is. However, for the purposes of this paper we will use the term *conjunctive (morphemes/operators)* in the interest of neutrality.

2 The empirical picture

The basic empirical observation, which is not altogether new, about Japanese, Korean, and Malayalam elements formed by indeterminates with conjunction markers are usually licensed in 'negative contexts' as seen already in (1) - (3). This kind of data has been in the past analysed as cases of negative polarity licensing. However, there are reasons to doubt this approach. First, the *ind*+CONJ items are licensed by the presence of negation, not just negation in a broad sense though, including semantic negation. They have to be licensed by a clausemate overt negation. Therefore, negation in a higher clause would not count as a licenser, unlike what happens in English. The following is an example from Korean to illustrate the strict licensing condition of a clausemate negation:

⁷The feature that immediately comes to mind here is uninterpretable [NEG].

- (5) *Mary-nun [nwukwu-to ku-uy email-ey tap-hayssta-ko]
 Mary-TOP who-CONJ he-GEN email-to reply-did-COMP
 sayngkakhaci anh-ass-ta
 think NEG-PAST-DE
 ‘Mary did not think that anyone replied to his email’

In (5), the *ind*+CONJ item, ‘*nwukwu-to*’ in the embedded clause fails to be licensed as it lacks a negation within its clause. The presence of the negation in the higher clause does not contribute to its licensing, whereas it would have been enough to license *any* in English. The same contrast is also seen in Japanese and Malayalam. In short, even though the *ind*+CONJ items are called negative polarity items, the licensing environments are more restricted than normal NPI licensing environments.⁸ Watanabe (2004) further claims that according to the criteria proposed by Vallduví (1994) and Giannakidou (2000) to distinguish negative polarity and negative concord elements, the items formed by indeterminates and conjunction markers should be classified as concord elements. The criteria in question are:

- (6) a. Ability to appear in nonnegative contexts
 b. Ability to appear in preverbal positions⁹
 c. Ability to be modified by expressions like *almost*
 d. Ability to be used as an elliptical answer
 e. Clause boundedness

We refer the reader to Watanabe (2004) for an extensive demonstration of the application of these tests to Japanese. Similar results obtain in Korean as shown (7):

- (7) a. Chelswu-nun mwues-to hyunghaynay-lswuiss-ta
 Chelswu-TOP what-CONJ imitate-can-DE
 ‘Chelswu can imitate anything’ (6-a)
 b. Younghi-nun keuy nwukwu-to silhehan-ta
 Younghi-TOP almost who-CONJ hate-DE
 ‘Younghi hate almost anyone’ (6-c)
 c. *Mary-nun [nwukwu-to ku-uy email-ey tap-hayssta-ko] sayngkakhaci
 Mary-TOP who-CONJ he-GEN email-to reply-did-COMP think
 anh-ass-ta
 NEG-PAST-DE
 ‘Mary did not think that anyone replied to his email’ (6-e)

Interestingly, though, not all tests succeed equally well for Korean. Namely, Korean *ind*+CONJ elements cannot appear in fragment answers for instance.

⁸We will return to the full range of contexts which license these expressions.

⁹This test is irrelevant for an SOV language like Japanese and Korean.

- (8) A: Nwuka pati-ey oass-ni?
 who party-to came-Q
 ‘Who came to the party?’
 B: *Nwukwu-to
 who-CONJ
 ‘Nobody’

This may ultimately be an issue for the theory of ellipsis rather than the analysis of negative concord items. It is important however as this test was designed by Zanuttini (1991) to show that negative concord items are inherently negative. As we will see in section 4, this is not a conclusion that we will adopt in the analysis of *ind*+CONJ elements and as soon as one has abandoned the technical implementation of Watanabe’s (2004) analysis, we believe that this conclusion is not even necessary for Japanese.

Before we turn to these considerations, however, we would like to note that the characterisation of NCI for the *ind*+CONJ elements may, in the end, be a little too restrictive anyhow. It is in fact not the case that *ind*+CONJ requires overt negation always in order to be licensed. In fact, the following data, which to our knowledge have not been discussed so far in the literature show that it is possible to license them in generic and modal contexts.

- (9) Korean
- a. Chelswu-nun nwukwu-to caki sayngil-pati-ey choday
 Chelswu-TOP who-CONJ self birthday-party-to invite
 halswuiss-ta
 can-DE
 ‘Chelswu can invite anyone to his birthday party’
 - b. Mary-nun mwues-to seshimhi kwanchal han-ta
 Mary-TOP what-CONJ carefully observation do-DE
 ‘Mary observes anything carefully’
- (10) Japanese
- a. Reiko-wa hitoride doko-mo ik-eru
 Reiko-TOP alone where-CONJ go-can
 ‘Reiko can go anywhere alone’
 - b. Noriko-wa dono hon-o mo suki-ta
 Noriko-TOP which book CONJ likes
 ‘Noriko likes any of these books’
- (11) Malayalam
- a. aar-kk-um innathe meeting-il var-aam
 who-DAT-CONJ today’s meeting-to come-can
 ‘Anybody can come to the today’s meeting’
 - b. town-ileekkulla wazhi aar-um paranju tar-um
 town-to way who-CONJ tell give-mod

'Anyone will tell you the way to the town.'

In these environments *ind*+CONJ items receive a universal interpretation which is similar in some respects to the free-choice interpretation. Do these cases suggest that in fact the more traditional analysis in terms of negative polarity was indeed on the right track? This does not seem to be the case either as not all contexts allowing NPIs allow *ind*+CONJ. Most importantly, it is impossible to license *ind*+CONJ in conditionals and interrogatives which are paradigmatic examples of NPI licensing contexts.

(12) Conditionals

- a. Korean
*Nwukwu-to cenhwa ha-myen, na-hantey yenlak-hay-ra
who-CONJ phone do-COND I-DAT contact-do-IMPER
'If *nwukwu-to* phones, contact me'
- b. Japanese
*Dare-mo-to deeto-o su-reba, naguru
who-CONJ-with date-ACC do-if hit(will)
'If you date with *dare-mo*, (I) will hit (you)'
- c. Malayalam
*nii innale aare-um kantu enkil, innu Jayan-e kanante
you yesterday who-CONJ saw if, today Jayan-ACC to-see
auasyam illa
need not
'If you saw *aare-um* yesterday, there is no need to see Jayan again.'

(13) Interrogatives

- a. Korean
*Chelswu-ka mwues-to mek-ess-ni?
Chelswu-NOM what-CONJ eat-PAST-Q
'Did Chelswu eat *mwues-go*?'
- b. Japanese
*Haruko-wa kinoo yoru nani-mo tabeta-ka
Haruko-TOP yesterday evening what-CONJ ate-Q
'Did Haruko eat *nani-mo*?'
- c. Malayalam
*Aneil enth-um ka.l.icc-oo?
Aneil what-CONJ ate-Q
'Did Aneil eat *enth-um*?'

The significance of the patterns shown above is, we believe, first that the items in question are not inherently negative. Second, given that it is undoubtedly true that they require some kind of close relationship with a licensing operator, the question arises whether *negative* concord is the right char-

acterisation. Empirically it seems implausible that they are NCIs indeed. To summarise, the empirical picture then, we seem to have in Japanese, Korean and Malayalam, *ind*+CONJ elements which can only be licensed by negation, modality, and the generic operator, and which receive a universal interpretation alongside the negative concord kind of interpretation. We have suggested already that although we believe that we do not have negative concord here, we seem to have “some kind of concord” relation as the licensing conditions are more strict than those seen with negative polarity.

2.1 On the locus of the polarity sensitivity

Before we move on to examine more closely the account in terms of negative concord, we would like to sharpen a little more the issue that concerns us most, why are these elements sensitive to these environments. Whatever we accept the nature of these items to be, NPIs or NCIs, we also need to ask why are they sensitive like this at all. This question becomes extremely important if we are going to provide these elements with a compositional semantics. To illustrate, take English *anyone*, this item is made from the composition of the determiner *any* and the pronominal form *one*. Now *any* is a polarity sensitive determiner and any DP that is headed by it will require licensing by specific operators. This sensitivity is then, naturally, inherited by the complex element *anyone*. If we apply the same very simple reasoning to the *wh*+CONJ elements that we discussed above we are finding ourselves in front of a rather problematic case. The sensitivity could be attributed to the indeterminate, the conjunctive morpheme/operator, or perhaps the combination of the two, i.e. for some obscure reason, when the two come together they produce a polarity sensitive item, though we would still have to explain how this actually happens. Considering the indeterminate as the source of the sensitivity seems unlikely since for one, in Korean at least an indeterminate pronoun can be used on its own without requiring any further licensing as an indefinite. Secondly, when the indeterminate combines with a disjunction operator (or whatever the operator that creates existential quantifiers out of indeterminates is) the resulting element is not always polarity sensitive in the same way - some have argued that we have then a positive polarity item or it is not sensitive at all.

- (14) a. Chelswu-nun ecey nwukwu-lul mannass-ta
 Cheslwu-TOP yesterday who-ACC met-DE
 ‘Chelswu met someone yesterday’
- b. Chelswu-nun ecey nwukwu-inka-lul mannaci
 Cheslwu-TOP yesterday who-Q-ACC meet
 anh-ass-ta
 NEG-PAST-DE
 ‘There was someone that Chelswu didn’t meet’

- c. Chelswu-nun ecey nwukwu-na mannass-ta
 Chelswu-TOP yesterday who-DISJ met-DE
 ‘Chelswu met everyone yesterday’

The second option is the operator. In this case what one would expect is that the presence of the conjunctive operator would always create a polarity sensitive DP. This, again, is not the case. First of all, in Japanese and Korean, when the conjunctive operator acts *at-a-distance* as in (15) for Japanese and in (16) for Korean there is no polarity sensitivity to be seen anywhere:

- (15) [Dono gakusei-no okaasan]-mo ottota
 which student-GEN mother-CONJ danced
 ‘Every student’s mother danced’

(ex.6a, p.12. Shimoyama (2001))

- (16) [enu kukcek-uy haksayng]-to hangsa-ey
 which nationality-GEN student-CONJ event-to
 chotay-patass-ta
 invitation-received-DE
 ‘Students of every nationality were invited to the event’

Moreover, given that this conjunctive operator can attach to NPs other than indeterminates one would expect to turn them into polarity items, even proper names. But again this is not the case.

Therefore, it seems that attributing the sensitivity to the conjunctive operator would also be inappropriate. Finally, could it be the mode of combination? Unless there is something special in the mode of combination then it seems rather unlikely too. One is in fact rather hard pressed to even think of a way to instantiate this idea. Then what? All possibilities seem to have been exhausted and we are left with the ugliest, lexical ambiguity. One could always suppose that there are at least two elements that are homophonous and one of the two is polarity sensitive, the other not. This is indeed an idea that has been pursued in different guises by Kim (2001, 2006) and in a different context by Watanabe (2004). Let’s first turn to a discussion of these two approaches.

3 Indeterminates and Negative Concord.

In this section, we do not intend to get into much detail about the intricacies of negative concord. A large literature exists on the topic and we do not have much that is new to offer. What we are interested in is rather the specific requirements that a negative concord analysis imposes on the account of the data presented in the previous sections. One of the main issues that has given

rise to some controversy regarding negative concord is the question of the inherent negativity of n-words. Giannakidou (2000) claims that n-words are not inherently negative (and therefore the fact that there is only one logical negation is no surprise). She claims that n-words can be seen as simple universals that can be raised by QR to a scope position above negation. Her general approach seems indeed attractive for the data discussed here and we believe that ultimately our analysis is compatible with the semantics that she develops. We will depart from her system in what concerns the licensing mechanisms. On the other hand, Watanabe (2004) looking at the *ind*+CONJ construction in Japanese concludes that *ind*+CONJ must be analysed as inherently negative. We will focus here on Watanabe’s analysis as his empirical concerns are very close to ours.

3.1 Watanabe’s 2004 system

According to Watanabe (2004), elements like Japanese *dare-mo* (WH+CONJ) carry a [+NEG] feature and an uninterpretable focus feature. Watanabe suggests that the [*u*Focus] feature comes from the *also/even* meaning of the particle *mo*. Watanabe further proposes that the concord reading comes about after the [NEG] feature of the Neg^0 head undergoes checking with the [NEG] feature of the concord item. Both of these features are interpretable. The [NEG] feature of the concord element is subsequently copied onto the Neg^0 head where it cancels the negativity of that head, and therefore there is only one negation in the sentence, the one deriving from the concord item. Furthermore, the concord item is made active by the presense of the uninterpretable FOCUS feature.¹⁰

Watanabe’s system is complex and wide ranging and we cannot do fully justice to his proposals in the space available in this paper. We will limit ourselves to giving only a few conceptual/technical and empirical reasons why we do not adopt his analysis.

3.1.1 Conceptual Reasons

The main theoretical reason why Watanabe’s system is unappealing to us is the nature of the checking system that he develops. More specifically, our objections center around two points. First the fact that the probe of Neg is an interpretable feature [NEG]. Now this seems to be completely against the spirit of having an AGREE operation to deal with uninterpretable features. Secondly, if interpretable features are allowed to be probes as a matter of course, then it is only by mere stipulation that one can stop all sorts of interpretable features to be probes that find no matching goal.

In fact, even the notion of a matching goal is in this system hard to define. Would an uninterpretable feature count as a matching goal for an

¹⁰Watanabe does not say why the Neg^0 head is itself active.

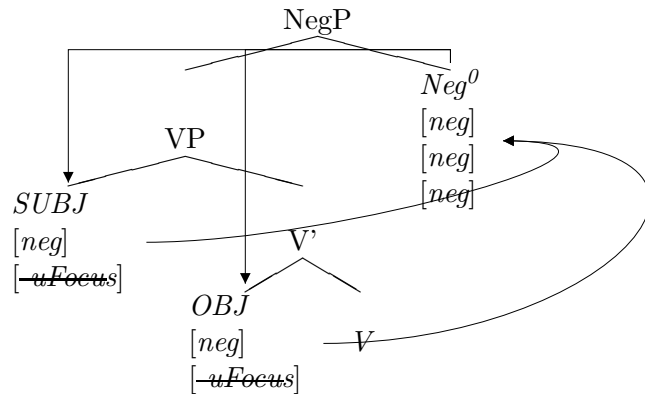
uninterpretable probe? This situation seems to us to remove from the the probe-goal system and the AGREE operation all their conceptual appeal. Moreover, the relation established between the [NEG] feature of Neg^0 and the [NEG] feature of the *ind*+CONJ is mediated by an uninterpretable focus feature which is deleted as a result of the AGREE relation established between the two [NEG] features. Again, this strikes us as very implausible because the uninterpretable focus feature does not enter in any kind of relationship with the probe.

Finally, there is the issue of feature-copying. Watanabe assumes a system whereby the features of the goal are copied onto the probe. Although one might simply say that this is no more than a different implementation of the notion of feature valuation, when it is put in the context of the present system, where interpretable features are probes and where copying of the [NEG] feature on the Neg^0 head is seen as the only way to “nullify” Neg^0 ’s semantic import - this device seems to make wrong predictions precisely in contexts of negative concord. The contexts that we have in mind involve cases where two NCIs are licensed by the same neg-head as in the following Korean (17) and Japanese (18) examples:

- (17) Nwukwu-to mwues-to mekci anh-ass-ta
 who-CONJ what-CONJ eat NEG-PAST-DE
 Nobody didn’t eat anything
- (18) Dare-mo nanimo hosiku-nai
 who-CONJ what-CONJ want-neg
 Noone wants anything

Now, within Watanabe’s system both NCIs would have to be marked as [*u*Focus, +Neg], and Neg^0 as, of course, [Neg]. The derivation would proceed as follows. The [Neg] feature of Neg^0 would probe and find both the subject and the object as items that it can agree with. Given that the probe is interpretable, the option of saying that after the first AGREE relation it cannot agree any more is not open to us. The subject and the object will, one after the other, lose their *u*Focus feature and copy their [NEG] feature onto Neg^0 . Thus we have the following (19):

- (19)



As a result, Neg^0 ends up with 3 [Neg] features. Assuming that two of them will cancel each other out, we are left exactly where we started, i.e., where Neg^0 has a neg feature and so do the two NCIs. These sentences should then have the double negation reading in:

(20) *It is not the case that noone ate anything*

This is, however, an impossible reading for the sentences in (18) and (17) which only have the equivalent reading to (21):

(21) *nobody ate anything*

Therefore, it follows that a feature copying mechanism produces the wrong results in more complex cases of negative concord.

Let us now turn to some further empirical issues.

3.1.2 Focus and licensing as at a distance

Watanabe proposes that the particle *mo* found in the Japanese cases is a realisation of the uninterpretable focus feature. The reasoning here is that the PF system uses the particle with the meaning of *also/even* to realise the uninterpretable focus features. One question that arises from this idea is what is the role of the particle when it is not directly attached to the indeterminates but associated with it at a distance as seen in (15) repeated in (22):

(22) [Dono gakusei-no okaasan]-mo ottota
 which student-GEN mother-CONJ danced
 ‘Every student’s mother danced’

(ex.6a, p.12. Shimoyama (2001))

Now in these cases, there is no question of having negative concord. The DP to which *mo* attaches does not require negation for licensing and furthermore, it is not at all clear that there is anything like a focus feature here.

According to most researchers, in these cases, *mo* acts upon the indeterminate and provides \forall force. Within Watanabe's system, one must stipulate that there are at least 2 different *mos*: one which is the focus particle with the additive/*even* meanings, and one with the universal quantifier meaning. However, these meanings are not unrelated. There are proposals according to which the universal meaning could be derived from the scalar meaning of *even*.

Whatever the precise analysis of this turns out to be, it is clear that a theory which relates these meanings will be preferable to one which assumes simple homophony

Essentially, the question here is why is the combination *ind+mo* an NCI whereas the combination [*DP ...IND...*]-*mo* is not?

Let us also note here that there is nothing in the fact that *mo* combines directly with an indeterminate in the first case, whereas the composition in the second case is only indirect. The following example, where *dare-mo* is followed by the nominative marker *-ga* is also not an NCI:

- (23) Dare-mo-ga Taka-no tanjoobi-ni kaado-o katta
 who-CONJ-NOM Taka-GEN birthday-AT card-ACC bought
 'Everyone bought a card at Taka's birthday'

The reasons outlined above seem to us to justify seeking a different solution to the problem of *ind+CONJ*.

Before we close this section, there is one last point to make with respect to Watanabe's ideas. There is one way to read him as saying that the particle *mo* is a realization of the focus feature but does not always carry focus or even it is not always the realisation of an uninterpretable focus feature. One may be encouraged in thinking so by his remark:

If the checking operation involved in negative concord is driven by the uninterpretable focus feature it is not surprising that the focus system makes use of the phonologically identical [*to the one meaning even/also?* (GT & KHG)] particle for nonvacuous semantic interpretation.

Although the meaning of the quote is not entirely clear, it seems to signify that the use of the particle *mo* is in fact almost completely accidental. The PF side of the focus system uses that particle as opposed to any other it could use. This also implies that the [NEG] feature is to be found within the indeterminate, a proposal for which we know of no supporting evidence.

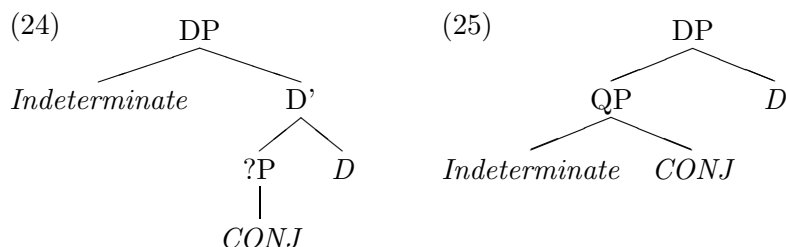
Thus, even under this kind of interpretation, it seems to us that the approach defended by Watanabe obscures rather than illuminates the generalisations and principles involved.¹¹

¹¹More specifically on Korean, Kim (2001, 2006) assumes that the morpheme *-to* has a feature [+Additive] in positive sentences and [+NEG] in negative sentences. She does

Thus we have now arrived at a point where clearly the accounts that we looked at seem insufficient both on empirical and on conceptual/theoretical grounds. In the next section we will propose a reconceptualisation of the issues which will allow us to both bypass the difficulties that we have pointed out with the previous accounts but also to capture some of their more useful insights in a sometimes surprising manner.

4 Analysis

In our search for the origin of the sensitivity we dismissed - quite out of hand the possibility that it was *the combination* of the two elements that produced the sensitivity. Of course, expressed in this manner it is very difficult to see how we would go about it at all but we might want to question here the underlying assumption that the indeterminate and the conjunctive operator combine directly. This is an assumption that we have been tacitly making (as the null hypothesis) and it is also an assumption that seems to be part of Watanabe's approach too.¹² If we dismiss this assumption then the door is open to the idea that there may be some phonologically null material that intervenes and serves as the *glue* so to speak between the indeterminate and the conjunctive operator, or that this extra material dominates the indeterminate + conjunction construct and is the locus of the sensitivity. A determiner would be a prime candidate. Two structural options present themselves naturally here representing the two options just mentioned (24) and (25) respectively:



What one ends up choosing eventually may depend on variety of other

not particularly explain how these elements are related. Clearly her account would be compatible with a lexical ambiguity hypothesis. We should note here that Kim, as in most of the Korean literature the focus is on elements such as *amwu-to* which are slightly different from the ones that we are considering here. However, this does not change much since the morpheme *-to* is supposed to be the same.

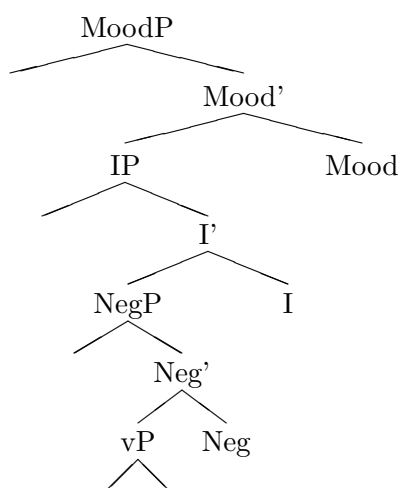
¹²Although in more recent work Watanabe has proposed a rather elaborate structure for Japanese DPs. It is unclear what the relation between the structure proposed in Watanabe (2005) is with the theory of negative concord in Watanabe (2004) at first sight they seem incompatible to a certain extent, or, if they really are not then one would be forced indeed to assume that the conjunctive operator appearing in the NCI case is just a homophone of the operator that in Watanabe (2005) is taken to be the head of QP, as a distributive universal quantifier.

considerations. However, what seems to us to be of particular importance here is that this view really opens up an interesting approach to the issue of the sensitivity of these elements. Imagine, simply that the determiner meaning is *No*, Japanese and Korean do not have a lexical determiner that means *No*, one might then naturally suppose that the negativity of that meaning is encoded by means of a [NEG] feature. We believe that it is most natural, in order to allow identification to express this feature as *uNeg* rather than an interpretable negative feature which would not require licensing. If this is on the right track then we can also suppose that licensing by some other operators should not be excluded *a priori* since there is no necessity that a negative determiner be chosen. A greater variety of determiners should be available here. What are these determiners is a question that we will not address directly here but see section 5 for some further remarks. Now with this in mind we can implement a syntactic approach to the licensing mechanisms in a rather straightforward manner.

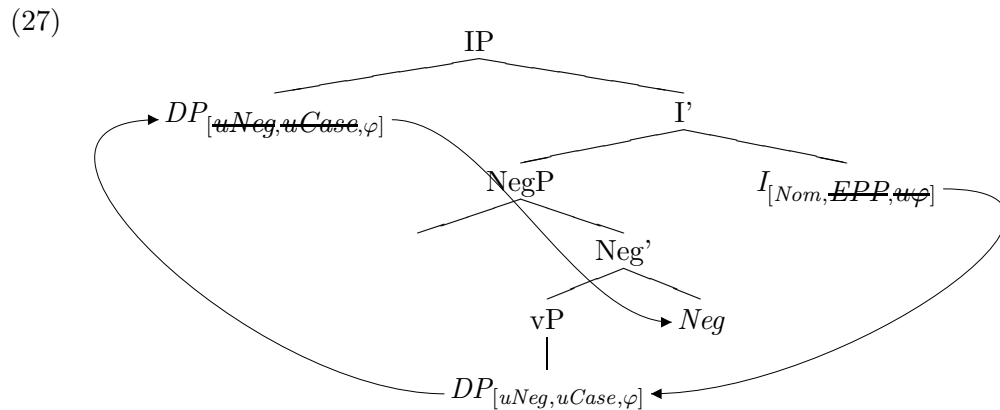
4.1 A syntactic implementation

Our approach to the phenomenon of *concord* includes part of Watanabe's insights' namely the fact that we have a case of syntactic agreement (i.e. that the concord items in question are licensed via the syntactic operation of AGREE). Unlike Watanabe, however, we will not assume that agree requires feature copying. We will adopt a more mainstream view of agree which involves either feature valuation, as in the case of φ feature checking, or feature deletion. The latter is simply a case of licensing which applies to uninterpretable features without values in the sense that φ features have values. Now, let's get more concrete. We will assume that the (26) represents the relevant part of the clausal structure:

(26)



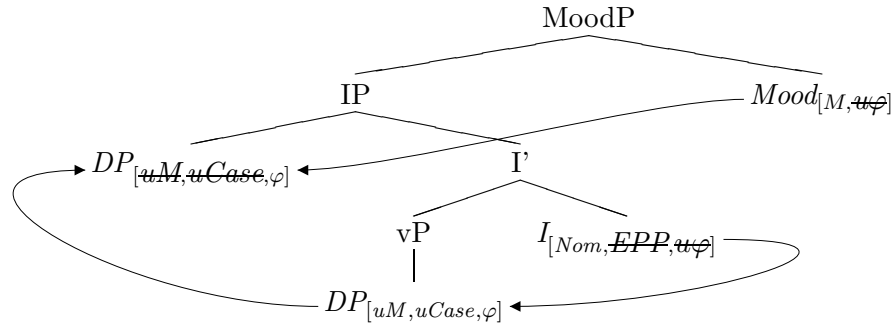
We will now also assume that the structure of the indeterminate+CONJ complex is either (24) or (25), which one is immaterial at this point. From the structure in (26) it is obvious that outside the vP domain where the *ind*+CONJ has been initially merged there are three potential positions where it might appear, by overt movement that is.¹³ Namely, these positions are [Spec NegP], [Spec, IP], and [Spec MoodP]. D will also be specified with either *uNeg* or call it *uM* in the case of a determiner licensed by the Mood head. Furthermore, the DP will also be specified for [*uCase*]. For all intents and purposes then, this DP is active. As the derivation proceeds, when I has been merged, with its own φ features and EPP requirements a probe - goal relation between I and the DP is established, and due to the EPP property of I the DP raises to [Spec, IP]. Now from that position the DP, whose properties have not been fully satisfied since it still contains the [*uneg*] feature, probes within its C-command domain and finds Neg with which it agrees. Schematically we have the following (ignoring for simplicity everything above IP) the order of the operations is to be understood as the arrows point from right to left.



In cases where there is no Neg projection, *ind*+CONJ items are only allowed in environments where the Mood head has the relevant specifications. In these cases we propose the following operations. The Mood head is specified with uninterpretable φ features and is therefore a probe which finds in its domain the subject in [Spec, IP]. The agreement relation that is subsequently established is sufficient for the licensing of the *ind*+CONJ .

(28)

¹³Let's assume at this stage for simplicity that we are dealing with a sentence containing a monoargumental verbal predicate.



The same kind of operations will license *ind*+CONJ in the presence of the generic operator which we will assume can find a natural enough home in Mood^0 .

For simplicity's sake we have so far used an intransitive structure for illustration. What happens in case there is an object? Especially, what happens if the *ind*+CONJ is the object of the verb? There seems to be no problem for this case. The *ind*+CONJ in object position will agree with the Mood head. No movement will be necessary and the subject will not intervene since having had its case satisfied it will be inactive as a goal for the Mood probe. Another case to consider is the case where there are two *ind*+CONJ elements present in the sentence, say both subject and object. In this case, again the Mood probe will be able to license the object given that the Neg head will have licensed the subject element. Now, the above account captures the tightly constrained set of requirements put on the licensing of the items in question. However, there are some technical issues to be resolved first. To begin with, although this account makes crucial use of the activity condition in order to rule out subject intervention in cases of licensing of the object, the same activity condition seems to be violated by the absence of any uninterpretable features on Neg which would make it an active goal for the subject. Let's then assume that Neg does, as it must, have some uninterpretable feature uF and is therefore active. Two possibilities arise now with respect to the identity of uF . Either it is φ or φ related or it is something different. If we assume that we are dealing with φ -features here then we expect that as soon as Neg has been merged it will establish a probe-goal relation with the subject (the closest goal) and, in one fell swoop, the $u\text{Neg}$ of the subject and the $u\varphi$ of Neg.

4.2 Conjunctive operators and *non*-sensitivity

We mentioned earlier that a remarkable fact about these items was that when the conjunctive operator attached to a DP which contained an indeterminate (acting at a distance) or when a case marker followed the operator there was no polarity sensitivity. Why is that? No theory that we know of, including ours, has an explanation for these facts. Our theory does not explain the facts immediately but on closer inspection it may provide a way to

handle these cases too. The innovation of the theory that we have proposed lies in the idea that there is a determiner with relevant properties (*uNeg*) which dominates the phrase that is composed by the indeterminate and the conjunctive operator. This proposal allows us to clearly separate the quantificational force provider from the elements that requires licensing. Now if we make the reasonable assumption that the conjunctive operator is indeed the head of the QP in whose specifier the indeterminate sits then it follows that if it were possible for the indeterminate with the conjunctive operator to appear as a bare QP then it would not be a negative-sensitive item. This prediction is verified in the cases of the appearance of the conjunctive operator with full DPs as in (15) repeated in (29):

- (29) [Dono gakusei-no okaasan]-mo ottota
 which student-GEN mother-CONJ danced
 ‘Every student’s mother danced’

Furthermore, if we make the, again reasonable, assumption that the case marker occurs in D^0 it follows that the element composed by *indeterminate*+CONJ+CASE will be free of distributional restrictions and licensing requirements. Again, this prediction is fully verified. Thus we want to suggest that (25) is the correct structure for the indeterminate-based quantifiers. This completes the analysis, although certain questions remain. We will move on to a more speculative part of the paper where we propose a conceptually coherent way to understand the possibility of substantive uninterpretable features.

5 On Features and the syntax-semantics interface

The theory that we developed here relies in a crucial manner on the idea that certain elements are endowed with uninterpretable features such as [*uNeg*] or [*uM*]. Moreover we dismissed Watanabe’s theory of checking involving copying on both conceptual and empirical grounds. Now, however, we should ask a more general question. Why should features like [*uNeg*] exist at all? Or even more generally, why should uninterpretable features exist at all? We see uninterpretable features as falling in two categories, first there is the φ -type where the features in question are not intrinsically uninterpretable but rather simply unvalued. In fact in the more restrictive system of Chomsky (2005) these should be the only types of features that drive syntactic operations. But feature-valuing makes little sense in the context of a feature like [*uNeg*]. In fact should one wish to extend the valuation view to such features, the results would be empirically inadequate. For instance, if [*uNeg*] was the feature of NCIs then we would expect negation to value it as [+neg] but this would give a double negation reading, contrary to fact. The option that negation values [*uNeg*] as [-neg] is thoroughly unappealing. Thus the

notion of valuation does not seem entirely appropriate for these cases, and yet they seem to be required if we are correct. We would like to suggest the following rationale for the appearance of features of this type. Following our suggestion that Japanese and Korean choose a determiner specified as [*uNeg*] due to lack of a lexical determiner with the meaning *No* we would like to generalise this proposal as follows: (30)

(30) **Realisation of uninterpretable features**

A substantive feature [\mathcal{F}] on category \mathcal{C}^0 may be marked [*u* \mathcal{F}] if and only if it is possible to express configurationally (or constructionally) the meaning [$+\mathcal{F}$] and there is no appropriate lexicalisation of [$+\mathcal{F}$] on \mathcal{C}^0 .

Expressing a meaning configurationally, at least with respect to negation, directly echoes Ladusaw (1996) as we also conclude that an item marked [*uNeg*] does not express negation in itself, but we differ from him in what concerns the division of labor regarding the licensing mechanisms. But there is not only negation, we also proposed a [*uM*] feature to account for licensing in modal contexts. Within the approach taken here following (30) we conclude that the meaning expressed in this way is different from the meaning the *ind+CONJ* would express alone. In fact we suggest here that this is how the interpretation of a *modalised universal*, (cf. Partee (1995)) comes about. There are further consequences of this type of approach that we cannot explore here. To illustrate the way a theory based on (30) might work and the predictions that it will make consider the debate on English *any*. One way to summarise the controversy is to center on whether there is a single item *any* whose varying interpretations in different contexts is derived in one way or another, or two different *any*, one a negative polarity item and one the free-choice *any*. We are not taking sides on this debate here. But within a theory like the one described here one might conceptualise the issue as follows. *Any* represents a head, say Q, which in itself has no licensing requirements. This head will be dominated by another one, say D, which will be endowed with the relevant substantive uninterpretable features which will ensure the configurational expression of the appropriate meaning. The exact meaning of $D_{u\mathcal{F}}$ is beyond the scope of this paper but the logic is clear. In the same way we can understand the the general concord mechanisms that Kratzer (2005) has advocated. Again, clearly, it is beyond the scope of the present paper to establish the different meaning that are thus expressed. The research programme is, however, clear.

6 Conclusions

In this paper, we addressed the crosslinguistically robust, yet entirely unexplained, tendency of conjunctive quantifiers to be polarity/concord items.

We suggested that the reason for this was not to be found in the overt elements that combine to produce these quantifiers but originate in a covert determiner specified with an uninterpretable [NEG] feature. We further rationalised the occurrence of these uninterpretable features as following from the lack of lexical material that could fill this position. This account has opened up the possibility of a research programme that combines insights from the recent work of Kratzer, Watanabe and others in a coherent and constrained fashion. Further carrying out of this research programme has to be left for future work.

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