

- (40) a. På avslutningsfesten var det ei
at the graduation party was there an
tilstelning med alle foreldra nede i
event with all the parents down at
Munch-museet.
the Munch Museum
b. Da # spelte eg der _
then played I there

If neither of the two adverbials is fronted, the order of them would be as in (41a), not as in (41b).

- (41) a. Eg # spelte _ der da.
b. *Eg # spelte _ da der.

6. In this paper I have tried to explicate some of the causes and principles underlying some apparently random phenomena in syntax. A successful study of the inter-relationship of syntax and pragmatics will hopefully lead towards the kind of understanding that is the ultimate goal of linguistics.

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Quantifier scope and syntactic islands*

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Introduction

Rodman (1976) claims that quantifier scope relationships are governed by island constraints, and in particular by the Complex NP Constraint. According to this claim, which was recently defended in a slightly modified form in Cooper (1979), a quantifier within a relative clause cannot have scope over anything outside that clause. Compare (1)a. with (1)b.:

- (1) a. Guinevere has a bone in every corner of the house.
b. Guinevere has a bone which is in every corner of the house.

Sentence (1)a. is ambiguous between a sensical reading, in which every has scope over a bone, and a nonsensical reading, in which a bone has scope over every. Sentence (1)b. has only the nonsensical interpretation, i.e., every cannot have scope over a bone in (1)b. Rodman's claim is that this difference is due to the fact that every in (1)b. but not in (1)a. occurs in a syntactic island and therefore cannot have scope over anything outside that island.¹

In this paper I wish to make the following two points:

I. The restriction on the possible scope of the quantifier every is independent of syntactic islandhood.

II. This restriction does not apply to the scope of the existential quantifier normally associated with indefinite NPs. In this connection, I will provide some evidence against Fodor and Sag's (1980) claim that indefinite NPs are inherently ambiguous between a quantificational and a referential sense. I will also argue against Kempson's (1979) treatment of scope ambiguities.

1. Scope of every

Consider the sentence in (2):

- (2) John told a reporter that Peter lives in

every French town.

The NP every French town is not in a syntactic island, as the sentences in (3) show:

- (3) Where did John tell a reporter that Peter lived?
This is the town that John told a reporter that Peter lived in.

Thus, (2) should be ambiguous between a sensical reading, in which every has scope over a reporter and a nonsensical reading, in which every is in the scope of a reporter. These two readings can be represented along the lines of (4) and (5):

- (4) (every x: French town(x)) [(∃y: reporter(y)) (John told y that Peter lives in x)]
For every French town there was a reporter such that John told him that Peter lives there.
- (5) (∃y: reporter(y)) [John told y that [(every y: French town(y)) (Peter lives in y)]]
There was a reporter such that John told him that Peter lives in every French town.

But the sentence in (2) has only the nonsensical reading given in (5), in which a reporter has scope over every. Every in (2) cannot have scope over an NP which is outside its clause, even though the clause is not a syntactic island; syntactic islands (in Ross's (1967) sense) cannot be invoked to restrict the scope of every in (2). In (6) I give more examples which do not involve syntactic islands and where every in a subordinate clause cannot have scope over an indefinite NP in the matrix clause:

- (6) a. A man said that John loves every woman in my class.
b. Dr. Johnson told a nurse that she should be in every ward at exactly 5 pm.
c. John told a friend that Peter is going to marry every girl in his class.

None of these sentences can have an interpretation in which every has scope over the indefinite NP. Sentence (6)a. can involve only one man; Dr. Johnson's request in (6)b. and John's statement in (6)c. can only be absurd. As the sentences in (7) show, every does not occur in a syntactic island in (6):

- (7) a. Who did a man say that John loves?
b. Where did Dr. Johnson tell a nurse that she should be?
c. That's the girl that John told a friend that Peter is going to marry.

If syntactic islands were relevant to the issue, the a. and b. pairs in (8) would exhibit a contrast similar to the one between (1)a. and (1)b.:

- (8) a. A man claimed that he was in every room at 5 pm.
b. A man made the claim that he was in every room at 5 pm.
a. It seems obvious to a friend of mine that John loves every woman in his class.
b. That John loves every woman in his class seems obvious to a friend of mine.

But there is no contrast here. In none of these sentences can every have scope over the indefinite NP.

It is desirable to have one principle which accounts for the data in (1), (6) and (8). This principle cannot crucially involve syntactic islands since (2) and (6) do not contain any, and since there is no contrast between the a. and b. sentences in (8).

A first approximation of the restriction on the scope of every is given in (9):

- (9) Every cannot have scope over an indefinite NP which it does not command.

The obvious question is: at what level does (9) apply? The answer involves several independent issues. Consider sentence (10):

- (10) Dr. Johnson wants a nurse to be in every ward at 5 pm.

Unlike (6)b., this sentence is ambiguous between a reasonable reading, in which every has scope over a nurse and an unreasonable reading, in which a nurse has scope over every. Sentence (11) appears to be unambiguous:

- (11) A professor wants every student to get a job.

Here every cannot have scope over a professor. From (10) and (11) one may conclude several things: (a) that

(9) applies at the DS level and there is a rule of Raising; (b) that there is no Raising and want takes infinitival complements whose subjects are accusative; (c) that the constraint in question refers to logical form rather than syntactic structure. Such a constraint could be formulated along the lines of (12):

(12) Every x cannot have scope over ly if y is the argument of a predicate P and x is the argument of a predicate Q, and q is in the scope of P.

I will not try to argue for any of these alternatives. I will simply conclude that, whatever the correct restriction is, it does not involve syntactic islands.

II. Scope of indefinite NPs

I will argue now that the constraint that restricts the scope of every with respect to indefinites does not operate in the opposite direction; indefinite NPs in subordinate clauses can have scope over NPs in the matrix. I will start with examples that involve syntactic islands.

Sentence (13)

(13) John bought every book that was published by a publishing house in New York.

has two interpretations: one in which the indefinite NP has scope over every and one in which every has scope over it. (In the first case John bought all the books published by some particular publishing house; in the second, John bought every book such that a New York publishing house published it.) Similar examples are given in (14):

(14) a. Jon dates every girl who knows a diplomat in Washington.
b. John gave an A to every student who recited a difficult poem by Pindar.

The truth conditions of the two interpretations of the sentences in (13) and (14) are different. What remains to be shown in order to make the point that indefinites can have scope out of subordinate clauses, and in particular, out of syntactic islands, is that (13) and (14) are indeed ambiguous and that the ambiguity is a matter of scope.

A case for ambiguity

According to Kempson (1979), a difference in truth conditions is not sufficient proof of ambiguity. She claims that if one of the two interpretations of an allegedly ambiguous sentence entails the other, the sentence should be pronounced unambiguous and should be given only the entailed, "weak" interpretation.

Note that in (13) and (14), the readings in which the indefinite NPs have narrow scope can be said to entail the readings in which these NPs have wide scope with respect to every. Thus, if John dated every girl such that there is a diplomat in Washington whom she knows, for any particular such diplomat, John dated every girl that knows him. According to Kempson then, (13) and (14) should be given the interpretation in which the indefinite NP has wide scope with respect to every. Therefore, even if we accept Kempson's treatment, we have to allow indefinites to "escape" islands, unlike NPs quantified by every, which are clause-bound.

In more familiar cases, such as (15),

(15) Everybody in this room speaks an exotic language.

the reading in which the indefinite NP has wide scope entails the reading in which it has narrow scope, so according to Kempson, (15) should be given the narrow scope interpretation. Fodor and Sag (1980) give an example in which neither reading entails the other:

(16) Mary dates half the men who know a producer I know.

An analysis à la Kempson would have to say then, that when interpreting a sentence which is possibly ambiguous with respect to quantifier scope, one considers all the logical possibilities and then one discards those interpretations which entail others, if there are any such. This account seems particularly unappealing to me so I conclude that (13)-(16) are ambiguous. As we have seen already, this conclusion is not crucial to my argument because (16) would be ambiguous and (13)-(14) would have a wide scope interpretation of the indefinite NPs in Kempson's analysis. So even in this analysis indefinites would escape islands. Cooper (1979) argues that indefinites in an island may give one the "illusion" of a wide scope reading in case they happen to refer to objects that uniquely satisfy the description. Obviously, this

condition is not met in (13) and (14) but the "illusion" of a wide scope reading persists.

A case for scope ambiguity

Fodor and Sag (1980) bring practically the same arguments in favor of the ambiguity of (13), (14), and (16). The point of their paper is that this ambiguity is not a matter of scope. They argue that indefinite NPs are inherently ambiguous between a referential, proper name-like interpretation, and a quantificational interpretation. Referential indefinites, just like proper names, are "beyond" scope since they do not involve an existential quantifier. A sentence with a referential NP in it will always be equivalent to a quantificational interpretation in which the NP has widest scope. The claim is that in all cases in which an indefinite NP appears to have scope outside a syntactic island, as in (13), (14) and (16), the NP is actually referential, rather than quantificational; quantificational NPs never have scope outside an island. It follows from this treatment that if an NP is interpreted as occurring within the scope of another quantifier, the NP can only be quantificational, since referential NPs are always equivalent to "widest scope" quantificational NPs. Now if indeed quantificational NPs cannot have scope outside an island, it should be impossible to have sentences in which an indefinite NP within an island is within the scope of some quantifier and has scope over an NP that is outside that island. Fodor and Sag (1980) claim that this is indeed impossible. My informants, however, found that the sentences in (17) and others like them, do have an interpretation in which the indefinite NP is inbetween the two quantifiers:

- (17) a. Each student has to come up with three arguments which show that some condition proposed by Chomsky is wrong.
b. Everybody told several stories that involved some member of the Royal family.

The interpretation that concerns us here is the one in which each student had to pick some condition and come up with three arguments showing that that condition is wrong and in which everybody picked some member of the Royal family and told several stories about him. The relevant readings of (17) have the quantifiers in the order given in (18):

- (18) a. each some three
b. each some several

In this interpretation of (17), the indefinite NPs have to be quantificational because they do not have widest scope; they occur in an island but have scope over NPs outside that island. The existence of this reading of (17) considerably weakens Fodor and Sag's inherent ambiguity claim because one of the main goals of their analysis is precisely to render every and quantificational indefinites alike with respect to scope possibilities. But if the sentences in (17) do indeed have the interpretation I have been talking about, quantificational NPs can escape islands whereas every cannot.²

Quantificational NPs can have scope outside an ordinary subordinate clause as well. Sentence (19)

- (19) Every senator told several newspapermen that some Cabinet member was corrupt.

can have an interpretation in which the order of the quantifiers is the one given in (20):

- (20) every some several

In this case every senator picked some Cabinet member and told several newspapermen that that Cabinet member was corrupt. We see then that the scope possibilities of every and quantificational NPs are different.

Conclusion

In the first part of this paper I argued that the scope of every is not only island-bound but clause-bound as well. In the second part of the paper I argued that the scope of indefinite NPs is not only clause-free but island-free as well. The conclusion is that quantifier scope and syntactic islands are independent and that different quantifiers have different scope possibilities. This conclusion holds even if we accept Fodor and Sag's treatment of indefinite NPs because the examples in (17) show that a quantificational indefinite can have scope out of an island; the example in (19) shows that it can have scope out of a clause. The indefinite NPs in (17) and (19) have to be quantificational because they occur within the scope of a quantifier.

Some questions left unanswered are: (1) What is the correct constraint on the scope of every? (2) Which quantifiers obey it and which don't? (3) What is the motivation for the constraint and for the

differentiated behavior of quantifiers with respect to it?

Footnotes

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1. Note that for to relatives differ in this respect from ordinary relatives. The sentence

(i) This hospital provides a TV for every child to watch.

is ambiguous between an interpretation in which every child has scope over a TV (every child has his own TV) and an interpretation in which a TV has scope over every child (there is one TV for all the children).

2. If we substitute a for some in (17), the desired reading is harder, but not impossible to get. It is certainly true that examples like (17) are not easy to find because indefinite NPs tend to have widest or narrowest scope. I do not know why this is the case.

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Dissimilation in Gothic Without Thurneysen's Law*
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Traditional accounts of Gothic phonology include an apparent generalization known as Thurneysen's Law,¹ which states that voicing in fricatives after an unstressed vowel dissimilates with the voicing of the consonant immediately preceding the vowel (Chomsky and Halle, 1968:352):

$$(1) \begin{bmatrix} -\text{son} \\ +\text{cont} \end{bmatrix} \rightarrow [\alpha \text{voice}] / \begin{bmatrix} +\text{cons} \\ -\alpha \text{voice} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ -\text{cons} \\ -\text{stress} \end{bmatrix} \text{---}$$

This rule has been cited as evidence for the claim (Chomsky and Halle, 1968:178) that phonological theory must permit rules of a type referred to here as polarity dissimilation, according to which one sound in a word reverses its value for some feature so as to disagree with that feature's value in another sound. In this paper, however, it will be shown that Thurneysen's Law is not motivated by the available evidence, and thus cannot be used to support the need for polarity dissimilation rules.²

As formulated in (1), Thurneysen's Law clearly is a rule of polarity dissimilation, for it asserts that both voicing and devoicing of fricatives occurred in Gothic, as evidenced, it seems, by the relic suffix alternations in hat-iza 'hatred' vs. ag-isa 'fright' and fast-ubni 'position' vs. wald-ufni 'power'.³ In order to justify the $[-\alpha \text{voice}]$ specification, however, it would have to be shown that the underlying representation for some suffix contained a voiced fricative, while some other suffix had an underlying voiceless fricative. But it would seem no demonstration of this kind is likely to be forthcoming because, as will be shown, every Gothic fricative which appears to obey Thurneysen's Law itself derives from a Germanic voiceless fricative (PIE voiceless stop), and would therefore be subject only to the voicing subrule of the pair abbreviated by Thurneysen's Law.

Yet even this voicing half of Thurneysen's Law would have to be severely restricted morphologically, as a synchronic rule, because only a handful of all relevant suffixes exhibit the predicted voice alternations. In fact, given the limited evidence available,⁴ an exhaustive list of the forms supposed to have undergone Thurneysen's Law is not long, and serves to underline the limited applicability such a rule would have had in Gothic. In total, only five suffixes in Gothic