Why Saying That Sentences Like This Are Unacceptable Is Wrong

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- 1. Confronted with the unacceptability of sentences such as (1) Ross (1967:57) posited the output condition (A) (hereafter, the Internal-S condition).
 - (1) *I told [that we were in trouble] a man who had a kind face. 1
 - (A) Grammatical sentences containing an internal NP which exhaustively dimens S are unacceptable.

Notice that the bracketed S in (1) is "internal" and is also exhaustively dominated by an NP (i.e., it has no sister branches). Ross cites sentences such as (2)-(4) as further evidence for his condition.

- (2) *Did [that John showed up] please you?
- (3) *I went out with a girl who [that John showed up] pleased.
- (4) ? *That [that John showed up] pleased her was obvious.

Furthermore, he felt it to be not being avonly continuation to hope that a more adequate version of (A) may turn out to be universal (Ross, 1967:69).

After reexamining the Internal-S condition (A), this paper shows that it is too strong (for English) and proposes a much weaker constraint (B). It will be shown that (B) is a global rule. Also evidence will be presented to show that the Internal-S condition is not universal.

- 2. The Internal-S condition (A) as postulated by Ross excludes sentences such as (1) from the set of acceptable sentences while correctly including (5) in the set of acceptable sentences.
 - (5) I told a man who had a kind face [that we were in trouble].

However, it incorrectly excludes too many sentences from the set of acceptable sentences. For example, it excludes sentences such as (6b) along with (6a).

- (6a) *He told [that he was in trouble] everybody who had a kind face, though we asked him not to.
- (6b) He told everybody who had a kind face [that he was in trouble], though we asked him not to.

This suggests that the Internal-S condition applies to the independent clause and the adverbial clause independently so that the adverbial though-clause as well as the main clause are severally subject to the Internal-S condition, but not

together. The fact that the adverbial clause is also subject to a similar condition is demonstrated by sentences such as (7a) and (7b).

- (7a) *Though I told [that we were in trouble] a man who had a kind face, he said that he could not help us because he was in trouble himself.
- (7b) Though I told a man who had a kind face [that we were in trouble], he said that he could not help us because he was in trouble himself.

Notice that in (7b) the object complement of <u>tell</u> is not internal to the adverbial clause itself. Further examples in favor of the hypothesis that adverbial and main clauses are independently subject to a condition are:

- (3) If it is obvious that transformationalists are telling the God's truth, [that they are cheating themselves] is obvious, too.
- (9) <u>Figure of</u> his demonstrating to them [that he was capable of carrying out his duties], the hissod officials dismissed John.

With the foregoing discussion we might (be tempted to) posit a modified Internal-S condition (A').

(A') Grammatical sentences whose adverbial or independent clauses contain an internal NP which exhaustively dominates S are unacceptable.

Notice that though both condition (A) and condition (A') allow (10a), which is an acceptable sentence, only (A') but not (A) allows (10b), which is also an acceptable sentence.

- (10a) The prehistoric people never tried to find the earth's edges, though they believed [that it was flat].
- (10b) Though they believed [that it was flat], the prehistoric people never tried to find the earth's edges.

Now let us consider sentences such as those in (11).

- (11a) It was obvious that Nixon told everybody who had a kind face [that he was in trouble].
 - b) *It was obvious that Nixon told [that he was in trouble] everybody who had a kind face.
 - c) That Nixon told everybody who had a kind face[that he was in trouble] was obvious.
 - d) *That Nixon told [that he was in trouble] everybody who had a kind face was obvious.

The sentences in (11) all have only an independent clause and there is nothing that could rightly be called an adverbial clause. So condition (A') (as well as (A)) will erroneously mark all of them as unacceptable. However, (11a) and (11c) are acceptable thus requiring the Internal-S condition to be modified again.

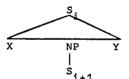
From (11b) and (11d) it is clear that a condition is needed which blocks the occurrence of internal sentences within a "main clause" as well as any "subordinate clause." But, the scope of such a condition is restricted to any clause and its respective subordinate clause, and not to any other clause inside that subordinate clause. Thus we have condition (B).

(B) Subordinate clauses which are exhaustively dominated by an NP cannot occur "internally" in their respective main clauses.

This condition correctly eliminates (11b) and (11d) from the set of acceptable English sentences while still retaining (11a) and (11c), because of the relationship between the bracketed clause and the subject complement of obvious.

Condition (B) states that a sentence containing a substructure such as (C) is unacceptable if X and Y are both non-null and there is no S intervening between S, and Sites

(C)



Specifically, it makes the claim that no restriction obtains between S_{i+1} and S_j, where S_j dominates S_i. For example, consider (12).

(12) [[For John to claim [that he is the oldest man in the whole world] is very queer].

In (12), S_2 is not "internal" to S_1 , and S_3 is not internal to S_2 and there is no restriction on the configuration of S_3 within S_1 . Similarly in (13) S_5 is not internal to S_4 , S_4 is not internal to S_3 and S_3 is not internal to S_2 , and it is a perfect sentence although all of S_3 , S_4 , and S_5 are internal to S_4 .

(13) [When [she felt that [for John to claim [that he was the oldest man in the world]] was too much] she decided to tell him to stop making such claims.

Thus the formulation (B) accounts for the English data. Notice that this predicts the acceptability of (14) and (15), which Ross himself observed to be counter-evidence to his condition (A) (Ross, 1967:106).

- (14) Bill said (that) for her to enlist would be impossible.
- (15) Jack thinks (that) what he's eating is scrambled eggs.

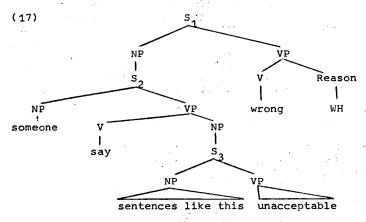
Notice further that condition (B) has an important implication to linguistic theory. It requires that the theory of language provide for a definition of a main clause and its subordinate clauses as the relation is obtained in the underlying representation.

3. In this section I shall show that the condition (B) is a 'global" rule in the sense the term is used by Lakoff and others.

Let us turn to the title sentence, reproduced here as (16) for convenience.

(16) Why saying that sentences like this are unacceptable is wrong.

Ignoring the irrelevant details, the underlying representation of this sentence is as in (17).



In the surface, however, S_2 node does not appear (due to tree pruning) and so S_3 is immediately below S_1 (i.e., there is no S between S_1 and S_3). Hence condition (B) applies incorrectly making (16) an unacceptable sentence. However, (16) is an acceptable sentence, and there is enough reason to believe that (B) captures the needed generalizations in English. Looking at (16) and (17) we notice that (16) will

be thrown out simply because So is pruned. But if somehow we

could make (B) "see" S2, then we won't have a problem.

This problem will be solved if we make (B) a global Under this hypothesis, (B) throws out sentences just in case they have (C) as a sub-structure, where S. was a subordinate clause of S, in the underlying representation. Specifically, even if some S, is one of the next lower S's of S; (that is, there is no intervening S) and is internal to it in the surface, the whole sentence is still acceptable if S, was not one of the next lower S's of S; to begin with (i.e., the first tree in the derivation). Thus, in the derivation of (16), though S, gets erased leaving no S bottom S, and S3, (B) does not rule it out because in the underlying structure S2 is not the next lower S of S4.

A possible alternative to treating (B) as a global rule is, to change the tree-pruning convention. In this approach, the S-pruning rule (or convention) is split into two parts - the first part only marks the appropriate S node for deletion, and the second part deletes the S node so marked, thus making tree-pruning a global rule. Then, by applying the Internal-S condition (B) before applying (the second part of) tree-pruning, and making tree-pruning a very late rule, the above data can be accounted for without treating (B) as a global rule. However, even after ignoring any side effects the delaying of S-pruning might bring in, this analysis does not account for sentences such as (18) where it is irrelevant whether the sentence node is erased or not after subject raising. Hence the first alternative seems to have more strength.

(18) I consider [for John to leave early] to be an insult.

Notice that the formulation (B) of the Internal-S condition along with its treatment as a global rule can account for the grammaticality of even very complex sentences such as (19).

- (19) Though I expected [that after saying [that they were tired], everybody would leave], the girl who apparently believed [that [for her to remain a virgin any longer] would be immoral], neither said [that she was tired] nor did she make any attempt to leave.
- Let us now look at how Emonds (1972) treats the Internal-S condition. Among others, Emonds' claims include the following that are relevant for our present discussion:

1) Sentences [that-complements] and infinitives [for-to complements] in subject position start out as parts of VP and a rule of subject replacement moves the complements into the subject position. 2) The subject replacement rule is a root transformation. That is, "it must not apply in non-root S's." (Emonds, 1972:35). 3) Rosenbaum's analysis of complements will require ad hoc condition to account for the data which his second claim accounts for and Ross' Internal-S condition is doubtful, too.

In support of his second claim above Emonds cites a number of sentences (both grammatical and ungrammatical) of which (20) and (21) are typical.

- (20a) *He protested the decision that for the bill to be marked paid meant nothing.
 - b) He protested the decision that it meant nothing for the bill to be marked paid.
- (21) *I don't believe that you study history hurts you.

However, Emonds' data seems to be either incomplete or incorrect. I was informed that sentences of the type (20a) are acceptable. Further, in addition to (21), (21a) is also unacceptable revealing the fact that it is not the rootness of a sentence that determines the application of extraposition (or subject replacement) but some other factors such as the main verb.

(21a) *That you study history hurts you.

Notice further that sentence (19) and Ross' sentence (14) are clear counter examples to Emonds' claim.

His other data with relative clauses can easily be accounted for by the Internal-S condition. However, as was mentioned earlier, Emonds doubts Ross's condition. One of the reasons for his doubt, he savs, is "As Ross himself pointed out, gerunds, which may be dominated by NP's, occur in sentence interior position" (Emonds, 1972:37). The question of internal gerunds will be discussed in the next section; but, it should be pointed out that if at all, it is only a part of another bigger problem - the non-discreteness of categories.

The only other counter example provided by him is "headless" relative clauses which occur "quite freely in sentence interior position" (Emonds, 1972:37) as in (22).

(22) I never assumed what I heard on the news was true.

But, it seems that 'headless' relative clauses should be treated as complex NP's and so the Internal-S condition is not applicable to them at all. That headless relatives are really complex NP's is evident from (23).

- (23a) What you heard on the news is true.
 - b) *Who is what heard on the news true?
 - *Who did what hear on the news true?
 - *Where is what you heard true?
 - *Where did what you hear is true?

The strings in (23b) are all ungrammatical and the complex NP constraint seems to account for this fact easily.

Thus, Emonds' attempts to do away with the Internal-S condition turn out to be futile. In fact Subbarao (1973) argues that Emmonds' whole analysis of complement sentences is inadequate from an observational, a descriptive, and an explanatory point of view.

5. Consider now sentences such as (24).

- (24) I can't see [how [your studying history] hurts you].
- In (24) we have a <u>Poss-ing</u> complement sentence which is exhaustively dominated by an NP and is internal to the S which was its immediately higher S in the underlying structure. Thus (24) and others like it seem to violate the rule (B). However, when we consider more data it becomes clear that there is a continuum of acceptability among various complement types. Consider (25).
 - (25a) *That you study history hurts you.
 - b) ?*For you to study history hurts you.
 - c) Your studying history hurts you.
- What (25) shows is that there is a notion of 'clausiness' whic's is 'squishy' as Ross (1972) called it. Using this squishy notion we can say that sentences which violate rule (B) are acceptable to a lesser or greater extent depending upon the 'clausiness' of the offending S. This will account for the acceptability variation in (24) and (26) or in (27) and (28).
 - (26) *I don't believe for you to study history hurts you.
 *I don't believe that you study history hurts you.
 - (27) I can't understand why my working late bothers him.
 - I can't understand why for me to work late bothers him.
 - (28) *I can't understand why that I work late bothers him.
- 6. Now let us turn to see if the Internal-S condition is a universal. Let us consider Telugu and Hindi, both of which are verb-final languages.

Telugu has three complementizers - ani, adaw, and atlu, but as the following sentences demonstrate all three complement types can occur internally in a sentence.

- (29) neenu [vaadu kastaalaloo paddaadu ani] vinnaanu
 'I' 'he' 'troubles-in''fell' ani 'heard'
 'I heard that he got into troubles.'
- (30) neenu [vaadu raavadaw] cuuseenu
 'I' 'he' 'come-adaw' 'saw'
 ' I saw his coming.'
- (31) neenu [vaadu vellipoyinatlu] vinnaanu
 'I' 'he' 'left-atlu' 'heard'
 'I heard that he left.'

In Hindi there are two complementizers - ki, and kaanaa. kaa-naa-complements can freely occur initially and medially (i.e., internally, too). But, ki-complements always need to be extraposed to the right (actually unbounded) if there is no head noun. Consider (32) - (37).

- (32) [uskaa aath bajee uthnaa] asambhav hai 'he+kaa' '8' 'o'clock' 'det up+naa' 'impossible''is' 'It is impossible for him to get up at 8 o' clock.'
- (33) raam [prabhaat kaa biimaar par jaanaa]jaantaa hai 'Ram' 'Prabhat+kaa' 'ill' 'fall+naa' 'knows' 'Ram knows of Prabhat's falling ill.'
- (34) * [(yah) ki vah jhuuth booltaa hai (yah)] galat hai
 'it' ki 'he' 'lies' 'tells' 'it''wrong''is'
 'It is wrong that he lies.'
- (35) yah galat hai ki vah jhuuth booltaa hai 'it' 'wrong''is' ki 'he' 'lies' 'tells' 'It is wrong that he tells lies.'
- (36) *raam [(yah) ki vah jhuuth nahii booltaa(hai)
 'Ram' 'It' ki 'he' 'lies' 'not' 'tells'
 (yah)] jaantaa hai
 'it' 'knows'
- 'Ram knows that he does not tell lies.'

 (37) raam jaantaa hai ki vah jhuuth nahii booltaa (hai)

 'Ram' 'knows' <u>ki</u> 'he' 'lies' 'not' 'tells'

 'Ram knows that he does not lie.'

However, this cannot be treated as an instance of Internal-S condition because \underline{ki} -complements without head nouns are not permitted whether initially or medially.

Thus, there is no discernible reason to believe that Hindi or Telugu has an Internal-S condition. Hence, it is not universal.

7. To summarize, in this paper I have shown that:
1) Ross' Internal-S condition is too strong, 2) A much weaker condition, viz., (B) obtains in English, 3) This is a global rule, 4) The theory of language needs the notion of a main clause and its subordinate as expressed in the underlying representation, 5) Emonds' arguments against having Internal-S condition are wrong, 6) The seemingly counter-

example cases constitute a part of a larger phenomenon which Ross calls squishiness, and (7) The Internal-S condition is not universal.

However, it seems as though nature doesn't want one to boast about the simplicity of grammars, for I have found two sentences, which look like exceptions to my analysis, viz.

- *The salesman who that I bought a car seemed most important to was a Southerner.
- *What what I ate cost almost broke me.

FOOT NOTES

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¹Here and in the rest of the paper I use square brackets around S's which are exhaustively dominated by an NP to facilitate easy understanding of the point.

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