

Prepositional Stranding and the Asymmetry

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Foreward

We recognized in our former number of the journal that extractability from P''¹⁾ is the marked case and the fact led us to the assumption that prepositional phrases were essentially related to movement rules. In making this assumption, we departed from the common sense in the early transformationalist's hypothesis that the category prepositional phrases were basically effective with respect to the functioning of transformational syntax. Transformational analysis of prepositional stranding such as Ross's²⁾ had been primarily directed to explain why prepositional stranding was not always possible. But what we had been asking was why a certain amount of prepositional stranding was possible in the first place. And this is the question that we are hoping to answer in this paper.

Prepositional stranding

Prepositional stranding may occur in English as a result of Wh-movement and N''-movement (NP-movement). Consider the following examples.

- (1) a. Who did you talk to?
b. What did they talk about?
c. The person who they saw a picture of
d. A good person to work with
- (2) a. This topic has never been talked about before.
b. That gut can't be counted on.
c. These problems must be looked into.
d. There are three unaccounted-for problems.

On the basis of examples such as (1) and (2), it has generally been concluded that P-stranding (prepositional stranding) is a frequent and regular phenomenon. This conclusion is supported by the fact that stranding is produced by the two core rules of transformational syntax ; Wh-movement and N''-movement. However, things are not so simple as that. Consider the following examples.

- (3) a. *What did they leave notwithstanding?
b. *This is the journalist that Bill resigned according to.
c. *Which break should we leave during?
d. *What is it through repetition of an act that one gains the experience of?

- (4) a. *His mother is travelled with by John.
 b. *The third round was lost in by Rocky.
 c. *Switzerland is bought many houses in by German.

And note now that there is an asymmetry between stranding ability of Wh-movement and that of N''-movement. Consider the examples (4) and (5).

- (5) a. Who did John's mother travel with?
 b. Which round did Rocky lose in ?
 c. Switzerland is the country that German buy many houses in.
 d. ? Which hat did Mary travel with wearing?

It turns out that stranding of Wh-movement is possible in a much wider class than that of N''-movement. This asymmetry is one of the very fundamental facts about prepositional stranding in English that must be explained in relation to other phenomenon in transformational syntax.

The Asymmetry

The asymmetry we have observed should already warn us not to regard P-stranding as the central fact about prepositional phrases in English. Particularly, we should not be deceived by the frequency of P-stranding and the corehood¹⁾ of the rules that produce it. In fact, when we look at a number of other constructions, extraction out of P'' (prepositional phrases) is generally impossible. The only exception is the extraction of modifying clauses. Consider the following examples.

- (6) a. I spoke with most people yesterday who were there.
 b. I spoke with fewer people yesterday than were there.
 c. ? I spoke with many people yesterday that I can't say who they were.

But, again, extraction is not possible in a large variety of constructions. Consider the heavy N''-shift of Bresnan.⁵⁾

- (7) a. I can't talk about these things to my father-in-law.
 b. ? I can't talk about to my father-in-law the horrible dreams I've dreamt recently.
- (8) a. I'll look into these matters next week.
 b. ? I'll look into next week the matters that you told me about.
 c. *I am getting along with now him.

P'' appears to be an island with respect to these examples mentioned above. Similar cases can be seen about P''-fronting and extraposition.

- (9) a. They took a shot at him from behind the car.
 b. From behind the car they took a shot at him.
 c. *Behind the car they took a shot at him from.

- (10) a. Before we could do anything, he fainted.
 b. ? Before, he fainted, we could do anything.

- (11) a. Until it's dark, we can't move.
 b. *Until we can't move, it's dark.

On the basis of such facts it is fair to conclude that P''' is essentially an island. What remains to be explained is why Wh-movement and N'''-movement allow elements to escape from the island that the prepositional phrase is. We will consider this problem next.

P''' as a Binding Category

Now the main facts we aim to explain are the following points.

- (12) a. The unmarked cases of prepositional phrases (P''') in natural language are considered to be complete islands.
 b. In languages such as English, P''' is an island with respect to most syntactic processes.
 c. The asymmetry of P-stranding is found in English.
 d. Extractability from P''' is the case of English.

Consider, now, the interaction between postposition and particles in the following examples.

- (13) a. John called up Mary.
 b. John called Mary up.

The rule of P-shift (Particle shift) itself is, of course, compatible with the head constraint (Ross 1967),⁶⁾ since the head constraint does not prohibit the head itself from being extracted. But the head constraint predicts that once the postposition has been extracted, the complement of the postposition is no longer "bound" by the head and may start behaving as if it were an independent member of the sentence. Consider the following examples.

- (14) a. He lives in that house.
 b. It is the house that he lives in.
 c. Which house does he live in?
 d. He is making a cake ; it's making a cake that he is doing now.

The contrast between (14b) and (14c) is explained by the head constraint. That is, the preposi-

tion is only responsible for the case that appears in its N''' complement, or case assignment can't go down into the complement of a preposition. Furthermore, a case inside the complement of a preposition can't exert any influence outside the P''' that contains it.

It would seem reasonable to claim that the lexical entry of the preposition itself carries the necessary semantic information. Verbs, then, can select a P''' on the basis of the semantic information contained in the preposition and the preposition will select the case in its N''' complement.

Another example is the NEG-placement. NEG-placement roughly positions the negation before another major constituent in the clause. But not can't be placed before an N''' inside a P''' .

- (15) a. *John goes to not Tokyo.
 b. John does not go to Tokyo.
 c. *John is going to not start.
 d. ? John is going not to start.

Apparently, the position inside the P''' is not accessible. These facts are assumed by the head constraint above-mentioned.

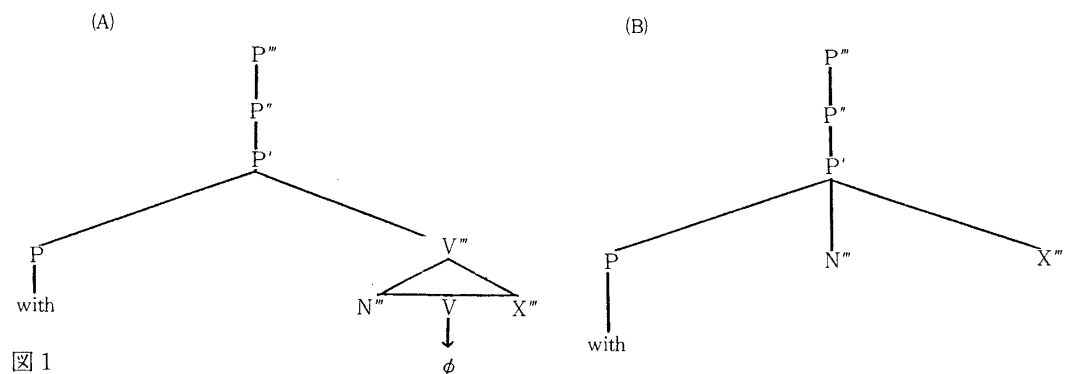
Conclusion

As a final point concerning the general status of the head constraint, it must be incorporated into the overall framework of constraint and the prepositional island constraint above-mentioned has the property that can be formulated in terms of the notion c-command⁷. And the c-command is defined as follows by Reinhart (1976).

- (16) Node A c (constituent)-commands node B if neither A nor B dominates the other and the first branching node which dominates A dominates B.

Notes

- 1) Cf. Our former paper (1984)



- 2) Cf. Ross, J. R. ; "Constraints on variables in syntax", PHD Diss. MIT (1967)
- 3) Cf. Bresnan, J. W. ; "On the form and functioning of transformations", LI, 7-1, 3~40 (1976)
Cf. Postal, P. M. ; "Cross-Over Phenomena", Holt, Rinehart and Winston (1971)
- 4) Cf. Stilling, J. T. ; "Remarks on core grammar", PHD Diss., Univ. of Massachusetts.
- 5) Cf. Bresnan, J. W. ; "On the form and functioning of transformations", LI, 7-1, 3~40 (1976)
- 6) Cf. Ross, J. R. ; "Constraints on variables in syntax", PHD Diss. MIT (1967)
- 7) Cf. Reinhart, T. ; "The syntactic domain of anaphora", PHD Diss. MIT (1976)

His notion of c-command is like bellow.

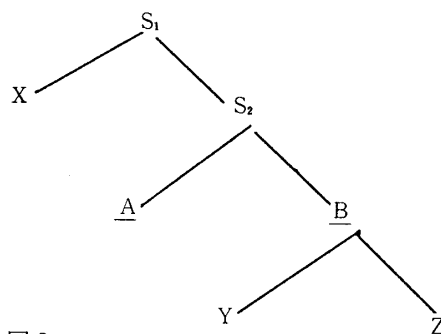


图 2

Cf. Chomsky, N. and H. Lasnik ; "Filters and Control". LI, 8, 425~504 (1977)

Cf. Chomsky, N. ; "On binding", LI, 11, 1~46 (1980)