NOTICE

This document is a reproduction of my two squibs which appeared in Linguistic Research No.3. As the original papers were sent to press in a hurry, they contained a rather embarrassing number of typographical and/or editorial errors. Minimal corrections have been added as of May the 14th. 1985.

Harada Yaunari

EASY TO SOLVE?

Yasunari Harada

This article reviews and examines the interaction of two proposals within GPSG concerning the so called slash categories.[1]

1. easy to solve!

Gazdar [1982a,b] claims that what he calls missing object construction, as exemplified by the sentence in (1), can be given a straightforward account if the grammar of English is to contain the phrase structure rule in (2)[2] and relevant adjectives are to be subcategorized for this phrase structure rule.

(1) John is easy to please.

(2) AP --> A (PP) $\overline{\overline{VP}}/NP$[2]

2. quite easy and not at all difficult to solve!

Gazdar [1981] claims that a simple coordination schema, such as (3), and a slash category analysis of rightward dependencies, such as (4), can give satisfactory account of those reduced coordination[3] constructions that have been explained in transformational terms through Right Node Raising Transformation, as exemplified by the sentence in (5).

(3) @ --> $@_1$ ... and $@_n$ where @ is any syntactic category

(4) @ --> @/$ $ where @ is a clausal category and $ is any clausal or phrasal category[4]

(5) Jack may be and Tony certainly is a werewolf.

3. easy to solve?

Although the slash category accounts of missing object construction and of reduced coordination involving rightward dependencies are successful enough in themselves, the interaction of these two meets some difficulty, namely, the grammar fragment that incorporates the above two assumptions cannot induce the sentence in (6), which is acceptable.

(6) John is easy and eager to please.

Three alternative strategies to resolve this problem within the framework of GPSG are open to us.

a. We might begin by modifying the phrase structure rule that is responsible for missing object construction. This implies a total reconsideration of the semantics of adjectives involved. However, I doubt if such a move is possible within the current framework of GPSG without losing the generalizations expressed by the simple phrase structure rule in (2).

b. We might begin by modifying the definition of slash categories and the specification of coordination in such a way as to incorporate cases like (6). However, this means that we have to throw away everything that has been established so far within the framework of GPSG. So this should be the last resort.

c. We might begin by deciding that at least some elliptical sentences are not in the proper domain of sentence grammar. Tonoike [1985a,b], trying to establish a descriptively satisfactory account of gapping within the general approach to

syntax as present in GPSG comes near to this move. In fact, a lot of problems involving coordination are so troublesome to the current framework of GPSG that this seems to be the only sensible conclusion. For instance, Sag, Gazdar, Wasow and Weisler [1984,to appear] are forced to leave important properties of gapping to pragmatics which is currently undeveloped.[5]

Consider, for example, the following expressions we encounter every day.

(7) I don't want anyone to know about you and me.

(8) Japan and Korea are separated by the Japan sea.

As far as I can decipher the technicalities of notations, the semantics of coordination as described by Gazdar [1980] is not intended to cover cases like these.

Also I am not as yet certain if that semantics can account for the coordination of the following sort.[6]

(9) the military relation between Japan and the United States

(10) Between you and me, that professor is an idiot.

Therefore, I am at a loss what kind of phrase structure grammar can readily account for the following elliptical expression.[7]

(11) the difference between pre- and post-cyclic rules

These examples seem to indicate that at least some elliptical expressions are to be understood as 'locally defined string macros'.[8]

NOTES

1. The definition of slash categories and notational conventions involved can be found in Gazdar [1981,1982a]. I use slash notation mainly for typographical convenience. It could be interpreted as a shorthand way of expressing categories with the feature specification <slash NP> in Gazdar and Pullum [1982] or Gazdar, Klein, Pullum and Sag [to appear].

2. See phrase structure rules (3) and (5) in Gazdar [1982b]. The feature specification <NP -nominative> is omitted as it is virtually irrelevant to the discussion that follows.

3. Reduced coordination in the sense of Harada [1981].

4. Irrelevant details and later refinements are disregarded here.

5. Originally, Gazdar [1981] did not claim that sentences involving gapping should be generated by the coordination schema (3). In fact, Gazdar, Pullum, Sag and Wasow [1982] explicitly deny Williams' [1981] inference to the contrary. It is quite conceivable that whatever is responsible for gapping and other reduced coordiantions left unexplained by Gazdar's rightward dependency analysis is responsible for the sentence in (6).

6. I would like to stress that although these are descriptive problems to be solved, none of these point to internal inconsistencies of GPSG so far established. This is the crucial advantage of GPSG over other approaches to syntax.

7. For other problematic cases of reduced coordination, see Harada [1981] and references cited there.

8. As opposed to 'structural macros' such as gapping.

REFERENCES

Gazdar, G. (1980) "A Cross-categorial Semantics for Coordination," Linguistics and Philosophy, 3, 407-409.

Gazdar, G. (1981) "Unbounded Dependencies and Coordinate Structure," Linguistic Inquiry, 12, 155-184.

Gazdar, G. (1982a) "Phrase Structure Grammar," in P. Jacobson and G. K. Pullum (eds.), The Nature of Syntactic Representation, D. Reidel, 131-186.

Gazdar, G. (1982b) "Easy to solve," Linguistic Analysis, 10, 361-363.

Gazdar, G. and Pullum, G. (1982) Generalized Phrase Structure Grammar: A Theoretical Synopsis, Indiana University Linguistics Club.

Gazdar, G., Pullum, G., Wasow, T. and Sag, I. (1982) "Coordination and Transformational Grammar", Linguistic Inquiry, 13, 663-677.

Gazdar, G., Klein, E., Pullum, G. and Sag, I. (to appear) Generalized Phrase Structure Grammar, Blackwell.

Harada, Y. (1981) "Reduced Coordination and Transformations," Linguistic Research, 1, 64-74.

Sag, I., Gazdar, G., Wasow, T. and Weisler, S. (1984) Coordination and How to Distinguish Categories, Report No. CSLI-84-3, Center for the Study of Language and Information, Stanford University.

Sag, I., Gazdar, G., Wasow, T. and Weisler, S. (to appear), "Coordination and How to Distinguish Categories," to appear in Natural Language and Linguistic Theory.

Tonoike, T. (1985a) Coordination and Gapping within a Framework of Generalized Phrase Structure Grammar, MA Thesis, Tokyo Metropolitan University.

Tonoike, T. (1985b) An analysis of Gapping in a Metagrammatical Organization of Grammar, ms.

Williams, E. (1981) "Transformationless Grammar", Linguistic Inquiry, 12, 645-653.

305-36 ICHIGAYA-KORAMACHI SHINJUKU-KU

TOKYO 162 JAPAN