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.

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DOUBLE FEATURE
OR EVERYONE IS BOUND TO BE IN TROUBLE, AREN'T THEY?

a brief note
on pragmatic significance
of certain features within GPSG

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Sirai [1985], in an attempt to recapture within the framework of GPSG the syntactic generalizations formerly expressed through transformational mechanisms, proposes the following set of rules for tag questions.[1]

(1) Tag Metarule:

VP -> W, VP => S[TAG, AGR @] -> W, NP[PRO, @]

(2) S -> NP[@], H[-SUBJ, ~AUX], S[TAG, +NEG, AUX do, AGR @]

(3) S -> NP[@], H[-SUBJ, $NEG, AUX &], S[TAG, -$NEG, AUX &, AGR @]

(4) VP[+NEG, AUX @] -> H[SUBCAT @, +n't], VP

(5) VP[+NEG, AUX @] -> H[SUBCAT @], NOT, VP

(6) Feature Cooccurrence Restriction:

a. [NEG] [+AUX]

b. [TAG] [+INV]

For those readers who are not familiar with the current GPSG notations and conventions, a brief explanation is presently given of what the set of rules as shown in (1)-(6) intuitively means.

S[TAG] in rule (1), (2) and (3) represents the tag question, i.e., that part which consists of an auxiliary verb possibly with n't contraction followed by an appropriate pronoun possibly

followed by not. Thus, rule (1), along with (4) and (5), induces the phrase structure rule necessary for expanding the tag question into an auxiliary, possibly with n't contraction, and a pronoun, possibly followed by not. Second, rule (2) specifies that if the main sentence does not contain any auxiliary verb (in the obvious sense of "contain"), then the auxiliary in the tag question shall be "do". Third, if the main sentence contains an auxiliary verb (in the obvious sense of "contain" as above), then it will be the auxiliary verb of the tag question that follows it.

The feature specification <AGR @> in rule (1), (2) and (3) ensures, along with corresponding occurrences of @ in relevant NPs, that the pronoun in the tag question must "agree" with the subject NP of the main sentence. Under the current formulation of GPSG, agreement could be defined on such features as would designate number, person, gender and so forth.[2]

Negation is realized either as n't contraction on the auxiliary verb (rule (4)) or as the negative adverb not (rule (5)).

Feature Cooccurrence Restriction (6a) specifies that if some category is specified with respect to the feature NEG then that category must have the feature specification <+AUX>, in other words, only those categories whose head is an auxiliary verb can be negated. Feature Cooccurrence Restriction (6b) specifies that if some category is specified with respect to the feature TAG then that category must have the feature specification <+INV>, in other words, tag question is always inverted.

These rules induce the following type of sentences.

(7) Peter helped you, didn't he?[3]

(8) The twins had not seen a hovercraft before, had they?

(9) James wasn't driving the car, was he?[3]

(10) You saw him, did you not?[3]

Also, the sentence in (11) poses no problem to our analysis, because the lexicon we presuppose has to provide for the expression aren't I independently of tag questions, as can be seen by the sentence in (12).[4]

(11) I'm supposed to fix this bagbiter, aren't I?

(12) Aren't I supposed to fix these bugs right away?

However, since Sirai's proposal is not intended to be descriptively exhaustive, minor inadequacies of his analysis can be trivially pointed out. For instance, the rules given above cannot induce tag questions of the following sort.

(13) You saw him, did you?[3]

(14) I think he's an asshole, isn't he?

(15) He could have consulted us, don't you agree?

(16) Open the door, will you?

(17) Let's go, shall we?[3]

As is obvious, minor modifications can fix these bugs, so I do not consider these as serious problems to his proposal. However, the following difficulty is somewhat troublesome to his analysis.

(18) Everyone is in trouble, aren't they?

The trouble here is that even though "[t]he personal pronoun should logically be singular," the pronoun they is used "to avoid the awkwardness of saying"[5] he or she.[6]

I have no ready syntactic alternative to solve this difficulty. It may be best, from syntactic point of view, to forget about dealing with the agreement between the main sentence and the tag question and leave that task to pragmatics.[7] This way, the problems noted earlier also vanish automatically. However, in doing so we will be casting away the general cases where agreement can be expressed in a straightforward manner. In my present understanding, what is needed is a full reconsideration of pragmatics of the feature system within GPSG.

GPSG makes full use of 'syntactic features' to locally define the global well-formedness of syntactic configurations of categories. Head Feature Convention and Foot Feature Convention, for instance, are defined in such a way as to achieve these tasks.[8] However, features that designate such things as number, person, and so on have posed some technical problems from earlier stages of GPSG. For instance, if we suppose that only identical categories can be coordinated, simple coordination of NPs such as you and me or one ball and two bats raises a problem because categories are conceived of as bundles of feature specifications in current GPSG framework, and so if we presuppose identity of categories to be strict matching of features involved then singular NPs and plural NPs can never begin to be coordinated. The analysis of coordination by Sag, Gazdar, Wasow and Weisler [1984,to appear], for instance, is an attempt to solve this

problem within the framework of GPSG as outlined by Gazdar, Klein, Pullum and Sag [to appear].

The trouble with sentences like (18) obviously stems from the fact that if we posit a feature designating number to ensure the correct dependency of the subject NP of a sentence and its tensed verbal element, we would want that feature to be utilized in other agreement dependencies. Thus, everyone and is should share the feature specification <+ SING>. Also, we have to ensure that aren't and they share the feature specification <- SING>.[4] In general, these two feature specifications "agree", so the set of rules shown in (1)-(6) makes correct predictions, but when troublesome subjects such as everyone, no one and so on are involved, the two clash.[9]

Linguists outside GPSG, however, have proposed 'features' such as [± stative], [± controllable], [± animate] and so on which are more closely related to 'semantic' well-formedness of sentences; such as selection restrictions of particular verbs or adjectives as displayed in the minimal pairs in (19)-(21), although it is not very often spelled out how a given configuration is determined to be semantically deviant.[10]

(19) a. Be quiet.
b. #Be tall.

(20) a. A cow is sleeping.
b. #A stone is sleeping.

(21) a. We made him be examined by the doctor.
b. #We made him be fired by the boss.

Thus, along with features that are postulated to account for syntactic well-formedness of sentences, features have been proposed that are supposed to account for the semantic well-formedness of sentences. The way I understand it, it has been the implicit assumption of linguists who utilize 'semantic features' that just as syntactic well-formedness of a given sentence is determined by the overall distribution of syntactic features, so the distribution of 'semantic' features determines the semantic well-formedness of a sentence.

The treatment of features related to number, person and so on as developed by Sag, Gazdar, Wasow and Weisler [1984,to appear] with respect to coordination of NPs is, in this respect, ingenious but somewhat misdirected. Admittedly, syntactic distribution of features such as SING, XSP and THP could express the fact that a first person singular NP and a third person plural NP coordinated with and result in a first person plural NP as they demonstrate, but such approach seems to represent a false generalization. The point here is that the plurality of nouns is essentially a semantic or pragmatic matter. If we admit that point the following type of apparent syntactic irregularity becomes a pseudo problem.

(22) Two miles is a long way to walk.

(23) I'm friends with him.

(24) Fish and chips is my favorite food.

(25) All work and no play makes Jack a dull boy.

The trouble with everyone is that its 'number' is 'syntactically' singular but 'semantically' plural. Thus, the

feature designating plurality of NP consisting of everyone must have 'double values' when it is anaphorically related to some other NP. But this is a problem to any theory that utilizes such notions as 'plurality', 'binding' and so on. So, everyone is bound to be in trouble, aren't they?

NOTES

1. Those readers who are interested in understanding what these notations precisely mean may want to read Gazdar, Klein, Pullum and Sag [to appear]. However, nothing crucial depends on the understanding of the technicalities displayed in these rules.

2. Gazdar, Klein, Pullum and Sag [to appear], for instance, employ such features as SING(singular), XSP(excluding speaker), THP(third person), CASE and NFORM(it and there) to be possibly specified on NPs.

3. These examples are from Thomson and Martinet [1980; 96-98].

4. I agree with Gazdar, Pullum and Sag [1982] in taking that the problem involved in the expression aren't I is essentially lexical.

5. Thomson and Martinet [1980: 25].

6. However, this remark should not be taken to mean that the use of the personal pronoun they in these contexts is the result of the feminist movement in the seventies. I remember distinctly that a young American, who taught me English in the early seventies, once had to admit, in spite of the direction of the school grammar book to the contrary, that he would use they in these contexts.

7. Sirai [personal communication] is aware of the descriptive difficulties involved and mentions he has had in mind this line of move.

8. Consult Gazdar, Klein, Pullum and Sag [to appear] to see how this is actually done under current GPSG framework.

9. The young American English teacher mentioned in note 6 made a very significant remark in that context. He said that he would use they "because everyone is everyone". What he meant was of course that although everyone is 'logically' or 'syntactically' singular, it is 'semantically' or 'pragmatically' plural.

10. These terms should be taken rather figuratively as I am not as yet ready to give a full account of 'a semantic feature system' that is compatible with the current formulation of GPSG.

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