

PRO Is Still Case-Ungoverned*

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The main purpose of this squib is to show that unlike Lasnik and Uriagereka's (1988) claim, the Case-theoretic approach to the distribution of PRO in English can substantially broaden its empirical coverage if we adopt Park's (1988a) proposal that Chomsky's (1981) PRO-theorem be recast as the PRO-condition, which states that PRO must be Case-ungoverned (or PRO may not be Case-governed). In order to make the PRO-condition work properly, we invoke the Case theory of Chomsky (1986a), where case-marking consists of two separate steps: Case-assignment and Case-realization. We also propose with respect to the Case theory that the adjacency condition on Case-assignment of Stowell (1981) be reinterpreted as a condition for Case-realization. In addition, the Case-absorbing properties of passive morphology will be redressed as the properties that absorb the Case-realizing ability of its host verb.

As is generally well known, there are two major approaches to the problem of determining one aspect of the distributional properties of PRO: one is to say that PRO is not allowed in the position where Case is assigned (see, for example, Aoun (1985) and Bouchard (1984)), and the other is to invoke the so-called PRO-theorem of Chomsky (1981), which allows PRO to appear only in ungoverned position. For expository purposes in the discussion that follows, let us call the former the *Case approach* on the one hand, and the latter the *government approach* on the other.

In their recent discussion on this matter, Lasnik and Uriagereka (1988, hereafter L&U) seem to prefer the government approach to the Case

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approach. They argue against the latter approach for the reason that “there are environments where lexical NPs are impossible exactly because they cannot have Case, but where PRO is still impossible.” (L&U, 50) Calling forth Stowell’s (1981) adjacency condition on Case-assignment, L&U claim that we have no plausible explanation for the ungrammaticality of (1a), in contrast to (1b), if we are ever to assume the Case approach.

- (1) a. *I like very much PRO
 b. *I like very much Mary

In (1a), PRO cannot receive Case because of the adjacency condition on Case-assignment: hence Caseless.

Given this array of the phenomenon under probe, it appears true that under the Case approach, (1a) should be fine with PRO. The prediction made by the Case approach, therefore, might seem to be in direct contradiction to the actual ungrammaticality of (1a). Notice, however, that if, on the other hand, we adopt the government approach, it would seem very likely that (1a) could be successfully accounted for since PRO is still governed even if it is Caseless. In what follows, however, I will show that contrary to L&U’s claim, the Case approach can substantially broaden its empirical coverage if we adopt Park’s (1988a) proposal as regards the issue under consideration. For convenience, I will refer to this third approach as the *Case-government approach*.

In Park (1988a), it was argued that the PRO-theorem (2) of Chomsky (1981) must be reinterpreted as the PRO-condition (3).

(2) *PRO-Theorem*

PRO is ungoverned (=PRO may not be governed).

(3) *PRO-Condition*

PRO is Case-ungoverned (=PRO may not be Case-governed).

An immediate question with the PRO-theorem in (2) is: what kind of government is utilized in it? We may find an answer to this question by examining the logic of deriving the theorem in question. Note that according to Chomsky, the PRO-theorem, as its name already implies, is not a principle of the grammar but merely a theorem that results from his binding theory.

Park (1988a) observes that if we want to derive the PRO-theorem by *reductio ad absurdum* from principles A and B of the binding theory, we should assume that [+anaphoric] NPs and [+pronominal] NPs must be in complete complementary distribution. As is implied by Huang (1983), Bouchard (1984) and Chomsky (1986a), among others, this complete complementarity hypothesis cannot be strictly maintained, however. Simply put, then, a certain logical fallacy creeps into the derivation of the theorem from the binding theory. (For detailed discussion on this issue, see Park (1988a). Understanding of this work, however, is not necessary for the discussion in this squib.)

Even if we assumed that (2) could be derived from the binding theory, we have yet to answer the question raised above, namely, what kind of government is made use of in it? Note that in addition to the general inclusive notion of government there are several subvarieties of government, i.e. proper government, θ -government, antecedent government and lexical government. Judging from Chomsky's (1981) discussion on the binding theory, it seems that the general inclusive notion of government is involved in (2) since the PRO-theorem is derived, it is claimed, as a theorem from the binding theory.

Note that according to Chomsky and many others, government in its most general sense is considered as a necessary condition for the characterization of each of its subvarieties. Let us take a look at the following formulation by Aoun and Sportiche (1983), for example, which has so far been most widely accepted in the literature:

(4) *Government*

α governs β iff for every γ , γ =a maximal projection, γ dominates α \Leftrightarrow γ dominates β .

Notice that the definition in (4) mentions nothing about conditions on governed terms or on choice of governor. The generality incorporated in this definition is necessary if we are to make the notion government a general unifying concept playing a central role in such modules of the grammar as binding theory, Case theory, θ -theory and the Empty Category Principle.¹

¹ It seems, however, that contrary to the standard assumption, the general

Now, consider the following:

- (5) Who did John try [_S t' [_S PRO [_{I'} to [_{VP} kiss t]]]]

Is PRO ungoverned in (5)? Surprisingly enough, it is governed, if (4) is the relevant concept with respect to the PRO-theorem in (2).² Thus, the government approach also seems to fail to account for the distribution of PRO in any satisfactory way. Park (1988a), in this respect, proposed that the PRO-theorem in (2) be elaborated as the PRO-condition in (3), presenting, in addition, the following definition of one of the subconcepts of government, namely Case-government:

- (6) *Case-Government (C-Government)*

α Case-governs β iff α governs β and α has Case-assigning properties.

The PRO-condition in (3) together with the concept of *c*-government in (6), thus, eliminates the unnecessary complications caused by the PRO-theorem in (2) where the general notion of government in (4) is employed. It would still seem, however, that (3) may not account for the ungrammaticality of (1a) and of many other similar cases. In what follows, it will be shown that (3), in fact, can handle those cases in an adequate manner.

Let us, at this point, assume that the Case theory of Chomsky (1986a) is on the right track. According to this theory, the process of Case-marking consists of two steps: Case-assignment and Case-realization. An immediate consequence of this approach is that all lexical categories and Infl with Agr can now "assign" Case even though the manner of "realizing" Case in each case may be distinct. Assuming, as in Chomsky (1986a) again, that both Case-assignment and Case-realization fall under government, let us observe the following:

notion of government is not so inclusive as one might expect it to be. Lansik and Saito's (1984) definition of antecedent government, for instance, seems to be dissociated from the general definition of government. Chomsky (1986b) also defines one of the subvarieties of government, namely θ -government, independently of the general notion of government. Park (1988b) discusses this matter in some detail.

² The governor of PRO in this case may include I', *to*, VP, and the intermediate trace *t'* also, if S (=IP) is assumed, as in Chomsky (1986b), not to be a barrier to government. Note that whether we adopt (4) or the new definition suggested in Chomsky (1986b) is immaterial to our discussion here. See Park (1988a) for more detailed discussion.

- (7) a. the [_{N'} destruction [_{NP} the city]]
 b. [the city]'s destruction e
 c. the [destruction [*of* the city]]

Since the head noun *destruction* governs its complement NP *the city* in (7a), the former assigns genitive Case to the latter at D-structure. As has already been implied above, the genitive Case can now be realized in either of the following ways: (i) it is realized in subject position by Poss-insertion (see (7b)), or (ii) it is realized in the complement by *of*-insertion (see (7c)). Similar processes can be claimed to be operative in the case of adjectives also. Chomsky's discussion about this particular point, in effect, boils down to the following:

- (8) a. Verbs, prepositions and Infl with Agr act not only as Case-assigners but as Case-realizers.
 b. Nouns and adjectives act only as Case-assigners.³

With this much theoretical apparatus, we are now fully ready to deal with the problematic cases that L&U claim to be the major difficulty with the Case approach mentioned at the outset. Suppose now that the second condition in the definition of c-government in (6) means what it means literally. That is, the term "Case-assigning" in (6) is intended to mean the same as what Chomsky (1986a) intends it to mean. With this specified sense of the term, then, the PRO-condition in (3) will be interpreted as follows:

- (9) In the structure [... α ... β ...] or [... β ... α ...],
 PRO may not appear in the position of β if
 (a) α governs the position occupied by β , and
 (b) α is V, P, N, A or Infl with Agr (i.e. α is a Case-assigner).

Now, let us turn to the problematic case (1a) and see how our Case-government approach to the distribution of PRO accounts for its ungrammaticality. Before we proceed further, however, we have to make one thing clear at this juncture. That is, we will recast the adjacency condition of

³ Case-realizers for the genitive Case assigned by nouns or adjectives include such morphemes as 's, and *of*. Note, in this connection, that Case-assignment does not necessarily lead to Case-realization.

Stowell (1981) in the following fashion:

(10) *Adjacency Condition on Case-Realization*

An NP can have its actual Case only if its Case-realizer is adjacent to it. (That is, Case can be realized only if the realizer and the realizee are adjacent.)

It is now immediately clear that (1a) is ruled out by our PRO-condition in (3) in that PRO is no doubt Case-governed in the example under consideration even if it cannot have actual Case because of the adjacency condition on Case-realization in (10).

The other examples that L&U cite as counterexamples to the Case approach can also be readily accounted for by our Case-government approach. Observe the following, which are drawn from L&U:⁴

- (11) a. *It was arrested PRO
 b. *There was arrested PRO
 (12) a. *John's destruction PRO
 b. *I am proud PRO
 (13) a. *I believe [PRO to be intelligent]
 b. *my belief [PRO to be intelligent]

Recall that verbs, prepositions and Infl with Agr have Case-realizing properties as well as Case-assigning properties (see (8) above). If we reinterpret the Case-absorption of passive morphology in such a way that passive morphology absorbs the Case-realizing ability of a verb, then in (11) the verb governs PRO, and hence assigns Case. But due to its passive morphology the verb can no longer retain its Case-realizing ability: hence PRO has no Case. Note, however, that even if PRO cannot have Case here, it is nevertheless Case-governed. The ungrammaticality of the examples in (11) can thus be accounted for by the PRO-condition in (3).

Let us turn now to the examples in (12). Recall one of our conclusions in (8): nouns and adjectives can assign Case but they cannot realize it themselves. If this is the case, then the noun *destruction* and the adjective *proud* in (12) do assign Case to their complement, namely PRO, even

⁴ Assume that *it* and *there* in (11) are expletives. If they were not expletives but referential expressions, they would of course violate the θ -criterion.

though they cannot realize that Case on PRO. Simply put, then, PRO is Case-assigned in (12) albeit Case may not be realized on it for the now familiar reason. Consequently, the ungrammaticality of the examples in (12) can be accounted for by the PRO-condition in (3). Similarly, the PROs in the examples of (13) are all Case-governed since as is well known, these examples are so-called Exceptional Case-Marking constructions. Here again, they are ruled out correctly by the PRO-condition (3).

To conclude, it is shown in this short squib that the PRO-condition of Park (1988a), in conjunction with the Case theory of Chomsky (1986a), can successfully handle the problems noted by such linguists as L&U who, based on those problems, argue against the Case approach to the distribution of PRO. The net result of my discussion here is, therefore: PRO may not be Case-governed, or PRO is still Case-ungoverned.⁵

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⁵ As an anonymous *Language Research* reviewer pointed out, there is a remaining problem with respect to the distribution of PRO in the gerundial construction in English:

- (i) a. John's going to the movies...
 b. PRO going to the movies...

For the present, I cannot suggest any plausible solution to this problem since to the best of my knowledge, there is no convincing theory as regards the structure of gerunds, which is beyond the scope of this squib. Reuland (1983) provides us with an interesting analysis of English gerunds within the Government-Binding framework, albeit his analysis does not seem to shed much light on the distribution of PRO. Notice, in this connection, that the problem with PRO in gerunds is not specific to my proposal in this squib. I reserve the topic for future research.

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