ON CERTAIN PREPOSITIONAL PHRASE MODIFIERS*

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Although previous accounts of absolute phrases have been proposed (McCawley 1981, Ruwet 1976, van Riemsdijk 1978), the analysis presented here is unique in that it relates absolute phrases to other superficially similar prepositional phrase modifiers. It is claimed that the differences between the two types of modifiers can be explained in syntactic terms by positing distinct underlying structures for the two constructions. These two syntactic structures, taken in conjunction with the Government Binding Theory proposed by Chomsky (1979), account for the surface differences between the two types of modifiers. The comparison presented here makes use of a crucial distinction within the Government Binding Theory--that of NP versus S. Finally, it is shown that semantic considerations lend support to the syntactic analysis proposed.

1. Introduction

This study will focus on the characterization of modifiers of the form 'preposition + -ing complement'. One subset of this class of modifiers is that of 'absolute' phrases. Some examples appear below.[1]

(1) With Jefferson signing the Declaration of Independence, the others are sure to follow.
With Fido following him, de Gaulle jogged along the beach.
With Betty complaining about life in Siberia, I think I'll cancel my trip there.

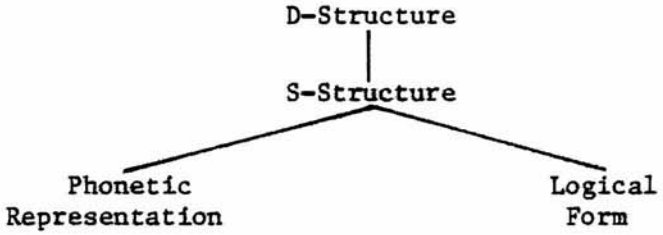
Previous accounts of absolute constructions have been presented for English by McCawley (1981), for French by Ruwet (1976), and for Dutch by van Riemsdijk (1978). The analysis I propose here is unique in that it relates absolute phrases to other prepositional phrases, such as those in (2).

(2) In signing the Declaration of Independence, Jefferson set an example for the others.
Upon Fido's biting his leg, de Gaulle sent for a doctor.
After Betty's complaining about life in Siberia, the stock market report sounded fantastic.

I will posit distinct syntactic structures for the two types of modifiers. The proposed syntactic structures make certain predictions within the framework of the Revised Extended Standard Theory (REST). We will see that these predictions are confirmed and thus support our analysis.

A few general remarks must be made with respect to the REST framework. A grammar of a language within this theory is based upon the following model.

(3)



The base, or D-structure, is constrained by $\bar{X}$-theory (Jackendoff 1977) and is related to S-structure by a transformational component. Transformations are of the general form 'move α', where the range of α is language-particular and is assumed to leave an anaphoric trace. The trace-enriched structure that results from the application of movement rules is called an 'S-structure'. A given S-structure is independently the input to a phonological component and to an interpretive component. The former includes deletion rules, filters, and stylistic rules and ultimately produces a phonetic representation (PR). In the latter component, semantic interpretation rules and binding phenomena are found, and a logical form (LF) representation is produced. Further relevant details of the REST framework will be explicated in the text.

The remainder of this paper is organized as follows. Section 2 presents the proposal that will be argued for in section 3. Arguments formulated within the Government Binding Theory of REST make up this third section. In section 4, some semantic observations are presented that support our analysis. Finally, a summary and conclusion appear in section 5.

2. Syntactic analysis

We will assume that the underlined portions of both (1) and (2), repeated below, are prepositional phrases.

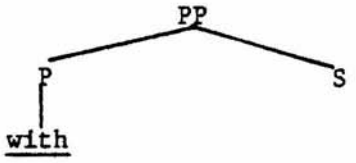
(4) With Jefferson signing the Declaration of Independence,
With Fido following him,
With Betty complaining about life in Siberia,

(5) In signing the Declaration of Independence,
Upon Fido's biting his leg,
After Betty's complaining about life in Siberia,

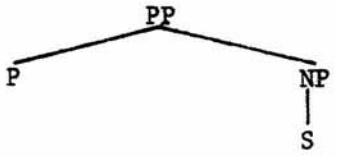
Though superficially similar, I claim that the PPs in (4) and (5) have different underlying syntactic structures. Specifically, I propose that

the complement to with in (4) is S, while the complement to the prepositions in (5) is a sentential NP. This proposal is schematized below.

(6)



(7)

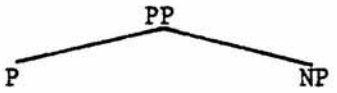


The NP complement in (7) turns out to play a key role, as we will see in section 3 of this paper. It finds motivation for its existence in the fact that simple prepositional phrases take NP object complements.

(8) in the house
after your party
by the river
with a baseball bat

(7) may hence be viewed as a special case of the following schema.

(9)



It should be noted that the preposition with may also appear in the structure (7).

(10) with his signing the document
with Mary's reading the story to the children

It will be claimed in section 4, however, that PPs like those in (10) are distinct in meaning from their absolute phrase counterparts, shown below.

(11) with him signing the document
with Mary reading the story to the children

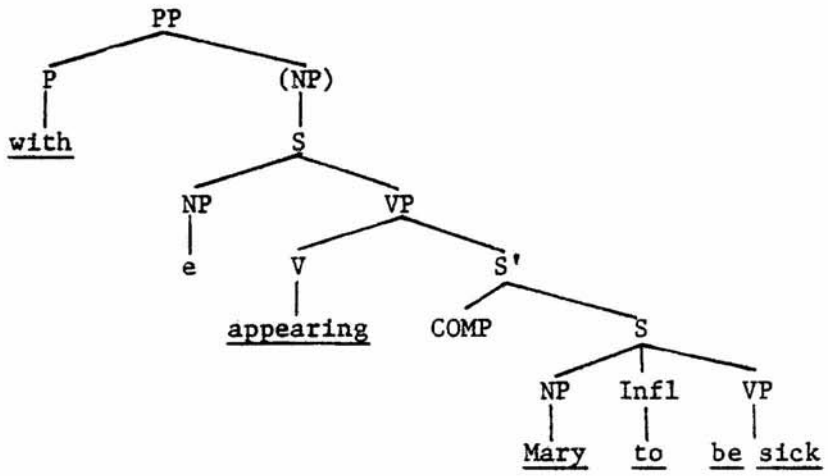
(7), then, characterizes the general type of PP modifier being considered here, while (6) is the structure of absolute phrases only. In other words, all prepositions subcategorize NP complements, and 'absolute' with subcategorizes an S complement.

In searching for some preliminary motivation for the S node in the complement of (6) and (7), note that this complement serves as the domain for traditionally cyclic transformations. The first member of each pair below has the underlying structure (6), while the second member has the structure (7).[2]

(12) a. with the child being scolded by his parents
with the child's being scolded by his parents
b. with Bill sending his parents some money
with Bill's sending his parents some money
c. with the public believing the senator to be a crook
with the public's believing the senator to be a crook
d. with the exams being easy to grade
with the exams' being easy to grade
e. with Mary appearing to be sick
with Mary's appearing to be sick

Note especially (12e). Within REST, the underlying structure of this example is as follows.

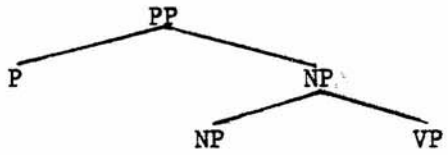
(13)



According to REST assumptions, S' deletion applies[3] and then Mary is moved to the subject position of the higher clause. The precise surface form of Mary will be discussed in section 3.

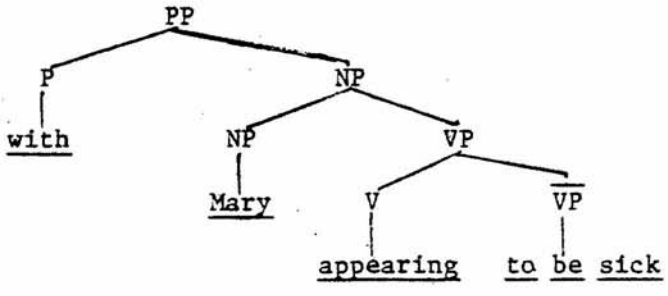
This proposal argues against one in which the PP complement contains no S node, as in (14), for example.

(14)



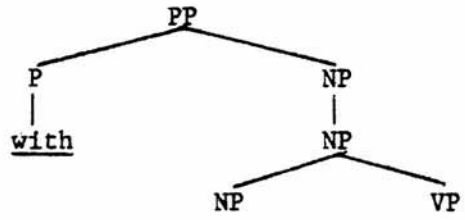
This alternative analysis might posit (15) as the underlying source of (12e).

(15)



Note that such a structure presumably requires no movement rule to derive the PPs in (12e). This structure, however, contradicts certain REST assumptions (cf. Koster and May 1981 for discussion). Furthermore, even if the movement rule described above is allowed to apply to an underlying structure like (14), two problems arise. First, the following structure, in which NP is solely dominated by NP, is unmotivated.

(16)



The more acceptable version of this structure would be (14). But, discarding (16) shows that this hypothesized proposal is left with no means of distinguishing between our (6) and (7). As will be shown in the following paragraphs, however, this distinction is a significant one, and should be stated by any account of our data.

The second difficulty with adopting structure (14) has to do with Case marking. Although the details of Case marking will be presented in section 3.1, we will note here that (14) either (i) provides no means of obtaining two different Case markings, as is required; or (ii) presents an unresolvable Case conflict situation. We thus reject (14) as a possible underlying source for the prepositional phrase modifiers being considered here.

Let us turn now to the Government Binding Theory (GBT) for arguments in favor of our two proposed structures (6) and (7).

3. Arguments from the GBT

The GBT is a recent development of REST and is outlined in the work of Chomsky (1979). We next present arguments supporting (6) and (7) that can be derived from this framework.

3.1 Case marking

According to the GBT, all lexical NPs (NPs that are phonetically realized) must be marked for (abstract) Case.[4] Abstract Case is assigned to an NP which is governed by a [-N] lexical category (i.e. V or P), where the notion of government is defined roughly as minimal c-command.[5] The definition of government given by Chomsky appears below.

(17) α governs β iff α minimally c-commands β.

α minimally c-commands β $=_{def}$ α c-commands β and there's no γ such that α c-commands γ and γ c-commands β and not γ c-commands α.

Furthermore, government and hence Case marking are sensitive to the government boundaries, NP and S'. This last stipulation, as we will

see below, turns out to be crucial in distinguishing absolute PPs from other prepositional phrases.

Consider again the data (4) and (5). If pronouns appear as the embedded subjects of these PPs,

(18) with him signing the Declaration of Independence,
with him following de Gaulle,
with her complaining about life in Siberia,

(19) in his signing the Declaration of Independence,
upon his biting de Gaulle's leg,
after her complaining about life in Siberia,

we see that subjects of absolute phrases are marked with objective Case, while those of other PPs are marked with genitive Case. Moreover, the PPs in (19) may not occur with subjects in the objective Case.

(20) *in him signing the Declaration of Independence,
*upon him biting de Gaulle's leg,
*after Betty complaining about life in Siberia,

These Case marking facts are explained if the structures (6) and (7) are adopted. In (6) with assigns objective Case to the embedded subject NP, just as the preposition in (9) assigns objective Case to the NP in its complement. Note that government across an S node is permitted, as in Chomsky's treatment of bridge verbs.[6]

However, as stated above, government across an NP node is blocked. In this regard, consider structure (7). Note that the NP node dominating the S of the complement there entails that the embedded subject will not be assigned Case by the preposition. The ungrammaticality of the examples in (20), in which the preposition has assigned objective Case, confirms this prediction.

Next, as previously noted, all lexical NPs must be assigned Case. Genitive Case, Chomsky suggests, is assigned to an NP by the following rule.

(21) NP $\longrightarrow$ (NP + Poss)/ (____ V')$_{NP}$

The NP node dominating the complement in structure (7) provides the relevant context in which this rule may apply. We thus have an account of the genitive marking that appears on embedded subjects of this structure, as seen in (19) and (20).

Furthermore, note that the lack of an NP node dominating the complement of with in (6) predicts that the complement subject of with will never receive genitive Case by rule (21). In other words, the only Case that will be assigned to the subject of the absolute clause of (6) is the objective Case that is assigned by with.

An apparent counterexample to our proposal is found in the ungrammaticality of the examples below.

(22) a. *with there's being more robberies in the neighborhood
*with there's appearing to be life on Mars
*with its raining cats and dogs
*with its happening to be obvious that the butler killed the mistress

Assuming these PPs are derived from structure (7), Case marking appears to have mistakenly assigned genitive Case to there and it. For, note that if objective Case had instead been assigned (i.e., if the PPs of (22a) had been derived from structure (6)), the examples would be grammatical.

(22) b. with there being more robberies in the neighborhood
with there appearing to be life on Mars
with it raining cats and dogs
with it happening to be obvious that the butler killed the mistress

Two explanations can be offered to account for such data. First, it may be claimed that there and 'dummy' it do not otherwise appear as subjects of NPs.

(23) *there's tendency to be more robberies in the neighborhood
*there's appearance to be/of being life on Mars
*its appearance to be/of raining
*its happening to be obvious that the butler killed the mistress

An alternative explanation for the ungrammaticality of (22a) and (23) might be that there and it do not take genitive Case because of the resulting homophony with their contracted forms, there is and it is.

Regardless of the account adopted, however, it should be pointed out that, consistent with either of these hypotheses, the following PPs are not acceptable.

(24) *after there's being more robberies in the neighborhood
*in there's appearing to be life on Mars
?*upon its raining cats and dogs
?*before its happening to be obvious that the butler killed the mistress

In summary, then, the Case marking facts discussed in this section are explained by the GBT if structures (6) and (7) are adopted.

3.2 Occurrence of PRO

Within the GBT, PRO is considered to be a pronoun (NP) which lacks a phonetic matrix--i.e., is phonetically unrealized. Its appearance in LF is restricted to ungoverned positions by the Binding Conditions of the GBT. For example, since the subject of an infinitive is ungoverned, PRO may appear there.

(25) I promised ($_{S'}$ ($_{S}$ PRO to feed the cat))

The S' node above blocks government of PRO by promised.

Returning now to (6) and (7), consider the position of the embedded subject NP. This position is governed by with in (6), as required by the Case assignment proposal of section 3.1 of this paper. The complement subject in (7), however, is in an ungoverned position. The NP node dominating the complement prevents anything outside the complement from governing (and assigning Case to) the subject NP. Thus, our analysis makes the claim that PRO may appear as the embedded subject in (7), but not in (6). The following data support this claim.

(26) In signing the Declaration of Independence
Upon biting the general's leg
After complaining about life in Siberia

(27) *With signing the Declaration of Independence
*With following him
*With complaining about life in Siberia

It must be emphasized that structure (6) underlies the examples in (27).[8] Recall from section 2 that with may appear as the head of structure (7) and thus take a sentential NP complement. In this structure, an embedded PRO subject should be allowed, provided that Case marking has not applied to assign genitive Case to it. In fact, if the examples in (27) are derived from a source like (7), a difference in grammaticality is obtained. Consider (28) below.

(28) With signing the Declaration of Independence, Jefferson began a new period of American history.
With following de Gaulle, the CIA launched its new surveillance program.
With complaining about life in Siberia, Betty's soft voice seems out of place.

Further discussion of the examples in (28) will be found in section 4.

The above data illustrating the behavior of PRO with respect to our PPs, then, are consistent with the proposed structures (6) and (7).

3.3 Lexical anaphors and pronouns

Within the GBT, a lexical anaphor is a lexical item which requires an antecedent--i.e. reflexives (himself) and reciprocals (each other). We will consider only reflexives here.[9] In previous transformational work (e.g. Langacker 1969 and others), reflexives and pronouns were treated as a single phenomenon. Both were subject to the 'precedes and commands' condition, stated below.

(29) A pronoun cannot both precede and command its antecedent.

In addition, a reflexive pronoun had to appear as a clausemate to its antecedent.

The Binding Conditions of the GBT apply independently to reflexives ('anaphors') and pronouns. The Binding Conditions, though, depend crucially on the definition of 'governing category', which Chomsky gives as the following.

(30) α is a governing category for β $=_{def}$ there's some γ such that γ governs β and α contains γ. (where α = NP or S)

According to the Binding Conditions of the GBT, an anaphor must be argument-bound in its minimal governing category, while a pronoun must be argument-free in its minimal governing category,[10] where 'minimal governing category' is defined as a governing category which properly contains no governing category (cf. Chomsky 1979:8).

This account of binding has certain implications for the analysis being proposed here, as will be demonstrated in the remainder of this section. We will also, where appropriate, compare the GBT account of anaphora with the earlier (transformational) account described above. We first consider lexical anaphors.

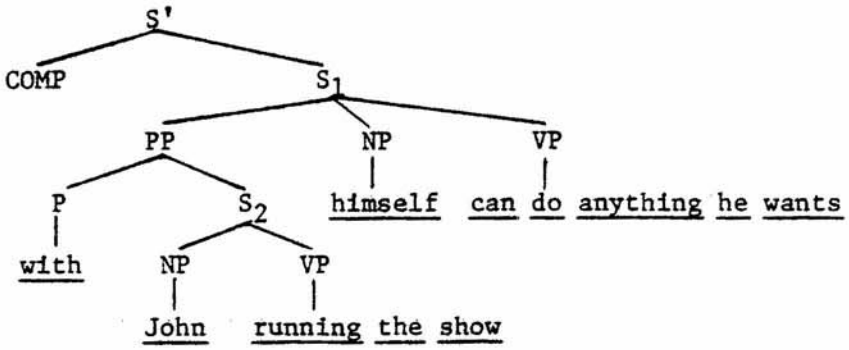
3.3.1. Lexical anaphors

To begin with, note the ungrammaticality of the following sentence.

(31) *With John$_i$ running the show, himself$_i$ can do anything he wants.

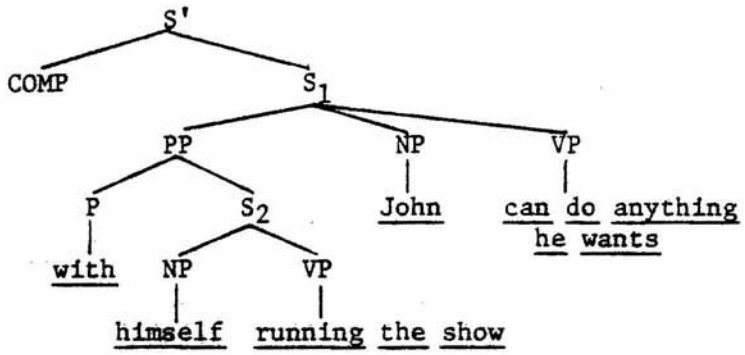
Under the traditional clausemate analysis of reflexives, one could conclude from (31) that the subject of the absolute phrase is in a different clause from the matrix subject. This conclusion is consistent with our proposed structure (6), in which the complement to with is an S constituent. Let us, then, attribute the following structure to sentence (31).

(32)



Suppose we interchange John and himself in (32), yielding (33).

(33)



The sentence that corresponds to this structure, (34) below, should be ungrammatical because there is no structural difference between (33) and (32).

(34) With himself$_i$ running the show, John$_i$ can do anything he wants.

Surprisingly, though, (34) seems acceptable.

For a solution to our problem, we turn to the GBT. We will see that, whereas the difference in grammaticality between (31) and (34) poses a serious problem for the clausemate analysis, the GBT can account for these sentences using the structures (32) and (33). Indeed, there seems to be no motivated way of accounting for both (31) and (34) under the clausemate analysis.

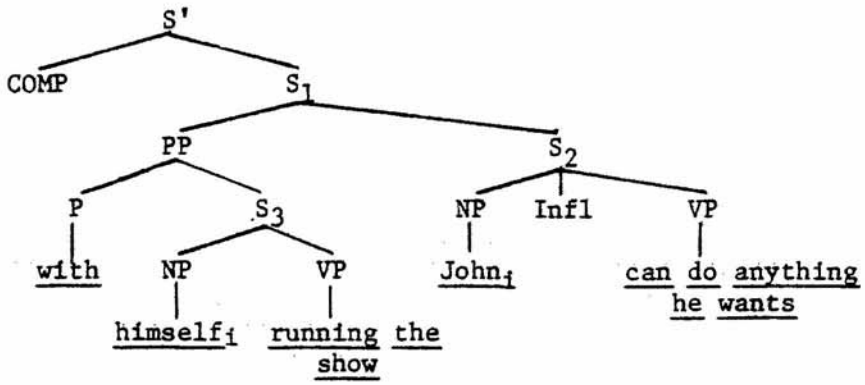
The application of the Binding Conditions of the GBT, as stated above, is based on the determination of governing categories. Let us examine, then, the governing categories of the anaphor in (32) and (33). Recall that the Binding Conditions state that an anaphor must be argument-bound in its minimal governing category.

In (33), the anaphor is assigned Case by with and therefore its minimal governing category is the governing category that contains with. Since S but not PP is a possible governing category, S_1 of (33) is the minimal governing category of himself. And, since himself is coindexed with the c-commanding argument, John, it is argument-bound within S_1 and therefore satisfies the Binding Conditions.

(32), in contrast, contains an anaphor that is not argument-bound in its minimal governing category. As in (33), the minimal governing category of himself is S_1. Although himself is coindexed with John in (32), John does not c-command himself, and thus the anaphor is argument-free. The ungrammaticality of (31) follows.

Note that the Binding Conditions indirectly specify that (33) rather than (35) is the structure of (34). In (35), the with phrase is a sister constituent to S_2.

(35)



Such a structure appears to be assumed by McCawley (1981). However, if, as Chomsky claims, governing categories can be NP or S, not S', then in (35) the minimal governing category of John is S_2, while that of himself is S_1. In other words, himself in (35) is not argument-bound in its minimal governing category and hence we discard (35) in favor of (33).

Returning now to (7), the structure of other PPs, we see that the NP node dominating the complement clause plays a crucial role. Since NP is a possible governing category and since the embedded subject receives Case internal to this NP, this NP is the minimal governing category of the prepositional complement in (7). The Binding Conditions, then, predict that anaphors may not appear as embedded subjects in this constructuion since there would be no c-commanding argument with which they could be coindexed within NP. This prediction is borne out, as can be seen below.

(36) *After himself cleaning the room, John went to the movies.
*By herself arresting the criminal, Mary showed great bravery.[11]

Summarizing this section, then, the facts concerning lexical anaphors first of all support our syntactic analysis of with and other prepositional phrases. Secondly, this data has enabled us to delimit the position in which these prepositional phrases occur in a sentence--specifically, as a sister to the matrix subject.

Both of these results are heavily dependent upon the GBT and in turn argue against the traditional clausemate analysis of reflexives. As pointed out above, the difference in grammaticality between (31) and (34) is a source of embarrassment for the traditional analysis. Another example of the inadequacy of such an approach is the fact that our example (34) defies a Raising analysis of the type that might be proposed for (37).

(37) John$_i$ believes himself$_i$ to be handsome

Traditionally, it has been proposed that himself is raised into the matrix S, becoming a clausemate of the subject, and hence accounting for the intended coreference. But analogous motivation for raising himself to become a sister of with in structure (33) is absent. Even if Raising

applied, there would still be no clausemate subject for it to be coindexed with. The GBT is thus able to account for (34), whereas previous theories of anaphora dependent upon clausemate status could not.

3.3.2. Pronouns

As might be expected, conclusions similar to those of the preceding section can be drawn from the examination of pronouns within both types of PPs being discussed here. First, observe the following.

(38) a. With him$_i$ running the show, John$*_{i/j}$ can do anything he wants.
b. With it$_i$ turning sour, the milk$*_{i/j}$ will have to be thrown out.

The fact that the proximate (coindexed) readings above are unacceptable is a counterexample to a 'precedes and commands' analysis. Since the relevant pronouns in (38) precede but do not command their antecedents, coreference should be allowed, but it is not.

As before, it can be shown that the GBT is able to account for these data. According to the Binding Conditions, pronouns must be Case-marked and free in their minimal governing category. Once again, the embedded subject and the matrix subject are in the same governing category, the matrix S, given the positioning of the PP as in (33) above. The Binding Conditions correctly predict that the two subjects cannot be coindexed and hence the interpretive facts follow.

The Binding Conditions also predict that he and John in (39) may be coindexed.

(39) With John$_i$ running the show, he$_{i/j}$ can do anything.

In (39), he and John are in the same governing category, but he is not bound within that category since it is not coindexed with a c-commanding argument. Hence, the proximate and obviative interpretations are both available in this sentence.

Unfortunately, (39) poses a problem for the GBT when the binding of John is considered. Nonpronominal lexical NPs, according to the Binding Conditions, must be argument-free in every governing category. John, however, is argument-bound in the matrix S and thus (39) is a counterexample to the Binding Conditions. We will discuss this problem below.

Returning now to structure (7), we see yet once more that the NP complement node there plays a key role. Its effect is to again act as the minimal governing category of the prepositional complement. Hence, any pronominal NP that occurs inside this complement NP should be accessible to coindexing with any NP that is outside of it. The examples below support this claim.

(40) With its$_{i/j}$ turning sour, the milk$_i$ will have to be thrown out.
After his$_{i/j}$ robbing the bank, John$_i$ was jailed.

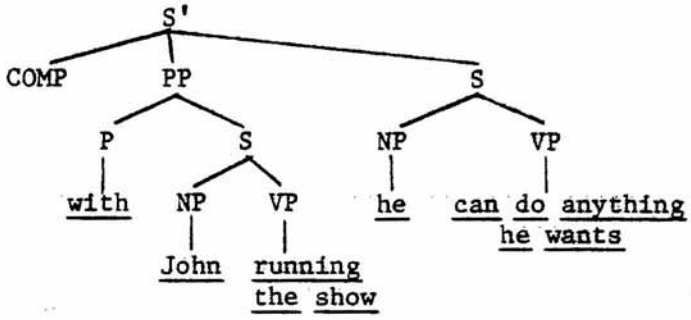
The traditional precedes and commands analysis can account for these readings since the pronoun precedes but does not command its coindexed antecedent. Such an analysis also allows the readings shown in (41).

(41) After John's$_{i/j}$ robbing the bank, he$_i$ was jailed.

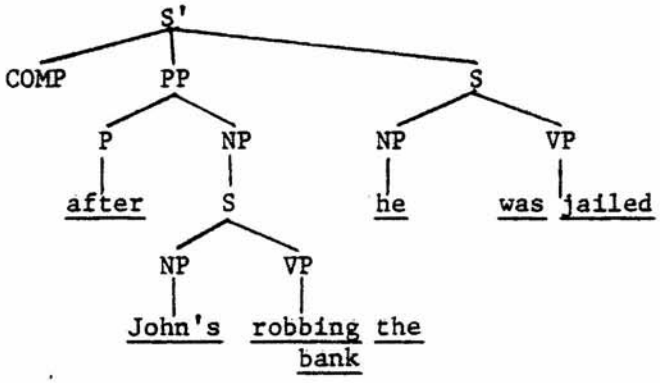
However, the proximate interpretation of this sentence, like that of (39) above, contradicts the GBT's Binding Conditions. The difficulty is that the embedded lexical subject is supposed to be argument-free in all governing categories, but it is not.

One possible solution to this problem is to claim that the absolute phrase is a sister to the matrix S and a daughter to the parent S'.

(42) a.



b.



It should be pointed out that (42) differs from the undesirable (35) in that the modifying clause in (42) is attached to S', not to S. This positioning has the consequence that the subject of the PP has no governing category, since S' is excluded from the set of possible governing categories. As a result, in (42a), for example, the embedded subject is governed by with but is contained in no governing category. This conclusion seems strange, intuitively. One of the underlying motivations for the GBT is that government and binding are closely related. The situation entailed by (42) seems to run counter to this view.

We thus leave the problem posed by (39) and (41) as an unresolved issue. These examples, like others in section 3.3, point to a difference in empirical predictions made by the GBT and the precedes and commands analysis. To summarize, although the traditional precedes and commands analysis (including the clausemate restriction) can account for

(36), (37), (39), (40), and (41), it cannot account for (31), (34), nor (38). The GBT analysis, in contrast, can account for all of these examples, except for (39) and (41). We conclude this section by suggesting that the treatment of nonpronominal lexical NPs in the GBT needs revision. The requirement that such NPs be free in all governing categories seems to be too strong in light of examples like those below.

(43) (In order) For John$_i$ to run for president, he$_i$ has to win our support.
Because Mary$_i$ is interested in birds, she$_i$ loves to go camping.
John$_i$ and his best friend usually trade lunches, but yesterday John$_i$ ate John's$_i$ lunch and his best friend ate his.

Each of these sentences contains a nonpronominal lexical NP that is not argument-free in every governing category--John, Mary, and John's, respectively. The Binding Conditions would hence incorrectly exclude these sentences with these intended interpretations. The treatment of such data is left for future research.

4. Semantic evidence

The previous section presented syntactic evidence to support our claim of section 2. This section draws upon semantic judgments to distinguish between the two proposed types of complements to P. This distinction is seen most clearly in with phrases. Since with subcategorizes both S and NP complements, both of the following are acceptable.

(44) With John proving the theorem, current research will soon take a new turn.

(45) With John's proving the theorem, current research will soon take a new turn.

We will thus be concerned with finding some semantic tests that differentiate (44) and (45).

Considering first with phrases which do not contain the aspect markers have or be, I claim that gerundive NP complements of this sort express completed situations or actions. This notion of completion is probably to be related to the proposal made by Kiparsky and Kiparsky (1970), who, citing Lees (1960), claim that gerundive nominals occur in factive contexts. This 'completed' meaning of gerundive complements accounts for the unacceptability of adverbs such as possibly in the examples below.

(46) a. With John perhaps/possibly/probably proving the theorem in a couple of days,
b. *With John's perhaps/possibly/probably proving the theorem in a couple of days,

Note that objective + -ing complements as in (46a) do not necessarily have this completed meaning.

Our claim is further supported by data like the following.

(47) a. With Reagan winning the election, Carter will make a last-minute appeal to the voters.
b. *With Reagan's winning the election, Carter will make a last-minute appeal to the voters.

(47b) is bizarre because the with phrase says that Reagan has already won the election (the late-night projections are unanimously conclusive, for instance). The matrix clause action (Carter's last-minute appeal to the voters) hence does not follow.

Additional examples are found below. In each case, under the most natural interpretation, the gerundive complement seems to have been completed, while the corresponding objective + -ing complement does not.[12]

(48) a. With John running a mile in five minutes flat,
With John's running a mile in five minutes flat,
b. With John pushing a cart of flowers through the lobby,
With John's pushing a cart of flowers through the lobby,
c. With Bill reaching the top of the mountain,
With Bill's reaching the top of the mountain,
d. With John believing in Santa Claus,
With John's believing in Santa Claus,

To illustrate more clearly the difference between the members of the pairs above, observe the following.

(49) a. With John pushing a cart of flowers through the lobby tomorrow morning, he'll have to wake up at 6 a.m. to get there in time.
b. ?*With John's pushing a cart of flowers through the lobby tomorrow morning, he'll have to wake up at 6 a.m. to get there in time.

If the with phrase action of (49b) has already been accomplished, as we claim it has been, then the matrix clause action seems strange. By the same token, the with phrase in (50a) below is incongruous with its matrix clause because the with phrase action can be interpreted as taking place at the present time.

(50) a. ?*With John running a mile in five minutes flat, a new world's record was set.
b. With John's running a mile in five minutes flat, a new world's record was set.

As another example illustrating the completed sense of gerundive NP complements, consider (51).

(51) a. ?*With John believing in Santa Claus until the age of seven,
b. With John's believing in Santa Claus until the age of seven,

The situation of (51b) seems to be that John is older than seven and that he has stopped believing in Santa Claus. (51a), however, admits only the strange interpretation under which John is younger than seven years old and it is known that when he does become seven, he will automatically stop believing in Santa Claus. These interpretations, of course, are facilitated by the until clause. Until can only be used when a time limit has been or can be set.

(52) a. With John sleeping until noon,
b. With John's sleeping until noon,

Thus, in (52a), John is sleeping now, this morning. His alarm clock may be set for 12:00 and it is known that John will be awake after 12:00. In (52b), John has awakened; it is past noon. Returning to (51), it is usually not possible to set a time limit on the duration of one's beliefs, so (51a) is strange. (51b), however, is acceptable since John's believing in Santa Claus has already ended. The relevant period of time can be delimited and its endpoint made precise.

We have claimed in the preceding paragraphs that gerundive complements to with express completed situations/actions. We do not mean to imply, however, that nongerundive complements cannot express completed actions. In the absence of adverbial elements (e.g. tomorrow, until), objective + -ing complements may express completed situations/actions. The first member of each of the pairs in (48) may, for most speakers, encode this meaning. However, I claim that this is a secondary interpretation, the primary one being the noncompleted interpretation.

The presence of an aspectual marker (have, be), like the presence of adverbs, also tends to disguise the completed vs. noncompleted distinction. Have, of course, forces a completed reading, as seen in both the (a) and (b) examples below,

(53) a. with John having sung,
b. with John's having sung,

while be seems to force a noncompleted reading.

(54) a. with Mary being sick,
b. with Mary's being sick,

Additional examples appear below. Compare (50a) with (55a) and (49b) with (56b).

(55) a. With John having run a mile in five minutes flat, a new world's record was set.
b. With John's having run a mile in five minutes flat, a new world's record was set.

(56) a. With John being in the parade tomorrow morning, he'll have to wake up at 6 a.m.
b. With John's being in the parade tomorrow morning, he'll have to wake up at 6 a.m.

Some speakers express the opinion that there is a difference in focus or style between the pairs in (53)-(56). The gerundive (b) complements above seem to place emphasis on their subjects. Thus, the with phrase of (55b), in contrast to the one in (55a), might be paraphrased as 'with John--not Bill--having run a mile in five minutes flat'.

Another difference between the with phrases in (55) and (56) can be found in the meanings attributable to with. As the head of an absolute phrase, with expresses the temporal notion of simultaneity. A sentence containing an absolute phrase may hence be paraphrased as 'with X taking place at time T, the matrix action or situation Y occurs/obtains'. In contrast, when with occurs with NP as its complement, it seems to take on its commitative or accompaniment reading, which is illustrated in the examples below.

(57) John went to the movies with Mary.
They handled the situation with tact.

The absolute meaning of with obviously includes the notion of accompaniment. But it is the temporal factor that distinguishes absolute with from commitative with. Thus, simultaneity is implied in (55a) but not in (55b). The same tends to be true of the preceding examples of this section. Finally, note that the PPs in (28) do not express the notion of simultaneity found in absolute phrases. As was seen in section 3.2, these PPs are not absolute phrases, as shown by their PRO subjects.

We have suggested, then, that the meaning of with is reflected in the complement that it appears with. In addition, the semantic difference between gerundive NP and sentential complements to with seems to be one of completion vs. noncompletion. This proposal that gerundive complements to with express completed states furthermore implies that the same meaning should be attributable to gerundive complements to other prepositions. In this regard, consider the following.

(58) In spite of John's proving the theorem, he's ready to commit suicide.
Before Mary's hiring a new secretary, she wants to take a vacation.
By Harry's learning to speak Greek, he is carrying on our family's tradition.

The accomplishment of the gerundive nominal, not its ongoing state, seems to be the favored interpretation of the PP modifiers above, as predicted by our proposal.

One might ask about the relationship between gerundive nominals and nongerundive nominals (cf. Chomsky 1970). I claim that the relationship is indeed a close one. In this regard, consider the following.

(59) a. with the army destroying the town
b. with the army's destroying the town
c. with the army's destroying of the town
with the army's destruction of the town
with the town's destruction

Given our proposal, the nominalizations of (59c), like that of (59b), denote a completed action. Further exploration of the similarities between gerundives and other nominalizations must be left for future work.

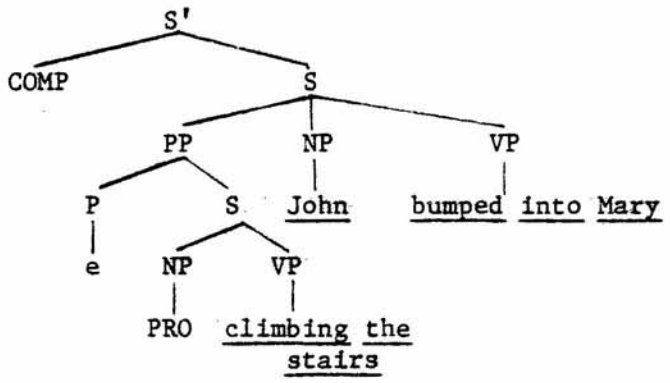
Finally, as a result of our discussion of Case marking (section 3.1) and PRO (section 3.2), and our semantic judgments (this section), we can propose that the initial clauses of (60) below are derived from absolute with phrases.

(60) a. The sun shining, de Gaulle took Fido for a walk.
The enemy quickly approaching, the defenders prepared for battle.

b. Climbing the stairs, John bumped into Mary.
Knowing his mother as he did, Bill was absolutely certain that she was innocent.

These -ing clauses have traditionally been called 'present participles'. As stated above, they can be derived from absolute phrases, based on the following reasoning. First, the phrases of (60) do not seem to denote completed situations or actions, thus in keeping with our proposal of this section. Secondly, the (a) examples contain lexical subjects. Since they are not marked with genitive Case, the clauses should not be NPs, i.e., should not be derived from structure (7). If they are derived by deletion of with from absolute clauses, however, these subjects will be marked with objective Case and will escape the effects of the Case filter, assuming with assigns Case before deleting. If with does not assign Case before deleting, the Case filter would exclude the resulting sentence. Finally, consider the (b) examples of (60). The participles here, I claim, have PRO subjects. Recall that in section 3.2 we saw that PRO cannot appear as the subject of an absolute phrase because it would then be governed by with. If, however, with deletes, PRO is left in an ungoverned position, as in (61) below.

(61)



As above, with has the option of assigning Case before it deletes. If it does, however, we assume that PRO would be governed by the Case assigned to it, and hence the sentence would not be allowed. Our analysis, along with the GBT, thus provides an interesting account of the present participles in (60).[13]

5. Conclusion

Let us summarize our findings here. We have seen that absolute with phrases can be distinguished from other prepositional phrases with -ing complements on syntactic grounds. This was demonstrated within the framework of the Government Binding Theory of REST. We can thus describe absolute phrases as PPs whose heads are the preposition with, whose complement subjects are marked with objective Case, and whose complement verbs are tenseless and are marked with -ing. Some semantic judgments were called upon to offer additional support for our claim that absolute phrase complements are to be distinguished from other prepositional phrase complements.

As a final remark, let me emphasize once more the crucial role that the NP complement of (7) plays. NP within the GBT is not only a governing category, but is also a barrier to government. As was seen above, government affects Case marking and binding. Our analysis, then, provides a unique setting in which to view the fundamental workings of the GBT. The GBT, in fact, makes the correct predictions of the data we have examined.

Footnotes

*I would like to thank the following people for their assistance, encouragement, and native speaker intuitions: Jeanne Gibson, Grant Goodall, Sue Lindner, Leslie Saxon, and Mary Ellen Shankland. I would also like to extend special thanks to Yuki Kuroda for his patient help in the development of many of the ideas presented here.

[1]We will consider here only absolute phrases marked with -ing. Those marked with -en, as in (i) below, will not be treated.

(i) with him elected,
with Mary thought to be a fool,
with Fido taken to a kennel,

[2]See McCawley 1981 for additional arguments in favor of positing the S node in structure (6).

[3]S' deletes so that Subjacency is not violated. For discussion, see Chomsky 1979.

[4]I adopt here Chomsky's convention of using 'Case' (with a capital 'C') to denote abstract Case. The relationship between abstract Case and morphological case is not one-to-one. See Chomsky 1979 for more discussion of abstract Case.

[5]This is not the only manner in which an NP may be assigned Case within the GBT. Case may also be assigned inherently in the base. However, no arguments for inherent Case marking will be considered here since the facts can be accounted for in terms of structural Case assignment, as presented in the text.

[6]In other words, with assigns Case to its complement subject just as believe does in (i).

(i) I believe ($_S$ him to be an idiot)

[7]I have observed that although judgments of the there examples of (22)-(24) are very clear, judgments of the it examples are somewhat uncertain.

[8]I am indebted to Grant Goodall for bringing this point to my attention.

[9]Unfortunately, examples of PPs with reciprocals (e.g. each other) as subject are difficult to construct. The examples presented in the text will hence be restricted to PPs having reflexive complement subjects.

[10]α is said to be argument-bound in a category β if it is coindexed with a c-commanding argument that is contained in β . Otherwise, α is argument-free in β .

[11]Perhaps another explanation can be offered for the unacceptability of the examples in (36). Note that reflexive pronouns cannot be marked with genitive Case.

(i) *himself's/hisself
*herself's
*themselves'/theirselves

One could propose, then, that the reflexives in the examples of (36) have not been Case-marked and hence fall victim to Chomsky's Case filter.

That the intended proximate interpretation is independently allowed in such PP constructions is shown in section 3.3.2, example (40).

[12]The verbs of the PPs in these examples are taken from Vendler 1967. They represent the four classes of verbs that he distinguishes. (a) and (b) are 'process' verbs--i.e., can normally appear in the progressive. (a) is an Accomplishment verb, while (b) is an Activity verb. (c) and (d) are Achievement and State verbs, respectively. These two latter types of verbs are nonprocess, according to Vendler, and do not appear in the progressive. It is interesting, then, that they do appear marked with -ing in our examples.

[13]Several remarks must be made here with respect to this analysis of present participles. First, with cannot always delete.

(i) ??Him proving the theorem, current research will soon take a new turn.
??Jefferson signing the Declaration of Independence, the others are sure to follow.

The conditions which govern the deletability of with are not clear to me at this time.

Secondly, deletion within the REST is assumed to be recoverable. The semantic content of absolute with must therefore in turn be assumed to be negligible. Other prepositions (after, by, etc.), then, are reasonably viewed as carrying more semantic information than with. Their nondeletability can be accounted for along these lines.

Finally, it is plausible to analyze with as a complementizer. Doing so can be syntactically motivated and recalls the analysis of Chomsky and Lasnik (1977). Argumentation for this proposal will be included in future work.

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