

OBSERVATIONS AND COMMENTS ON THE RULE OF
EQUI-NP DELETION IN ENGLISH SYNTAX

by

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Preface

It has been suggested by some that an abstract S may fail to explain various inconsistencies in syntax and that certain rules hitherto thought acceptable in the system, may in fact have serious flaws. Michael Brame, in Conjectures and Refutations in Syntax and Semantics, attacks the notion of the abstract S through the rule of Equi-NP Deletion which he finds so often riddled with ad hoc devices in its application that it is, for him, not a rule of syntax.

In this paper I will present some of Brame's arguments against Equi-NP Deletion (henceforth, Equi) and comment on or question these arguments. The format of this paper will be straightforward: I will present an argument, explain it as Brame sees it, and then offer my own comments or criticisms. I would like it understood that it is my belief that the Equi question remains open. Before proceeding with Brame's arguments against Equi, however, it might be to our advantage to briefly investigate the foundation from which Brame argues.

I Introduction

1.1 Abstract S

First, what is an abstract S? It is an S in underlying representation which, due to structural change through various rule applications, is not an S in surface structure. An example of the abstract S is seen in an S like 'John wants to go' whose surface structure is derived from [John want it] S₁ [John go] S₂ in the following simplified manner:

1. Complementizer Placement applies and 'for-to' is chosen.
[John want] [it]_{S₂} for John to go]S₂
2. Equi applies and the subject NP of the complement, which is co-referential to the subject NP of the matrix S, is deleted.
[John want] [it]_{S₂} for-to go]S₂
3. It-Deletion applies on S₁.
[John want]_{S₂} [for-to go]S₂
4. Complementizer Deletion applies on the S₂ cycle.
[John want]_{S₂} [to go]S₂

As I mentioned above, the abstract S is thought by some to be inadequate in its explanation of syntax. A proposed remedy for this inadequacy is the VP complement which, posited in place of an abstract S, might allow for the derivation of a variety of surface structures without need for several ad hoc devices.

1.2 Joan Bresnan's VP hypothesis

Joan Bresnan, in "Sentence Stress and Syntactic Transformations" (Bresnan; 1971) presents a formulation and exploration of the VP complement. She tells us that

It has been proposed...that certain infinitival complements should be derived from deep structure

VP's rather than Ss. Suppose this proposal is applied to the analysis of certain adjectives plus complement constructions. The question is whether in a construction like 'It is tough for students to solve this problem', there is an underlying S= [for students to solve this problem] or an underlying PP+VP= [for students] [to solve this problem]. (Bresnan, 1971: 263)

Assuming the existence of both VP and S as underlying complements, Bresnan suggests that the "full range of possible subcategorizations for Adjectives would be expressed as VP ... (PP)($\begin{smallmatrix} VP \\ S \end{smallmatrix}$). (Bresnan, 1971: 263, footnote #4).

1.3 Bresnan's arguments against the sentential analysis

Bresnan presents several arguments against the sentential analysis of complements to adjectives like 'tough'. First, if 'tough' takes S complements, There-insertion, which is a sentence-cyclic transformation, should be applicable on the inner cycle. However, while we can have (1a), we can not have (1b)

- (1) a. It will be tough for at least some students to be in class on time.
 b. *It will be tough for there to be at least some students in class on time.

Second, "for-to complementizer of a true sentential complement allows many types of objects which the preposition 'for' after 'tough' does not". (Bresnan, 1971: 264)

- (2) a. Emmy was eager for that theorem on modules to become known.
 b. *It was tough for that theorem on modules to become known.

Third, complements to predicates such as 'hard' do not act as sentential constituents (they can not be shifted). While we can derive (3b) from (3a), we can not derive (4b) from (4a).

- (3) a. It is surprising [for a woman to act that way S
 b. [For a woman to act that way] S is surprising.
- (4) a. It is hard for a woman to act that way.
 b. *For a woman to act that way is hard.

1.4 Object-Shift as proof of VP complement superiority

The proposed superiority of a VP complement is realized, for example, in Bresnan's version of the rule of Object-Shift.

The rule of Object-Shift proposed by Bresnan is different from that which "transports an NP into subject position only from an "immediately lower clause", and "may not occur across more than one S-bracket..." It is intra-Sentence rather than cross-Sentence and "may not occur across any S brackets". (Bresnan, 1971:266, footnote #6).

Bresnan has attempted to prove that "VP as well as S must be a possible adjectival complement in deep structure", and that [a] given adjective may therefore be substituted for VP or S (or both)". (Bresnan, 1971: 266). If Bresnan's Object-Shift is stated in a way so as to apply to adjectives with VP complements, a reduction of the arbitrariness in the grammar and the descriptive rule features occurs.

- (7)*a. Such things are not $\left\{ \begin{array}{l} \text{good} \\ \text{appropriate} \end{array} \right\}$ for there to be children involved in.
- b. It is not $\left\{ \begin{array}{l} \text{good} \\ \text{appropriate} \end{array} \right\}$ for there to be children involved in such things.

Bresnan's version of the rule would predict the ungrammaticality. For Bresnan, 'good' and 'appropriate'

may take both S and VP complements... Object-Shift can apply only to VP complements...and There-insertion can apply only to S complements. The presence of 'there' in (7a) forces the "'S interpretation of the complement in both, and hence the shifted object in (7a) is ungrammatical". (Brame, 1976:77).

Bresnan's Object-Shift is formulated as $[_S \text{ Pred (PP)} \underset{VP}{[V^*(P)NP]]}$ (where V^* is representative of a randomly long string of verbs). This formulation will allow (8a) but not (8b)

(8) a. John is easy for Bill to please.

b. *You are tough for me to believe that Harry hates.

Since there are adjectives which take (PP)+VP complements only and adjectives which take both (PP)+VP and S, Bresnan suggests that there should be a class of adjectives which takes (PP)+S. This, she says,

is just what we would expect if VP is, with S, a possible complement generated in phrase structure. The phrase-structure rules will then specify VP as an alternative choice wherever S is specified, as in the rule $VP \rightarrow \dots (PP) \left(\begin{smallmatrix} VP \\ S \end{smallmatrix} \right)$. (Bresnan, 1971:268).

An example of (PP)+S might be

(9) It was not good for the community that John was executed.

In summation then, we see that Bresnan suggests a class of adjectives which is not subcategorized for S, and that this adjective class will not allow such rules as There-insertion to apply within the complement. She proposes that this class will take a (PP)+VP complement and suggests that one advantage of her analysis would lie in the reduction of arbitrariness in the grammar. However, she does not deny the existence of the S complement, pointing out that there is a class of adjectives-of which 'good' and 'bad' are members-that permit both (PP)+VP and S complements.

1.5 Michael Brame's extension of the VP hypothesis

Part Two of Brame's Conjectures and Refutations in Syntax and Semantics is a summation and extension of Bresnan's work. It is an overall refutation of the abstract S analysis and a specific argument against Equi. The gist of Brame's arguments against this rule is that the VP complement

derived in the surface structure by the application of Equi can be realized without Equi through the initial positing of the VP complement as suggested by Bresnan. Brame also wishes to show that not only is Equi unable to account for its inability to apply to deep structures where it theoretically should be applicable, but ad hoc devices must be created to overcome this inability. In short, according to Brame, if the VP complement can be posited at the outset, without having to go through Equi with its potential for ad hoc creations, then Bresnan's VP complement formulation is to be favored over the abstract S analysis. Therefore, Equi is no longer a rule of syntax.

1.6 Brame's summary of some of the arguments against VP hypothesis

Brame begins his discussion by summarizing Bresnan's position and the arguments against her made by Berman and Szamosi, 1972. Berman and Szamosi's arguments revolve about the rule of Object-Shift and are as follows: first, "there are Object-Shift predicates that allow two instances of "'for-to'". (Brame, 1976:77).

(10) a. For his wife to accept this view would be tough for John.

b. It would be tough for John for his wife to accept this view.

Second, "there are Object-Shift predicates that do allow There-insertion". (Brame, 1976:78).

(11) It's impossible for there to be five mistakes in that paper.

Third, "there are restrictions on PP of Object-Shift predicates because there is a PP in the matrix S in addition to an embedded complement S, but the matrix PP is usually optional". (Berman & Szamosi, 1972:78).

(12) It's impossible for that theorem on modules to become known
(if you don't publish it).

Fourth, "there are Object-Shift predicates that do allow S-Shift".

(Berman & Szamosi, 1972:78).

(13) a. It is impossible for Sam to dislike Mary.

b. For Sam to dislike Mary is impossible.

Fifth, "Object-Shift does not move objects across S boundaries because of "'the structural description of the rule'". (Berman & Szamosi, 1972:78).

1.7 Brame's response to arguments against Bresnan

Brame responds to Berman and Szamosi's arguments with a defense of Bresnan. He points out that Bresnan is aware of the complaint made by Berman and Szamosi involving (11) and (13) and acknowledges that some speakers allow a wider subcategorization for some Object-Shift Predicates", and can thus allow both VP and S complements. But, Brame says, "because some Object-Shift complements select S, in addition to VP, this in no sense implies that the VP complements are S complements in underlying representations". (Brame, 1976:79). Brame finishes his response to Berman and Szamosi here, by pointing out that if 'to please John' in

(14) It is tough to please John.

is shown to derive from "an underlying S, they [Berman and Szamosi] would have to show that VP patterns like S...". (Brame, 1976:79).

Replying to Berman and Szamosi's account of the ungrammatical (15):
 (15) *Defense plants are not good for there to be Communists involved in.
 as bearing upon the structural description of Object-Shift, Brame says (Brame: 1976:82) that Berman and Szamosi "offer no formulation of their structural description so as to provide a basis for comparison." Also, "they are mistaken in assuming that the relevant facts are unrelated to the underlying structures...", their assumption being that "transformational

devices are to be favored over structural devices in accounting for ungrammaticality". (Brame, 1976:80).

Looking at There-insertion and S-Shift, Brame says that Berman and Szamosi account for (16)

(16) *It would be tough for John for him to accept this view.

by

subcategorizing 'tough' for PP+S and by marking 'tough' to obligatorily undergo Equi-NP Deletion. The ad hoc nature of this account can not be glossed over..., for essentially the effect of marking 'tough' to obligatorily undergo Equi-NP Deletion, followed by pruning of the S node, is just to ensure that 'tough' ends up with a PP+VP complement, which is what Bresnan accomplishes straight-away. (Brame, 1976:81-2).

Brame further remarks that whereas Berman and Szamosi "require the new obligatory application of Equi-NP Deletion for predicates such as "'tough'", Bresnan does not, "a significant argument for her VP hypothesis". (Brame, 1976:82).

There is a difficulty in Berman and Szamosi's obligatory matrix PP.

(17) It's tough [for PRO] PP [PRO talk to idiots] S

Brame remarks that "it is somewhat surprising that preservation of the S-structure requires such an elaboration of abstract structure which just happens to result in the surface VP structure with which Bresnan commences". (Brame, 1976:82).

(18) a. It would be tough for PRO PP [for Nixon to be President again]S

b. It would be tough for Nixon to be President again.

To block the derivation of (18b) from (18a), Berman and Szamosi must fall back upon a constraint which states that "'if the matrix prepositional phrase contains PRO, Equi must apply; and derivations in which it can not apply, because there is no coreference, are blocked'". (Brame,

1976:82). Brame, remarking that even Berman and Szamosi find this constraint odd, says

As so often happens, more and more abstract underlying structures raise more questions than they answer...the constraint on identity of embedded subject and matrix object of the preposition,...is designed so as to ensure that we end up with a surface VP, which is what Bresnan assumes from the beginning. (Brame, 1976:83).

Another constraint on tough-movement which would block movement out of tensed clauses is needed in the Berman and Szamosi analysis.

(19) a. It is impossible to believe that John stole that book.

b. *That book is impossible to believe that John stole.

Brame notes that "the ungrammaticality of (19b) follows from Bresnan's analysis, which requires no extra constraint". (Brame, 1976:83).

Brame concludes this section with the observation that the

theoretical mechanisms required by Berman and Szamosi... all have the same effect of bringing about a VP structure..., the fact that we end up with a VP follows as an automatic consequence of Bresnan's VP hypothesis... The proliferation of constraints...suggests that something is indeed missed by Berman and Szamosi. (Brame, 1976:83-4).

1.8 Equi-NP Deletion's ad hoc creations

Brame cites a number of "ad hoc devices which are consequences of the rule of Equi-NP Deletion". Two of these are, one: that "absolute exception features, deep structure constraints, or derived like-subject constraints are needed for predicates such as 'try' and 'persuade'", and two: "Optional versus obligatory application of Raising for predicates such as 'expect'". (Brame, 1976:100-1). Brame says

It will be recognized that all of these special conditions are a consequence of the assumption that the relevant predicates select S complements and that there is a rule of Equi-NP Deletion. The

conditions are all ad hoc in the sense that they do not provide explanations for additional data, nor can they be generalized in any revealing way. (Brame, 1976:101).

1.9 Brame's VP complement proposal

In an attempt to remedy the above, Brame proposes a hypothesis which is an extension of Bresnan's VP hypothesis. He says that

Where the standard theory adopts an S complement whose subject is eliminated by Equi-NP Deletion, I propose a VP complement, which is not dominated by an abstract S node...A consequence of this proposal is that there is no rule of Equi-NP Deletion as traditionally conceived. (Brame, 1976:101).

I have attempted in the above, a summary of Berman and Szamosi's work as seen through Brame's eyes. I also tried to summarize Brame's responses to their ideas.

1.10 Conclusion

The purpose of this introduction was to give the reader an overall view of the arguments surrounding Equi. I summarized Bresnan's VP hypothesis, introducing the reader to the syntactic analysis she adheres to and from which Brame puts forth his objections to Equi.

II Observations and Comments

2.1 Some problems of analyses incorporating Equi-NP Deletion

We begin in Section Two of Chapter Five (Brame, 1976) where Brame remarks that problems of "for analyses incorporating Equi-NP Deletion arise in connection with predicates such as 'try', 'condescend', 'attempt', 'need', and the like". (Brame, 1976:93). Within the standard theory, (20b) is derived from (20a)

(20) a. John tried [for John to leave]S

b. John tried to leave.

Since John is generated in the complement subject position of (20), other NPs such as 'Mary', 'Harry', etc. should also be generated in this position, according to Brame, but (21) reveals that this is not so:

(21) *John tried for Mary to leave.

The same problem, Brame tells us, is present for the verb 'persuade'; we can have (22) but not (23):

(22) a. John persuaded Mary [for Mary to leave]S

b. John persuaded Mary to leave.

(23) *John persuaded Mary for Harry to leave.

To remedy the problem in (21), Brame says that

a special constraint is required to ensure that the subject of the embedded sentence be identical to, and coreferential with, the subject of the matrix sentence in all such cases involving 'try', 'concede', etc. (Brame, 1976:94).

To remedy the situation in (23), there must be a constraint which "will ensure that the complement subject is identical to, and coreferential with, the object of predicates such as 'persuade' and 'convince'". (Brame, 1976:94).

2.2 George Lakoff's exception features

The above two remedies revolve about the idea of exception features proposed by George Lakoff in Irregularity in Syntax. Lakoff's ID-NP-DEL produces (24b) from (24a):

(24) a. I asked [for I to leave]S

b. I asked to leave.

Lakoff suggests further that there are cases which either must meet

the structural description of this rule or which must not meet the structural description of this rule. These cases are called "absolute exceptions". (Lakoff, 1970:49). (25) and (26) show verbs that must meet the structural description of Equi.

- (25) a. John refrained from doing that.
 b. *John refrained from Bill's doing that.
- (26) a. John tried escaping.
 b. *John tried Bill's escaping.
 c. *John tried Bill escaping.

Lakoff says of this category of verb

In each of the a sentences, the embedded subject has been deleted, since it was identical to the matrix subject. But if, as in the b sentences, the matrix subject is not identical to the embedded subject, that is, if the SD of ID-NP-DEL is not met, then no grammatical sentence can result. Those VERBS must meet the structural description of ID-NP-DEL. (Lakoff, 1970:51).

- | | |
|---|---|
| (27) a. I bade him go.
b. *I bade go.
c. *I bade myself go.
d. *I bade for me to go. | (28) a. I yelled for John to go.
b. *I yelled to go.
c. *I yelled for me to go.
d. *I yelled myself to go. |
|---|---|

Examples (27) and (28) show verbs with the "opposite" trait: they must not meet the structural description of Equi.

If these verbs were simple exceptions that could not undergo ID-NP-DEL when they met its structural description, one would expect the subject of the embedded sentence to appear, even though it was identical to that of the matrix sentence. As the c and d sentences in (25) [and (26)] show, this is not the case. The identical embedded subjects may neither appear, nor be deleted. Not only can these verbs not undergo ID-NP-DEL, they may not even meet its structural description. (Lakoff, 1970:50).

In his discussion on p. 91 of Irregularity, Lakoff defines the verb

'persuade' as bringing oneself or another to belief, certainty, or conviction, but when "'persuade' takes a for-to complement, it has an entirely different use, namely "'to bring or cause someone to intend to do something'", as in "'John persuaded Bill to leave'". (Lakoff, 1970:94).

Lakoff represents

this sense of 'persuade with a hypothetical lexical item that is assigned the lexical meaning intend... Since there are not sentences like *'John persuaded Bill for Harry to leave', our hypothetical lexical item must also be an absolute exception to ID-NP-DEL. (Lakoff, 1970:94).

The verb 'persuade' is an absolute exception of the kind which must meet the structural description of the rule. The same analysis would be applicable to a verb like 'convince'. Thus, the problem that Brame brings up for examples (20), (21), and (23) would be explained in the above manner by Lakoff.

2.3 Brame's response to exception features proposal

Brame argues that if we can generate coreferential subject in complement subject position, we should ordinarily also be able to generate non-coreferential subjects. However, there are certain verbs that raise difficulties here.

Brame points out the error of Lakoff's proposed exception features which would have such predicates as 'try' and 'persuade' obligatorily meet Equi's structural description. He notes that Lakoff's

conception of exceptionality..., encompasses exceptional devices...never permitted in the standard theory,...is simply a reformulation of the problem and is tantamount to giving up the quest for an explanation for the ungrammaticality of (21) and (23). (Brame, 1976:94-5).

An answer to this assumption by Brame might be found in the qualities of the verb 'persuade'. The object of 'persuade' appears generally in

the matrix rather than only in the immediate lower embedding. That is, in (22a) John persuaded Mary [for Mary to leave]_S, the person undergoing John's persuasion is Mary and she occupies the object position in the deep structure. The subject will persuade the immediate object to carry out a certain action and the object, acting as the subject of the action (actually, being subject to the action through the persuasion of the matrix subject), will appear as the subject of the embedded complement in the deep structure. In (23) *John persuaded Mary for Harry to leave, while the true object appears as the matrix object, it does not appear as subject in the embedded clause. It is not Harry who is to leave, but Mary. Since the true object of 'persuade' has been determined by its appearance in the matrix object position, 'Harry', as subject of the embedded clause, generates an ungrammatical sentence.

Brame uses (29)

(29) a. John persuaded Mary [for John to leave]_S

b. John persuaded Mary to leave.

c. John persuaded $\begin{smallmatrix} B \\ S_2 \end{smallmatrix}$ [for B to eat]_{S₂}

as evidence of the failure of Lakoff's exception features: (29a) generates (29b) and Lakoff can not "provide an explanation for the relevant observations". (Brame, 1976:94-5). The same explanation given above for (23) holds for (29). Although the 'John' of the matrix and the 'John' of the complement are apparently coreferential, (since not marked otherwise), the object of 'persuade' which appears in the matrix is Mary. John can not persuade Mary for himself to leave (although John could persuade Mary to persuade him to leave). (29b) is therefore technically ungrammatical even though the structural description of Equi is met.

Let me explain briefly my idea of "technically ungrammatical". It has been suggested that verbs can be classified under the types: two-point verbs and three-point verbs. The former, of which 'try' is a member, requires only a subject and an object as in (20a), John tried [for John to leave]S. 'John' is the subject of the verb and 'eat' is the object. The latter type, as well as requiring a subject and an object in the matrix, requires the specification of the goal towards which the subject of the matrix is motivating the matrix object as in (29c) in which 'John' is the persuader, 'Bill' is the object of the persuasion, and to eat is the goal towards which 'Bill' is being motivated by 'John'.

The characteristics of each of these verb types must be satisfied, it seems to me. Does the use of 'persuade' in (29a) satisfy the three-point verb characteristics? In the matrix we have the persuader, 'John' and the object of his persuasion, 'Bill'. The object towards which 'Bill' is being persuaded should appear as the complement object. However, 'John' has been generated. But 'John' is not being persuaded to leave, 'Bill' is—as the matrix subject suggests. Therefore, the violation of this verb selectional-type feature quality (a three-point verb type) might act to block Equi's application.

What might be suggested is that even though Equi's structural description is met, the rule can not apply, which is to say, ultimately, that Equi's application might be dependent upon the nature of the matrix verb, as well as the satisfaction of the rule's structural description. While Lakoff admittedly does fail to provide an adequate explanation for (29), the solution to the problem might lie in the above suggestion which could be tied into his exception features proposal.

2.4 The feature [+ personal]

I wish to suggest that in the cases of Ss like (20), a verb feature [+personal] will be posited. This feature is an inherent feature of verbs such as 'try' or 'start' and is active anywhere within the deep structure. The feature requires that the complement subject be coreferential to the matrix subject. For example, 'try' is marked [+personal] which means that while (30a) is grammatical because the coreferentiality requirement is met, (30b) is ungrammatical,

(30) a. John tried to eat.

b. *John tried for Harry to eat.

In (30b) the [+personal] feature is not satisfied in terms of coreferentiality between the matrix subject and the complement subject. Keeping the basic definition of the feature, we can extend its range so that with verbs like 'convince' or 'persuade', the complement subject must be coreferential to either the matrix subject or object. Thus, we have two [+personal] categories: one category includes verbs such as 'try', and the other, verbs such as 'persuade'. An example of a [-personal] verb would be 'wish': it does not require coreferentiality. We can have both (31) and (32):

(31) a. John, wished [for John to leave]S

b. John wished to leave.

(32) a. John wished [for Mary to leave]S

b. John wished for Mary to leave.

The [+personal] feature tells us that an agent performs an action for his own direct gain or, indirectly, for someone else's gain.

(33) a. *I tried for you to succeed in show business.

b. *I tried for your success in show business.

c. I tried to arrange for your success in show business.

Example (33a) is ungrammatical because the subject of 'try' is not equal to the object; this equalness being what the feature demands. Example (33b) is ungrammatical-or at least awkward-when it is equivalent in meaning to (33c), but acceptable when its meaning is that of (34):

(34) I tried (for personal gain) to equal your success in show business.

An objection might be raised against the feature [+ personal] in that it would make Equi too powerful, with a verb like 'try', and 'persuade', Equi's application would be obligatory. However, the data seems to suggest that there is a limited class of verbs similar in requirements to 'try', i.e. 'start'. This would suggest that the feature may not necessarily be ad hoc.

In summation, I have suggested that certain ad hoc devices may be circumvented by taking a closer look at the verb in question. A verb like 'try' might have a feature which requires coreferentiality between the subjects of the matrix and complement before a grammatical S can be derived. Such a feature may not be ad hoc by virtue of its being found in other verbs with the same requirements as 'try'.

2.5 The subject-subject, object-subject constraints

Brame points out that a proposed solution by Perlmutter to sentences (20)-(23) involves a "subject-subject constraint for predicates such as 'try', and an object-subject constraint for predicates such as 'persuade'" which are "intended to be well-formedness conditions on deep structures". (Lakoff, 1970:95). For Brame, such constraints fail in the light of sentences like (35):

(35) a. John tried to be examined by the doctor.

b. John tried it [the doctor pass examines John]_{S2}

Says Brame,

In the standard deep structure of (35), the complement subject is not identical to the matrix subject or object. It is only after the complement has been passivized that the embedded subject satisfies the conditions for Equi-NP Deletion. (Brame, 1976:95).

In response to this, one might keep in mind that the two occurrences of 'John' that appear in the deep structure (35b) are marked as coreferential and identical before passivization takes place. (Passive being marked to occur in (35b).) If the two occurrences of 'John' were not marked in this manner, even after Passive had applied, the conditions for Equi's application would not be met. Passive is not placed in the deep structure just so Equi can apply. If Passive is not in the deep structure of (35), the S will be ultimately ungrammatical which is what is predicted by Equi] the feature [+ p]. If the two 'John's were not marked as coreferential, we would have something like (36):

(36) *John tried for John (his friend) to be examined by the doctor.

which is ungrammatical. In short, all the elements for Equi's application are present in the deep structure of (35). If any of the ingredients were missing, Equi could not apply. Therefore, I can not see the relevance of Brame's above-quoted observation.

What if there is no Passive marker in (35)'s deep structure? The feature [+ personal] would not be satisfied in the deep structure and the S would be automatically classified ungrammatical. Actually, the feature [personal] would act as a kind of back up for the optional placement of Passive. If Passive does not apply, the S is ungrammatical, if Passive

does apply, the requirements of the feature [personal] are satisfied, Equi is then satisfied. The feature [personal] may anticipate the deficiencies of the like-subject constraint mentioned by Brame. In short, relative to the deep structure of an S like (35), if the deep structure lacks a Passive marker in the lower embedding, an ungrammatical S will be generated which is what would be predicted from the inability to satisfy the feature [+ personal].

Brame says that although the two occurrences of 'John' in (37a) satisfy the like-subject constraint in the deep structure of (37), an ungrammatical S if Passive applies is still derived.

(37) a. John tried [for John to examine the doctor]S

b. *John, tried for the doctor to be examined by John.

The same principle that I suggested above, applies here. If (37a)'s lower embedding is marked for Passive, the second occurrence of 'John' no longer satisfies the feature [+ personal] in its new position. If Passive does not occur, the feature is satisfied and thus, Equi is satisfied.

In summation then, I have commented on Brame's questions about Perlmutter's subject-subject and object-subject type constraints. I have suggested that the violations he points out might be circumvented by the positing of a feature in the verb which would define the requirements of the verb rather than cause the arbitrary creation of the conditions for a rule's application just so that it may apply.

2.6 The Raising problem

Brame claims that in the standard theory (38a) and (38b) derive from (39):

(38) a. Sally expects herself to become rich someday.

b. Sally expects to become rich someday.

(39) Sally expects [Sally to become rich someday]S

The rule of Raising is permitted to

apply optionally for predicate such as 'expect', although obligatorily for others. If Raising applies, (38a) is derived subsequent to Reflexivization. If Raising does not apply, Equi-NP Deletion is invoked to yield (38b). (Brame, 1976:97).

Brame says that this ad hoc device-rules that are obligatory for some verbs and not for others--stems in part from the assumption that Equi is a rule of English syntax, and that (38a) and (36b) should derive from the same source. Since, for Brame, there is no rule of Equi, (38a) and (38b) must have different sources. Each derives from an underlying structure essentially identical to its surface structure, and these are:

(40) a. Sally expects herself [to become rich]VP

b. Sally expects [to become rich]VP

Brame finds these structures to be

a desirable result as is evidenced by the fact that (40a) and (40b) are not synonymous as is implied by (38)...It is a consequence of the VP hypothesis that (40a) and (40b) have differing underlying sources and therefore should not be synonymous... (Brame, 1976:102).

If we keep in mind the above-mentioned suggested qualities of verbs such as 'persuade' or 'expect', we might have two possible deep structures to work with--(39) and (41):

(41) Sally expects Sally [Sally to be rich someday]S

Deep structure (41) would underlie (38a) while (39) would underlie (38b). To yield (38a) from (41), Equi would apply on the matrix cycle, eliminating the third occurrence of 'Sally'; Reflexive would then apply, transform-

ing the second occurrence of 'Sally' into 'herself'. I can not observe any loss of generalization in the suggestion of individual deep structures for (38a) and (38b)--Brame himself has suggested individual deep structures. Raising is dropped from the rule roster because of the qualities of 'expect'.

I wish to suggest that the rule of Raising is no longer necessary at this point if the observations about the object N typically appearing in the matrix have any validity. The problem Brame mentions seems to be solved: since Raising is no longer needed, the selective quality of the verb in question is eliminated and this would leave us with a single possible deep structure.

In brief, I have agreed with Brame on different deep structures for (38a) and (38b) and agreed, therefore, that they are not synonymous. Also, there is a possibility that Equi can apply here without the formation of ad hoc constraints.

At this point, let me sum up what I have been so far seeking to accomplish. I have presented some of Brame's arguments against Equi as he views it in light of the extended VP hypothesis. I have then offered my own comments or ideas on his arguments.

2.7 Failure of Equi-NP Deletion as a transformation

(42) John was persuaded to leave.

(43) [(John) NP (leave) VP]S

In Section Four, Brame asks "why is the rule of Equi-NP Deletion taken to be part of the transformationalists' repertory of transformations...". (Brame, 1976:107). One argument is semantic and claims that "a complement preserving the abstract S as in (43) is part of the under-

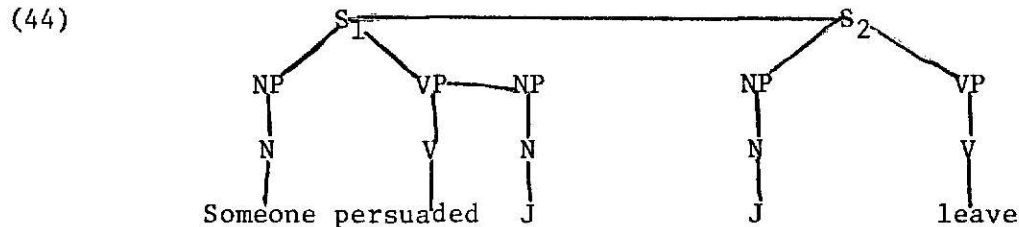
lying representation of (42), to which Equi-NP Deletion must then apply to yield (42)". (Brame, 1976:107).

Chomsky, in Aspects of the Theory of Syntax, defines the relation 'subject-of' "as the relation holding between the NP of a sentence of the form NP-AUX-VP and the whole sentence,...". (Chomsky, 1965:69)..

Brame cites Chomsky's definition and says himself that

the subject-predicate relation holds between an NP and predicate just in case both are directly dominated by the same S...(in (42)) 'John' is the subject of 'persuade' and is furthermore the subject of 'leave' only if there is an abstract S which directly dominates both 'John' and 'leave'. (Brame, 1976:107).

The deep structure of (42) is represented approximately by (44):



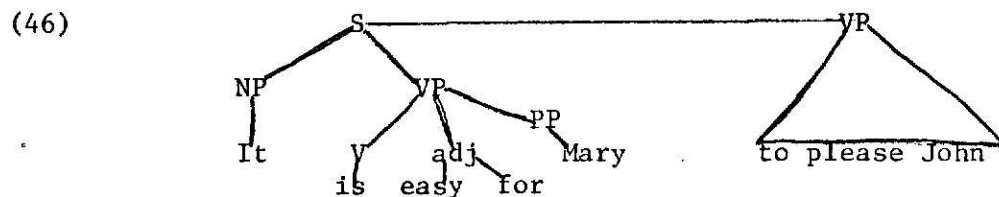
The structural description of Equi is met and Equi applies.

Commenting on the above, Brame says, "all other things being equal, abstract structures such as (43) as embeddings for (42) are only as good as the definitions of grammatical relations used as support for them."

(Brame, 1976:108). A new definition of grammatical relations seems evident to Brame from sentences such as (45):

(45) It is easy for Mary to please John.

which, following Bresnan's already cited work, must be derived from a structure approximately like (46):



Brame says of (45) that

Although 'Mary' is the subject of the embedded complement, the standard definition of subject fails to express this fact. There is, therefore, independent evidence indicating that a new definition of grammatical relations is needed which does not make use of the abstract S...thus Equi-NP Deletion is not supported by grammatical relations. (Brame, 1976:108).

Brame is arguing this point from within his desired framework. He is right in that (46) fails to show 'Mary' as the complement subject. However, he is using Bresnan's deep structure diagram rather than a diagram from the present theory which would show 'Mary' as the complement subject. It is false reasoning to present a deep structure diagram which is not constructed from the standard theory concepts, and then, since this alien deep structure does not show a particular standard theory grammatical relation, to suggest a revision of the grammatical relations.

2.8 Brame's response to some of Postal's arguments

Brame argues against Postal's "independent evidence for the abstract S" (Postal, 1970) and the resulting rule of Equi that Postal argues for in his article "On Coreferential Complement Subject Deletion" (Postal, 1970). Brame finds Postal's arguments to be invalid and resulting in a "significant loss of generalization". (Brame, 1976:108).

Brame disagrees with Postal's gap argument. Postal feels that the following data favors Equi.

(47) *Joan_i wants Joan_i to get married.

(48) Joan wants to get married.

Postal says of example (47) that

the subject of the complement cannot be "identical to"
the subject of the main clause verb where "identical

to" means coreferential. Hence sentences like (47) are illformed, or, at best, only interpretable in such a way that the italicized (underlines) NP designate distinct beings. (Postal, 1970:445).

Brame sums up to Postal's argument, saying

Since sentences such as (47) exist in which noncoreferential NPs occur in the relevant positions, Postal considers the absence of (47) to constitute a gap which is filled by generating (47) and deriving (48) from (47). (Brame, 1976:110).

Brame finds Postal's argument to be specious and leading to a significant loss of generalization since the illformedness of (47) with that of (49)

(49) Joan_i wants Joan_i.

can not be generalized in Postal's framework. Brame points out that for Postal two distinct criteria are needed: Equi will rule out (47) and Reflexivization will rule out (49). But Brame suggests that "whatever criterion is brought to bear to rule out (47) can be brought to bear to rule out (49). But this refutes the argument for Equi-NP Deletion, since Equi-NP Deletion cannot express the obvious generalization". (Brame, 1976:111). Thus, Brame does not find Equi to be justified by examples like (47).

I feel that it is necessary to comment on Ss like (47)-(49). Postal suggests that a possible form of S construction is NP V NP. A verb like 'want' can take either S or NP as (47) and (49) show respectively. I do not believe that it is suggested by Postal that 'want-like' predicates take S complements as a matter of course; rather, that 'want-like' predicates can have S complements. However, it would be wrong of Postal to assume that all VPs in "relevant positions" must generate S complements. If, then, (47) is not related to (49) in S construction-type, it would be wrong to make the assumption that a single criterion would be applicable

to both construction-types.

One additional item. Brame would have a loss of generalization occur in trying to account for (47) and (49): Equi is only applicable to (47) and not (49). Are we to assume then that although Brame does not explicitly say it, there is no rule of Reflexivization? This assumption is based upon Brame's contention of a single criterion which will deal with (47) and (49) at the expense of Equi and Reflexive. However, if we agree with the assumption, we might be unable to derive (51):

(51) John loves himself.

What I have suggested above is that Postal's acknowledgement of different S constructions would mean that a particular S might be subject to different criteria depending upon its construction.

Next, Brame points out that "predicates such as 'try' imply a gap of the type abhorrent to Postal" (Brame, 1976:111), although Postal does not seem bothered by it.

(52) *Joan tried for Barbara to get married.

(53) a. Joan tried to get married.

b. Joan_i tried [Joan_i get married]_S

The difference between (52) and (53) "creates a gap in subject position of the embedded complement in Postal's sense of gap, for if matrix and constituent subjects can be coreferential...they can be noncoreferential." (Brame, 1976:112).

With regard to (52), the [+ personal] feature in 'try' might act as a partial explanation that "there are no corresponding grammatical sentences with S complements where the embedded subject is not identical to the matrix subject". (Brame, 1976:112). It has been already suggested

that the feature [+ personal] in the matrix verb would allow for a co-referential NP in the complement as part of the satisfaction of the matrix verb's feature requirements. That such a situation exists seems evident by the fact that with such verbs as 'try', noncoreferential matrix and complement subjects generate ungrammatical Ss. Therefore, a feature which requires that the complement subject be coreferential with the matrix subject for a certain class of verbs, and thus allows only grammatical Ss to be generated, does not seem too far-fetched or ad hoc in nature (assuming that other verbs with be marked either [+ personal] or [- personal]).

In conclusion, I have suggested that the remedy for the above argument might be found in the acceptance of a [+ personal] feature. It is possible that this feature is similar in nature to Lakoff's exception features in its placement within the verb.

One more thing might be kept in mind concerning the feature [+ personal]: that it requires for verbs such as 'try' that the complement and matrix subjects be coreferential, seems only to be an addition to the already established feature make-up of verbs such as 'believe', for example, which requires a [+ human] subject.

(54) a. I believe that Joan is nice.

b. *The draw believes that Joan is nice.

We can have (54a) but not (54b) which is semantically deviant.

In summation, I have looked over Brame's comments on Postal's gap argument and have questioned the assumption by Brame that distinctly different deep structures should be subject to the same rule criterion. I also suggested that Brame's claim that if matrix and constituent subjects can be coreferential they can also be noncoreferential, may be too general,

and that the make-up of certain verbs may require coreferentiality between matrix and complement subjects.

III Overall Conclusion

The purpose of this paper was to observe and comment on some of the arguments presented by Michael Brame against the rule of Equi-NP Deletion, and to suggest an alternate approach to Brame's contention that Equi is not a rule of English syntax. One suggested alternate approach was the positing of a verb feature designed to explain the problem of Equi's failure to apply or to produce grammatical Ss in cases where the rule conditions were supposedly met. This paper deliberately commented on only some of the arguments put forth by Brame, but on the basis of these, the writer believes that the question of Equi being a rule of English syntax remains open on both sides and subject to further study.

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OBSERVATIONS AND COMMENTS ON THE RULE OF
EQUI-NP DELETION IN ENGLISH SYNTAX

by

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There has been some debate over the place of the rule of Equi-NP Deletion in English syntax. The VP complement analysis, favored by linguists such as Joan Bresnan, will oppose Equi-NP Deletion in English syntax. Other linguists, like Paul Postal, favor the sentential analysis which incorporates the rule in question. I have presented some aspects of this debate in this paper.

A proponent of the VP hypothesis is Michael Brame. His arguments opposing Equi-NP Deletion are based in part upon ideas such as George Lakoff's exception features and Postal's gap argument. These fail, according to Brame, to account for all the data, or they account for the data by means of ad hoc creations.

The purpose of this paper is to present some of the arguments that Brame sees as evidence against Equi-NP Deletion as a rule of English syntax, and to discover if his arguments are conclusive. This I have tried to accomplish by suggesting some ideas of my own (the positing of a feature [+ personal], for example) as viable alternatives to Brame's arguments. Thus, support might be given to the position that Equi-NP Deletion is a rule of English syntax or, at least, the suggestion made that the issue could remain open to further investigation.