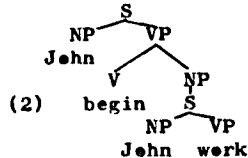
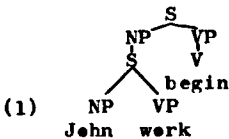


The Underlying Structure of the Begin-Class Verbs

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This paper will treat the underlying structure of the class of aspectual verbs in English whose semantic function is to assert the initiation, duration, or cessation of its associated proposition. In this class are the verbs begin, start, keep, resume, stop, finish, and several others. For the sake of simplicity I will refer to them as the begin-class verbs.

An inquiry into the structure of these verbs was made in Perlmutter (1968). Perlmutter provided several arguments that, working within the theory of Chomsky (1965), the begin-class verbs would have to occur in two different deep structure configurations. One would be intransitive and subject-embedding, represented by (1). The other would be transitive and object-embedding, represented by (2). John began to work and other sentences with active complements would occur in both deep structures:



Perlmutter gave several excellent arguments for the existence of the intransitive structure (1). They are based on the fact that fixed object nouns such as reccourse occur as surface subject of begin, as in (3), and on the synonymy of the active and passive sentences (4) and (5). These facts could only be explained by positing an intransitive begin, as is true of cases like (6), where begin is even a surface intransitive:

- (3) Recourse began to be had to illegal methods.
- (4) The noise began to annoy Joe.
- (5) Joe began to be annoyed by the noise.
- (6) The deling out of the emergency rations began.

The crucial argument for transitive begin¹ depends on the existence of the like-subject constraint in English, which Perlmutter also attempts to justify in his thesis. Since he argues that the verbs try, condescend, intend, and refuse demand that the next lower sentence have the same subject that they do, in sentence (7) begin would have to be transitive in deep structure with the subject John:

- (7) John tried to begin to work.

It should be apparent that there is total synonymy between these sentences when they are transitive and when they are intransitive. John began to work has only one meaning if we disregard the irrelevant fact that it may have an agentive (or intentional) reading and a non-agentive one. This fact is irrelevant because John worked and all other sentences with active verbs have the same ambiguity. Yet no one would wish to argue that in the latter sentence the ambiguity is a structural one, represented by a transitive and an intransitive work.

There is no a priori reason why two sentences with the same lexical items but two deep structures should not be synonymous. When we say that two sentences are synonymous we are claiming that they are identical at the level of semantic representation. If the rules of semantic interpretation mapping each deep structure onto this level are motivated ones, well and good. If they are not--if, for example, the rules which would be needed to map (2) onto the same semantic representation as (1) must be ad hoc ones, we would be justified in doubting the well-formedness of deep structure (2).

Looking first at the intransitive deep structure (1), there is every reason to believe that it is a well-formed input to the semantic component. In addition to the common semantic property of "aspectualness", there are several other properties which the begin-class verbs share with other intransitive subject-embedding verbs such as happen. For example, I argue in Newmeyer (1969) that intransitive subject-embedding verbs cannot co-occur with semantic tense or semantic aspect independently of their complement verbs' co-occurrence. Examples (8)-(11) illustrate that this is true of the begin-class verbs as well:

- (8) a. John is beginning to work right now.
 b. *John was beginning to work right now.
 c. *John has begun to work right now.
 d. *John had begun to work right now.
- (9) a. *John is beginning to work at noon yesterday.
 b. John was beginning to work at noon yesterday.
 c. *John has begun to work at noon yesterday.
 d. *John had begun to work at noon yesterday.
- (10) a. *John is beginning to work by now.
 b. *John was beginning to work by now.
 c. John has begun to work by now.
 d. *John had begun to work by now.
- (11) a. *John is beginning to work by noon yesterday.
 b. *John was beginning to work by noon yesterday.
 c. *John has begun to work by noon yesterday.
 d. John had begun to work by noon yesterday.

One should not be misled by the fact that tense and aspect have been altered syntactically in the complement. The associated time adverbials are preserved as indicators of the original semantic tense and aspect of the complement.

I also argue that intransitive subject-embedding verbs

cannot co-occur independently with adverbials. The ungrammaticality of (12)-(15) indicates that this is also true of the begin-class verbs:

- (12) *John began at ten o'clock to work at midnight.
- (13) *John began nastily to work merrily.
- (14) *With a knife John began to butcher Otto with a cleaver.
- (15) *John began in Boston to work in Cambridge.

It is evident that the begin-class verbs, if transitive, must be like-subject verbs themselves. This follows from the ungrammaticality of (16):

- (16) *John began for Bill to go.

Since these verbs are putatively transitive like-subject verbs, we would expect that any generalizations which we could make about the like-subject class as a whole would also apply to them, when transitive. For example, one fact about like-subject verbs is that they all involve behaving in some way with respect to a future state. For this reason it is always possible to use a future time adverb with the complements of these verbs, even when the verb itself is in the past tense. For example:

- (17) Alice refused to go next week.
- (18) Mrs. Greech condescended to read a story tomorrow.

But the begin-class verbs do not share this characteristic. They may not be in the past tense when a future adverb is present, as the following illustrate:

- (19) *Alice began to go next week.
- (20) *Mrs. Greech kept reading a story tomorrow.

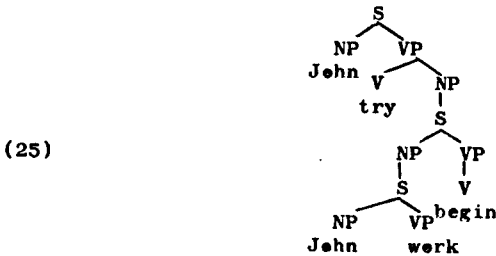
However, I have just shown that the begin-class verbs do not co-occur independently with tense and adverbials at all. This is even true when the like-subject constraint would demand that they be transitive in deep structure. (21)-(24), where the constraint would require their transitivity, are as ill-formed as (12)-(15):

- (21) *John intended to begin at ten o'clock to work at midnight.
- (22) *John refused to begin nastily to work merrily.
- (23) *John tried to begin with a knife to butcher Otto with a cleaver.
- (24) *John condescended to begin in Boston to work in Cambridge.

Therefore, even when theoretically transitive, the verbs of the begin-class obey the same constraints as they would when intransitive. But for the transitive begin-class verbs these constraints are totally unpredicted. Try, refuse, and the other like-subject verbs are not prohibited from independently co-occurring with tense, aspect, and adverbials in deep

structure. Therefore, not only would these constraints have to be stated ad hoc for the transitive begin-class verbs, but they would do no more than duplicate exactly constraints which are already well motivated for the intransitive verbs. The postulation of ad hoc projection rules whose only function is to derive an interpretive structure already derived in a highly motivated way from the identical lexical items in a different deep structure configuration is clearly undesirable. Yet the like-subject constraint, if it does apply in English, seems to give one no alternative but to postulate these transitive deep structures.

However, there is an alternative within the scope of the like-subject constraint that does not demand the postulation of a transitive begin. Let us consider the possibility that the begin-class verbs are always intransitive in deep structure, but that the like-subject constraint "skips over" them, or, as one might say, the begin-class verbs are "transparent" with respect to the like-subject constraint. If this is the case then phrase-marker (25) underlies (7):



The constraint would apply between the two instances of John, ignoring the intervening sentence.

In order to disprove the transparency hypothesis one need only choose three verbs: a like-subject verb (A), a begin-class verb (B), and a third verb (C), such that (A) grammatically embeds (B), (B) embeds (C), and (A) embeds (C). If the sentence formed by the embedding of (C) into (B) and (B) into (A) is ungrammatical, then transparency is disproven. Unfortunately for the theory of transparency this can be done. Let (A) be the verb refuse, (B) be the verb begin, and (C) the verb doubt. Note that (26)-(28) are grammatical:

- (26) Mary refused to begin to work.
- (27) Mary began to doubt John's intentions.
- (28) Mary refused to doubt John's intentions.

However, (29), the A // B // C embedding, is ungrammatical:

(29)

- (29) *Mary refused to begin to doubt John's intentions.

Therefore, the notion "Transparent with respect to the like-subject constraint" is shown to be a false one.⁴

Since transparency does not seem to be a suitable device to account for the problems raised by the begin-class verbs' apparently occurring in two deep structures, we must look elsewhere for a solution. Having a look at the like-subject constraint itself, we see that the situation is much more complicated than one might expect. For example, there are a great number of exceptions (or apparent exceptions) to this constraint. (30) and (31) below are only two:

(30) I tried to be arrested.

(31) I intend for you to go.

Perlmutter recognized these examples in his dissertation and attempted to account for them by positing an intervening sentence between the like-subject verb and the complement. This sentence would have the same subject as the like-subject verb and would have a main verb in pronominal form with the semantic properties of let or get (or simple causative verbs in general).

This proposal of Perlmutter's is intriguing because it suggests a possible solution to the transitive begin problem which does not rest on the notion of transparency. If arguments analogous to the type Perlmutter used to defend an intervening sentence where the like-subject constraint was apparently contradicted could also be used to motivate an intervening sentence between the like-subject verb and the begin-class verb, then there would be no reason to postulate transitive begin-class verbs. This is true because let, get, and verbs with similar semantic properties are not themselves like-subject verbs.

As a matter of fact it can be shown that positing an intervening causative pre-verb between every instance of a like-subject verb and a begin-class verb has some explanatory power. For example, the sentence which disproved transparency is explainable under the intervening verb hypothesis. The ungrammaticality of (29) would follow from that of (32):

(32) *Mary got herself to begin to doubt John's intentions.

Likewise, one does not need transitive begin to explain the ungrammaticality of (34) beside grammatical (33). It would follow from the ungrammaticality of (35):

(33) I began to be tall in my early teens.

(34) *I tried to begin to be tall in my early teens.

(35) *I got myself to begin to be tall in my early teens.

One more argument similar to Perlmutter's can be used to support an intervening sentence between like-subject verbs and begin-class verbs. Consider the following paradigm:

(36) Bill kept dropping things.

(37) I made Bill keep dropping things.

(38) Bill made himself keep dropping things.

(39) Bill tried to keep dropping things.

Note that (36) has a certain ambiguity. It could mean that Bill dropped things intentionally or accidentally. (37) is ambiguous in the same way. But if the causative higher verb has the same subject as the lowest verb there is no ambiguity. (38) has only the intentional reading. (39), the result of embedding (36) in Bill tried also only has one reading--the intentional one. This fact is predicted if an intervening verb with the subject Bill and the semantic properties of make is present in (39).

I have just shown that the same line of argumentation that Perlmutter used in his thesis results in the postulation of a causative pre-verb between every like-subject verb and a begin-class verb below it. Therefore, the begin-class verbs need not be anything but intransitive and subject-embedding in deep structure. If these are indeed valid arguments, then there is no need to postulate a transitive begin. On the other hand, if they are not valid arguments, then there is no evidence supporting the like-subject constraint in English and there is still no reason to postulate a transitive begin.

In the remainder of this paper I will argue that the latter alternative is the correct one. Upon close scrutiny the arguments for intervening pre-verbs can be shown to be rather weak. In the first place, if the arguments are followed through to their logical conclusion, we are forced to posit that the like-subject verbs always embed causative pre-verbs. If we look at sentences (36)-(39) without the aspectual we can see why this must be so. (40)-(43) presents this paradigm:

- (40) Bill dropped something.
- (41) I made Bill drop something.
- (42) Bill made himself drop something.
- (43) Bill intends to drop something.

The ambiguity pattern of (40)-(43) is identical to that of (36)-(39). Since this is true no matter which like-subject verb we substitute, the same line of reasoning demands that there always be a pre-verb beneath the like-subject verb. This would make the like-subject constraint even stronger than Perlmutter ever proposed. Not only would the subject of the next sentence down be required to be identical, but the semantic content and syntactic behavior of the lower verb would be sharply constrained as well.

If the semantic and syntactic properties of the pre-verb were constant, there would be no great objection to positing its presence. But not only must this pre-verb have different properties for different like-subject verbs, but it must have differing properties under the same verb, depending upon what is embedded below it. For example, consider (44):

- (44) I intend for my son to be rich.

There are causative verbs which may be inserted between intend and be rich:

- (45) I intend to get my son to be rich.
- (46) I intend to let my son be rich.
- (47) I intend to make my son rich.

However, none of (45)-(47) are exact paraphrases of (44). That means that the pre-verb might share properties of the verbs of (45)-(47), but cannot be identical to any of them. Now consider (48):

- (48) We intended for the package to be picked up by the kidnapper.

Since the following sentences are ungrammatical--

- (49) *We let the package be picked up by the kidnapper.
- (50) *We got the package picked up by the kidnapper.
- (51) *We made the package be picked up by the kidnapper.

the pre-verb certainly cannot have the properties of let, get, or make. However, (52) is grammatical and is a paraphrase (or close to a paraphrase) of (48):

- (52) We intended to have the package picked up by the kidnapper.

In (48), the pre-verb must have properties something like have, while in (44) it surely cannot have these properties because (53) is ungrammatical:

- (53) *I had my son be rich.

Since the properties of the pre-verb seem to fluctuate so and cannot be fixed even below one verb, it seems it is not being used in a coherent--and hence truly explanatory--way. There are many other problems with the pre-verb proposal. Consider (54):

- (54) The Syndicate intended for the Mets to lose.

The following sentences are all grammatical:

- (55) The Syndicate intended to let the Mets lose.
- (56) The Syndicate intended to get the Mets to lose.
- (57) The Syndicate intended to make the Mets lose.
- (58) The Syndicate intended to have the Mets lose.

Do any of (55)-(58) paraphrase (54) exactly? This is difficult to say. However they are all consistent with (54). That is, a possible interpretation of (54) is any one of (55)-(58). But (55)-(58) all differ somewhat in meaning from each other. If there are as many possible pre-verbs as ways of

"intending for the Mets to lose"--and remember that a pro-verb need not correspond exactly to any particular lexical item--then the notion "pro-verb" is surely being used vacuously. This is especially true since it can be shown that the syntactic properties of the pro-verb have to be stated totally ad hoc. For example, the verbs get and make can co-occur with instrumental by-phrases:

(59) We got the Mets to lose by bribing the shortstop.

(60) We made the Mets lose by bribing the shortstop.

But the verb intend can never co-occur with an instrumental by-phrase:

(61) *We intended for the Mets to lose by bribing the shortstop.

What should be a simple fact about the verb intend is required by the pre-verb hypothesis to be a totally ad hoc syntactic fact about one (or more) of the many pre-verbs which can be embedded below intend. And this fact does not follow from the necessary semantic properties of the pre-verb.

Even if the pre-verb hypothesis were correct, it would contribute nothing to the explanation of why there are apparent counter-examples to the like-subject constraint. Even if the grammaticality of (62)--

(62) I tried to be arrested.

could be attributed to an intervening pre-verb, it would not explain why the pre-verb could not be deleted (in most English dialects) in (63):

(63) *I tried for you to be arrested.

Furthermore, it would not explain why the "like-subject" verbs differed from each other in this respect--why (64) should be grammatical beside ungrammatical (63):

(64) I intended for you to be arrested.

What may occur below a so-called "like-subject" verb seems to depend on the complex semantic make-up of the proposition below it. In particular, it seems to depend on the extent to which the subject of the "like-subject" verb can exert conscious control over the proposition. For this reason (66) sounds much better than (65):

(65) *I intend to understand what is going on right now.

(66) I intend to understand what is going on by next week. Rather than being due to a complicated, if not unstatable, condition on the rule of pre-verb deletion, the grammaticality of (66) and ungrammaticality of (65) must be a function of the degree to which one can control "understanding" and the

degree to which different time adverbials allow this control to be implied. On how this is to be captured by the grammar I am unsure, but it must be done at a level where rules--whether semantic or syntactic--can refer to whole properties of propositions, not merely to features of individual lexical items.

Since the pre-verb argument is invalid, there is no justification for positing a like-subject constraint in English. The principle argument for positing begin-class aspectuals in deep structures other than intransitive and subject-embedding is therefore also invalid--the begin-class need only be intransitive in deep structure.

FOOTNOTES

1. Other arguments for the transitive structure are rebutted in Newmeyer (1969).
2. One might still wish to argue that in (8)-(11) it is begin that chooses tense, aspect, and adverbials in deep structure, rather than the complement which would have to be prohibited from co-occurring with all three. While I show in Newmeyer (1969) that this hypothesis is unsatisfactory, it still does not contradict the claim that there is no independent co-occurrence of tense and aspect when one sentence contains both a begin-class verb and a complement verb.
3. John started Bill working and similar sentences all have a causative interpretation and can be handled easily by the Causative Substitution Rule of Lakoff (1968).
4. I wish to thank David Perlmutter for first pointing sentences like (29) out to me, and also for his many valuable comments to me on the subject matter of this paper.

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