

SOME OBSERVATIONS ON THE "PRESENT PARTICIPLE"¹

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Introduction

Traditional descriptions of ING forms distinguish between two major functions: ING as present participle (or "verbal adjective"), and ING as gerund (or "verbal noun"). e.g.:

I heard Mary coming up the stairs. (present participle)

Standing in the rain is bad for your health. (gerund)

Some transformation grammarians have recently moved towards treating all such ING forms as being dominated by an NP node:

I heard $\left[\begin{array}{l} \text{NP} \end{array} \right.$ Mary coming up the stairs $\left. \begin{array}{l} \text{NP} \end{array} \right]$

$\left[\begin{array}{l} \text{NP} \end{array} \right.$ Standing in the rain $\left. \begin{array}{l} \text{NP} \end{array} \right]$ is bad for your health.

even extending this analysis to such examples as I was standing in the rain:

I was $\left[\begin{array}{l} \text{NP} \end{array} \right.$ I stand in the rain $\left. \begin{array}{l} \text{NP} \end{array} \right]$

One obvious result of this approach is that the distinction between gerund and present participle is lost - all ING-form complements of verbs are gerunds.

In his squib, "Re: Doubl-ing," Gary Milsark attacks this loss of distinction between gerunds and participles. He claims that it is necessary for any adequate account of certain observable facts of English - in particular, constraints on NP-movement rules (Passive, Cleft, TOUGH-movement), and on doubl-ing (i.e. sequences of two consecutive V+INGs).

Milsark's basic aim is to refute Ross's claim (Ross, 1972a), that an account of the facts of doubl-ing requires global rules and trans-derivational constraints. According to Ross, a doubl-ing construction is ungrammatical if and only if three conditions are met:

- (i) the two ING forms are contiguous in surface structure;
- and (ii) the ING forms in question are members of adjacent clauses in deep structure;

and (iii) there is no possibility in any derivation for NP+POS to occur between the two ING forms.

Milsark accepts that condition (i) is well established by Ross. This means that output conditions are necessary to block ungrammatical doubl-ings. Accepting condition (ii) as well as condition (i) would necessitate global conditions, because (i) refers to a surface structure configuration whereas (ii) refers to a deep structure configuration. If all conditions on doubl-ing could be stated in terms of surface structure only - i.e. if (ii) could be replaced by an output condition - then any motivation for a global rule collapses. This is the line of attack taken by Milsark. He claims that the participle/gerund distinction, independently motivated by constraints on NP-movement rules, accounts adequately for doubl-ing constraints. Gerunds are dominated by NP in deep and surface structure; participles are not dominated by NP at all. We can use the lack of a surface NP node as a condition for the unacceptability of doubl-ing, and thus replace Ross's condition (ii) by an output condition. If this is true, Ross's claim for a global rule fails. Ross's condition (iii) is also unnecessary under Milsark's analysis. Milsark's participles have no immediately dominating S node, and therefore there is no possibility for an NP+POS to be introduced in any derivation. So, accepting Milsark's analysis would mean we would no longer require global rules or trans-derivational constraints to account for restrictions on doubl-ing.

My central concern in this paper, then, is to examine the evidence that Milsark provides in support of his claim that there is a valid distinction to be made between participles and gerunds, as indicated in Figures (1) and (2):

Figure 1. (Participle)

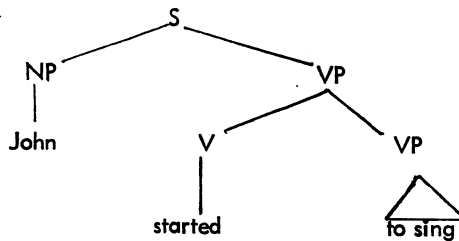
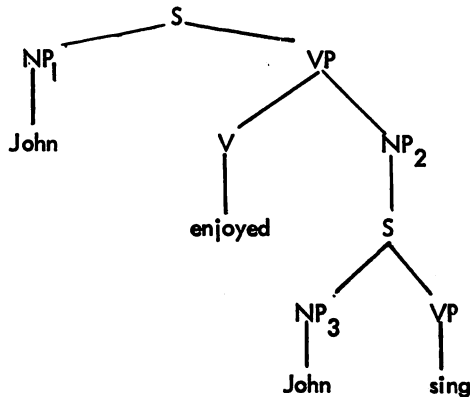


Figure 2. (Gerund)



My purpose is not to prove that an NP₂ node is necessary for participles as well as gerunds, but simply to show that Milsark has not proved that it is not (a much weaker stand).

Milsark's argument, and some possible objections.

Milsark's main line of argument can be summarised fairly briefly as follows:

- (a) Consider sentences (1) to (3):²
1. a. Everyone enjoyed going to the pub.
 b. Going to the pub was enjoyed by everyone.
 c. It was going to the pub that everyone enjoyed.
 d. Going to the pub was hard for everyone to enjoy.
 2. a. John started going to the pub.
 b. *Going to the pub was started by John.
 c. *It was going to the pub that John started.
 d. *Going to the pub was hard for John to start.
 3. a. John started the new project.
 b. The new project was started by John.
 c. It was the new project that John started.
 d. The new project was hard for John to start.

In (1), the ING complement is a gerund (i.e., dominated by NP); it undergoes the NP-movement rules of Passive, Cleft, and TOUGH-movement. In (2), the ING complement does not undergo NP movement. In (3), the object of start is an ordinary NP, and of course, undergoes NP movement.

(b) Set (3) shows that the verb start generally allows NP-movement rules to apply. Therefore the only possible reason for their not applying to (2) must be that the ING complement is not dominated by NP. i.e. it is not a gerund in this sentence, but a participle (dominated by VP).

(c) Now consider sentences (4) and (5):

4. John was enjoying going to the pub every day.

5. *John was starting going to the pub every day.

The ING complement of enjoy is a gerund; that of start is a participle. In general, doubl-ing sequences are grammatical if the second ING is a gerund, but ungrammatical if it is a participle.

(d) The sequence X+ING - Y+ING is ungrammatical if Y is not dominated by NP.

It seems to me that there are three possible lines of attack open at this point:

1. Even if Milsark is right in all other respects, is his constraint on doubl-ing adequate? In particular, can he avoid the necessity of global rules?
2. The second line of attack is to question Milsark's data, especially with respect to doubl-ing examples with start. This opens up the possibility that doubl-ing constraints may in fact be lexical in nature. i.e. that no widespread generalisation is possible on syntactic or semantic grounds.
3. The third possibility is to question either or both of the two basic assumptions of Milsark's argument. i.e. :
 - (i) that it is the same verb start that appears in both (2) and (3);
 - and (ii) that NP-movement rules provide a valid test for the NP status of a constituent.

I. The inadequacy of Milsark's output condition.

Let us consider first of all just how adequate Milsark's output condition is, as he has stated it.

First, a rather trivial point. "Y is not dominated by NP" is not adequate, in that if Y+ING is an adjective, doubl-ing is quite acceptable:

This lecture is getting interesting.

Being charming will do you no good.

I doubt whether Milsark would be happy with the suggestion that adjectives are NPs. Therefore he needs, at the very least, to reword the condition to allow adjectives as well as gerunds.

More importantly, even if the participle/gerund distinction is valid, Milsark may still have to refer to deep structure configurations, in order to account for all doubl-ing constraints. Note in particular examples (6) and (7):

6. I watched a man who had been flying describing it to some chicks. (Ross)
7. I enjoy watching Pam painting the house. Who do you enjoy watching painting the house?

(6) is quite acceptable, yet Y is not dominated by NP. (7) also seems perfectly acceptable, but painting the house must, in Milsark's terms, be a participle, not dominated by NP. It may be possible to account for these exceptions to Milsark's condition in terms of surface structure, but Milsark gives no indication as to how this would be done.

Assuming Milsark can deal with these examples with surface structure conditions only, there are still two basic questions to be answered:

- (i) Is it correct to assume that doubl-ing constraints are syntactic in nature, or even that they can be generalised at all?
- (ii) If the answer to that question is affirmative (which is far from proved), is Milsark's participle/gerund distinction an appropriate basis for that generalisation?

2. Are doubl-ing constraints lexical in nature?

There is some evidence to suggest that doubl-ing constraints are not syntactic. First, consider examples of starting+ING. Milsark and Ross both regard all such constructions as ungrammatical. However, in my judgment, supported by some, but not all, other native speakers that I have asked, there are differences in the degree of ungrammaticality. Some examples are in fact completely acceptable to some speakers. Consider, for example, sentences (8) to (12):

8. John is starting attending pottery classes as from next Tuesday.
9. He is starting going to concerts regularly, too.
10. John is starting painting the house tomorrow.
11. John is starting attending more regularly nowadays.
12. John is starting going out with girls.

I find here that (8) and (9) are almost acceptable, and are completely acceptable to some people; (10) is very questionable; and (11) is definitely out.³ Notice that (8), (9), and (10) are even better with John will be starting , where the reference to future time is emphasised even more strongly. Also, (9) is only possible for me if it is taken as following (8) in the same piece of text - i.e. with the futurity framework carried over from (8). It seems then, that some basis for excluding or allowing doublings may be found in the semantic distinction between "present description" (unacceptable, as in (11)), and "future prediction" (acceptable, as in (8), (9), and possibly (10)).

This notion of time reference could perhaps be expanded to account for Ross's observation⁴ that the sentence: He's beginning not signing any petitions is slightly odd, despite the fact that the two ING forms are not contiguous in surface structure. The oddity certainly seems to be a matter of temporal values.

Sentence (12) raises further problems. As pointed out to me by Mr J.B. Tomson (University of Newcastle), (12) for some speakers, better even than (8) and (9). Here there seems to be some habitual sense, another value often attributed to progressive aspect.

Whatever explanation is found for these examples, it is certain that neither Milsark's nor Ross's purely syntactic approach to the problem can account for this data.

A further possible complication arises when we look at (13) :

- | | | | | | | |
|-----|----|----------|---|-------------|---|---------------------|
| 13. | a. | John was | } | enjoying | } | painting the house. |
| | b. | | | liking | | |
| | c. | | | starting | | |
| | d. | | | commencing | | |
| | e. | | | intending | | |
| | f. | | | considering | | |

(a) is acceptable, whereas (b) is distinctly odd. (c) is unacceptable; (d) is probably out, but it doesn't seem as bad as (c). (e) is perhaps not entirely unacceptable, but it is certainly much worse than (f) which is perfectly O.K. This data tends to suggest that even semantic generalisations are going to be hard to find. It will be difficult, I

think, to find convincing semantic grounds for separating like and enjoy.

In general, of course, it is much preferable not to have to fall back on lexical marking to account for doubl-ing. For one thing, this would be tantamount to confessing that we do not understand the phenomenon. And for another, we will be left with the unexplained fact that doubl-ing constraints coincide with NP-movement constraints to a very high degree. It would therefore be preferable, if possible, to find a syntactically-based generalisation. Which leads us to question 3: Is Milsark right in claiming that the ING complement of start is not an NP?

3.1 start - how many verbs?

On Page 544 of his squib, Milsark states: "NP-movement rules can apply to ING complements of enjoy but not to ING complements of start. That this is not due to some peculiarity of the verb start but rather is a fact about the ING complement, can be seen from [our set (3)], where an ordinary NP is substituted for the offending ING complement. Here the movement rules apply normally."

The question immediately arises: Is Milsark justified in assuming that we have the same verb start in John started the new project as in John started singing? If not, then the constraints on NP-movement may well be "due to some peculiarity of the verb start," or rather, of one of the verbs start. There is in fact some justification for claiming that there are at least two, or possibly even three, verbs start, with rather different syntactic properties.

Consider the set of sentences (14):

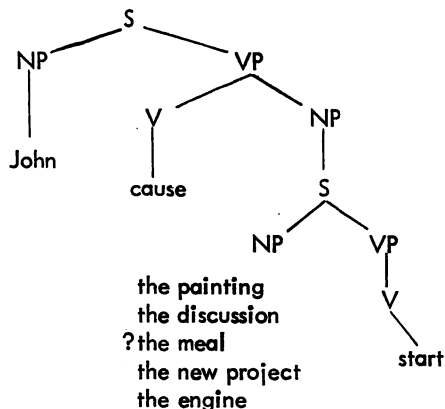
- | | | | | |
|-----|----|--------------|---|---------------------|
| 14. | a. | John started | } | painting the house. |
| | b. | | | to paint the house. |
| | c. | | | the painting. |
| | d. | | | the long climb. |
| | e. | | | the discussion. |
| | f. | | | the meal. |
| | g. | | | the new project. |
| | h. | | | the engine. |

In (a) and (b), John commenced to perform the action named. (c) can be interpreted either as (a), or with the meaning that John was the initiator. i.e. he caused the painting to be started. (d) is the same as (a); John set out on the climb. (e) represents the initiator sense again. (f) is possibly ambiguous, as (c). (g) could either mean that John began work on the project, or that he officiated at the opening

(e.g. as Lord Mayor). (h) again is ambiguous: either, John began work on the engine, or John caused the engine to start (running).

From these, we can take out those examples where start has a (roughly) causative sense. Call this start, start₁, and ascribe it an approximate deep structure as in Figure 3:

Figure 3. (start₁)

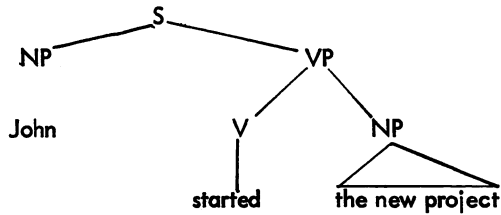


Thus, the surface structure object of start is the deep structure subject of start. It is dominated by an NP node; it can be an ordinary NP (as meal, engine, project), or a "de-verbal" noun (as painting, discussion). As is to be expected, start₁ allows its surface structure object to undergo the various NP-movement rules.

Apart from this "causative" start, we have (a), (b), (d), and one reading of each of (c), (f), (g), and (h). These seem to me to fall into two distinct sets, (a) and (b) on the one hand, and (c,d,f,g,h) on the other. This latter set semantically require some action verb to complete their sense: to work on the engine/ the new project/?the painting, to eat the meal, to make the long climb. What this verb should be is often unclear, but in most cases a general-purpose verb like work or perhaps do seems called for. But (a) and (b) provide this verb explicitly in their complement. If we distinguish between the two sets, calling one set start₂ and the other start₃, we have start₂ accepting as object or complement most ordinary NPs and nominal gerunds, while start₃ accepts only verbal gerunds and infinitive complements.

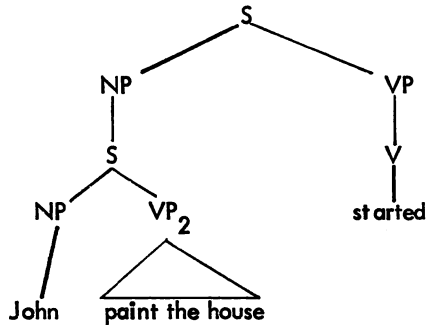
There seems no reason why start₂ should not be given an ordinary transitive deep structure as in Figure 4; although if this is the case, some explanation must be provided (perhaps by semantic interpretation rules?) for the "understood" action verb.

Figure 4. (start₂)

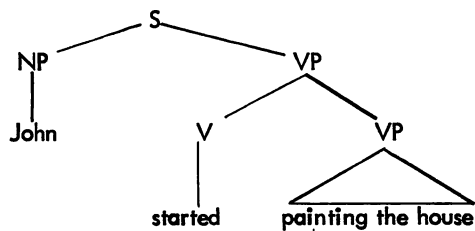


For start₃, we have the very tempting suggestion made by Newmeyer (1969), and earlier by Ross, that certain "aspectual" verbs in English (e.g. begin, start, continue) should be treated as intransitive in deep structure:

Figure 5. (start₃)



This structure would undergo Raising, whereby the VP₂ would be left-sister-adjoined to begin, giving the surface structure:



Now start₂ allows NP-movement rules to apply quite freely, whereas start₃ does not. So we have sentences (15):

15. a. It was the new project/*singing loudly that John started. (CLEFT.)
- b. What John started was the new project/*singing loudly. (PSEUDO-CLEFT.)

- c. The new project/*Singing loudly was started by John. (PASSIVE.)
- d. The new project/*Singing loudly was tough for John to start. (TOUGH.)

The proposed DSs account directly for these facts, in that the ING complement of start₃ is always dominated by VP not NP.

There is one problem with this analysis, and that is that more recent work by Perlmutter and Ross indicates that the intransitive deep structure for begin, start, and so on, is only applicable to sentences with inanimate non-agentive subjects. e.g. :

It is beginning to rain

For sentences like John began singing, with an animate, agentive, subject, they claim that a transitive DS is necessary, as I gave for start₂. If this is true, then Milsark's data may be valid (although with a bit of luck, someone may yet discover that there are two transitive starts, one allowing NP movement, the other not). However, it seems to me that Perlmutter and Ross's analysis is not essential, if we allow semantic interpretation rules to give the required agentive force to the SS animate subject - an approach that may well be motivated on independent grounds, to account for shifts of meaning between active and passive, or differences caused by choice of subject NP in a Fillmore Case Grammar.

Other recent evidence for a transitive/intransitive division of start₃ seems unconvincing. For example, Ross (1972b) claims that transitive begin allows Anaphoric Complement Deletion, whereas intransitive begin does not. So:

- 16. a. I told John to write to Mary, and he began at once.
- b. *It's supposed to be muggy tonight, but it hasn't begun yet. (Ross).

This however seems to me to be a stative/non-stative distinction, rather than an agentive/non-agentive one. Notice that the sentence (17) is quite acceptable, with "intransitive" begin:

- 17. It has snowed for three days now; it began on Friday and hasn't stopped since.

To sum up this section, I would say that Milsark is making too great an assumption in treating all instances of start as the same verb. Insofar as his theory depends on that assumption, so it needs, at the very least, much more investigation.

3.2 The validity of NP-movement rules.

The last question that needs asking concerns the use of NP-movement rules as a test for the NP status of the ING complements. In particular, do these rules apply to all NPs, or only to some? If they are restricted in their application, are the restrictions based on the nature of the main verb, or the NP itself? If some NPs will not undergo NP movement because of the nature of the NP itself, then Milsark's argument collapses - there is no evidence that some ING complements are not dominated by an NP node. On the other hand, if the rules are restricted because of the nature of the main verb, Milsark may still be in trouble, depending on the nature of the various verbs start.

Let us look briefly at some of the NP-movement rules:

- (i) TOUGH-movement. This only moves NPs, but it doesn't move all NPs (refer Postal 1970). What types of NP can be moved by this transformation has not yet been fully established. So TOUGH-movement cannot provide strong evidence that a constituent is not a NP.

However, the fact that TOUGH-movement only moves NPs is significant when we find examples such as (18):

18. a. Eating strawberries was hard for me to stop.
b. Eating strawberries was hard for me to continue.

According to Milsark, stop and continue take participle ING complements. But by TOUGH-movement, these ING complements are NPs.

This then is direct counter-evidence to Milsark's claim.

- (ii) Pseudo-Cleft. Milsark does not use this test. Emonds (1970) rejects it, because (so he claims) it can move all major constituents, not just NPs. However, pace Emonds, pseudo-clifting does not move VPs. Emonds' examples (p.100) are:

19. What John is doing is kicking me in the shins.
20. What you should do is blow up some buildings.

presumably derived from the original sentences:

21. John is kicking me in the shins.
22. You should blow up some buildings.

But if VPs were pseudo-clefted in a genuine way, the pseudo-cleft forms would be:

23. *What John is is kicking me in the shins
 24. *What you should is blow up some buildings.

The presence of DO in Emonds' examples suggests an underlying structure incorporating DO + NP.

If VPs cannot be genuinely pseudo-clefted, Ross's example:⁵

25. What I was attempting was playing the "Minute Waltz" with my nose.

constitutes evidence that the ING complement of attempt is an NP (i.e. a gerund), again contrary to Milsark's claim.

(iii) Cleft. Emonds claims that Clefting is an infallible test of NP-hood. This depends on his prior claim that infinitive and THAT-clause complements are not NPs:

26. *It's to eat strawberries that I want.
 27. *It's that you like strawberries that I can't believe.

Even if we accept Emonds' claims, there are still some problems. For example, consider sentences (28), (29):

28. a. I like eating strawberries.
 b. (?) It's eating strawberries that I like.
 c. It's eating strawberries that I like doing.
 29. a. I continued eating the strawberries.
 b. * It was eating the strawberries that I continued.
 c. (*) It was eating the strawberries that I continued doing.

(28b) - the cleft version of (28a) - is not particularly attractive; it is certainly much improved by the addition of doing. Yet the ING complement of like should be a gerund, and as such allow clefting freely. Again, (29b) is undoubtedly bad; yet this too is considerably improved by adding doing. It seems that what we have here may be not a definite grammatical/ungrammatical distinction, but a gradation of degrees of acceptability.

(iv) Passive. Not all two-NP structures allow Passive movement. However, the restrictions seem to depend largely on the nature of the main verb, rather than the character of a particular NP. Perhaps Passive may turn out in the long run to be the strongest and safest test for NP status. Yet even so, it does not apply to all NPs in all constructions. Given a non-passivising verb - perhaps one of the verbs start? - the Passive test is no longer reliable.

It would seem then that none of the NP-movement rules used by Milsark is 100% reliable as a test of NP status, applying to all NPs and only to NPs. If this is true, NP-movement rules provide a shaky basis for establishing a NP/non-NP distinction. Perhaps we could resort to the time-honoured method of pronoun-substitution. This actually provides some rather interesting examples; for instance, the set of sentences (30), where the ING complement can be pronominalised regardless of the main verb.

30. a. Stop it! Stop eating your food like a horse!
 b. I like eating six meals a day, but Joe says it is unhealthy.
 c. I started eating six meals a day, although Joe said it was unhealthy.
 d. I stopped eating six meals a day, because Joe said it was unhealthy.

Conclusion

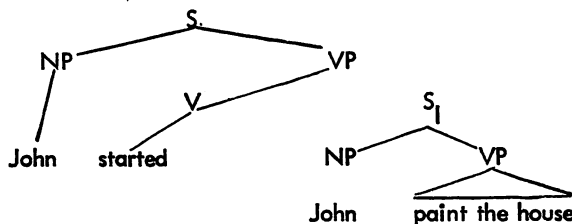
If we accept (provisionally, and despite the problems mentioned in the preceding section) that NP-movement rules could be a valid test of NP-hood, and if we allow (as I think we must) that some ING complements undergo these movement rules while others do not, then three possible solutions are open to us.

- Either: (i) the main verb must be lexically marked to prevent application of the NP rules;
 or: (ii) the fact that the NP₂ node in Figure 2 (above) dominates an S node blocks the movement of that NP/S branch;
 or: (iii) the ING complement is not dominated by an NP node at all.

(i) is a rather unsatisfactory solution, although it may yet be forced upon us. (ii) is obviously far too powerful a constraint. And neither of these first two possibilities provides any explanation for the link between doubl-ing and NP-movement. So it would seem that the absence of an NP node is the most likely solution.

There are three ways of providing a structure with a non-NP ING complement:

1. Rosenbaum's VP-Complement structure:



2. Milsark's Participle structure: (as Figure 1, above).

3. Intransitive structure: (as Figure 5, above).

(1) and (2) have the same consequences in most respects. (1) requires an (ad hoc) statement that the DS subject of S_1 must be identical to the subject of start, and that Equi-NP deletion is obligatory. (2) requires a semantic interpretation rule to guarantee that the subject of the lowest VP is identical to the subject of the main verb. (3) bypasses the Equi-NP problem; the DS subject of start is not John but John paint the house. (3) accounts nicely for many examples of non-NP ING complements - perhaps all of them if we reject Ross and Perlmutter's transitive verb analysis of begin, start, and so on. In this case, we need a semantic interpretation rule to account for the agentive force carried by an animate subject NP.

To conclude: It seems that Milsark is partly right - some ING complements do not have a dominating NP node. However:

- (i) Constraints on doubl-ing are much more complex than has so far been indicated, by either Ross or Milsark;
- (ii) Milsark has not proved that "participle" is a relevant concept in a discussion of these ING complements;
- (iii) There is no convincing evidence so far that the participle/gerund distinction provides a grammar with any extra explanatory power.

FOOTNOTES

1. This is a slightly revised version of a paper read at the A.U.L.L.A. XV Congress, August, 1973.
2. Examples taken from Milsark, Ross and Emonds have been renumbered for convenience.
3. Interesting, unsolicited, support for my claim that (8) is perfectly acceptable for some speakers came from a first year student who saw it written up on the white-board in my office. Her comment: "Oh, do you just use that board for messages?"
4. Ross (1972a), p. 71.
5. Ross (1972a), p. 69.

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