An Analysis of English Gerund in the Minimalist Framework

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1. Introduction

This paper is an attempt to give a simple and unified analysis of English gerund in the framework of Pesetsky and Torrego (2001, 2004) (Henceforth P&T 2001, 2004). English gerunds have several peculiar properties: as for their distribution, they behave like Determiner Phrases (DPs), while they clearly contain Verb Phrase (VP) structures as part of their internal structure. The hybrid characters have attracted a lot of researchers' attention, and various analyses of gerundive constructions have been proposed consistently in the history of generative grammar. These previous analyses, however, will not be considered to be so simple or unified.

This paper will show that if we incorporate P&T's 2001, 2004 proposal concerning structural case, we will be able to give a simpler, more unified analysis of gerunds in English. Of course, the paper of this length cannot give a comprehensive examination of the construction, but if we are on the right track, our analysis may be taken to be some support for P&T's hypothesis.

In section 2, we will review the latest proposal regarding the structures of gerunds, and we argue that Acc-*ing* must also be assumed as dominated by DP. Then we show that some DPs are never assigned any case in syntax, but must be supplied a "default case" by morphology. Section 3 is an elucidation of a theory of syntax without an abstract case system. This theoretically improved theory, in addition to the idea of default case, enables us to present a simpler unified analysis of English gerundive constructions in Section 4. The final section, Section 5, gives a brief summary and explores the consequences of a new analysis of gerund.

2. Theoretical preliminaries

2.1 An analysis of gerundive constructions in the Minimalist framework

In the first half of this subsection we will present the latest proposal of the structures of gerundive construction in the framework of the Minimalist Program. The second half will show that there still remain a few serious problems with the proposal.

Miller (2002: 285-6) proposes the following structures for Acc-*ing* and Poss-*ing*, respectively.[1]

(1) Acc-*ing*

[$_{TP}$ DP [$_{T'}$ [$_{T}$ -*ing*] *v*P]]

(2) Poss-*ing* (derived by conversion of Acc-*ing*)

[$_{DP}$ [D [$_{NP}$ N TP(=Acc-*ing*)]]

According to Miller, Acc-*ing* is almost the full clause, but lacking C, and the Poss-*ing* is Acc-*ing* plus nominal heads N and D. In other words, Acc-*ing* is a bare TP, while Poss-*ing* is a "nominalization" or conversion of Acc-*ing*.

The proposed structures are consistent with the traditional view of gerunds, which holds that Acc-*ing* is clausal, while Poss-*ing* has a nominal structure. (cf. Reuland 1983) So nothing seems to be wrong with the structures, but they make several wrong predictions.

The most serious problem about structure (1) is that the whole gerund, rather than only the DP subject of Acc-*ing*, will be subject to A-movement.

(3) a. Jane remembered [there being a juggler on stage].

b. *There was remembered [being a juggler on stage].

c. [There being a juggler on stage] was remembered.

(Schütze 1997: 24)

(4) a. Jane believes [Bill to know the answer].

b. Bill is believed [to know the answer].

c. *[(For) Bill to know the answer] is believed.

(ibid.: 23)

The verb *remember* takes an Acc-*ing* complement. The subject *there* cannot be raised to the matrix subject position (3b), but the Acc-*ing* as a whole can be moved to be the matrix subject (3c). This situation is the direct opposite of that of ECM complement, as we can see in (4).

Next, consider (5). Whatever the mechanism is, the ECM subject position is a "case-marked" position. If we assume the structures shown above for gerunds, then we can predict that the entire Acc-*ing* cannot appear as an ECM subject. This prediction is not borne out.[2]

(5) a. John likes [Frank's cooking supper] to be controversial.

b. John likes [Frank cooking supper] to be controversial.

(Schütze 1997: 24)

(5b) clearly suggests that Acc-*ing* is dominated by the DP, just like Poss-*ing*.

Finally, for whatever reason, ordinary clauses such as *that*-clauses and infinitives are excluded from the cleft focus position or the subject position involved in Subject-Aux Inversion.

(6) a. ??It's [that he wants to quit school] that Fred told us.
b. ??It's [to submit her manuscript to *Fortune*] that Alice intends.
(McCawley 1998: 66)

(7) a. * Did [that John showed up] please you?
b. ??Would [for Bush to be elected] be horrible?
(ibid.: 325, 328)

If Acc-*ing* has the suggested structure (1), it will not easily occur in these positions. This is not true.[3]

(8) It's [John kissing Mary] that would upset me.

(9) Would [Mary kissing John] annoy you?
(Portner 1992: 115-6)

We have seen three problems related to the structure of Acc-*ing* proposed by Miller 2002. The problems arise from the assumption that Acc-*ing*'s are bare TP's. If we instead hypothesize that Acc-*ing* is not just a TP, but is also dominated by DP, then there is no problem. If they are DP's, then their DP-like syntactic behavior is an automatic consequence.

If Acc-*ing*'s are DP's like Poss-*ing*'s and their subject is not licensed externally (not "governed" externally, if we use the Government and Binding Theory (GB) terminology), the accusative case on the subject will not be checked and the derivation will consequently crash. In the next subsection we will tackle the problem of how to avoid this dilemma.

2.2. Default case

We seem to have fallen into a serious dilemma. We have seen in the last subsection, that Acc-*ing* behaves like a DP, but if it is a DP, we will have no way to give its subject the accusative case. So far, we have tacitly assumed that all DPs, at least argument DPs, must be assigned case. Schütze 1997 argues, however, that there are many environments in which no case could be assigned.

In fact, there are 12 environments which Schütze 1997 calls "default case" environments. He does not maintain that all of the 12 environments should be dealt with by this "default case," but he says it is clearly desirable to supply the default Accusative case to the nominal elements in question.[4]

(10) "nominal elements lacking a case feature when they come out of the syntax are supplied with a default

feature, ACC in English, by the morphology." (Schütze 1997: 61)

(11) default case environments (ibid.: 53)

a. *What*? Her/*She cheat on you? Never!

b. Her/*She in New York is what we must avoid.

c. Him/*He tired, they decided to camp for the night.

d. Him/*He liking beans surprised them. Him/*He liking beans, they bought some.

e. It was us/*we. There's me/*I. The murderer is her/*she.

f. Me/*I, I like beans. Judy thinks that the best student, her/?*she, should be president.

g. Me/*I too. Me/*I neither. Me/*I next!

h. Everyone but them/*they gets on John's nerves. Students smarter than her/*she get no scholarship. The Jets did that, not us/*we.

i. Who did it?--Me/*I.

j. We can't eat caviar and him/*?he (eat) beans.

k. Us and them/*We and they are gonna rumble tonight.

l. The real me/*I is/*am finally emerging. Lucky me/*I gets/*get to apply for a Green Card. How much would us/??we with insurance have to pay?

Schütze's argument is very convincing, and "default case" system is an elegant and necessary one. Hence his system will be adopted in the following discussion.

Some might say that in the cases of gerund (11d), we can assume that there is a special INFL present, that is, the morpheme *-ing*, which is responsible for the Accusative case checking. In fact, what Reuland 1983 proposed for NP-*ing* constructions is a case-marking system along these lines. The case transmission analysis like Reuland 1983 could not be adopted in the Minimalist framework. Even if it was formulable in our framework, several problems would arise: Why the case of the subject is always in accusative, even when the gerund appears in non-accusative environments? Furthermore, this analysis presupposes two different *-ing*'s for Acc-*ing*'s and Poss-*ing*'s, so it can never be a unified analysis.

3. A theory without abstract case system

In this section, we will elucidate the proposal made by P&T 2001, 2004. Their proposal, combined with the default case system, will enable us to give a surprisingly simple picture of English gerund structures.

P&T 2001, 2004 try to dispense with abstract case *per se*, since abstract case, being a purely formal feature, seemingly has no interpretation. It is an obvious fact, however, that not only English but many other natural languages have an abstract case system. P&T suspect that cases seem to be uninterpretable on D, but

they are in fact an interpretable feature on some other head, which they assume to be T. If case feature is replaced by Tense feature, we can eliminate at least one of those features that have no semantic value from the theory of syntax.

First, they observe the fact that nominative case and subject agreement have a close relationship with each other. Then they suggest that just like subject agreement has some interpretation for D, nominative case is interpretable on T. Hence, their key proposal: nominative case on DP is actually an uninterpretable variant of a tense feature (*u*T).[5]

Their analysis will be briefly summarized below. P&T first investigate the distribution of auxiliary fronting in interrogative and other clause types, and the behavior of *that* and *for* in embedded CPs. They find that nominative case on subject and subject agreement on T are closely related.

(12) T-to-C asymmetry in matrix questions (Koopman 1983)[6]

[nonsubject *wh* → "optional" T-to-C movement]

a. What a nice book Mary read ___! (exclamative)

b. What did Mary read ___? (interrogative)

[subject *wh* → no T-to-C movement]

c. Who ___ read the book?

d. *Who did ___ read the book? /*What a nice person did ____ read the book!

As an illustration, observe the contrast shown above (12). When the nonsubject *wh* undergoes local *wh*-movement, T-to-C movement occurs optionally, so the T element (e.g. *did*) may or may not appear. On the other hand, T-to-C movement is never observed in the case of subject *wh*-movement, hence the unacceptability of (12d).

The contrast between (12b) and (12d) shows that when nominative subject occupies the specifier position of CP first, T cannot move to C. This is accounted for in this way: In each case, the matrix C bears both [*u*T(+EPP)] and [*u*Wh(+EPP)] on their assumption. In (12b), the closest bearer of *u*T and that of *wh* are different, so *wh*-movement of the object and T-to-C movement of *did* both occur. In (12d), on the other hand, the closest bearer of *u*T (the nominative subject) happens to be the closest bearer of *wh*, so only the *wh*-movement of the subject occurs. By some kind of economy consideration, the other movement (T-to-C) never takes place. Cf. Economy of movement (P&T 2004: 498).

The same paradigm can be seen in the Belfast dialect of English. The only necessary assumption is that the embedded declarative clause contains both [*u*T(+EPP)] and [*u*Wh(+EPP)]. Then the following contrast can be explained in exactly the same way.

(13) Belfast English (P&T 2004: 498 citing Henry 1995)

[nonsubject *wh* → (optional) T-to-C movement]

a. Who did John say [did Mary claim [had John feared [would Bill attack ___]]]?

[subject *wh* → no T-to-C movement]

b. Who did John say [___ went to school]?

c. *Who did John say [did ___ go to school]?

At this point, P&T notice the strong resemblance between the "*did*-trace effect" ((12), (13)) and the *that*-trace effect (14).

(14) That-*trace effect* (Perlmutter 1971)

[nonsubject *wh* → optional *that*]

a. What do you think [Mary read ____]?

b. What do you think [that Mary read ___]?

[subject *wh* → no *that*]

c. Who do you think [___ read the book]?

d. *Who do you think [that ___ read the book]?

That is usually considered to be an element of C, but if it can be taken to be an element of T like *did*, then *did*-trace effect and *that*-trace effect are one and the same effect. So they made a proposal in (15).

(15) *Nature of English* that (P&T 2004: 499)

That is not C, but a particular realization of T moved to C.

(15) may seem a rather ad hoc stipulation concerning the complementizer. In fact this proposal has a wider explanatory value. First, it can offer an analysis of the optionality of *that* in declarative complement clauses.

(16) *Apparent optionality of* that *in complement CP* (ibid.)

a. Mary expects $[_{CP}\ [_{T}\ \text{that}]_j + [\text{C}, \sout{u\text{T}}]\ [_{TP}\ \text{Sue will buy the book}]]$.

b. Mary expects $[_{CP}\ [\text{Sue}, \sout{u\text{T}}]_j\ [\text{C}, \sout{u\text{T}}]\ [_{TP}\ \text{t-Sue}_j\ [_{T}\ \text{will}]_j\ \text{buy the book}]]$.

In non-*wh* complements, the head C contains only *u*T, which can be eliminated either by T-to-C movement or subject movement to Spec, CP.[7] When T-to-C movement occurs, we have a *that*-clause. If the subject itself moves to Spec, CP, there will be a *that*-less clause.

Second, the non-omissability of *that* in subject clauses can be accounted for under the hypothesis (15).

(17) That-*omission asymmetry* (cf. Stowell 1981)

[nonsubject CP → optional *that*]

a. Mary thinks [that Sue left]

b. Mary thinks [Sue left]

[subject CP → obligatory *that*]

c. [That Sue left] is obvious.

d. *[Sue left] is obvious.

The contrast between (17c) and (17d) can be explained in the following way. Clausal subjects must be "nominative," which means in P&T's framework that they have to contain some instance of T in their head. The clausal subject in (17c) has *that* in its head, so it can count as "nominative." The subject clause in (17d), however, contains no T moved to C as its head, hence it is not nominative.

Further confirmation of the plausibility of analyzing *that* as T comes from nonfinite clauses. *For* in *for-to* infinitives is an obvious counterpart of *that* in declarative finite clauses. So, *for* can be taken as another instance of T moved to C. The existence of *for*-trace effects and a *for*-omission asymmetry confirms this analysis.

(18) *The* for-*trace effect* (P&T 2004: 500)

*Who would you prefer [for ___ to buy the book]?

(19) For-*omission asymmetry* (ibid.)

[nonsubject CP → optional *for*]

a. Mary would prefer [for Sue to leave]

b. Mary would prefer [Sue to leave]

[subject CP → obligatory *for*]

c. [For Sue to leave] would be desirable.

d. *[Sue to leave] would be desirable.

If *for* is another instance of T moved to C, the above phenomena can be explained in exactly the same way as the *that*-trace effects and *that*-omission asymmetry.

4. A new analysis of gerund

P&T 2001, 2004 offer a conceptually attractive theory of abstract case, in which case feature is not an independent entity in the grammatical theory, but an uninterpretable Tense feature on the D. I would like to show in this section that incorporating P&T's hypothesis into the analysis of English gerund, a simpler, theoretically desirable picture of gerundive constructions will appear.

Various attempts have been made to explain the peculiarities of gerund in the history of generative grammar. To mention a few, Abney 1987, Reuland 1983, Milsark 1988, and Miller 2002. Usually, gerundive constructions are divided into two types, Poss-*ing*'s and Acc-*ing*'s. This division is based on the case assigned to the subject of the clausal gerunds. Poss-*ing*'s are those gerunds in which their subject gets genitive (or possessive) case, while Acc-*ing*'s are somewhat similar to ECM complements, and their subject gets its accusative case from outside.[8]

Poss-*ing*'s are clearly DPs, at least judging from their external syntactic behaviors. Therefore, whatever the mechanism of genitive case assignment, there has been a consensus that the subject of Poss-*ing* is assigned (or checked for) their case, similar to the way the specifiers of ordinary DPs get their genitive case.

On the other hand, we have never been of one opinion about the case-checking system of the subject of Acc-*ing*'s. Some (e.g. Miller 2002) say Acc-*ing*'s are just like ECM complements, and using the GB terminology, their subject is governed from outside and assigned accusative case. Others (e.g. Reuland 1983) maintain that accusative case is not directly assigned to the subject, but it is first given to the morpheme *-ing* and then transmitted to the subject.

These previous analyses of gerunds (both Poss-*ing* and Acc-*ing*) cannot be adopted as they are. As for Poss-*ing*'s, possessive case must be reformulated as an uninterpretable Tense feature, so that it will conform to the general framework of P&T 2001, 2004.

Acc-*ing*'s have a harder problem to solve. Acc-*ing*'s have generally been considered more like ordinary clauses (i.e., tensed finite clauses and *for-to* infinitives), rather than typical nouns. This is not true. As we have seen in section 2, they behave just like Poss-*ing*'s. So, if Poss-*ing*'s are DP's, then Acc-*ing*'s must also be DP's.

Furthermore, if they are DP's, the subject will not be assigned any case from outside, whatever the internal structure of Acc-*ing*'s. DP's are strong "islands." Thus we have fallen into a serious dilemma. The distribution of Acc-*ing*'s strongly suggests that they are DP's, but if they are DP's then we have no way to assign their subject accusative case.

What I would like to show in this section is that a unified, simpler analysis of gerundive constructions can be given, if P&T's 2001, 2004 theory is combined with the default case system by Schütze 1997. In this analysis, the only difference between Poss-*ing*'s and Acc-*ing*'s is reduced to the presence or absence of [*u*T] on the subject DP.

First, the internal structure of Poss-*ing* is proposed. Then this section will show that if we subtract just one feature from Poss-*ing*, we can get Acc-*ing*.

4.1 The structure of Poss-*ing*

P&T 2001, 2004 make several suggestions about the structure of genitive case assignment. But they do not show the definite and clear picture of genitive case assignment. The following analysis is therefore not exactly theirs, but it is almost an automatic consequence of their theory of abstract case, so we are certain that they will agree on the structure of Poss-*ing*'s given here.

Let us assume that genitive case is another instance of *u*T on D.

(20) *The nature of genitive case*

Genitive case (like nominative and accusative) is an instance of *u*T on D.

This uninterpretable feature must be checked within the DP phase. Different proposals are made concerning the possessive morphology. P&T 2001 propose that "*'s*, *the*, and *a* are not instances of D, but belong to a category that we may call R ("article")" (p. 403), while P&T 2004 suggest "possessive morphology ... is a product of a nominal T_S" (p. 527).[9]

RP of P&T 2001 is not clearly defined. This is probably because what is important for P&T 2001 is that *'s* is not an instance of D, but a member of a lower head. As far as our discussion is concerned, this RP can be safely replaced by the nominal T of P&T 2004. Now Poss-*ing* will have the following structure.

(21) Poss-*ing*

$[_{DP}$ [D, *u*T(-EPP), *i*ϕ] $[_{TP}$ [DP_i, ~~*u*T~~, *i*ϕ] [[T, *i*T, ~~*u*ϕ~~(+EPP)] $[_{vP}$ $[_{DP}$ t_i] [v VP]]]]]

Nominal T, like verbal T, has an interpretable Tense feature (*i*T), and an uninterpretable ϕ-features (*u*ϕ), which includes (+EPP) subfeature. This *u*ϕ agrees with *i*ϕ in the subject DP, and as it contains (+EPP) feature, the DP is raised to the specifier position of the nominal TP.

The raised DP is checked by the nominal T, so it has possessive morphology (*'s*). The D head of the topmost DP has of course *u*T, but it is (-EPP), so no movement results. This D is phonologically empty.[10]

4.2 Acc-*ing* is a defective Poss-*ing*

Now consider what happens if the subject DP of Poss-*ing* lacks *u*T feature. There must be no nominal T in these cases. If there is one, its *u*ϕ(+EPP) must be checked, but cannot be. For the subject DP now lacks *u*T, so it is not an active goal any more. Or put differently, the subject DP does not meet the "Match condition."

(22) *Match Condition*

If a head H enters an Agree relation with a set of phrases K, each syntactic feature of H must be present on some member of K (not necessarily with the same value, including value for EPP) (P&T 2001: 383 (61))

Then the resulting structure will look something like (23), which I propose to be the structure of so-called "Acc-*ing*." The subject DP, lacking *u*T, receives no "case" in syntax. The morphology component will take care of this caseless DP, and the default case kicks in.

(23) Acc-*ing*

$[_{DP}$ [D, *u*T(-EPP), *i*φ] $[_{vP}$ [DP, *i*φ](default Acc) [*v* VP]]]

Now we can explain why it is always accusative DP that appears as the subject of Acc-*ing*, even when the gerund is in the subject position of finite tensed clause, or in the absolute position where apparently no case is assigned. The subject DP never gets case in syntax, so it is always assigned a default accusative case feature in morphology.[11]

We have proposed that according to the framework of P&T 2004, Poss-*ing* will be given the structure of (21), while Acc-*ing* will have the structure of (23). Acc-*ing* is minimally different from Poss-*ing* in that the subject DP of the former lacks *u*T feature. Everything else follows from this difference.

5. Conclusion and some consequences

Our analysis of English gerund proposed in the last section is conceptually superior to the preceding analyses. Not only can it account for the peculiarities of gerundive constructions more adequately, it is also the simplest possible analysis of the construction.

If the above analysis is correct, Acc-*ing* is not a different structure than Poss-*ing*, but it is just a defective Poss-*ing*, lacking *u*T on the subject DP. Thus, all gerundive constructions have basically the same structure. Their apparent differences are reduced to the feature content of their subject DP.

Furthermore, our analysis can give an account for some mysterious properties concerning the gerund. First, observe the following contrast between Poss-*ing* and Acc-*ing*.

(24) a. [There being five people in the room] bothered me.

b. *[There's being five people in the room] bothered me.

(Portner 1992: 119)

Expletive *there* can appear in Acc-*ing*, but not in Poss-*ing*. This is almost an automatic consequence of our analysis. *There* is usually assumed to be caseless, (cf. Groat 1995, Radford 2004) which means in our framework that the expletive *there* lacks *u*T. Even if *there* appears with nominal T, the *u*φ features on T cannot be checked by *there*. So the derivation will ultimately crash. *There* can appear only in so-called Acc-*ing*, hence the contrast between (24a) and (24b). Notice that *there* in this case is in fact caseless, and it is

supplied in the morphology the default accusative case.

Next, examine carefully the structure of Acc-*ing* (23) in the last section. Notice that this structure is not limited to Acc-*ing*. The head D carries as its complement *v*P, but the *v*P can be replaced by PP or any other "small clauses."

(25) a. [Her/*She in New York] is what we must avoid. (=(11b))
b. [Down the hill] will roll the ball.
c. [In the center of the room] sat a frog. (P&T 2001: 407)

The pronoun *her* in (25a) is in fact caseless, but the default case is assigned to it in the morphology. This explains why the pronoun is in the accusative case, rather than in the nominative case. (25b) and (25c) are the examples of locative inversion. P&T (2004: 407) suggest that argumental locative PPs, such as *Down the hill* and *In the center of the room*, must bear *u*T, since their behavior is entirely like that of nominative DPs. Though they do not give any definite structure for this construction, it is in conformity with their analysis to treat the small clause subject and locative PP subject as having the structure shown in (23).[12]

Third, Portner 1992 argues that a variety of contrasts between Poss-*ing*'s and Acc-*ing*'s can be accounted for semantically, that is, if we assume that "Acc-*ing*'s are indefinite and Poss-*ing*'s are definite."

(26) a. Which city do you remember him describing?
b. *Which city do you remember his describing?
(27) a. Which man did he take a picture of?
b. ?Which man did he take the picture of?
(Portner 1992: 118)

He maintains that the unacceptability of (26b) comes from the same reason as the infelicitousness of (27b). Portner 1992 suggests that the definiteness may be derived from the possessive morphology. Possessive morphology gives rise to definiteness in the noun phrase. This seems to be a correct generalization, but it is not immediately clear why *'s* is related to definiteness.

In our analysis, in contrast, we can assume that nominal T is the source of definiteness. If we can establish the connection between the nominal T and the definiteness phenomena, we will be able to account for the contrasts syntactically.

Finally, but rather speculatively, we can propose that PRO-*ing* might be analyzed only as Acc-*ing*. So far we have not discussed the structure for PRO-*ing*. This is partly because there is no wide agreement on what PRO is, or more largely because the control problem is not settled at all.

I would like to show what can be said about the properties of PRO under the framework of P&T 2004.

PRO is generally assumed to be caseless. We exclude null case from our consideration. This means in our framework that PRO lacks *u*T just like expletive *there*. We have seen in (24) that *there* cannot appear in Poss-*ing* construction, but only in Acc-*ing* construction.

(28) PRO-*ing* is an Acc-*ing*.

(28) makes several interesting predictions. For example, it is predicted that PRO-*ing* does not show any definiteness effect. Whether these predictions are borne out or not should be an important topic for the future research.

Notes

1. English gerunds are usually classified into three groups: that is Acc-*ing*, Poss-*ing*, and PRO-*ing*. This classification is based on the case assigned to their subject.

   The structures shown in the text are slightly different from those Miller in fact proposes. For example, we have changed his MP to TP in our structures. Nothing hinges on this decision; the modifications were made just for the ease of presentation.
2. Although Hornstein and Lightfoot (1987: 45), Johnson 1988 say that Acc-*ing* is not allowed as an ECM subject, "neither I (i.e., Schütze: MY) nor numerous other native speakers I have consulted find any contrast here (i.e., between (5a) and (5b): MY)" (Schütze 1997: 25).
3. Notice that Acc-*ing*'s in these sentences are put in a "less definite" environment. It is usually assumed that though Poss-*ing*'s can appear in the cleft focus position and be involved in Subject-Aux Inversion, Acc-*ing*'s cannot.

   (i) a. *It was [John kissing Mary] that upset everyone.
   b. It was [John's kissing Mary] that upset everyone.
   (ii) a. *Did [Mary kissing John] upset her parents?
   b. Did [Mary's kissing John] upset her parents?
   (Portner 1992: 115)

   Portner argues that what is wrong about (ia) and (iia) is that the Acc-*ing* is put in too definite an environment.
4. Schütze admits that in some cases (especially, (11d, e, j, and k)) NOM subjects can appear instead of default ACC subjects. This fact, however, is a further confirmation of the default case system, since we find no other environments allowing such "vacillation" between Accusative and Nominative.
5. P&T 2004 explore the possibility of extending their analysis of nominative case as *u*T on D to

accusative case, and propose (i). Since this extension is not directly relevant to our discussion, it will not be dealt with in this paper.

(i) *The nature of accusative case*

Accusative case (like nominative) is an instance of *u*T on D.

6. Though T-to-C movement is optional in the case of nonsubject *wh*-movement, it has some consequence for interpretation. Cf. P&T (2001: 377).
7. Though P&T 2001, 2004 do not touch upon this, but the mechanism is not entirely clear for eliminating the uninterpretable feature *u*T on C by another uninterpretable feature *u*T on the subject. The hidden assumption will be that once checked by an interpretable feature, even an uninterpretable feature can be a checker of other uninterpretable features. Notice that the *u*T on the subject *Sue* is already checked by *i*T on *will*.
8. For the ease of presentation, I am using the terminology of GB. In what follows, I will show that the subject of Acc-*ing*'s is never assigned accusative case, but it is caseless. Furthermore, I will propose that genitive case is another instance of *u*T on D, like other structural cases.
9. P&T 2004 assume that there are two kinds of T, that is, T_S and T_O. T_O is newly introduced to their system in order to accommodate the accusative case as *u*T on D. In P&T 2001, it was suggested that T_S is responsible for both the nominative and accusative case checking, and no T_O is assumed. Since we are mainly concerned with T_S, and do not deal with T_O, T_S will hereafter be called just T in this article for ease of presentation.
10. The fact that Poss-*ing*, or more generally DP_S, is introduced by the empty head might be another similarity between DP and CP, as suggested by P&T 2004.
11. DP without *u*T will be problematic if the Argument Tense Condition must always hold.

(i) *Argument Tense Condition (Case Filter)*

An argument must bear T (*u*T or *i*T). (P&T 2004: 501)

If this condition should be strictly observed, the subject DP of Acc-*ing* cannot be an argument, as it lacks any Tense feature in our analysis.

My suspicion is that although the condition is a correct generalization and almost always holds, it is just a generalization derived from deeper conditions. Most of the cases, if the derivation includes an argument without T, it will crash. In some cases, however, the derivation will go through even if it contains a T-less argument. Acc-*ing*, and other default case environments will be such rare cases.

12. Presently I have no idea how we should disallow bare VPs, e.g., VPs without the morpheme -*ing*, from

the structure (23).

References

Abney, Steven. 1987. The English noun phrase in its sentential aspect. Doctoral dissertation, MIT.

Groat, Eric. 1995. English expletives: A Minimalist approach. *Linguistic Inquiry* 26, 354-64.

Henry, Alison. 1995. *Belfast English and standard English*. Oxford: Oxford University Press.

Horn, George. 1975. On the nonsentential nature of POSS-*ing* constructions. *Linguistic Analysis* 1, 333-387.

Hornstein, Norbert and David Lightfoot. 1987. Predication and PRO. *Language* 63, 23-52.

Johnson, Kyle. 1988. Clausal gerunds, the ECP, and government. *Linguistic Inquiry* 19, 583-609.

Koopman, Hilda. 1983. ECP effects in main clauses. *Linguistic Inquiry* 14, 346-350.

McCawley, James D. 1998. The syntactic phenomena of English, Second edition. Chicago: University of Chicago Press.

Miller, D. Gary. 2002. *Nonfinite structures in theory and change*. Oxford: Oxford University Press.

Milsark, G. L. 1988. Singl-*ing*. *Linguistic Inquiry* 19, 611-634.

Perlmutter, David. 1971. Deep and surface structure constraints in syntax. New York: Holt, Rinehart and Wilson.

Pesetsky, David and Esther Torrego. 2001. T-to-C movement: Causes and consequences. In Kenstowicz, Michael. ed. 2001. *Ken Hale: A life in language*. Cambridge, Mass.: MIT Press, 355-426.

Pesetsky, David and Esther Torrego. 2004. Tense, case, and the nature of syntactic categories. In Guéron, J. and J. Lecarme. eds. 2004. *The Syntax of Time*. Cambridge, Mass.: MIT Press, 495-537.

Portner, Paul Howard. 1992. Situation theory and the semantics of propositional expressions. Doctoral dissertation, University of Massachusetts.

Quirk, Randolf, et al. 1985. *A comprehensive grammar of the English language*. London: Longman.

Radford, Andrew. 2004. *Minimalist syntax: Exploring the structure of English*. Cambridge: Cambridge University Press.

Reuland, Eric. 1983. Governing *-ing*. *Linguistic Inquiry* 14, 101-136.

Schütze, Carson Theodore Robert. 1997. INFL in child and adult language: Agreement, case and licensing. Doctoral dissertation, MIT.

Stowell, Timothy. 1981. Origins of phrase structure. Doctoral dissertation, MIT.