

The Accusative-*ing* Construction and the Feature Checking Theory*

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0. Introduction

In the literature of generative grammar, English gerunds as in (1) have given rise to much controversy:¹

- (1) a. John remembered [them reading the book].
b. Mary favored [him singing the song].

Among the issues are the categorial status of this construction and Case assignment to the embedded subject. In this paper, I will deal with these questions under the feature checking theory proposed in Chomsky (1992) and Chomsky and Lasnik (1993). In what follows, the gerundive constructions whose subject DPs bear accusative Case will be called 'the ACC-ing construction'.²

This paper is organized as follows. In Section 1, I consider the categorial status of the ACC-ing construction. In Section 2, the question about accusative Case on the embedded subject is discussed. I further suggest that several differences in behavior between the subject of the ACC-ing construction and that of the so-called Exceptional Case Marking construction should follow from a crucial difference in licensing of Case on the subject. Concluding remarks are provided in Section 3.

1. The Categorial Status of the ACC-ing Construction

1.1 The Clausal Status

It has been claimed in the literature that the ACC-ing

- (4) a. *He regrets [there's being so many mistakes in the text].
 b. He regrets [there being so many mistakes in the text].
 (Nakajima 1991)

The pleonastic *there* is assumed to be inserted to satisfy the Extended Projection Principle, which demands that a clause should have a subject. Nakajima suggests that the ungrammaticality of (4a) should be explained with the basic notion of Economy of Derivation, which states that operations are driven by necessity, not otherwise (Chomsky 1986a; 1991). In (4a), there is no reason to insert *there*, because the POSS-ing construction is not a clause and need not have a subject.⁵ On the other hand, the grammaticality of (4b) suggests that the ACC-ing construction should be a clause and be required to have a subject; otherwise (4b) would be ruled out by the Economy principle, as (4a) is.

1.2 A Clause without COMP

In the above discussion, we argued that the ACC-ing construction should be analyzed as a clause. Since Chomsky (1986b), two syntactic categories, that is IP and CP, have been generally assumed for clauses. The ACC-ing construction is assumed to be IP in some previous works (Abe 1986; Yamada 1987). In fact, as suggested in the following discussion, we can find no elements in the ACC-ing construction which are supposed to occupy the COMP position.

Stowell (1982) argues that gerunds lack the COMP position entirely. He claims that there is no gerundive complementizer corresponding to *for* or *that*. Furthermore, gerunds seem to have no position where *wh*-phrases can move. Consider the examples in (5):

- (5) a. I didn't remember [what I should do t].

- b. I didn't remember [what PRO to do t].
- c. *I didn't remember [what him doing t].

The verb *remember* does take an indirect question when it has a tensed complement as in (5a) or an infinitival complement as in (5b). The ACC-ing construction, however, never occurs as an indirect question, as the ungrammaticality of (5c) shows.

To support his claim, Stowell further presents the following examples concerning relative clause structures:

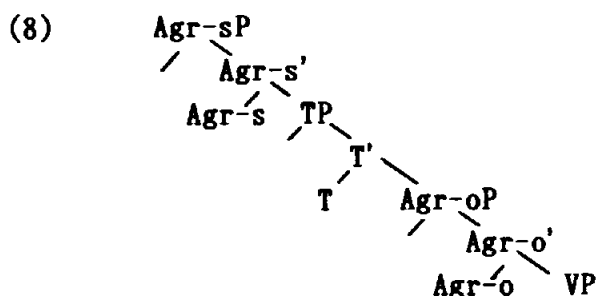
- (6) a. The city [that he visited] is Paris.
- b. The city [PRO to visit] is Paris.
- c. *The city [(his) visiting] is Paris.

It is assumed that a null operator occupies the COMP position in the tensed clause in (6a) and the infinitival clause in (6b). On the other hand, (6c) indicates that null-operator movement is not possible within the gerund. We can confirm that the same is true of the ACC-ing construction:

- (7) *I bought a book [him reading].

As discussed above, we can find no elements in the ACC-ing construction which are supposed to occupy the head position or the Spec position of CP. Since we have no motivation to analyze the construction as CP, we simply assume that it lacks the COMP position entirely.⁶

Under the feature checking theory (cf. Chomsky 1992; Chomsky and Lasnik 1993), IP is assumed to have an articulated structure which consists of some functional categories (cf. Pollock 1989; Belletti 1990). Adopting this hypothesis, we propose that the ACC-ing construction should have a structure like the following:



Specifically, the categorial status of the ACC-ing construction is Agr-sP.

1.3 A Distributional Property of the ACC-ing Construction

In the above discussion, we argued that the ACC-ing construction is a clause without COMP, that is Agr-sP. With this proposal, we can give a natural account of a distributional property of the ACC-ing construction.

Abney (1987) points out that the ACC-ing construction appears in some positions from which typical sentences are excluded. Five of such positions are presented here. The first is the prepositional object position:

- (9) a. I learned about John's weakness for stogies
 b. I learned about John's smoking stogies
 c. I learned about John smoking stogies
 d. *I learned about that John smokes stogies
 e. *I learned about for John to smoke stogies
 (Abney 1987)

The second is the subject position of a sentence where Subject-Auxiliary Inversion has applied:

- (10) a. Does John's weakness for stogies bother you?
 b. Would John's smoking stogies bother you?
 c. ?Would John smoking stogies bother you?

- d. *Does that John smokes stogies bother you?
 - e. *Would for John to smoke stogies bother you?
- (Abney 1987)

The third is the subject position of an embedded sentence:

- (11) a. I believe that John's weakness for stogies bothers you.
 - b. I believe that John's smoking stogies would bother you.
 - c. ?I believe that John smoking stogies would bother you.
 - d. *I believe that that John smokes stogies bothers you.
 - e. *I believe that for John to smoke stogies would bother you.
- (Abney 1987)

The fourth is the topic position:

- (12) a. John's weakness for stogies I can't abide.
 - b. John's smoking stogies I can't abide.
 - c. ?John smoking stogies I can't abide.
 - d. *That John smokes stogies I can't believe.
 - e. *For John to smoke stogies I won't permit.
- (Abney 1987)

The fifth is the focus position of cleft sentences:

- (13) a. It's John's weakness for stogies that I can't abide
 - b. It's John's smoking stogies that I can't abide
 - c. It's John smoking stogies that I can't abide
 - d. *It's that John smokes stogies that I can't believe
 - e. *It's for John to smoke stogies that I won't permit
- (Abney 1987)

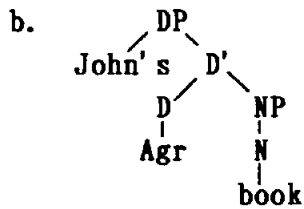
The examples in (9)-(13) show that the distribution of the ACC-ing construction is similar to that of the noun phrase or the POSS-ing construction, rather than that of the *that*-clause or the *for-to*-infinitive.⁷ In the following discussion, we will suggest that this fact should be attributed to a property which is found both in the noun phrase and in the ACC-ing construction.

Abney (1987) observes that there are a large number of languages in which overt agreement is found in the noun phrase between the possessor and the nominal head. For example, consider the following Hungarian examples from Szabolcsi (1987):

- (14) a. az en kalap-om
 the I-Nom hat-1sg
 'my hat'
- b. a te kalap-od
 the you-Nom hat-2sg
 'your hat'
- c. a Peter kalap-ja
 the Peter-Nom hat-3sg
 'Peter's hat'

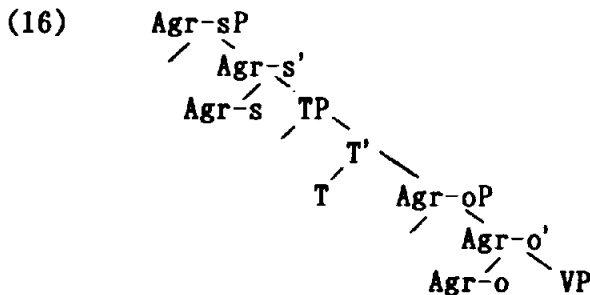
In (14), the head N agrees with the pronominal possessor just as the verb agrees with the subject in the sentence. Taking these facts into account, Abney argues that the noun phrase is headed by an Inflectional element, Agr, as is the case with the sentence. He suggests that the noun phrase should be headed by D which carries Agr and selects NP as its complement. For example, consider the following case:

- (15) a. John's book



The noun phrase in (15a) is assumed to have a structure as (15b), where Agr in the head D assigns genitive case to *John* in [Spec, DP].

With Abney's analysis of the noun phrase in mind, let us return to the examples in (9)-(13). As noted above, the ACC-ing construction appears in some positions where the noun phrase and the POSS-ing construction are found. This fact is a natural consequence of our analysis. Recall that we proposed that the ACC-ing construction should be Agr-sP, as shown in (8), repeated as (16):



Structure (16) shares one property with (15b). They are both headed by an Agr element. On the other hand, *that*-clauses and *for-to*-infinitives in (9)-(13) are CPs and do not have Agr in the head position.⁹ Therefore, it must be the Agr element that makes DP and the ACC-ing construction show the similar distribution.^{9, 10} Note here that, if the ACC-ing construction were analyzed as CP, the distributional property of the construction could not be explained straightforwardly.

To summarize, in the first place, we have argued that the ACC-ing construction should be analyzed as a clause, not a noun

phrase. Taking into account lack of gerundive complementizer and *wh*/null operator movement within the clause, we have suggested that the categorial status of the ACC-ing construction should be Agr-sP, rather than CP. The external distribution of the ACC-ing construction, which is similar to that of DP, has been attributed to the structure of the construction. Specifically, the ACC-ing construction is headed by an Agr element as well as DP.

2. On the Subject of the ACC-ing Construction

In the preceding section, we proposed that the categorial status of the ACC-ing construction should be Agr-sP. The so-called Exceptional Case Marking construction (henceforth the ECM construction) is also supposed to be Agr-sP in the recent literature (cf. Watanabe 1993), as exemplified in (17):

(17) Mary believes [_{Agr-sP} him to be honest]

The subject of the ECM construction (henceforth the ECM subject) is generally considered to depend on the matrix verb for accusative Case (cf. Postal 1974). Then, the ECM subject undergoes NP movement when the matrix verb is passivized, as the following example shows:

(18) John is believed [t to be a genius].

It has been often claimed in previous studies that the subject of the ACC-ing construction (henceforth the ACC-ing subject) has accusative Case assigned directly by the matrix verb, just as the ECM subject does (Yamada 1987; Suzuki 1988; Johnson 1988). Contrary to the ECM subject, however, the ACC-ing subject cannot undergo NP movement, as shown in (19):¹¹

- (19) a. *The boys were hated [t eating the fish].
 b. *Betsy was remembered [t telling the story].

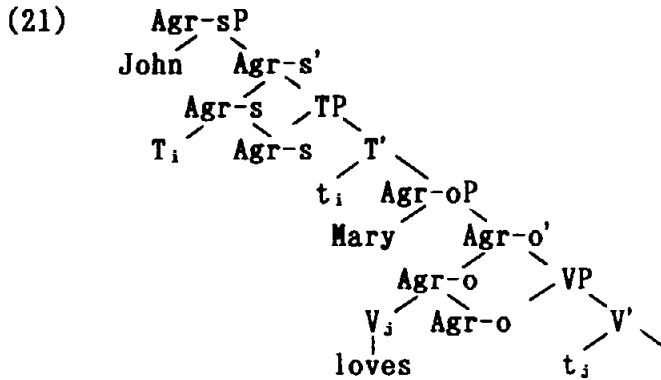
In what follows, we will examine whether the ACC-ing subject has its Case licensed as the ECM subject does, assuming the feature checking theory proposed in Chomsky (1992) and Chomsky and Lasnik (1993).

2.1 The Feature Checking Theory and the ECM Subject

Under the feature checking theory, categories lexically specified for certain morphological features must move to a position where these features can be checked off. Structural Case theory is also subsumed under this proposal. For example, consider the following case:

- (20) John loves Mary.

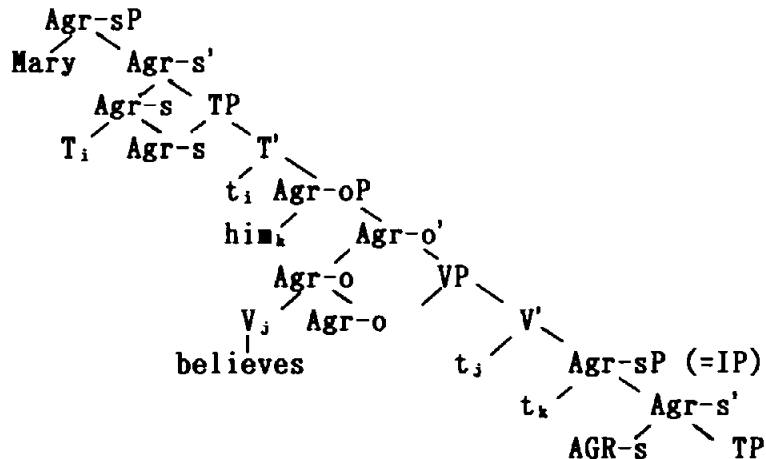
The subject DP *John* and the object DP *Mary* are specified for the Case-features, [+Nom] and [+Acc], respectively. The feature of DP must be matched with that of a Case-bearing head in a Spec-Head configuration. A finite Tense is concerned with nominative Case, and a verb is with accusative Case. If these heads bear those Case features, they are raised and adjoined to an immediate Agr, and then the Case feature of them are discharged. As for the case in (20), Case checking is fulfilled in the following configuration:



In (21), the subject DP is in [Spec, Agr-sP] and its Case feature is matched with that of T_i adjoined to Agr-s. The object DP is in [Spec, Agr-oP] and its Case feature is matched with that of V_j adjoined to Agr-o.¹²

Under the checking theory, the ECM subject is assumed to have its accusative Case checked in [Spec, Agr-oP] of the matrix clause at LF, as illustrated in (22) (cf. Chomsky 1992):¹³

(22) Mary believes him to be honest



Lasnik and Saito (1991) provide some pieces of evidence which support the analysis in (22). They show that the ECM

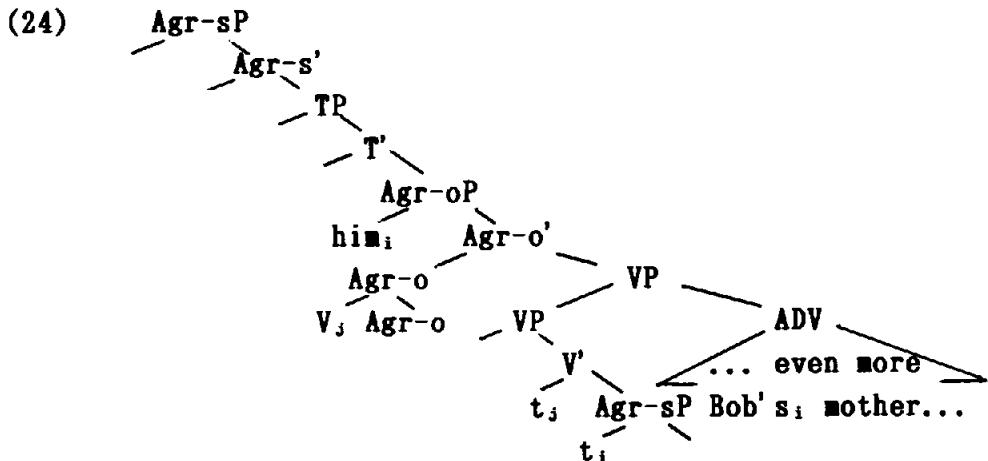
subject can 'command' the material in the matrix clause. We review two of them. The first is concerned with Binding Condition C. Consider the case in (23):

(23) a. ?Joan believes he_i is a genius even more fervently than Bob's s_i mother does.

b. *?Joan believes him_i to be a genius even more fervently than Bob's s_i mother does.

(Lasnik and Saito 1991)

They observe the contrast in acceptability between (23a) and (23b). In (23b), the ECM subject him is supposed to be raised to some position from which it can c-command Bob in the matrix adverbial. Under the checking theory assumed here, an LF configuration associated with (23b) is given as follows:



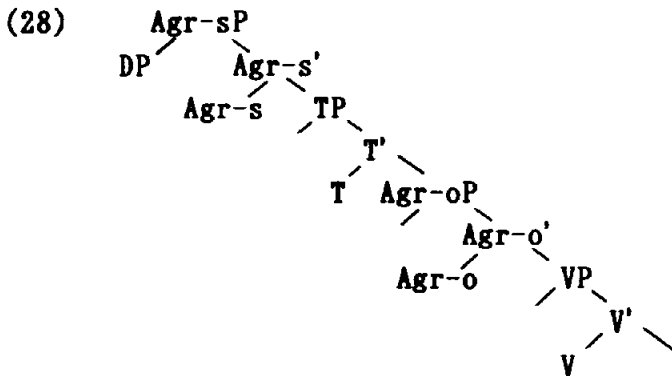
In (24), him c-commands Bob within the adverbial of the matrix clause. On the other hand, in (23a), the embedded subject he is assumed to have its nominative Case checked within the complement clause, and hence it cannot c-command Bob .¹⁴

The second evidence presented by Lasnik and Saito comes from the distribution of reciprocal expressions. It is generally assumed that the antecedent of a reciprocal must bear

(26) and (27) suggest that the ACC-ing subject should be at most as high as the subject of finite clauses.¹⁶ These facts indicate that the ACC-ing subject has its Case licensed within the complement clause, not in the matrix clause.

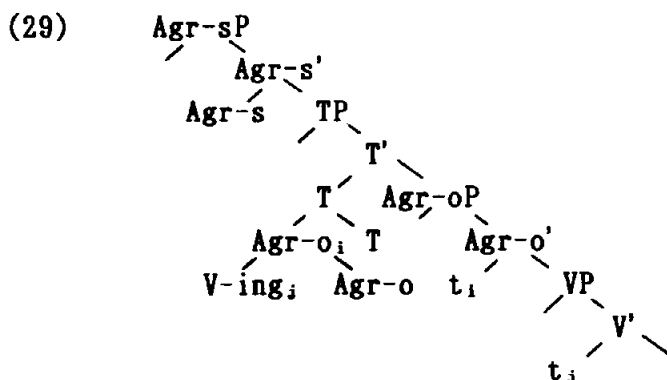
The next question to be asked is how the accusative Case of the ACC-ing subject is licensed within the complement clause, and why the ECM subject cannot have its Case licensed in the same way. The presence of the morpheme *-ing* distinguishes the ACC-ing construction from the ECM construction. We speculate that the morpheme might be concerned with the question.¹⁷

Under the feature checking theory, it is assumed that verbs and nouns have their morphological features in the lexicon, and they are checked in the appropriate position at some stage of a derivation to LF (cf. Chomsky 1992). The morpheme *-ing* is also considered to have its feature checked somewhere. In Section 1, we proposed that the ACC-ing construction should have a structure like (8), repeated as (28):



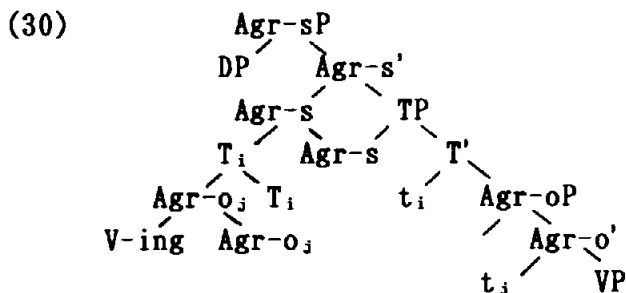
In (28), plausible positions where the feature of *-ing* is checked are Agr-sP, TP and Agr-oP. Generally, Agr-P is the projection where ϕ -features (gender, number, person) are checked. TP is the projection where Tense features are checked. Since no agreement is observed between *-ing* and some

element in the ACC-ing construction, *-ing* can be assumed to be a manifestation of a Tense feature in the clause. We propose that the feature of *-ing* should be checked in the following configuration at LF:



In (29), the verb with the morpheme *-ing* is adjoined to the head *Agr-o* and then the complex head [_{Agr-o} V-ing+*Agr-o*] is adjoined to the head *T*.

Given the premise that Case checking is accompanied by ϕ -feature checking between *Agr* and DP in Spec of *AgrP* (cf. Chomsky 1992; Watanabe 1993), we propose that the ACC-ing subject should have its Case feature checked in the following structure at LF:



In (30), the ACC-ing subject is the DP in Spec of *Agr-sP* and its Case feature is checked by the feature of Tense adjoined to *Agr-s*.^{18, 19}

2.3 Deriving the Properties of the ACC-ing Subject and the ECM Subject

With the above discussion in mind, let us consider the examples in (18) and (19), repeated as (31a,b), which are concerned with NP movement of the embedded subject.

- (31) a. John is believed [*t* to be a genius].
 b. *The boys were hated [*t* eating the fish].

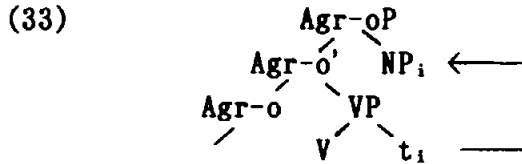
Given that the passive morphology absorbs the accusative Case feature of the verb, in (31a), *believed* cannot check the Case feature of the ECM subject *John*. Thus, the DP must move to [Spec, Agr-sP] of the matrix clause. On the other hand, in (31b), the ACC-ing subject *the boys* need not move to the matrix clause, because its Case feature is checked within the complement clause (cf. 2.2). To be precise, it must not move, given the basic assumption of Economy of Derivation, which states that operations are applied if they must be, not otherwise (Chomsky 1986a; 1991).²⁰ Therefore, the contrast in grammaticality between (31a) and (31b) can be attributed to the crucial difference in Case checking of the embedded subject.

There is another case which seems to follow from our proposal. Consider the following examples:

- (32) a. I believe *t* to have been tortured by Brazilians
 [the priests who are going to speak today].
 b. *I don't favor *t* being allowed to join [that sort
 of rude, uncouth, ill-behaved person]
 (Postal 1974)

Heavy NP Shift applies to the ECM subject, as in (32a), but never to the ACC-ing subject, as in (32b). According to Nishikawa (1990), Heavy NP Shift can be analyzed as A-movement to Spec of Agr-oP in overt syntax, as illustrated in (33), if

we assume that Spec of Agr-oP appears to the right of the head Agr-o:²¹



Nishikawa presents the following examples in Chichewa, which give support to his analysis:

- (34) a. Mdyerekezi a-ku-namiz-a abusa tsopano.
 devil SP-PRES-deceive-ASP priests now
 b. Mdyerekezi a-ku-wa-namiz-a tsopano abusa.
 devil SP-PRES-OP-deceive-ASP now priests
 c. *Mdyerekezi a-ku-namiz-a tsopano abusa.
 devil SP-PRES-deceive-ASP now priests
 'The devil is deceiving the priests now.'
 (SP = subject agreement prefix; PRES = present tense;
 OP = object agreement prefix; ASP = aspect or modal
 marker)

In Chichewa, the object is adjacent to the verb in normal cases, as shown in (34a). In addition to that, as shown in (34b), another element is allowed to intervene between the verb and the object, just as Heavy NP Shift construction in English. Note here that in this case, the object agreement marker, i.e., *wa* in (34b), must appear on the verb (cf. (34c)). If (34b) is derived from (34a) by moving the object NP, these examples suggest that Heavy NP Shift should be analyzed as a movement to the position that agrees with Agr-o.

Given Nishikawa's analysis, the examples in (32), repeated as (35), are explained straightforwardly:

- (35) a. I believe *t* to have been tortured by Brazilians

- [the priests who are going to speak today].
 b. *I don't favor t being allowed to join [that sort
 of rude, uncouth, ill-behaved person]
 (Postal 1974)

In (35a), Heavy NP Shift of the ECM subject is legal, because its Case feature must be checked in [Spec, Agr-oP]. On the other hand, in (35b), the ACC-ing subject need not move to [Spec, Agr-oP], because its Case feature is checked in the complement clause. (35b) is ruled out with the basic assumption of Economy of Derivation, as is the case with (31b). Thus, the contrast in grammaticality between (35a) and (35b) can be explained by noting the difference in Case checking of the embedded subject.²²

Finally, consider the following examples, which are concerned with scope interpretation of a quantified DP in the subject position:

- (36) a. Someone believes everyone to be a liar.
 (someone > < everyone)
 b. Someone remembers everyone arriving late.
 (someone > everyone)

In (36a), the ECM subject *everyone* can have wide scope with respect to the matrix subject *someone*. On the other hand, the ACC-ing subject *everyone* in (36b) strongly prefers to have narrow scope with respect to *someone*.

Adopting the checking theory assumed here, Kitahara (1992) develops a theory of scope interpretation without recourse to QR. In his analysis, chains formed by movements play a crucial role (cf. Aoun and Li 1989; 1991). Among the chains are Case-chains created by checking of Case features.

For example, consider the following familiar example:

- (37) Someone loves everyone.
 (someone > < everyone)

The sentence in (37) is ambiguous: either *someone* or *everyone* has scope over the other. Given the VP-Internal Subject Hypothesis (Kitagawa 1986; Kuroda 1988; Sportiche 1988; Koopman and Sportiche 1991), the following LF representation is assigned to (37):²³

- (38) [_{Agr-sP} someone_i Agr-s [_{TP} T [_{Agr-oP} everyone_j Agr-o
 [_{VP} t_i loves t_j]]

In (38), the subject DP *someone* is moved from Spec of VP to Spec of Agr-sP, where the Case feature [+Nom] is checked, and Chain 1 (someone_i, t_i) is created. On the other hand, the object DP *everyone* is moved from the complement position of V to Spec of Agr-oP, where the Case feature [+Acc] is checked, and Chain 2 (everyone_j, t_j) is created. Let us consider the following schematic representation of the two chains:

- (39) someone_i----- everyone_j----- t_i----- t_j
 Head----- Tail Chain 1
 Head----- Tail Chain 2

(39) shows that Chain 1 and Chain 2 overlap. More precisely, the head of Chain 1, namely *someone_i*, c-commands the head of Chain 2 (= *everyone_j*), which is not c-commanded by the tail of Chain 1 (= *t_i*). On the other hand, the head of Chain 2 (= *everyone_j*) c-commands the tail of Chain 1 (= *t_i*), which is not c-commanded by the tail of Chain 2 (= *t_j*). Under Kitahara's theory, scope ambiguity arises when the two chains overlap.

Let us see another example:

- (40) Someone thinks everyone saw you at the party.
 (someone > everyone)

(40) can be interpreted only as *someone* having scope over *everyone*. The following LF representation is assigned to (40):

(41) [_{AGR-oP} someone_i Agr-s [_{TP} T ... [_{VP} t_i thinks
 [_{CP} C [_{AGR-oP} everyone_j Agr-s [_{TP} T [_{AGR-oP} Agr-o
 [_{VP} t_j saw you at the party]]]]]]]]]

In (41), two chains are created, (someone_i, t_i) and (everyone_j, t_j). These chains do not overlap. In this case, Kitahara assumes that the quantifier phrase which c-commands the other has wide scope over it (cf. May 1985). Since the two chains formed by *someone* and *everyone* do not overlap and the former asymmetrically c-commands the latter in (41), *someone* has wide scope with respect to *everyone*.

With Kitahara's analysis in mind, consider our examples in (36), repeated as (42):

- (42) a. Someone believes everyone to be a liar.
 (someone > < everyone)
 b. Someone remembers everyone arriving late.
 (someone > everyone)

(42a) is given the following LF representation:

(43) [_{AGR-oP} someone_i Agr-s [_{TP} T [_{AGR-oP} everyone_j Agr-o
 [_{VP} t_i believes [_{AGR-oP} t_j to be a liar]]]]]

In (43), two relevant chains are formed, (someone_i, t_i) and (everyone_j, t_j). Since *everyone* moves to Spec of the matrix Agr-oP, these chains overlap, as is the case with (37). Thus, the scope ambiguity in (42a) is correctly predicted.

Consider, next, the following LF representation assigned to (42b):

- (44) [_{AGR-sP} someone_i Agr-S [_{TP} T [_{AGR-op} Agr-O
 [_{VP} t_i remembers [_{AGR-op} everyone_j [_{VP} t_j arriving
 late]]]]]]

In (44), two chains are created, (someone_i, t_i) and (everyone_j, t_j). In this case, *everyone* does not move to the matrix clause, because the ACC-ing subject has its Case feature checked within the clause. Therefore, those chains do not overlap. *Someone* asymmetrically c-commands *everyone*, and the former has wide scope with respect to the latter, as is the case with (40). Thus, the contrast between (42a) and (42b) with respect to the scope interpretation also follows naturally from the difference in Case checking of the embedded subject.

To summarize, we have proposed that the ACC-ing subject should have its Case feature checked within the clause, contrary to the case with the ECM subject. It has been assumed that a feature of Tense, which is concerned with the morpheme *-ing*, is responsible for the Case of the ACC-ing subject. By noting the difference in Case checking of the subject, we have accounted for several differences in behavior between the ECM subject and the ACC-ing subject: the applicability of NP movement and Heavy NP Shift to the subject, and scope interpretations of a quantified DP in the subject position.

3. Conclusion

In the former part of this paper, we have dealt with the question of what the categorial status of the ACC-ing construction is. We have argued that its clausal status, lack of *wh*/null operator movement within the construction, and its distributional property can be accounted for with the proposal that the ACC-ing construction should be Agr-sP. In the latter part, we have addressed ourselves to another question of how the ACC-ing subject has its Case licensed. It has been

suggested that the ACC-ing subject should have its Case feature checked within the clause, contrary to the case with the ECM subject. Several differences in behavior between the ACC-ing subject and the ECM subject have been attributed to the difference in Case checking of the subject.

NOTES

* This is a modified version of the idea reported at a monthly meeting of the Tsukuba English Linguistics Colloquium held on February 20, 1994. I would like to thank the audience there for useful discussion. I am especially grateful to Minoru Nakau, Yukio Hirose, Koichi Takezawa, Nobuhiro Kaga, Sinsuke Homma, Hidehito Hoshi, Mika Okuyama, Hideki Tanaka, Joe Morita, and Masanobu Ueda for comments and suggestions on an earlier draft of this paper. I am also indebted to my informants, Robyne Tiedeman and Ronald Craig, who have been extremely patient and helpful. Needless to say, all remaining inadequacies are my own.

¹ See Wasow and Roeper (1972), Horn (1975), Reuland (1983), Abe (1986), Abney (1987), Yamada (1987), Johnson (1988), Suzuki (1988), and Nakajima (1991) for discussions on the issues dealt with in the text.

² In this paper, we assume that noun phrases consist of two maximal projections DP and NP, with the head D selecting NP as its complement, which is the so-called DP hypothesis (Brame 1982; Fukui 1986; Speas 1986; Abney 1987; Fukui and Speas 1986). See also the discussion in Section 1.3.

³ Fiengo and Higginbotham (1981) propose that N' should be a possible adjunction site for QR in addition to S, taking into account the fact that quantifiers in the complement of a noun can have narrow scope with respect to the matrix verb. Their proposal is compatible with our account of (2b), because the quantifier *everyone* is in the subject position of NP,

which is outside N'.

⁴ I thank Joe Morita (personal communication) for bringing Nakajima's work to my attention.

⁵ Nakajima's (1991) account of the ungrammaticality of (4a) is supported by the following examples presented in Abe (1986):

- (i) a. * The commissioner denounced [everyone drinking beer at ballgames]
- b. The commissioner denounced [everyone's drinking beer at ballgames]
- c. The commissioner denounced [\emptyset drinking beer at ballgames]

(Abe 1987)

(ia) and (ib) show that the ACC-ing construction cannot occur as an object of the verb *denounce*, though the POSS-ing construction can. Note here that (ic) has the arbitrary control reading rather than the obligatory control reading. Taking these facts into account, Abe argues that the subject position of the POSS-ing construction can be null.

⁶ Reuland (1983) gives an account of the ungrammaticality of (5c) in his framework, though he assumes that the ACC-ing construction has the COMP position. According to his analysis, the ACC-ing construction in (ia) has a structure as (ib):

- (i) a. I remember John reading the letter
- b. I remember [_S [_S John [_{INFL} -ing] [_{VP} V NP]]]

He suggests that *-ing* should be a nominal element and be assigned Case by the matrix verb *remember* under government. With his proposal, (5c) is given the following structure:

- (ii) ... remember [_S *what* [_S him [_{INFL} -ing] [_{VP} V NP]]]

He claims that in (ii) *what* in COMP prevents the matrix verb from governing *-ing* in Infl, and hence *-ing* is not assigned Case.

Reuland's analysis, however, cannot be incorporated into the recent theory as it is. Since S and S' are assumed to be maximal projections of independent categories, namely, IP (or Agr-sP) and CP, respectively, government of Infl by an outside Case assigner is always blocked by the head C due to Relativized Minimality (Rizzi 1990). Therefore, in (ii), *-ing* cannot be governed by the verb *remember*, regardless of the presence or the absence of *what* in COMP.

⁷ Although Abney (1987) takes the sentences in (10c), (12c) and (13c) as grammatical, Horn (1975) gives '*' to similar sentences. My informants basically agree with Abney on the judgments in (9)-(13) and consistently suggest the contrast in acceptability between the examples in (a)-(c) and those in (d)-(e).

I have no account of the slightly degraded status of the examples in (10c), (11c) and (12c). Abney (1987) suggests that it might be ascribed to the generally slightly marginal status of the ACC-ing construction.

⁸ Rizzi (1990) argues that in English a tensed complementizer can be realized as Agr, if it is not realized as *that* and the Spec of COMP is filled by a *wh*-operator or a trace.

⁹ Infinitival clauses without overt complementizers do not appear in those positions exemplified in (9)-(13):

- (i) a. *I learned of John to smoke stogies
- b. *Would John to smoke stogies bother you?
- c. *I believe that John to smoke stogies would
 bother you.
- d. *John to smoke stogies I won't permit
- e. *It's John to smoke stogies that I won't permit

If these infinitival clauses are also Agr-sP, we need an

account to rule out the sentences in (i). We speculate that the subject DP *John* of the infinitives does not have its Case licensed in those positions. See Section 2 for the discussion of Case of embedded subjects.

¹⁰ Although we assume that both ACC-ing constructions and POSS-ing constructions carry Agr in the head position, only the latter trigger plural agreement on the verb, when they are conjoined in the subject position of tensed sentences, as in (i):

- (i) a. John coming (so often) and Mary leaving (so often) bothers/*bother me
 b. John's coming and Mary's leaving *bothers/bother me
 cf. That John came and that Mary left bothers/*bother me

(Abney 1987)

We suppose that the contrast in number agreement in (i) is due to some feature which distinguishes DPs from other categories. We leave this matter for future research.

¹¹ The ungrammaticality of (19) cannot be ascribed to the verbs *hate* and *remember* under passivization, because the following sentences are fully acceptable:

- (i) a. He is hated by everyone.
 b. He is remembered fondly by Mary.

¹² Under the theory assumed here, the movement of object DP to [Spec, Agr-oP] is delayed until LF by an economy condition, Procrastinate, which states that LF-movement is 'cheaper' than overt movement (cf. Chomsky 1992).

¹³ It is assumed that the ECM subject moves to [Spec, Agr-sP] of the infinitival clause in overt syntax, in order to satisfy the Extended Projection Principle. For further

discussion, see Chomsky (1994).

¹⁴ We assume that Binding Conditions A and C, which are relevant to the discussion in the text, apply at LF (cf. Chomsky 1992).

¹⁵ The judgments are not as clear as expected. Branigan (1992) accounts for the fuzziness. With respect to the example in (25a), he assumes that the parser will first try to attach the modifier to the VP in the complement clause, as follows:

- (i) The DA proved that [_{CP} the defendants [_{VP} [_{VP} were guilty] during each other's trials]]

In (i), the embedded subject *the defendants* c-commands the reciprocal *each other*. After that, the parser builds the correct structure, and the embedded subject no longer c-commands the reciprocal. Branigan suggests that the weakness of the judgment can be ascribed to the initial parse.

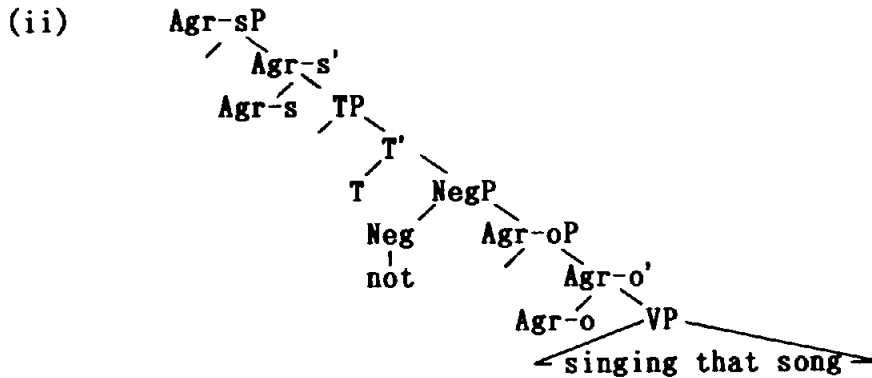
¹⁶ The examples in (27) are not as bad as they should be. We suppose that some effect of the initial parse can be involved in those cases, as Branigan (1992) suggests (cf. note 15).

¹⁷ I thank Hidehito Hoshi (personal communication) for helpful discussion on this point.

¹⁸ The ACC-ing subject appears on the left of *not*, as in (i):

- (i) a. I favor [him not singing that song]
 b. *I favor [not him singing that song]

Not is assumed to be in the head position of NegP, which is located between Agr-oP and TP (cf. Pollock 1989; Watanabe 1993) as follows:



Given the structure in (ii), the examples in (i) suggest that, in overt syntax, the ACC-ing subject should be in a position which is higher than NegP.

¹⁹ We leave open the question of why Tense of the ACC-ing construction bears the feature of accusative Case, rather than nominative or genitive Case.

²⁰ Nakajima (1991) also suggests that the inability of the ACC-ing subject to undergo NP movement should be explained with the assumption that movement must be a 'last resort' operation.

²¹ It is a crucial assumption in Nishikawa's analysis that Spec of Agr-oP, but not Spec of Agr-sP, appears to the right of its head. He notes that the asymmetry with respect to the direction of Spec may follow from the interactions of the direction of Case assignment and theta-role assignment.

²² Nishikawa (1990) gives an account of the ungrammaticality of (35b), assuming that the ACC-ing construction is CP. As discussed in Section 1, however, we analyze the ACC-ing construction as Agr-sP, rather than CP. So we need another account of the fact.

²³ Head-movement is ignored in the representation for simplicity.

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