

A lexical subject is normally assigned nominative Case in the direct complement both in Turkish and Korean when usual Case assigners such as Agr and tense are present. They, however, disallow other 'clausal complements' to have a lexical subject with accusative Case.

This paper is an attempt to answer the question of why there should be a difference like this. The paper is organized as follows. Section 2 is devoted to the review of the ECM phenomenon in English. While comparing the ECM in English with the apparent counterparts in Turkish and Korean, we try to explain the difference between these languages in section 3. We conclude with a short summary in section 4.

2. ECM in English

ECM (Exceptional Case Marking) is designed to explain a syntactic phenomenon in English as shown in the sentences in 1. (repeated here)

- 5.a. John believed him to have lied.
 b. I never expect them to return so soon.

That is, under the ECM approach, the matrix verb somehow can assign Case to the embedded subject which is apparently not related to it in terms of theta role relation: the matrix verb is not supposed to assign a theta role to the embedded subject. This is the line of assumption advocated by Rouveret and Vergnaud(1980) and Chomsky(1980)' which has been popular in the theory of principles and parameters approach. There is, however, another competing proposal on this issue.

Kayne(1981), while making an attempt to capture the systematic explanation of the difference shown in the following examples, suggests that prepositional complementizers in English can govern and hence assign Case to the embedded subject whereas that in French cannot.

- 6.a. I believe John to be the most intelligent of all.
 b.*Je crois Jean etre le plus intelligent de tous.

- 7.a.*I believe to have made a mistake.
 b. Je crois avoir fait une erreur. (Kayne(1981))

According to him, the verb 'croire' in French must subcategorize for an S' complement just as the verb

'believe' does. So, 'believe' type verbs take a ' ϕ ' type complementizer of Chomsky and Lasnik(1977). Now, both 'believe' and 'croire' subcategorize for S' complements with the ' ϕ ' complementizer. This complementizer has the ability to govern like the 'for' complementizer in English while it does not as the 'de' complementizer does not in French. This is due to the difference between English and French prepositions in their nature according to his hypothesis. However, if it is not only in infinitival complements which are followed by verbs like 'believe' and 'expect' that ECM takes place in English, ECM may not be that 'exceptional'.

In what follows, we propose that so-called 'Acc(usative)-ing' constructions involve Case assignment to the embedded subject by the matrix verb. Also is argued that the assumption that the ' ϕ ' complementizer is the one responsible for Case assignment fails in English. Now, consider the following examples.

- 8.a. Mary regrets him talking to Mike.
 b. John remembered them winning the race.

The sentences a and b involve so-called Acc-ing constructions. Here, the embedded subjects bear an accusative Case despite there being no Case assigner inside the embedded clause in which their theta roles are assigned. Now, suppose that Acc-ing constructions are clausal.' In other words, they are either IP(S)s or CP(S')s within the extended X'-theory; see Chomsky(1986) among others. This leads us to the assumption that either the matrix verb or something else like the ' ϕ ' complementizer is responsible for the Case assignment to the embedded subject. Do we have any clue for determining the categorial status of Acc-ing constructions and the Case mechanism ?

- 9.a. *Who_i do you regret t_i likes this book?
 a'. *Qui regrettes-tu qui aime ce livre?
 b. Who_i do you believe t_i likes this book?
 b'. Qui crois-tu qui aime ce livre? (Adams(1985))

Adams(1985) proposes that the difference in grammaticality of the sentences in (9) is due to the difference in the nature of complementizers. That is, she assumes that factive verbs take complementizers with the [+N] feature while non-factive verbs select complementizers with the [-N] feature. Further, following Kayne(1981a), she supposes that "[+N] categories cannot (properly) govern across an S-type

boundary" on the basis of the following evidence(from Kayne):

10. a. John appears to have left.
 b. *John's appearance to have left
 John's_i appearance [e_i to have left]

Now, the grammaticality of 9-b and b' and the ungrammaticality of 9-a and a' are explained like this: an indexed non-factive Comp-she assumes that Comp acquires at S-structure the index of the wh-phrases which are moved into it following Aoun, Hornstein and Sportiche(1980)-can properly govern a trace in the subject position since [-N] categories can govern across S-type boundary; on the other hand a [+N] Comp cannot properly govern across S though indexed. As a result, an ECP violation is invoked. Translating this into the framework of Barriers (Chomsky(1986)) which assumes the extended X'-theory, we have wh-phrases in the SPEC of CP not in COMP. Instead of assuming that 'COMP' properly governs the subject trace, which is not allowed in the Barriers framework: that is, non-lexical elements that do not theta govern do not properly govern the trace. Instead, we propose that the intermediate trace in the SPEC of the embedded COMP can antecedent-govern the subject trace unless the index of the intermediate trace is lost. Thus, a factive nominal COMP discharges its feature [+N] to its SPEC. This results in the lost of the index of the intermediate trace and an ECP violation. In case of a non-factive COMP, the intermediate trace can hold its own index since there is no feature in the COMP to be discharged and can properly govern the subject trace by way of antecedent government as a result. The ECP is met in this case. And the contrast is explained. Now, let's come back to our main example(repeated here).

11. a. Who_i did you regret him talking to t_i?
 b. Who_i did you regret t_i talking to him ?
 (Johnson(1988))
12. a. *Who_i do you regret t_i likes this book?
 a'. *Qui regrettes-tu qui aime ce livre?
 b. Who_i do you believe t_i likes this book?
 b'. Qui crois-tu qui aime ce liver? (Adams(1985))

Can we also assume that gerund complements in 11 have the same structure as that of 12-a: that is, is there a projection of COMP ? In 11, the extraction of wh-phrases is permitted whereas it is not in 12-a. We have the same verb here. If the answer is positive, it is hard to explain how the b sentence of 11 can be grammatical without violating the ECP. Along with the

2.sg.), the 'b' sentence simply lacks it in Turkish. The situation is not much different in Korean. As shown in 14, the subject honorific marker 'si' and tense marker are simply absent in the 'b' sentence. Here, the embedded subject bears accusative Case. When they are present, the subject bears nominative Case as in the 'a' sentence.

One can then assume that these syntactic phenomena in Korean and Turkish can be explained in exactly the same way as so-called ECM constructions in English are explained. In other words, across languages there is a syntactic phenomenon in which the embedded subject is assigned accusative Case by something other than the usual Case assigners in its own clause; the matrix verb assigns Case due to the absence of usual Case assigners like Agr or Tense inside the embedded clause. Therefore, we have the contrast in Case of the subject between the two types of embedded clauses, one of which has a Case assigner in it while the other of which does not.

However, it seems that the account may not be that simple. Observe that we have the same clausal types in 13 and 14, which are often called 'direct complement clauses' in both Turkish and Korean in terms of complementizers represented as the morpheme 'ko' in Korean and probably a null morpheme in Turkish. That is, unlike English where we have different clausal types, 'that' clauses and 'to' infinitives with different complementizers and INFLs, we have the same tense markers and complementizers in Turkish and the same complementizers in Korean. The difference is that usual Case assigners are absent in Korean and Turkish in these constructions such as agreement. On the contrary, we never have a 'that' clause without tense and agreement in which the subject is assigned accusative Case in English. The following examples illustrate the point.

- 15.a. John believed that Mary was a genius.
 b. John believed Mary to be a genius.
 c. *John believed that Mary be (or to be) a genius.
- 16.a. John regretted that John lost the race.
 b. John regretted John losing the race.
 c. *John regretted that John losing the race.

Descriptively speaking, one can simply say that 'that' clauses in English should always have verbs fully inflected in terms of tense and agreement. In our terms, this means that the 'that' complementizer always selects INFL with tense and agreement features so that it never has the bare verb form unlike infinitives in English.

On the other hand, in Korean and Turkish, so-called 'direct complement clauses' have an option of choosing two different INFLs: that is, one with tense and agreement features, and the other without them. And in these languages, the embedded subject is somehow able to be assigned accusative Case. This description is accurate. But one can still ask for a more explanatory way of accounting for this phenomenon. We could ask what is the key element that triggers the difference and what the case assigner might be. More importantly, we cannot explain the cross-linguistic difference in allowing ECM in terms of types of constructions. We will make an attempt at this way of explaining things.

In section 2, we assumed that the categorial status of embedded clauses in English in which Exceptional Case Marking is involved should be an IP at least at the level of S-Structure in order for the subject to be assigned Case by the matrix verb.

17. a. John believes Bill to have died.
b. John regrets Bill talking to Mike.

Is this also true for Korean and Turkish ?
To determine the Case assigning mechanism in the 'b' sentences in 13 and 14 which are repeated here, we have to be clear about the categorial status of these so-called 'direct complement clauses' in Korean and Turkish in which usual Case assigners are missing.

18. Turkish

(biz)[sen-i/*pro sinema-ya git-ti] san-iyor-du-k
we 2sg-Acc movie-Dat go-past believe-Prog-past-1pl
' We believed you to have gone to movies.'

19. Korean

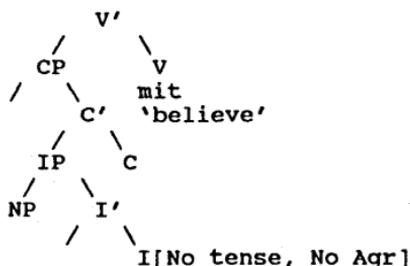
Na-nun[sensayngnim-ul chencay-i-(*si)-(*ess)-ta-ko]
-mitessta.

I-Top teacher-Acc genius-be-hon-past-decl-comp believed
' I believed the teacher to be a genius.'

First of all, in Korean, we always have the 'ko' morpheme in this construction which is assumed to represent the category 'COMP' just as is the 'that' complementizer in English. Furthermore, we also have the morpheme 'ta' which precedes the morpheme 'ko'. This is the morpheme that tells us the mood of the sentence. With the 'ta' morpheme, we get the declarative mood. Following Muysken and Riemsdijk(1985) which defines the category COMP as the one which decides the mood of the clause and assuming that COMP also functions as the indicator of the borderline between the matrix and

embedded clauses, let's suppose that indeed the 'ta' and 'ko' morphemes together, represent the category COMP.' Then, the structure of this clause looks like this:

20.



Hence, it is hard to assume that the matrix verb can govern and assign Case to the embedded subject since S'(CP) deletion does not seem to be available because of the presence of lexical items representing the category of COMP at S-Structure following the definition of government in Chomsky(1986).

21. Government

x governs y iff x m-commands y and every barrier for y dominates x.

Here, CP is a barrier for the embedded subject and does not dominate the matrix verb. The next task is then to find out another candidate for Case assigner. It is interesting to note that PRO never seems to occur in this construction—a 'ko' clause without overt subject honorification and tense, despite the absence of possible governors in INFL node. That is, considering that Agr and Tense features are absent in this construction and this construction is assumed to be a CP, there should be the possibility that PRO can appear here unless something else governs the SPEC position of IP.

The following examples show the difference in allowing PRO between the 'ki' complement' and the 'ko' complement in both of which AGR and Tense are absent.

22. KI Construction

- a. Na-nun[Swuni-ka cip-e ka-ki]-lul wuenha-n-ta.
 I-Top Nom home-to go-C(or I)-Acc want-prog-decl
 'I want that Swuni goes home.'
- b. Na-nun [PRO_i cip-e ka-ki]-lul wuenha-n-ta
 I-Top home-to go Acc want-Prog-decl
 'I want to go home.'

23. KO Construction(Direct Complement)

- a. Na-nun [Swuni-ka papo-i-la-ko] sayngkakha-yess-ta
 I-Top Nom fool-be-decl-Comp think-past-decl
 'I thought that Swuni was a fool.'
- b. Na-nun [Swuni-lul papo-i-la-ko] sayngkakha-yess-ta
 Acc
 'I believed(considered) Swuni to be a fool.'
- c. * Na_i-nun [PRO_i papo-i-la-ko] sayngkakha-yess-ta
 I-Top fool-be-decl-Comp think-past-decl
 '(intended) I considered myself to be a fool.'

What these examples imply is that there shouldn't be any possible Case assigner inside the 'KI' clause while there should be an item that functions as a governor and a Case assigner inside the 'KO' clause. We can draw from this a hypothesis that the nature of COMPS is different in the two types of clauses. That is, it is plausible to assume that the COMP in the 'KI' construction does not have any feature which potentially enables COMP to govern and assign Case to the embedded subject; on the other hand, the COMP in the 'KO' construction does have that feature, allowing Case assignment to the embedded subject by the head of CP, COMP. We further propose that it is the feature [-N] which characterizes the nature of COMP in the 'ko' clause that causes Case to be realized on the embedded subject.' Do we have any other evidence that confirms our hypothesis that the 'ko' clause is headed by a COMP with [-N] feature? It will be our next task to provide some evidence.

First of all, 'ko' clauses never take Case markers whereas all other clausal complements in Korean can or must take a case marker.' Let's take a look at the difference.

24. a. Na-nun[Swuni-ka sihem-e pwut-ess-ta-ko] mit-ess-ta
 I-Top Nom exam-to pass-past-decl believe-past
 'I believed that Swuni passed the exam.'
- b. Na-nun[Swuni-ka sihem-e pwut-ess-um]-ul al-ass-ta
 I-Top Nom exam-to pass-past-Acc know-past-decl
 'I knew that Swuni passed the exam.'
- c. Na-nun[Swuni-ka sihem-e pwut-ki]-lul para-yess-ta
 I-Top Nom exam-to pass Acc want(wish)
 'I wanted Swuni to pass the exam.'
- d. Na-nun[Swuni-ka sihem-e pwut-un]-kes-ul al-ass-ta
 I-Top Nom exam-to pass-past-Comp-Acc know-past
 'I knew that Swuni passed the exam.'

We can explain these phenomena with the assumption that a 'ko' clause whose head, COMP is an [-N] category

resists being assigned Case directly by the matrix verb. That is, a sort of the Case Resistance Principle as proposed in Stowell(1981) is applied here.

25. Case Resistance Principle(CRP)

Case may not be assigned to a category bearing a Case assigning feature. (Stowell(1981) ch.3)

However, our position is somewhat different from Stowell's in that while in his system it is the feature [+Tense] that triggers Case Resistance, resulting in the movement of 'that' clause out of the reach of government by the verb, it is the feature [-N] in COMP that causes Case Resistance in our system, disallowing 'ko' clauses to have Case markers. Taking into consideration the extended X'-theory which recognizes the full projection of COMP as well as INFL just like that of the four major lexical categories as proposed in Chomsky(1986), we have an advantage over Stowell's. Notice that Tense belongs to INFL and COMP is considered to be the head of CP in clauses like 'that' clauses in English or 'ko' clauses in Korean. We should then expect COMP to be the head of the clause which is responsible for the interaction with Case assigner. That is, it seems more plausible to assume that the nature of the head of a clause decides the syntactic behavior of that clause rather than that of the lower projection does.

Furthermore, a 'ko' clause does not take any postposition either. Following Chomsky(1974) and Stowell(1981) who suppose that the category 'P' represented as [-N, -V] and V which is [-N, +V] share the property of being able to assign Case because of their shared [-N] feature, we can give a proper explanation for this phenomenon. Once again suppose that collapsing the two [-N] features, one for 'P' and the other for 'Ko' clauses, causes a violation of the Case Resistance Principle.

There is also the fact that when taking a pro-form, this clause does not take the pronominal 'ku kes' while all other clausal constructions in Korean such as the 'Um', 'KI' and 'KES' constructions choose it. Instead, it takes the pro-form 'kulehke' which is the pro-form for VP(or IP) in Korean; see D-Yang(1976). This tells us that the nature of 'ko' clauses is non-nominal and it may share some feature with the projection of V. It then seems plausible to assume that they share the [-N] feature. Take a look at the following examples.

26.

- a. Toli-nun[Swuni-ka tachi-ess-um]-ul al-ass-ta kuliko
 Top Nom get hurt-past Acc know-past-decl and
 Na-to ku kes-ul al-ass-ta.
 I-delimiter that thing-Acc know-past-decl
 'Toli knew that Swuni got hurt and I knew it too.'
- b. Toli-nun[Swuni-ka tachi-ess-ta-ko]sayngkakha-yess-ta
 Top Nom get hurt-past-decl-C think-past-decl
 kuliko Na-to (*ku kes-ul)kulehkey sayngkakha-yess-ta.
 and I-delimiter that thing-Acc so think-past-decl
 'T thought that S got hurt and I thought so too.'

More support may come from the so-called 'Factiveness' effect. Remember that we adopted the distinction between the features, [+N] for factive COMP and [-N] for non-factive COMP as suggested in Adams(1985) in an effort to explain the following difference.

27. a. *Who do you regret t likes this book
 b. Who do you believe t likes this book

The same distinction between factive and non-factive clauses in allowing the extraction of wh-element at LF is also observed in Korean.

28.

- a. Ne-nun[J-ka ettehke cha-lul kochi-ess-tako]sayngkakhani
 you-Top Nom how car-Acc fix-past-decl think-Q
 'How do you think that J fixed the car?'
- b. ?/*Ne-nun[J-ka ettehke cha-lul kochiessum]ul hwhoihani
 how car-Acc fix-past-Comp regret-Q
 'How do you regret that John fix the car?'

We assume that the feature difference in COMPs makes a contribution to this contrast, following Adams(1985).

In sum, all four instances discussed in this section can be accounted for under the one simple assumption that 'ko' clause is headed by the COMP with [-N] feature.

It seems also possible to extend to 'direct complements' in Turkish our hypothesis for the constructions involved with ECM in Korean. First of all, corresponding complements in Turkish do not take Case markers, which is also true of 'ko' clauses in Korean.

29. Turkish

a. (biz) [sen/pro sinema-ya git-ti-n] san-iyor-du-k
 we 2sg.Nom movie-Dat go-past-2sg. believe-Prog-past-
 1.pl.

' We believed that you had gone to movies.'

b. (biz) [sen-i/*pro sinema-ya git-ti] san-iyor-du-k
 Acc no Agr

' We believed you to have gone to movies.'

So, this is different from Gerunds in Turkish which carry case markers.

Secondly, the so-called nominal(or genitive) Agr with which the embedded subject always bears genitive Case in Gerunds cannot be attached to this clause as shown in the above examples also. Both of these phenomena seem to indicate that direct complements in Turkish are never nominal. Thus, we can suppose that the COMP of direct complements bear the [-N] feature so that Case markers are not capable of being attached to them due to the Case Resistance Principle. As for the absence of the so-called nominal Agr, it seems quite natural to assume that nominal agreement is not able to agree with non-nominal elements.

Furthermore, it is also possible to observe that PRO never appears in this construction even though the clause lacks any kind of Agr; it is either verbal or nominal agreement that is absent(cf. Underhill(1976) and Kornfilt(1984) among others). On the contrary, PRO occurs in the so-called 'mAk' clause in which neither Agr nor tense appear. Consider the following examples.

Direct Complement

30.a. (biz) [sen-i/*pro sinema-ya git-ti] san-iyor-du-k
 Acc no Agr

' We believed you to have gone to movies.'

b. (ben) [siz-i/*pro sinif-ta kal-di] san-iyor-du-m
 Acc no Agr

' I believed you to have flunked.'

'mAk' Clause

31.a. (biz)_i [PRO_i istakoz-u ye-me-k] isti-iyor-uz
 we lobster-ACC eat-I-comp want-Prog-1pl

' We want to eat the lobster.'

b. (biz)_i [PRO_i t_i sev-il-me-k] isti-iyor-uz
 we love-passive-I-comp want-Prog-1pl

' We want to be loved.'

As we argued in the previous section, if we are correct to assume that the categorial status of both of

the direct complement clauses and the 'mAk' clauses are CPs, there should be an element that separates the former from the latter since both of them lack the usual Case assigners, the Agrs. The same assumption as the one advanced for the 'ko' clause in Korean seems to be applied here, too. The head of the direct complement can be represented by the [-N] feature which disallows the appearance of PRO since it can govern the SPEC of IP while the 'mAk' clause permits the occurrence of PRO, not being [-N] category.

4. Conclusion

In this paper, we propose that there are two kinds of the so-called ECM mechanisms. In English, it is solely the matrix verb that assigns Case to the embedded subject both in infinitival and Acc-ing complements. On the contrary, it is the complementizer that is eventually responsible for this Case assignment.¹⁰ Also, it is suggested that only COMP [-N] may assign Case while other COMPs like COMP[+N] may not on the basis that it is only the direct complements resisting Case markers that allow a lexical subject with the accusative marker as shown in Turkish and Korean.

Notes

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1. In fact, there is a case in which nominative Case is assigned to the subject even when no agreement takes place in English as in the following example. We assume that 'that' is responsible for this Case assignment. If so, we can extend our assumption that the COMP[-N] assigns Case in English as well. The difference is that accusative Case is assigned in Korean and Turkish while nominative Case is assigned in English by COMP.

(i) They require that every student wear(*s) a black hat.

2. 'Direct complement' is equivalent to the 'that' clause in English.

3. We assume that verbal(nominative) AGRs are responsible for nominative Case marking in Turkish following Kornfilt(1984).

4. The original idea of these two proposals is somewhat different in that the latter supposes 'Exceptional Case Marking' across two bounding nodes (S and S') while the former suggests 'Exceptional COMP Deletion', which results in the removal of S'. Chomsky(1981) follows the former idea which is often called 'S' Deletion'.

5. We do not discuss issues like whether the Acc-ing complement is a CP at D-Structure and CP deletion takes place later.

6. Ahn and Yoon(1989) provides more detailed discussion about the categorial status of 'ta' and 'ko' morphemes. Note that we assume that Korean is configurational and has the projections of so-called functional categories such as COMP and INFL without further discussion here. Refer to Han(1987), Choe(1985) among others.

7. This is one of the so called clausal complements in Korean. Roughly speaking, it is chosen by verbs which selects 'to' infinitival complements in English. Refer to Yang(1972), Lee(1979) and Yoon (1988, forthcoming) for the details.

8. This follows from the spirit of Chomsky(1974) and Stowell(1981) which assume that the categories having the [-N] feature are characterized as being able to assign Case.

9. We may overgeneralize in saying that all other complements carry Case markers. For instance, one can argue that so called small clauses, if any, may not. We won't discuss this issue here.

10. Case seems to originate from the matrix verb, although Case assignment is by way of the COMP[-N]. A piece of evidence comes from a sentence with a passive verb:

(i) John_i-i(*ul)[t_i papo-i-la-ko] mite-ci-n-ta.
 Nom(Acc) fool be-decl-Comp believe-passive-pres
 'John is believed to be a fool.'

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