Why Should Turkish Relativization Distinguish Between Subject and Non-Subject Head Nouns?
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WHY SHOULD TURKISH RELATIVIZATION DISTINGUISH BETWEEN SUBJECT AND NON-SUBJECT HEAD NOUNS?

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In his 1972 article 'Turkish Participles' Underhill analyzed the Turkish Relative Clause construction and classified them into two types, which were exemplified as in (1) and (2) (1972:87).

(1) mekteb-e gid-en oğlan
school-DAT go-part boy
'the boy who goes to school'
(2) oğlan-ın git-tiğ-i mektep
boy-GEN go-part-3s school
'the school which the boy goes to'

He generalized from these examples that "when the head noun is the subject of the underlying sentence, a construction of the -En type appears, while if the head noun is not the subject, a construction of the -DIg type appears." (1972:88) Thus (1) and (2) are both derived from (3).

(3) oğlan mekteb-e gid-er.
boy school-DAT go-pres
'The boy goes to school.'

In (1) the head noun oğlan 'boy' is derived from the subject of the underlying sentence, while in (2) the head noun mektep is derived from the noun which has a dative relation to the verb.

In a recent article, Hankamer and Knecht have also come to the same conclusion. "The SP appears when the target of relativization is the subject of the RC and the OP appears when the target is a non-subject."[1] (1976:198-199)

However, the authors of both articles are aware of the fact that this statement is not entirely adequate and the suffix -(y)En sometimes appears even when a non-subject is relativized as exhibited by them in the following examples.

(4) alt-ın-dan su ak-an kapı
bottom-3s-ABL water flow-SP door
'the door that water is flowing out from under'

which is derived from

(5) Kapı-nın alt-ın-dan su ak-ıyor.
door-GEN under-3s-ABL water flow-pres
'Water is flowing out from under the door.'

(Underhill 1972:90-91)

(6) yılan-ı kabağ-ı yi-yen adam
snake-poss squash-ACC eat-SP man
'The man whose snake ate the squash.'

which is derived from

(7) Adam-ın yılan-ı kabağ-ı ye-di.
man-GEN snake-poss squash-ACC eat-past
'The man's snake ate the squash.'

(Hankamer and Knecht 1976:199)

Hankamer and Knecht find Underhill's explanation of the preceding phenomenon inadequate and they make an attempt to present a more adequate analysis of the problem. Although they draw attention to some significant points in the choice of the suffixes -DIk and -(y)En in Turkish relativization, their analysis conceals the essence of the mechanism. Following the same strategy as Underhill, they begin their analysis with the assumption that SP is used when the subject of the underlying sentence is relativized and so their task is to account for the usage of SP with a non-subject head noun. The analysis of the problem from this perspective might only result in the description of cases in which -(y)En is used with non-subject head nouns but it is inadequate to reveal the reasons why -(y)En is used when -DIk is expected by the principle stated previously. This view obscures what is really happening during the process of relativization. It raises the question "Why should Turkish relativization distinguish between a subject and non-subject head noun?" Since there is no explicit or implicit agreement between the participial verb and the subject head noun, it follows that there is no point in distinguishing between the head nouns which are derived from a subject and non-subject member of the underlying sentence.

Therefore, I will approach the problem from a different perspective in the light of the syntactic and semantic characteristics of Turkish sentence structure such as word order, the function of case suffixes, definiteness and indefiniteness. Only from this perspective can we see that the main purpose of choosing -(y)En or -DIk is not to distinguish between the subject and non-subject head nouns. Instead, -DIk is obligatorily chosen whenever the subject which remains in the Relative Clause (RC) takes the genitive suffix (GEN-S). As a natural result of this principle, when there is no subject in the underlying sentence at the time of relativization or when the subject is deleted due to the subject relativization, the PS -DIk is not needed and so the PS -(y)En takes its place.

The rules involved in the RC formation are as follows:

I. Coreferential NP Deletion (CNPD): Delete the NP which is coreferential with the head noun.

II. Genitive Suffix Attachment Rule (GSAR): If the deleted NP is not the subject, add the GEN-S to the subject of the clause. The conditions for the application of this rule will be given later.

III. Participial Suffix Attachment Rule (PSAR): If the GSAR applies, then obligatorily choose the PS -DIk; otherwise, choose the PS -(y)En.

IV. Possessive Suffix Attachment Rule (Poss-SAR): If the PSAR chooses -DIk, then obligatorily add a Poss-S to the participial verb which agrees in number and person with the subject of the RC.

The only problem to be solved lies in the question "When does the GSAR apply?" Since the choice of appropriate PS depends on whether or not this rule applies, an answer to the above question will be sufficient to account for the choice of -(y)En or -DIk. However, before making an attempt to answer this question, I will first present a brief summary of case endings and their function and the role of word order in determining the functions and definiteness or indefiniteness of NP's in Turkish sentences.

In Turkish sentences the relationship between NP's and the verb is basically denoted by certain case endings.

Accusative (ACC): -(y)I
Dative (DAT): -(y)E
Locative (LOC): -DE
Ablative (ABL): -DEn
Genitive (GEN): -(n)In
Nominative (NOM): Ø (zero case ending)

A case ending is attached only to the final element of a nominal group. All the oblique objects[2] in a sentence are marked with one of the three case endings: DAT, LOC, or ABL. The subject is always in nominative case regardless of its definite or indefinite feature (with zero case ending). The indirect object takes the DAT case ending -(y)E and the direct object (DO) takes the ACC case ending -(y)I if it is definite. When the DO is indefinite and immediately precedes the predicate, which is its unmarked position, it appears in the nominative case. This means that a sentence may have two NP's without a case ending. In such a sentence, if one of the NP's is definite, it will be understood as the subject. If it were the DO, it would have the ACC case ending.

(8) Pınar bir köpek kovalı-yor.
a dog chase-pres
'Pınar is chasing a dog.'

However, the occurrence of an indefinite subject and an indefinite DO would certainly suggest the necessity of some kind of strict word order since case markings fail to indicate the functions of these two NP's in the sentence. For example, consider (9)

(9) Bir köpek bir çocuk kovalı-yor.
a dog a child chase-pres
'A dog is chasing a child.'

In (9) both the subject and the DO are indefinite. So both of them are in the nominative case. There is no morphological marker to indicate the difference in the relationship of the NP's to the verb. In such a case, the order of the NP's becomes crucial.

(10) Bir çocuk bir köpek kovalı-yor.
a child a dog chase-pres
'A child is chasing a dog.'

As seen in (10), a change in the order affects the function of the NP's. Thus when the DO has to be removed from the preverbal position, it has to be marked with the ACC case ending.

(11) Bir çocuğ-u bir köpek kovalı-yor.
a child-ACC a dog chase-pres
'A dog is chasing a child.'

It follows that the unmarked order of the constituents in a Turkish sentence is: SUBJECT, INDIRECT OBJECT, DIRECT OBJECT, VERB as indicated in (12).

(12) Aytül Pınar-a kalem-i ver-di.
-DAT pencil-ACC give-past
'Aytül gave the pencil to Pınar.'

In a transitive sentence the preverbal position is the unmarked position for the indefinite DO and in an intransitive sentence the preverbal position is the unmarked position for an indefinite subject. This means that the indefinite DO of a transitive clause and the indefinite subject of an intransitive clause do not have to be marked for their functions as long as they appear in preverbal position. This is a very important fact which plays a significant role in the choice of -DIk or -(y)En in relativization.

One of the functions of the GEN-S is to mark the subject of an embedded clause. It has two important functions in relativization: to distinguish the subject which remains in the RC from the subject of the sentence in which the RC appears; to prevent any change in the function and definite and indefinite feature which might be caused by the deletion of the coreferential NP in the process of relativization. In order to fulfill these two functions the GSAR applies obligatorily

A. to the subject of a transitive verb regardless of the definite or indefinite feature of the subject

B. to the definite subject of an intransitive verb and to the indefinite subject when it does not occupy the preverbal position.

Now I will discuss each application of GSAR and explain the reason why the rule is necessary under such conditions.

A. The GSAR is obligatory for the subject of a transitive participial verb as indicated in the examples below.

(13) a. Çocuk bir köpek kovalı-yor.
boy a dog chase-pres
'The child is chasing a dog.'

b. çocuğ-un Ø kovala-dığ-ı köpek
child-GEN chase-PS-POSS dog
'the dog which the child is chasing.'

c. *çocuk Ø kovala-yan köpek (in the intended
child chase-PS dog meaning)
'the dog which is chasing a child'

(14) a. Bir çocuk bir köpek kovalı-yor.
a child a dog chase-pres
'A child is chasing a dog.'

b. Bir çocuğ-un Ø kovala-dığ-ı köpek
a child-GEN chase-PS-POSS dog
'The dog which a child is chasing'

c. *Bir çocuk Ø kovala-yan köpek (in the intended
a child chase-PS dog meaning)
'the dog which is chasing a child'

As previously pointed out, the linear order of the NP's in a Turkish sentence is very important in some cases as an indication of the grammatical relationship of the NP's involved. (See examples in 9-10) For example, in a sentence like (14a) in which both the subject and the DO are indefinite, the unmarked order is S DO V and this order cannot be changed without causing change in the grammatical relationship of the NP's. It follows that the NP in the preverbal position will be understood as the DO of the sentence. In both (13c) and (14c) the deletion of the DO bir köpek 'a dog' causes the subject to appear in the preverbal position of the participial verb and so it will be identified as the DO. In order to prevent this change, the effect of the preverbal position must be nullified. This can be done by adding the GEN-S which fulfills the function of marking the subject of an embedded sentence as seen in (13b) and (14b).

When the subject is relativized, the deletion of the subject çocuk 'child', which is in the initial position, will not cause any change in the word order and so the NP's will retain their grammatical relationship. Therefore, the relativization of the subject does not require the GSAR. Following the rules of relativization the PS -(y)En will be chosen.

(15) Bir köpek kovala-yan çocuk
a dog chase-PS child
'The child who is chasing a dog'

The principle stated in (A) is based on the unmarked word order in Turkish sentences. In the marked order, the application of the GSAR depends on the semantic properties of the members in the clause and/or on the process of noun-incorporation, which is very common and productive in Turkish.[3] For example, in (16) and (17), which are structurally parallel, the indefinite subject köpek 'dog' is moved to the preverbal position.

(16) Kız-ı köpek ısır-dı.
girl-ACC dog bite-past
'A dog bit the girl.'
(17) Kız-ı köpek kovala-dı.
girl-ACC dog chase-past
'A dog chased the girl.'

Relativization of the DO kız-ı 'the girl' without the application of the GSAR is possible for (16) while it is not for (17) because the grammatical relation of the NP's is destroyed by the process as will be seen in (19).

(18) Ø köpek ısır-an kız
dog bite-PS girl
'The girl that a dog bit'
(19) Ø köpek kovala-yan kız
dog chase-PS girl
'the girl who chased a dog'

It is obvious that the semantic properties of the members in the sentence and the extra-linguistic knowledge of the speaker play a role in the identification of the grammatical relations in (18). However, in (19) since it is also possible that a girl might chase a dog too and since there is no morphological marker left in the clause to indicate that the deleted NP was the DO, the grammatical relations in the RC are determined on the basis of the unmarked order of Turkish sentences which is S DO V, and kız is understood as the subject.

Now consider the following examples.

(20) Kız-ı-nı köpek kovala-yan adam
daughter-POSS-ACC dog chase-PS man
'The man whose daughter a dog is chasing'

which comes from

(21) adam-ın kız-ı-nı köpek kovalı-yor.
man-GEN daughter-POSS-ACC dog chase-pres
'A dog is chasing the man's daughter.'

and (22) Kız-ı köpek kovala-yan adam
daughter-POSS dog
'the man whose daughter is chasing a dog'

which comes from

(23) adam-ın kız-ı köpek kovalı-yor.
man-GEN daughter-POSS
'The man's daughter is chasing a dog.'

In (20) the DO kız-ı-nı is marked with the ACC case ending so köpek 'dog' can be understood only as the subject. In (22) kız-ı is marked as a subject by the absence of a case ending. If it were the DO it would obligatorily take the ACC case ending following the rule that the possessive NP's are always considered definite and so they appear in the ACC case. It follows that the process of relativization and the assignment of the GEN case are based on whether or not it is possible to identify the subject and the DO. In other words, the GSAR operates whenever the relations of the subject and the DO are not indicated by means such as other case suffixes, word order, semantic properties of the members in the sentence etc. Of the six case suffixes previously presented, five of them operate both in the embedded sentence and in the matrix sentence. The GEN-S operates only in the embedded sentence. Thus the GEN-S is employed when all the other means fail to indicate the relations of the NP's in the embedded sentence. Therefore, Hankamer and Knecht's claim that "no matter what is relativized out of a clause with an indefinite subject, the RC is constructed with the SP," (1976:217) is too general a conclusion. It is only true for the intransitive clauses as will be discussed later by the principle (B).

I will now discuss another example from Hankamer and Knecht to support the claim that the GSAR does not apply unless it is needed to indicate the grammatical relation of the subject in the embedded sentence.

(24) a. Ø kabağ-ı ye-diğ-i şüpheli ol-an yılan
squash-ACC eat-part-POSS doubtful be-SP snake
'The snake which it is doubtful ate the squash'
b. * OP (1976:208)

The subject of this sentence is a sentential NP.

(25) Yılan-ın kabağ-ı ye-diğ-i
snake-GEN squash-ACC eat-part-POSS
'That the snake ate the squash'

If the GSAR applied during the relativization of an NP in this sentential subject, the final element of the nominal group, that is the nominalized predicate ye-diğ-i would take the GEN-S.

However, as we see in (24), the GSAR is not needed because the deletion of an NP in the sentential subject does not cause any change in the grammatical relation of the sentential subject to the main verb süpheli 'doubtful' and its relation is indicated by the absence of a case suffix. That is, a sentential NP which is in the nominative case can only function as the subject. A sentential DO always takes the ACC-S and sentential OO's take one of the three case suffixes: DAT, LOC, or ABL. Therefore, there is no need to mark the sentential subject with the genitive suffix during the process of relativization.

However, when the sentential NP appears as a DO as in

(26) Hasan yılan-ın kabağ-ı ye-diğ-i-ni san-ıyor
snake-GEN squash-ACC eat-part-POSS-ACC believe-pres
'Hasan believes that the snake ate the squash.'

(Hankamer and Knecht 1976:210) the relativization of any NP in the sentential object will require the PS -DIk because following the principle (A) the GSAR has to apply to the subject Hasan.

(27) a. Hasan-ın yılan-ın ye-diğ-i-ni
-GEN snake-GEN eat-part-POSS-ACC
san-dığ-ı kabak
believe-OP-POSS squash
'the squash that Hasan believes the snake ate'
b. *SP (1976:210)

Hankamer and Knecht propose The Mother Node Principle (MNP) to account for the examples in (24) and (26).

> If a subconstituent of a major constituent of the RC is relativized, the participle is chosen which would be appropriate for relativization of the major constituent itself. [That is, for the simple cases, if the mother node dominating the target is the subject of the RC, the SP is chosen; otherwise, the OP is chosen.] (1976:205)

Although the principle seems to work within the framework of transformational grammar, it is not necessary to include such a principle in the grammar of Turkish since the application of the GSAR will account for the choice of -(y)En or -DIk in relativization. In fact, the GSAR operates in complementization too, as seen in examples (28) and (29).

(28) a. Çocuk oda-da uyu-yor.
child room-LOC sleep-pres
'The child is sleeping in the room.'

b. Çocuğ-un oda-da uyu-duğ-u-nu gör-dü-m.
child-GEN room-LOC sleep-NS-POSS-ACC see-past-1sg
'I saw that the child was sleeping in the room.'

(29) a. Oda-da çocuk uyu-yor.
room-LOC child sleep-pres
'In the room a child/children is/are sleeping.'

b. Oda-da çocuk uyu-duğ-u-nu gör-dü-m.
room-LOC child sleep-NS-POSS-ACC see-past-1sg
'I saw that a child/children was/were sleeping in the room.'

Examples in (28) and (29) indicate that the definite subject of a complement sentence takes the GEN-S while the indefinite subject in the preverbal position does not.

I will now use the sentences in (28a) and (29a) to show that the GSAR applies the same way in relativization.

B. The GSAR is obligatory for the definite subject of an intransitive verb because the unmarked order for an intransitive sentence when the subject is definite is S OO V.

(30) a. Çocuk oda-da uyu-yor.
child room-LOC sleep-pres
'The child is sleeping in the room'

b. Çocuğ-un Ø uyu-duğ-u oda
child-GEN sleep-PS-POSS room
'the room in which the child is sleeping'

(31) a. Oda-da çocuk uyu-yor.
room-LOC child sleep-pres
'In the room a child/children is/are sleeping.'

b. Ø çocuk uyu-yan oda
child sleep-PS room
'the room in which a child/children is/are sleeping'

While relativizing the OO oda-da in the RC (30b), the deletion of this NP brings the subject çocuk to the preverbal position. Although this change in the position does not cause any change in the relation of the subject, it affects the properties of the subject. Namely, it changes the subject from a definite NP to an indefinite NP. Therefore, the GSAR is needed to retain the properties of the subject.

However, in (31) since çocuk has already been moved to the preverbal position prior to relativization, the deletion of the OO will not have any effect on its properties or grammatical relation. Therefore, there is no need for the application of the GSAR when the subject of an intransitive verb is indefinite and it is in the preverbal position.

We see that the conditions for the application of the GSAR accounts for the choice of -(y)En in Underhill's example, which will be repeated here for convenience.

(32) Alt-ın-dan su ak-an kapı
bottom-3s-ABL water flow-PS door
'the door that water is flowing out from under'

Since su 'water' is an indefinite subject occupying the preverbal position of an intransitive participial verb, by the principle (B) the GSAR is not needed.

The examples given in (28) and (29) suggest that the GSAR should be stated in the Turkish language even if we assume that the principles proposed by Hankamer and Knecht account for the choice of -(y)En and -DIk in relative clause formation. Throughout this brief study I have been trying to show that the choice of -(y)En or -DIk depends on the application of the GSAR, which can be generalized to cover all the embedded sentences as follows.

The GSAR applies obligatorily

I. to the definite subject of an embedded sentence

II. to the indefinite subject which is not occupying the preverbal position in the embedded sentence.

The examples presented in this study clearly show that the necessity for the GSAR arises from the fact that relativization and nominalization are the rules which do not alter the relations of the NP's to the verb. Thus the function to be filled during these processes is to retain the relations and properties[4] of the NP's in the underlying clause. Since this is accomplished by the GSAR adequately, none of the principles proposed by Hankamer and Knecht to account for the choice of -(y)En or DIk are necessary.

The analysis here supports the claim that grammatical relations play a central role in the syntax of natural languages (Johnson 1976). It leads to the conclusion that if languages are analyzed from this perspective, a number of linguistic phenomena can be accounted for just in terms of grammatical relations without adding unnecessary rules to the grammar.

Footnotes

1. Hankamer and Knecht also analyze two types of the relative clause construction and they call the relative clauses which are formed on the subject with the participial suffix (PS) -(y)En subject participle (SP) relative clause and the relative clauses which are formed on the object with the PS -DIk the object participle (OP) construction.

2. The term Oblique Object (OO) is used in Relational Grammar to refer to NP's which obtain relations other than subject of, direct object of, and indirect object of.

3. A great number of nouns form a tightly knit unit with verbs. Such nouns appear in the embedded sentence without the GEN-S. See Tura (1973:120-23) for details on noun incorporation in Turkish.

4. It is necessary to retain the semantic properties of NP's to obey the generally accepted rule that transformations should not decrease or change meaning.

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