

Wa and Ga in Turkish

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1. Introduction

Turkish has two strategies¹ for forming relative clauses, the choice of which depends on grammatical relations in the relative clause and the location of the relative clause gap. Specifically, the choice of strategy depends on the structural relationship between the gap and the subject of the relative clause. This phenomenon was first examined in generative terms by Underhill (1972), who proposed an analysis in terms of linear order of constituents and rule ordering. Underhill's analysis was in the framework of "Standard Theory" as defined in Chomsky (1965), in which the notions *subject* and *direct object* are derivative from constituent structure if referred to at all, and indeed Underhill's analysis makes no use of these notions. Hankamer and Knecht (1976) showed that the strategy choice depends on grammatical relations rather than linear order, and argued that an adequate description of the phenomenon requires direct reference to the grammatical relation *subject*. Csaió (1985) proposes a re-analysis of the phenomenon in GB terms. In this analysis, the notion *subject* is still crucial, but this time it is the abstract SUBJECT of Chomsky (1981). She rejects the Hankamer and Knecht analysis on empirical grounds, citing examples which appear to violate Hankamer and Knecht's principles.

In this paper we show that there are two dialects with regard to the distribution of one of the strategies, and that Csaió's empirical challenge to the Hankamer and Knecht analysis is based on examples that are acceptable only in the dialect which Hankamer and Knecht were not aware of. We also show that in both dialects the choice of the relativization strategy depends only on the position of the relative clause gap in relation to the subject of the relative clause. Csaió's analysis is shown to be inadequate, because it attempts to account for the distribution of the relativization strategies in terms of the binding theory, and thus is sensitive only to conditions local to the gap. We show, in fact, that the environment local to the relative clause gap has no bearing on the choice of relative clause strategy in Turkish for either dialect (except, of course, where the gap is at the top level of the relative clause).

We propose that the choice of strategy depends on the accessibility² of the relative clause subject to the gap.

Chung & Georgopoulos (1985) show that Chamorro and Palauan have morphologically distinguished relative clause strategies, where the marking on the relative clause verb is sensitive to grammatical relations at the top of the relative clause but not to the environment local to the gap site.³ These results suggest a research program focusing on other languages in which relative clause formation exhibits a sensitivity to grammatical relations in order to determine whether they, too, care about grammatical relations only at the top level of the relative clause. Our hypothesis will be that where two relativization "strategies" in a given language involve morphological marking of the relative clause verb conditioned by the position or grammatical role of the gap, that marking will always depend on grammatical relations at the top level of the relative clause, and never on the local grammatical relation of the gap, except where the two coincide.

¹ We use the term "relativization strategy" in the sense established by Keenan & Comrie (1977).

² See, e.g., Chomsky (1981, 212 ff.) for a discussion of accessibility. We give a definition for the sake of explicitness in section 4 below.

³ Actually, the Chung & Georgopoulos data indicate that there may be complementizer-gap agreement phenomena at any level in a complex structure, but the agreement is always local: the complementizer shows agreement with the gap host, rather than with the gap, when the two are distinct.

2. Two relativization strategies

Turkish has two ways of forming a relative clause. In both cases, the head nominal is preceded by a clause in which some noun phrase, which we shall call the relative clause gap, is missing. In addition, the highest verb in the relative clause takes a suffix, which we will call a "complementizer", chosen from one of two sets of suffixes, the choice depending (in ways to be elaborated on below) on the position of the gap. The complementizer suffix renders the verb nonfinite, and the resulting form is traditionally called a participle. For one set of participles, nothing else happens. For the other set, the subject of the relative clause appears in the genitive case, and the participle itself acquires a possessive suffix agreeing in person and number with the subject.

The following examples illustrate the simplest cases.

1. *Yılan kabağ-ı ye-di.*
snake squash-ACC eat-PAST
'The snake ate the squash.'

If we attempt to make a relative clause based on the sentence given in (1), the form of the relative clause will depend on which noun phrase we target as the relativization gap. If the gap occurs in subject position, we get (2).

2. — *kabağ-ı yi-yen yılan* (*wa* strategy)
squash-ACC eat-wa snake
'the snake that ate the squash'

We use an underbar to indicate the (unmarked word order) position of the gap. Here the relative clause verb takes the suffix *-An* (in the surface form *-yen*), and nothing else happens. We will call this relativization strategy the *wa* strategy.

If we target the direct object, on the other hand, we get (3).

3. *yılan-in ye-diğ-i kabağ* (*ga* strategy)
snake-GEN eat-ga-POSS squash
'the squash that the snake ate'

Here the relative clause verb takes the *-Diğ* suffix (in the surface form *-diğ*), the relative clause subject appears in the genitive case, the verb also takes a possessive suffix, and there is agreement in person and number between the relative clause subject and the possessive suffix on the verb. We will call this relativization strategy the *ga* strategy.

All of our examples will involve either *-An* (representing the *wa* strategy) or *-Diğ* (representing the *ga* strategy); there are other suffixes of both types. Although we will not in general give explicit examples, attempts to use the other relativization strategy usually result in ungrammaticality. For instance, it is ungrammatical to form the relative clause in (2) using the *ga* strategy, and it is similarly ungrammatical to form the relative clause in (3) using the *wa* strategy. Later we will discuss cases where the two strategies are in free variation for one dialect, but otherwise our examples should be interpreted as claiming that the relativization strategy shown is the only possibility for the situation in question.

The distribution of strategies in what appears from our studies to be the majority dialect is characterized by Hankamer and Knecht (1976) as follows:

4. Hankamer and Knecht (1976):
 - i. When the gap is the relative clause subject, or a subconstituent of the relative clause subject use the *wa* strategy.
 - ii. When there is no relative clause subject, use the *wa* strategy.
 - iii. Otherwise, use the *ga* strategy.

Clearly the relative clauses in (2) and (3) conform to (4). The gap in (2) is the relative clause subject, and the *wa* strategy is indeed grammatical (and the *ga* strategy is ungrammatical). As for (3) the gap is not the subject of the relative clause, nor is it a subconstituent of the relative clause subject, and the clause has a subject, so the *ga* strategy is correctly predicted to be the only choice.

Temporarily ignoring clause (4ii), the rule in (4) claims that the choice of relativization strategy is determined entirely by the position of the gap in relation to the subject of the relative clause. In cases where the gap is more deeply embedded, the grammatical role of the gap itself is irrelevant. One consequence of this is that possessor NPs relativize with the strategy determined by the grammatical relation of their hosts:⁴

5. — *kız-ı kitab-ı getir-en adam*
girl-POSS.3s book-ACC bring-wa man
'the man whose daughter brought the book'
Gap: genitive of the RC subject

6. — *kız-ı-nı sev-diğ-im adam*
girl-POSS.3s love-ga-POSS.1s man
'The man whose daughter I love.'
Gap: genitive of the RC direct object

In (5) the gap is within the relative clause subject, and the *wa* strategy is the only possible choice for forming a relative clause. In (6) the gap is within the relative clause direct object, and the *ga* strategy must be used. The grammatical relation of the gap with respect to its host noun phrase remains constant, and it is the grammatical relation of the host with respect to the top level of the relative clause which determines the choice of strategy, in accord with (4). Henceforth, we will use the term *gap host* to refer to the highest nominal in the relative clause dominating the gap. In the simplest cases, the gap host and the gap will coincide.⁵

Now consider a relative clause whose subject is itself a clause. If the gap is anywhere within the embedded clause, (4) predicts that only the *wa* strategy will be grammatical, regardless of the local grammatical relation of the gap, and this is correct.

⁴ Possessor NPs in Turkish are marked with the Genitive case, and the possessed NP is marked with a Possessor case suffix agreeing in person and number with the possessor NP:

1. *adam-ın kız-ı*
man-GEN daughter-POSS.3s
'the man's daughter'

One might be tempted, looking at examples (5)-(6) alone, to hypothesize that possessor ascension is at work; there is, however, no evidence from agreement, control, or reliability to support the existence of possessor ascension in Turkish. Furthermore, examples (7)-(10) below would remain to be accounted for.

⁵ We assume that the relation "dominates" is reflexive: every node in a tree dominates itself as well as all the nodes its daughters dominate.

7. — biz-e güven-eceğ-i şüpheli ol-an adam
 1p-DAR trust-COMP-POSS.3s doubtful be-wa man
 'the man that it is doubtful will trust us'
 Gap: the subject of the relative clause subject
8. (Biz-im) — güven-eceğ-imiz şüpheli ol-an adam
 (we-GEN) trust-COMP-POSS.1p doubtful be-wa man
 'the man that it is doubtful we will trust'
 Gap: the dative object of the relative clause subject
- In (7) and (8), it does not matter whether the gap is a subject or a direct object; all that matters is that the clause which contains it functions as the subject of the relative clause, and therefore the *wa* strategy is the only grammatical choice for relativization.
- Similarly, if the relative clause contains a direct object which is itself a clause, only the *ga* strategy will be appropriate, regardless of the grammatical relation of the gap in its minimal clause.

9. — kitab-ı getir-eceğ-i-ni san-dığ-ım cocuk
 book-ACC bring-COMP-POSS.3s believe-ga-POSS.1s child
 'the child that I thought would bring the book'
 Gap: the subject of the relative clause direct object

10. cocuk-ın getir-eceğ-i-ni san-dığ-ım kitap
 child-GEN bring-COMP-POSS.3s-ACC believe-ga-POSS.1s book
 'the book that I thought the child would bring'
 Gap: the direct object of the relative clause dir. object

In (9) the gap is the subject of its host clause, and in (10) the gap is the direct object of its host clause; but since the host is itself the direct object of the relative clause, the *ga* strategy is the only choice for relativization.

We do not include the relevant examples here for lack of space, but the generalization holds for further levels of embedding. In each case, it is the grammatical relation of the gap host at the top level of the relative clause which is important, and not that of the gap itself.

We now turn to clause (4ii). Accepting the analysis of Hankamer and Knecht, we assume for now that impersonal passives and sentences in which the subject has been incorporated into the verb form relative clauses which have no subject for the purposes of (4). It is possible that in such cases there is a silent pleonastic, or even that some other nominal advances to occupy subject position; a trivial reformulation of (4ii) will accommodate such assumptions.

2.1. Impersonal Passives

Turkish allows passives for any verbal predicate, as long as the agent can be interpreted as human.⁶ In particular, intransitives such as (11) may passivize.

11. çocuk-lar park-ın orta-sın-da oyna-dı.
 children-PL park-GEN middle-POSS.3s-LOC play-PST
 'The children played in the middle of the park'
 No relativization, no impersonal passive

⁶ Knecht (1985, pp. 55-65) presents evidence that Impersonal Passive depends on the human-ness of the agent. She argues against the position, argued in Perlmutter (1978), that unaccusatives may not form impersonal passives.

12. Park-ın orta-sın-da oyna-n-ır.
 park-GEN middle-POSS.3s-LOC play-PASS-AOR
 'It was played in the middle of the park'
 Impersonal passive, no relativization

The sentence in (12) shows an impersonal passive corresponding to (11). As predicted by (4), if (12) serves as a relative clause, the *wa* strategy must be used.

13. — orta-sın-da oyna-n-an park
 middle-POSS.3s-LOC play-PASS-wa park
 'the park that it was played in the middle of'
 Gap: into a locative after impersonal passive

A second set of examples parallel to (11) through (13) appears in (14) through (16). The verb *başla* 'begin' idiosyncratically requires an object in the dative case:

14. öğretmen ders-e başla-dı.
 teacher lesson-DAT begin-PST
 'The teacher began the lesson.'
 No relativization, no impersonal passive

15. Ders-e başla-n-ır.
 lesson-DAT begin-PASS-PST
 'It was begun the lesson.'
 Impersonal passive, no relativization

16. — başla-n-an ders
 begin-PASS-wa lesson
 'the lesson to which it was begun'
 Gap: complement of the RC verb after impersonal passive

As Hankamer and Knecht showed, any nominal element in such an impersonal passive clause may be relativized with the *wa* strategy (and the *ga* strategy is impossible).

2.2. Subject Incorporation

Another situation in which a relative clause has no subject (for the purposes of (4)) is when the subject has been incorporated into the verb. Hankamer and Knecht noted that when a subject is interpreted as nonspecific or generic it appears without any article or case marker and is located immediately to the left of the verb. Nonincorporated subjects without an indefinite article are interpreted as definite and non-generic:

17. Ari kız-ın bacağı-n-ı sok-tu.
 bee girl-GEN leg-POSS-ACC sting-PAST
 'The bee stung the girl's leg.'
 No incorporation; no relativization

18. arı-nın bacağı-n-ı sok-tuğ-u kız
 bee-GEN leg-POSS-ACC sting-ga-POSS girl
 'the girl whose leg the bee stung'
 Gap: into RC direct object, no incorporation

19. * ari — baceađ-in-1 sok-an kiz
 leg-POSS-ACC bee sting-wa girl
 'the girl whose leg the bee stung'
 Gap: into RC direct object, no incorporation

Examples (18) and (19) show that relativizing into the relative clause direct object requires the *ga* strategy, since the gap is not dominated by the relative clause subject.

However, if the relative clause subject has been incorporated, the *wa* strategy becomes possible (and the *ga* strategy is impossible⁷).

20. * kiz-in baceađ-in-1 ari sok-tu.
 girl-GEN leg-POSS-ACC bee sting-PAST
 'A bee/some bees stung the girl's leg.'
 Incorporation; no relativization

21. — baceađ-in-1 ari sok-an kiz
 leg-POSS-ACC bee sting-wa girl
 'the girl whose leg a bee/some bees stung'
 Gap: into RC direct object, after incorporation

In (20), *ari* 'bee' appears in immediate preverbal position, and the interpretation is nonspecific. Therefore we assume that subject incorporation has taken place. See Knecht (1985) for a discussion motivating and describing an incorporation analysis for examples such as (20) and (21). In this case, in contrast with (19), relativizing into the direct object permits only the *wa* strategy. As in the case of impersonal passives, once the relative clause subject is incorporated the *wa* strategy becomes possible for any nominal in the clause, and the *ga* strategy is impossible.

2.3. Deeper gaps

When the gap is contained within a larger constituent in one of these subject-absent constructions, the only possible relativization strategy for either dialect is the *wa* strategy, as predicted by the Hankamer and Knecht characterization summarized in (4). Example (22) illustrates a semantically

22. kasab-in et-1 kes-tiđ-1-ni söyle-diđ-iniz-e
 butcher-GEN meat-ACC cut-ga-POSS-ACC say-ga-POSS2PL-DAT
 inan-di-m.
 believe-PAST-AGRISG
 'I believe that you said that the butcher cut the meat.'

⁷ The *ga* strategy is possible with this word order:

1. — baceađ-in-1 ari-nin sok-tuđ-n kiz
 leg-POSS-ACC bee-GEN sting-ga-POSS girl
 'the girl whose leg the bee stung'
 Gap: into RC direct object, no incorporation

But the definite interpretation of *ari* 'bee' indicates that incorporation has not taken place. The indefiniteness-specific interpretation is not available in this structure. The syntactic re-positioning of the subject has to be due to some other process, as was recognized by Underhill (1972).

The impersonal passive of (22) is (23):

23. kasab-in et-1 kes-tiđ-i-ni söyle-diđ-iniz-e
 butcher-GEN meat-ACC cut-ga-POSS-ACC say-ga-POSS2PL-DAT
 inan-11-di.
 believe-PASS-PAST
 'It is believed that you said that the butcher cut the meat.'

When the gap is contained within the oblique clause, relativization of such structures invariably requires the *wa* strategy:

24. et1 kestigiđini söyleđiginize inan11d1ga kasap
 et-1 kes-tiđ-i-ni söyle-diđ-iniz-e
 meat-ACC cut-ga-POSS-ACC say-ga-POSS2PL-DAT
 inan-11-an kasap
 believe-PASS-wa butcher

25. * et1 kestigiđini söyleđiginize inan11d1ga kasap
 et-1 kes-tiđ-i-ni söyle-diđ-iniz-e
 meat-ACC cut-ga-POSS-ACC say-ga-POSS2PL-DAT
 inan-11-diđ-1 kasap
 believe-PASS-ga-POSS butcher
 'The butcher whom it is believed that you said cut the meat'
 (gap is embedded clause subject; *wa* good, *ga* bad)

26. kasabın kestigiđini söyleđiginize inan11an et
 kasab-in kes-tiđ-i-ni söyle-diđ-iniz-e
 butcher-GEN cut-ga-POSS-ACC say-ga-POSS2PL-DAT
 inan-11-an et
 believe-PASS-wa meat

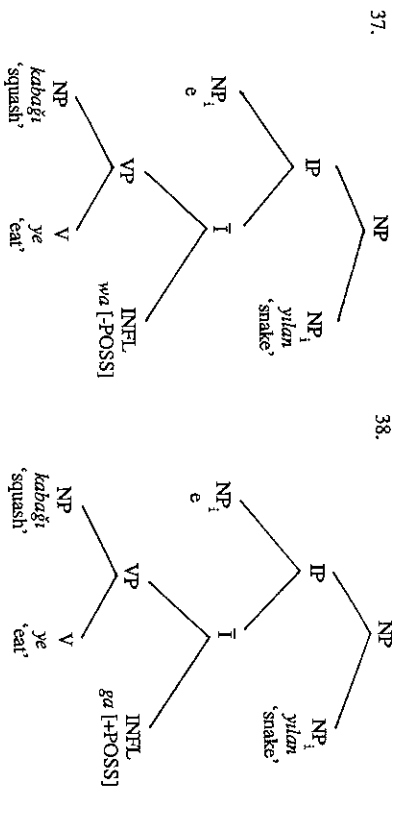
27. * kasabın kestigiđini söyleđiginize inan11d1ga et
 kasab-in kes-tiđ-i-ni söyle-diđ-iniz-e
 butcher-GEN cut-ga-POSS-ACC say-ga-POSS2PL-DAT
 inan-11-diđ-1 et
 believe-PASS-ga-POSS meat
 'The meat that it is believed that you said the butcher cut'
 (gap is embedded clause object; *wa* good, *ga* bad)

Facts like these can be produced to show that the same holds of subject-incorporation constructions. In short, when the relative clause lacks a subject, the *wa* strategy is allowed and the *ga* strategy is impossible, no matter where the gap is located.

2.4. Two dialects

Çat6 (1985) cites (28) as a counterexample to the Hankamer and Knecht characterization given in (4).

28. biz-1m — güven-eceđ-imiz-in şüpheli ol-duđ-u adam
 1p-GEN trust-COMP-POSS.1p-GEN doubtful be-ga-POSS.3s man
 'the man that it is doubtful we will trust'

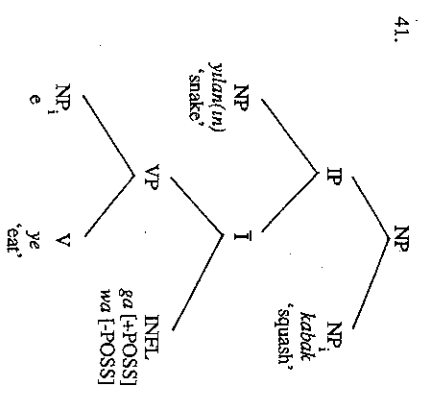


In (37), the [-POSS] AGR under INFL counts as a SUBJECT for purposes of the Binding Theory. Therefore, the gap's governing category is the relative clause (IP). Since the nearest binder for this gap is the head NP, which is outside of the relative clause, the gap is free in its governing category in accord with (34). In (38), the AGR is [+POSS], and does not count as a SUBJECT. Since there is no other subject that is accessible to the relative gap (since the relative gap itself is in subject position), the relevant governing category is the lowest matrix clause that contains both the head NP and the relative clause. Hence, the gap is bound by the head NP in its governing category, and the structure is correctly ruled out.⁹

However, one does not have to look far to find cases that are problematic for this account. Consider a simple case of object relativization. As the contrast between (39) and (40) shows, the *ga* strategy is required when there is a non-incorporated subject, and the relativization gap is inside the VP:

39. yılan-in _____ ye -diğ-i kabak
 snake-GEN eat-ga-POSS squash
 'The squash that the snake ate.'
40. * yılan _____ yi -yen kabak
 snake eat-wa squash

As the representation of these relative clauses in (41) shows, there is always a subject (whether the relative clause subject or the SUBJECT provided by the *wa* suffix) separating the binding head NP from the relative gap. Thus this gap is always free in its governing category. Csató's account seems to predict that both (39) and (40) should be grammatical:



Csátó notes this problem, but points out that the *wa* strategy is possible when relativizing out of VP constituents if the subject is incorporated or the relative clause undergoes impersonal passive (cf. (13) and (21) above). It is not clear, however, how she would disallow such *wa* relativization when the relative clause subject is unincorporated, and where there is no impersonal passive (as in (40)). Surely nothing in the Binding Theory account would prevent such relativization. In fact, this account seems to predict that *wa* relativization is always possible, since the [-POSS] AGR will always provide a SUBJECT to protect any relative gap from being illegally bound in its governing category by the head NP. As we have seen above, *wa* relativization is not always possible. In particular, it is prohibited when there is a subject of the relative clause and the gap is not dominated by that subject.

Csátó points to one area where her analysis seems empirically superior to the Hankamer and Knecht account. She notes that when the relative gap is embedded within a subject (e.g., as an element of a sentential subject) either the *wa* or *ga* strategy is possible:

42. biz-im _____ güven-eceğ-imiz-in şüpheli ol-an adam
 1p-GEN trust-COMP-POSS.1p-GEN doubtful be-wa man
 'The man that it is doubtful we will trust.'
 Object gap embedded in a sentential subject - *wa* strategy
43. biz-im _____ güven-eceğ-imiz-in şüpheli ol-an adam
 1p-GEN trust-COMP-POSS.1p-GEN doubtful şüpheli ol-dug-u adam
 be-ga-POSS.3s man
 'The man that it is doubtful we will trust.'
 Object gap embedded in a sentential subject - *ga* strategy

The Hankamer and Knecht analysis predicts that the two relativization strategies should be in complementary distribution; in particular, (43) would be ruled out. Under Csátó's analysis, (43) is allowed because the relative gap is inside a sentential subject which itself has a subject. Thus, in (44), IP₂ is the gap's governing category:

⁹ We assume that Csátó assumes a definition of accessibility akin to the one in Chomsky (1981); this definition differs from the one presented in the next section in ways that are not relevant to the issues at hand.

constructions and subject incorporation constructions the vacated subject position (or role) is taken over by some other nominal, which then hosts *wa* relativization. We will refer to this hypothesis as the oblique subject hypothesis, since in most cases the nominal taking over the subject role will be an oblique (but cf. examples (20-21)).

The oblique subject hypothesis has been argued against, specifically for Turkish impersonal passives by Breckenridge (1975). Breckenridge argues that oblique nominals in impersonal passives in Turkish do not exhibit any behavior indicative of subjecthood, citing constituent order, case marking, agreement, control, and reflexivization properties. Knecht (1985) recapitulates most of these arguments with more thorough exemplification.

We will not analyze all of Breckenridge's arguments here. Several of them are irrelevant to the hypothesis we are considering, since they assume that for a nominal to advance to subjecthood, that nominal would have to have some special status before advancement. We do not assume that. Other arguments involve the assumption that overt case marking must coincide with grammatical role at certain stages. We do not assume that either. When the arguments irrelevant to our hypothesis are set aside, there remain three which must be dealt with.

The first of these is the observation that in simple cases oblique nominals do not control agreement, even in impersonal passives:

- 52. ben-den kork-ul-ur
me-ABL fear-PASS-AOR
'I am feared'

- 53. * ben-den kork-ul-ur-um
me-ABL fear-PASS-AOR-1.sg

The second is that subjects in Turkish can be Equi victims, but oblique nominals in impersonal passives cannot:

- 54. Ali Ayşe tarafından sev-il-mek ist-i-yor
Ali Ayşe by love-PASS-INF want-PROG
'Ali wants to be loved by Ayşe'

- 55. * Ali kork-ul-mak ist-i-yor
Ali fear-PASS-INF want-PROG
'Ali wants to be feared'

And the third is that oblique nominals in Turkish cannot undergo subject-to-object raising. The evidence is that in an SOR structure where the embedded clause is an impersonal passive, an oblique nominal in that clause cannot undergo first-person reflexivization, which was shown in Aissen (1974) to be clause-bounded:

- 56. ben kendi-m-i aldat-t-ı san-ı-yor-um
I self-POSS.1sg-ACC deceive-PAST think-PROG-1sg
'I believe myself to have been deceived'
- 57. * ben kendi-m-den kork-ul-ur san-ı-yor-um
I self-POSS.1sg-ABL deceive-AOR think-PROG-1sg
'I believe myself to be feared'

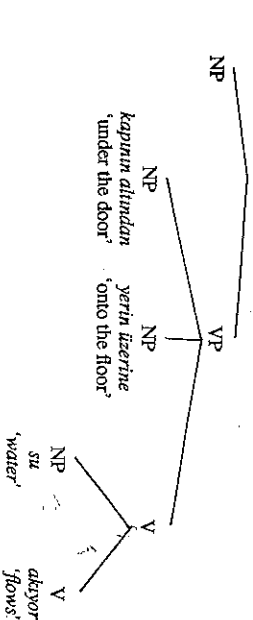
We do not contest any of these arguments. Nevertheless, we have discovered some evidence that indicates, despite the evidence to the contrary, that oblique nominals in subject-absent constructions can take on at least some properties typically reserved for subjects.

In the analysis to be considered we assume that both impersonal passive and subject incorporation leave an 'empty' subject position, allowing a VP-constituent to move into subject position. Although any VP constituent may move to the external subject position, this movement is not forced for any particular constituent; we assume that each VP constituent receives its morphological case in the usual way. Thus, the constituent that ends up in subject position will receive its case based on its position/role within the VP.

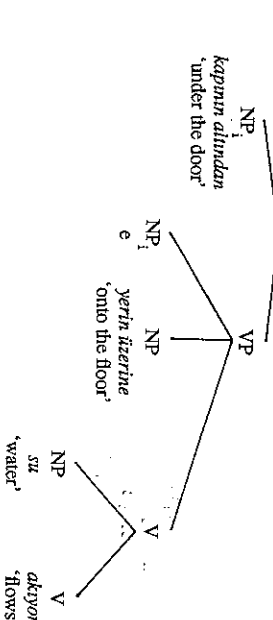
Consider how this movement can help explain the choice of relativization strategies. We saw above that both dialects disallowed *ga* relativization in suppressed subject constructions; in both dialects the VP constituents could only relativize with the *wa* strategy. This fact has generally required some sort of disjunction in the statement of *wa* relativization. Under the oblique subject analysis proposed here, the disjunction disappears. Consider the following subject incorporation example:

- 58. kapı-nın alt-ın-den yer-in üz-er-in-e su ak-ı-yor
door-GEN under-POSS-ABL floor-GEN over-POSS-DAT water flow-PROG
'water is flowing under the door onto the floor'

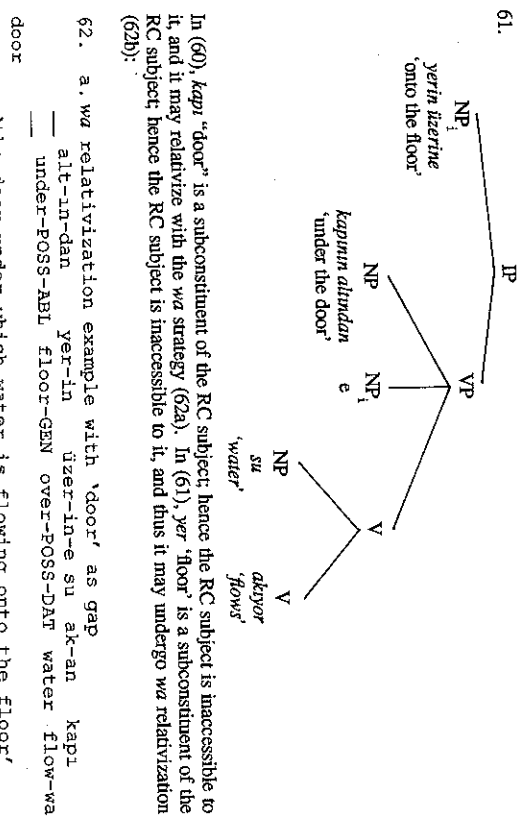
Assuming that incorporation leaves an underlying empty subject position, (58) might be represented as follows:



Either of the VP-internal NPs may move to become oblique subjects:



61.



Notice that under this approach, either VP-constituent may undergo *wa* relativization because either VP-constituent may move to subject position. There is no disjunction in the statement of *wa* relativization because *wa* relativization is only possible out of a relative clause subject.

The oblique subject approach neatly explains the possibility of *wa* relativization in suppressed subject clauses. Now we need an account of why *ga* relativization is impossible in these constructions. If an oblique nominal advances to subject in suppressed subject clauses, the account based on subject accessibility presented in section 4 makes the wrong predictions. For dialect A, for example, the analysis presented in section 4 says that *ga* relativization is possible when the RC subject is accessible to the gap. Given the oblique subject analysis considered here, there would be a relative clause subject accessible to any gap not dominated by the oblique subject.

For example, in (60), *kapı-nın alt-in-dan* has moved to subject position, however, *yer-in izzer-in-e* remains VP-internal, and the RC subject is accessible to it. *yer* should then be able to undergo *ga* relativization, but it cannot. Clearly the accessibility of the RC subject to the gap cannot be the determining factor in the acceptability of *ga* relativization if we adopt the oblique subject analysis.

An alternative account of *ga* relativization is that *ga* relativization is possible only when there is a relative clause subject capable of bearing the overt Genitive case suffix.¹⁴ Thus, a

¹⁴ For dialect B, this is the only requirement for *ga* relativization; for dialect A, it is also required that the RC subject be accessible to the gap.

possible rule of *ga* relativization could be as follows:

63. The *ga* relativization strategy is possible if the relative clause subject is accessible to the gap (Dialect A) or is distinct from the gap (dialect B) and does not bear an overt morphological case.

In a clause with no oblique subject, the subject receives nominative case. This case is not morphologically overt; hence, *ga* relativization is free to apply, attaching a genitive morpheme to the subject in the process. However, when the subject is already marked with an oblique, morphologically overt case, the *ga* relativization of a VP-internal constituent would entail that the subject receive two overt morphological cases: the case of the oblique subject, and the genitive case associated with *ga* relativization. We assume that such multiple case marking is universally disallowed; it is certainly disallowed in Turkish. Therefore, neither of the VP-internal NPs in (60) and (61) may host *ga* relativization. Thus, the fact that any VP constituent may potentially become an oblique subject accounts for the fact that *wa* relativization is possible for all constituents in suppressed subject constructions. The fact that the moved constituent keeps its overt morphological case explains why *ga* relativization is impossible for any of the constituents.

The oblique subject account explains the lack of *ga* relativization in suppressed subject constructions by assuming that oblique subjects may not bear an additional genitive case marker. What about cases where the subject is nominative? *ga* relativization should be possible out of VP constituents in simple sentences (with nominative subjects) as well as out of VP constituents when the subject is the derived nominative subject of personal passives. This is in fact true:

64. a. yılan-ın ye-diğ-i kabak
- snake-GEN eat-ga-POSS squash
- 'the squash that the snake ate'
- b. kitab-ın oku-n -duğ-u Cocuk-lar
- book-GEN read-PASS-ga-POSS child-PL
- 'the children to whom a book was read'

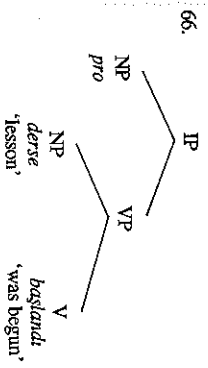
However, if *ga* relativization only cares about the case morphology of the subject, then we should expect *ga* relativization from subconstituents of a subject, as long as the whole subject is nominative. This is exactly the area where there is a dialect split. The account of this split developed in section 4 can be carried over to the present account. In section 4 it was hypothesized that the dialect split represents the choice of accessibility or distinguishability as the determining factor in *ga* relativization. For Dialect B an RC subject distinct from the gap and capable of bearing the Genitive suffix is sufficient for *ga* relativization; for Dialect A the RC subject must be accessible to the gap, and in addition be capable of bearing the Genitive suffix.

5.2. Independent Motivation for Oblique Subjects in Turkish

While the oblique subject analysis provides a neat account of Turkish relativization, it does so by positing the movement of a case-marked VP constituent to subject position. This section will present some independent motivation for oblique subjects in Turkish.

Many treatments of impersonal passive assume that the subject position is filled with a pleonastic element - this element is silent in pro-drop languages and overt in non pro-drop languages. This approach is supported, in part, by the fact that the same pleonastic element is used in impersonal passives as in other "subjectless" constructions, e.g., extraposition and weather verb sentences. In the case of pro-drop languages, this pleonastic element is silent. Since Turkish is a pro-drop language, we would expect silent pleonastics. Thus, impersonal passives like (65) might be analyzed as in (66):

65. ders -e başla-n -dı
 lesson-DAT begin-PASS-PST
 'The lesson was begun.'



However, it is not clear that Turkish has any independently motivated pleonastic elements, silent or otherwise. The SOV word order makes it impossible to say there is any extraposition (since an S-initial silent pleonastic would result in a sentence identical to a non-extraposed sentence). Weather predicates require a nonpleonastic subject. Hence, if silent pleonastics exist in Turkish, they occur only in impersonal passives and subject incorporation clauses. In addition, it turns out that impersonal passives are marginal without some oblique element.¹⁵

67. a. ? oku -n -du.
 read-PASS-PST
 'It was read.'
 b. o oda-da oku -n -du.
 that room-loc read-PASS-PST
 'It was read in that room.'

We can account for the marginality of (67a) if we assume that all Turkish sentences require that the subject be filled with some nonpleonastic element. This would entail that the obliques in (65) and (67b) are oblique subjects. Thus, the lack of independent pleonastic sentences and the marginality of obliqueless impersonal passives in Turkish lends support to the oblique subject analysis.

Further evidence for the oblique subject analysis comes from the fact that these obliques may undergo subject raising. Turkish has a raising to subject construction (Aissen 1974, Mulder 1976, Moore 1988), as illustrated in (68):¹⁶

68. Ben_i [e_i vur -ul -du] san -ıı -yor-um
 I [e_i shot-PASS-PST] believe-PASS-PROG-1.SG
 'I am believed to have been shot.'

The first person agreement on the matrix verb indicates that the embedded subject has raised to the matrix clause. It turns out that obliques may similarly raise just in case the embedded clause involves an impersonal passive or subject incorporation:

¹⁵ An exception is the rather artificial language used on signs - e.g. exit signs *çıkılır* 'it is exited here's the way out'.

¹⁶ The SOV word order of Turkish makes it difficult to see the effects of raising if the raisee is third person (since it is unclear whether the third person agreement is with the raisee or with a sentential subject). This is further complicated by the fact that third person plural agreement is optional, and permitted only for human subjects in any case. Hence, the clearest raising examples involve first or second person raisees.

69. a. Ban-a dans ed -il -di.
 I -DAT dance make-PASS-PAST
 'I was danced for.'
 Impersonal passive
 b. Ban-a_i [e_i dans ed -il -di] san -ıı -yor-um.
 I -DAT_i [e_i dance make-PASS-PAST] believe-PASS-PROG-1s
 'I am believed to have been danced for.'
 Impersonal passive with raised oblique.

70. a. Ban-a köpek atla-dı.
 me -DAT dog jump-PAST
 'A dog/dogs jumped at me.'
 Subject incorporation
 b. Ban-a_i [e_i köpek atla-dı] san -ıı -yor-um.
 me -DAT_i [e_i dog jump-PAST] believe-PASS-PROG-1s
 'I am believed to have had dogs jump at me.'
 Subject incorporation with raised oblique

- c. Ban-a_i [e_i köpek atla-dı] gibî gör-ür-dü-m.
 me -DAT_i [e_i dog jump-PAST] like appear-PAST-1s
 'I appear like I have had dogs jump at me.'
 Subject incorporation with raised oblique

The first person agreement on the matrix verbs in (69b) and (70b-c) indicate that the oblique subjects have raised. Note also that although the raisee still retains its oblique case, it nevertheless is able to control agreement. Since raisability and control of agreement are features of subjects in Turkish, these data provide independent support for the oblique subject analysis in Turkish.¹⁷

We have seen that the oblique subject analysis provides for a non-disjunctive treatment of *wa* relativization. Furthermore, the analysis is independently supported by the general lack of pleonastic elements and the raisability of obliques.

However, these putative oblique subjects do not seem to display other subject properties. They control agreement only when raised, not in simple clause structures (as noted in footnote 17), and they do not generally participate in EQUI-type control structures (Brockenridge 1975, p. 12; Knecht 1985, pp. 45-46). The obliques in question seem to fall in the rather grey area of "subject-like" in some respects, but not in other respects.

6. Conclusion

The problem of the distribution of relative clause strategies in Turkish reduces to the problem of specifying the set of relations between gap and relative clause subject correlating with each of the two sets of participle suffixes serving as complementizers for relative clauses.

We have shown that, even though there are dialectal differences in the distribution of the *ga* strategy, the choice of strategy does not depend on the grammatical structure local to the gap except in the simplest cases; it always depends on the grammatical structure at the top level of the relative clause, and can be characterized in terms of the relation between the gap host and the relative clause subject. We have shown that this relation can be expressed explicitly in terms of the

¹⁷ We have no explanation for the fact that raised obliques control agreement, while obliques which simply advance to subject position in subject-absent clauses do not. One should also bear in mind that examples with raised obliques are sometimes marginal.

notion of "accessibility", and that the dialect variation can be viewed as a parameterization of the required relation for one strategy.

The characterization of the distribution of the two strategies in terms of accessibility seems well established, and consequently our contention that that relation is properly appealed to in the analysis of these constructions is a firm result; but the above analysis leaves unanswered the same question as the Hankamer and Knecht analysis: why should obliques in subject-absent clauses behave like subjects? Our investigation reveals that there is some evidence that obliques acquire some other subject-like properties in these constructions, but that their accession to subjecthood is rather half-hearted.¹⁸ This raises questions about the categorality of the notion "subject" (cf. papers in Li 1976).

While the grammatical conditions determining the choice of relative clause strategy are not local to the gap, they are local in the relative clause itself, given that the gap host is identified. The constraints on the distribution of the two classes of complementizers can be regarded as a kind of agreement between the gap host and the participial suffix (the complementizer). This leads us to the suggestion that the phenomenon is an instance of "WH-agreement", as described in Chung & Georgopoulos (1988). Chung & Georgopoulos (1988) describe a phenomenon of "WH-agreement" in Chamorro and Palauan, where a verb in a relative clause is morphologically marked in a way that depends in part on the grammatical role or position of the relative clause gap. Chung & Georgopoulos note in passing that in general it is not the grammatical role of the gap itself that figures in the agreement, but the role of the major constituent in the relative clause that contains the gap; thus, just as in Turkish, the verb is agreeing with something in its own clause. This leads us to suggest that other cases of WH-agreement should be examined to see whether such agreement is always local in the relative clause. If so, this would bring WH-agreement in line with other agreement phenomena, which are typically local in nature; it would also further demonstrate the need for some version of a relation like accessibility to allow reference to the gap host in the statement of the agreement rule.

If our contention is correct, the common conception (since Keenan & Comrie 1977) of relative clause strategy choice will have to be modified. Keenan and Comrie assumed that when they found a relativization strategy choice sensitive to grammatical relations, it was the relation of the gap itself that mattered. We expect that it will turn out to be the grammatical role of the gap host that matters, and never the role of the gap itself (except in the simple case where the gap host is the gap).

References

Aissen, Judith (1974) "Verb Raising." *Linguistic Inquiry* 5:325-366.
 Andrews, Avery D. (1982) "The Representation of Case in Modern Icelandic," in Joan Bresnan, ed., *The Mental Representation of Grammatical Relations* 427-503. The MIT Press, Cambridge, MA.
 Barker, Chris and Geoffrey K. Pullum (1990) "A Theory of Command Relations," *Linguistics and Philosophy*.

¹⁸ There have been recent trends in Government and Binding theory that could possibly provide a representational account of differing degrees of "subjecthood". Sportiche (1988) proposed that French subject external arguments originate as VP specifiers, and subsequently move to the spec of IP to receive nominative Case. Along these lines, we might assume that oblique subjects, by virtue of their inherent Case, remain within the VP. Perhaps they may then move to the spec of IP marginally, accounting for the relative marginality of raising, and the fact that they may not participate in control structures. More recently, Pollock (1989) and Chomsky (1989) have proposed that IP be broken into at least an Agreement Phase (AP) and a Tense Phrase (TP). The inventory of such "functional" categories has been further expanded to possibly include a Negative Phrase (NP) and a Modal Phrase (MP). Since each of these projections brings a new specifier position, it is conceivable that the theory could distinguish several different types of "subjects", each corresponding to the specifier of a different category. Of course, such an approach would require some explanation as to why particular "subject" properties should correspond to any particular specifier.

Breckenridge, Janet (1975) *Rules which nothing undergoes: an investigation of impersonal passives and object raising constructions in German*, unpublished Harvard B.A. thesis.
 Chomsky, Noam (1965) *Aspects of the Theory of Syntax*. The MIT Press, Cambridge, MA.
 Chomsky, Noam (1981) *Lectures on Government and Binding*. Forts, Dordrecht.
 Chomsky, Noam (1986) *Barriers*. The MIT Press, Cambridge, MA.
 Chomsky, Noam (1989) "Some Notes on the Economy of Derivation and Representation," *MIT Working Papers in Linguistics* 10:43-74.
 Chung, Sandra and Carol Georgopoulos (1988) "Agreement with Gaps in Chamorro and Palauan", in M. Barlow and C. Ferguson, eds., *Agreement in Natural Languages: Approaches, Theories and Descriptions*, CSLI, Stanford, CA: 251-267.
 Csato, Eva (1985) "A syntactic analysis of participle constructions in modern Turkish", *Beginci Milletler arasi Turkoloji Kongresi*, Istanbul: 39-56.
 Hankamer, Jorge, and Laura Knecht (1976) "The role of the subject/non-subject distinction in determining the choice of relative clause participle in Turkish", *Harvard Syntax and Semantics 2*, Cambridge: 197-219.
 Keenan, Edward (1976) "Towards a Universal Definition of 'Subject'", in Charles Li, ed., *Subject and Topic*, 303-333.
 Keenan, Edward and Bernard Comrie (1977) "Noun Phrase Accessibility and Universal Grammar", *Linguistic Inquiry* 8: 63-100.
 Knecht, Laura (1985) *Subject and Object in Turkish*. MIT Dissertation.
 Langacker, Ronald W. (1969) "On Prominentalization and the Chain of Command," in D. A. Reibel and S. Schane, eds., *Modern Studies in English*. Prentice-Hall, Englewood Cliffs, N.J.
 Li, Charles ed. (1976) *Subject and Topic*. New York: Academic Press.
 Moore, John (1988) "Raising to Subject in Turkish," *Proceedings of the Fifth Eastern States Conference on Linguistics* 349-360.
 Mulder, Jean (1976) "Raising in Turkish," *Proceedings of the Second Annual Meeting of the Berkeley Linguistics Society* 298-307.
 Perlmutter, David M. (1978) "Impersonal Passives and the Unaccusative Hypothesis," *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society* 157-189.
 Pollock, Jean-Yves (1989) "Verb Movement, Universal Grammar, and the Structure of IP," *Linguistic Inquiry* 30:365-424.
 Pullum, Geoffrey K. (1986) "On the Relations of IDC-Command and Government," *Proceedings of the West Coast Conference on Formal Linguistics* 5:192-206.
 Sportiche, Dominique (1988) "A Theory of Floating Quantifiers and Its Corollaries for Constituent Structure," *Linguistic Inquiry* 19:425-449.
 Thainsson, H. (1980) *On Complementization in Icelandic*. Garland Press, New York.
 Underhill, R. (1972) "Turkish participles," *Linguistic Inquiry* 3: 87-99.
 Zaenen, A., J. Maling, and H. Thainsson (1985) "Case and Grammatical Functions: The Icelandic Passive," *Natural Language and Linguistic Theory* 3: 441-483.