On the Syntax and Morphology of Relative Clauses in Turkish

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0. Introduction:

The main aim of this paper is to describe as well as explain the different participial morphology found on the modifier clauses in Turkish relative clauses. This is a topic which has been widely discussed and debated in the field of studies in Turkish linguistics. However, while the debate has centered around questions of facts and the "correct" generalization(s), there has hardly been an attempt to actually explain the generalizations found, i.e. to tie the facts of morphology choice to more general principles of syntax at work in the language elsewhere, outside the realm of relative clauses. It is the latter enterprise which this paper attempts to address. In doing this, I will concentrate on facts of the "standard" dialect and will describe the facts at issue. While an account of the larger varieties of facts would be interesting and challenging, it would be too ambitious to attempt such an account here. Nevertheless, I believe that the proposal advanced here will lay the groundwork for such a larger, all-encompassing account of additional types of judgements, as well.

The account proposed looks at three different areas of relativization in Turkish: regular simple relative clauses, complex relative clauses (and, in particular, relativization out of "larger" subjects"), and relativizing non-subjects in constructions with expletive subjects (e.g. in impersonal passives and in constructions with non-specific subjects). I propose that, while the accounts for all three areas are different, there are various points of contact, and I outline and motivate such a modular account. The main approach has to do with a generalized version of Binding Theory, i.e. with an attempt to explain choice of participle via a (generalized) Binding Condition B and the fact that Turkish is a Null Subject Language. I claim that what's at stake here is not so much the choice of the participles as such, but rather that one participial form, i.e. **-DIK**, requires an agreement morpheme, while the other participial form, i.e. **-An**, does not have an agreement morpheme attached to it. I claim that it is the presence or absence of the agreement that determines the choice of participle, and that it is agreement which gives rise to the application of the Binding Condition just mentioned. This explanation is itself tied into the observation that Turkish does not permit resumptive pronouns in simple relative clauses.

If so, a hypothetical Turkish should be possible where the only participle morpheme

is -DIK, and where that morpheme is used instead of -An (in the contexts where -An has to be used in *real* Turkish) but without an agreement morpheme attached to it. In all other instances, the familiar -DIK with its agreement would be used. It is conceivable that there might be some Turkic languages with exactly this type of distribution with respect to agreement morphemes in relative clauses, even if the morpheme in question is a different one. Turkish seems to have (metaphorically speaking) opted for a situation where, perhaps redundantly, agreement shows up on just one type of participle; where agreement does not show up (because it *cannot* show up, due to the syntactic reasons outlined in this paper), another form, i.e. -An, is chosen, to make the dichotomy crystal-clear.

I. General word order facts in Turkish nominal phrases:

Turkish is a head-final language. Relative clauses are just one type of construction where this property is clearly observed.[1] Here, as well as in all other clauses, predicates are clause final, and inflectional elements follow the predicate. Kayne (1994) proposes to derive such constructions from a universal head-initial base with SVO order in clauses. In Kayne's framework, preverbal complements and adjuncts are derived from their putative original postverbal positions by leftward movement into specifier positions of a number of projections. Head-initial relative clauses are derived by leftward movement of the "target" of relativization into Spec/CP. It should be noted that the target in question—at least in relative clauses involving a complementizer rather than a wh-element–is just an NP, not a full DP. The CP, i.e. the modifying clause in the construction, is the complement of the D in a DP. Thus, in this analysis, the determiner and the head do not form a constituent in a relative clause construction. The following example illustrates the proposal for English, an SVO language with head-initial relative clauses:

(1) $[_{DP} [_{D^O} \text{the}] [_{CP} [_{NP} \text{book}]_i [_{C'} [_{C^O} \text{that}] [_{IP} \text{Jane read } [e]_i]]]]$

The derivation of wh-relatives is slightly more complicated. Kayne assumes that in such constructions, the constituent that moves to Spec/CP is a DP, headed by the wh-element:[2]

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[1] Turkish also has a head-initial relative clause construction, borrowed from Persian. This construction, used quite extensively in Ottoman Turkish and also in the earlier stages of the Republican era, is rarely used in colloquial styles of Modern Standard Turkish; its use is restricted to written, official styles. Interesting though some properties of this construction may be, I shall not consider the head-initial relative clause construction of Turkish in this paper.

[2] One question that arises here is why a full DP moves to Spec/CP in relative clauses involving wh-elements, while it is an NP that moves to Spec/CP involving a complementizer. Various answers come to mind; for example: 1. It is a DP that moves in non-wh relative clauses, as well; however, the head position of that DP is null; 2. What moves in wh-relatives is not a regular DP, but a

(2)   [$_{DP}$the [$_{CP}$ [$_{DP}$which [$_{NP}$ book]]$_i$ [$_{C'}$ [$_{IP}$ Jane read [e]$_i$]]]]

The NP then moves to the specifier position of the DP headed by *which*:[3]

(3)   [$_{DP}$the [$_{CP}$ [$_{DP}$ [$_{NP}$ book]$_j$ which [e]$_j$]$_i$ [$_{C'}$ [$_{IP}$ Jane read [e]$_i$]]]]

In languages with head-final relative clauses, the derivation is essentially the same as the basic derivation for languages like English, as illustrated in (1). However, there is an additional step involved: The IP-complement of C^o moves to the specifier position of the higher DP:

(4)   [$_{DP}$ [$_{IP}$ Jane read [e]$_i$]$_j$ [$_{Do}$ the] [$_{CP}$ [$_{NP}$ book]$_i$ [$_{C'}$[C^o that] [e]$_j$]]]

It is important to note at this point that a complementizer (rather, more specifically, an overt complementizer) cannot be stranded. Therefore, such constructions are licit only where the stranded complementizer is null:

(5)   [$_{DP}$ [$_{IP}$ Jane read [e]$_i$]$_j$ [$_{Do}$ the] [$_{CP}$ [$_{NP}$ book]$_i$ [$_{C'}$[C^o e] [e]$_j$]]]

The observation that in languages with head-final relative clauses there usually is no overt complementizer lends support to this analysis. An additional argument in favor of this derivation comes from the observation that in such constructions, the determiner of the construction, when present, shows up between the modifying clause and the "head". Kayne cites Amharic in this context, where a definite determiner follows the modifying clause and precedes the head, thus arguing that the category of the preposed clause is IP (rather than CP).

Turkish is another language where this particular aspect of Kayne's approach to head-final relative clauses is supported by the facts. In contrast to Amharic, Turkish has no overt definite determiner. However, it does have an indefinite determiner, whose placement in relative clauses is just as predicted by Kayne's derivation for head-final relative clauses illustrated in (5). A relevant example is given in (6):

(6)   güzel   bir   çiçek
         beautiful   one   flower
         'a beautiful flower'

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        special projection of WH. While interesting and important, this question is peripheral to the
        concerns of this paper, and I leave this area for future research.
3   Note that this derivation violates the Strict Cycle Condition. However, this slight problem can be
        remedied by reversing the two steps: the NP would first move to the specifier position of the
        lower DP headed ~by *which*, and that lower DP would then move to Spec/CP.

While the indefinite determiner is homonymous with the numeral 'one', its position is clearly different. To see this, compare (6) with (7):

(7)   bir   güzel   çiçek
        one   beautiful flower
        '??a beautiful flower'
        'one beautiful flower'

Here, the numeral precedes the adjectival modifier. That numeral can be understood as the indefinite determiner only in marked contexts; the construction has the feel of a scrambling construction. The contrast between the two constructions can be accounted for in a variety of ways. We could assume, for example, that the numeral and the determiner head different functional projections, with the numeral heading a QP and the determiner a DP, and where the QP dominates the DP.[4]

Demonstratives pattern with numerals and other quantifiers in this regard, i.e. they precede the adjective phrase:

(8)   a.   bu   güzel   çiçek
                this   beautiful flower
                'this beautiful flower'

        b.   *güzel bu ·   çiçek
                beautiful this flower
                'this beautiful flower'[5]

Demonstratives precede numerals and (some) other quantifiers:

(9)   bu   beş   güzel   çiçek
        this   five   beautiful flower
        'these beautiful flowers'

(10)   bu   birkaç güzel   çiçek
        this   few   beautiful flower
        'these couple of beautiful flowers'

If we assume that these order facts reflect the hierarchical order of the functional

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4   Alternatively, it might be possible to claim that the numeral and the determiner both head the DP, and that the AdjP raises to Spec/NP when the DP is headed by a Q, while it raises to Spec/DP when the head is a genuine determiner. I shall not attempt to address this issue in this paper.
5   This example is OK under scrambled predicative reading: 'this flower is beautiful'.

projections that they head, we could posit a Dem(onstrative) P(hrase) that dominates a Num(eral) (or Q(uantifier)) P(hrase), which in turn dominates a D(eterminer) P(hrase) that dominates the N(oun) P(hrase). In such an analysis, the AdjP would raise to the Spec position of the DP, but not further.[6] More importantly, it would not raise to the Spec position of the DemP, as illustrated by the ungrammaticality of (8)b.

Within an analysis based on the approach of Kayne to relative clauses, the IP would raise to Spec/DemP, i.e. farther and higher than an AdjP does. This is illustrated by (11) and, in particular, by a comparison of that example with the ungrammatical (8)b.:

(11)   [Ali-nin dükkân-dan e$_i$ al -dığ -ı]   bu güzel   çiçek$_i$
            Ali-Gen. shop-Abl.   buy-OPart.-3.sg. this beautiful flower
            'this beautiful flower that Ali bought in the shop'

These introductory remarks on the syntax of nominal phrases (including relative clauses) in Turkish and the facts as presented so far set the scene for the main concerns of this paper, namely the interaction of the syntax and the morphology of relative clauses in Turkish.

We have seen so far that adjectival as well as clausal modification in Turkish nominal phrases is consistent with Kayne's approach to head-final constructions, i.e. with deriving such constructions from head-initial projections (or, more specifically, from constructions with the order Specifier-Head-Complement). In this paper, I shall not attempt to argue in favor of this approach against some other conceivable approaches. Instead, I will remain neutral between this approach and one that assumes basic head-final order, and I shall continue to show that, perhaps surprisingly, a variety of facts in Turkish, a language with (surface) Complement-Head order, are consistent with Kayne's model. Some of the other facts to be discussed here do not bear on this particular issue, however, and this will be pointed out wherever relevant.

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6   This statement must be somewhat modified to allow for raising of the AdjP to the Spec of NumP. This is a marked option:
        (i) ?(?)   bu   güzel   beş çiçek
                         this   beautiful   five flower
        "These beautiful five flowers"
        Further, as we saw in (2), this option is even worse when the numeral is 'one'. The deterioration of acceptability in this latter case is probably due to the homonymy between the numeral 'one' and the indefinite determiner.

II. The main problems posed by the morphology-syntax interaction in Turkish relative clauses:

Let us start by describing the most salient properties of Turkish relative clauses, at least as they appear at a superficial level: They are right-headed, and the modifier clause is "nominalized" (in some studies, e.g. Underhill 1972, the verb form is called a participle). The determination of the "correct" choice of that participle morphology has been an issue of long-standing debate. This paper will address this issue, among others.

There is no overt complementizer, nor is there an overt wh-element. There is a gap in the position corresponding to the head.[7] The following examples illustrate these characteristics.

Relativizing a subject:

(12)a. [[e_i geçen yaz   ada -da ben-i gör-**en**]   kişi-ler$_i$]
            last summer   island-Loc. I-Acc. see-**SPart.** person-pl.
'The people who saw me on the island last summer'

Relativizing a non-subject:

(12)b. [[pro   geçen yaz   ada -da e_i gör-**düğ** -**üm**] kişi-ler$_i$]
           last summer   island-Loc.   see-**OPart.**-**1.sg.** person-pl.
'The people who(m) I saw on the island last summer'

When relativizing a subject[8], the suffix used is -**An**. There is no agreement morphology when this suffix is used.
When relativizing a non-subject[9], the suffix used is -**DIK**, which is followed by subject agreement morphology.

Further, relative clauses in Turkish exhibit island effects:

(13)*[Hasan-ın [[e_i geçen yaz e_j ben-i gör-**en**] kişi   -ler$_i$]-i
     Hasan-ın   last   summer   I-Acc. see-**SPart.** person-pl.-Acc.

             tanı -**dığ**] -ı   ada$_j$
             know-**OPart.**-3.sg.   island

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7   Turkish also has relative clauses with resumptive pronouns; however, they are typically of the left-headed variety and will not concern us here.
8   This generalization will be further refined later on.
9   This generalization, too, will be refined later in the paper.

Intended reading: 'The island (such that) Hasan knows the people who saw me (on it) last summer'[10]

In previous work (e.g. Kornfilt 1984, Kornfilt 1991), I took these facts to argue in favor of an analysis which attributes their island sensitivity to subjacency, in a fashion similar to better-studied European languages like English.

The morphology for "subject relativization" is not used anywhere else[11], but that for "non-subject relativization" is the most basic morphology found in complementation in general. There are two basic types in complementation: so-called factive (the basic type) and non-factive (which is somewhat like subjunctives in better-known languages like Romance languages).

(14)a.[pro   geçen yaz   ada -da   sen-i   gör-**düğ**   -**üm**] -ü
                last   summer   island-Loc. you-Acc.   see-**Fact.Nom. -1.sg.**-Acc.
herkes   -e   anlat-tı-m
everybody-Dat. tell-past-1.sg.
'I told everyone that I saw you on the island last summer'

(14)b.[pro geçen yaz   ada -da   sen-i   gör-**me**   -**m**] -i
                last summer   island-Loc. you-Acc.   see-**Non-F.N.-1.sg.**-Acc.
baba   -m   iste-me-di
father-1.sg. want-Neg.-past
'My father did not want that I should see you on the island last summer'

In the previous works mentioned above, I proposed an analysis which derives Turkish relative clauses from the regular factive complementation construction; this analysis was based on facts of the sort illustrated above. Note that the gerundive morpheme for the "Factive Nominalization" is the same, i.e. **-DIK**, which we find when (generally) relativizing non-subjects. It would appear reasonable to derive relative clauses from factive complements. However, if this is the case, we have to explain why the regular "strategy" of deriving relative clauses from regular factive

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[10]   For more discussion of island constraints (in particular, of the Complex Noun Phrase constraint), the reader is referred to Kornfilt (1984) and Kornfilt, Kuno & Sezer (1980).

[11]   This statement must be somewhat modified: the same suffix, i.e. **-An**, is also used in one type of time adverbial:
         (i)   ben   gel   -en   -e   kadar bura-da   kal!
                I   come   -**Adv.**-Dat. until here-Loc. stay
                'Stay here until I come!'
         This type of adverbial adjunct is not the most productive time adverbial used. Given its syntactic difference from relative clauses, I will not seek a syntactic explanation for the morphological resemblance between the participial morphology found in relative clauses and the adverbial morphology found in such adverbials.

complement clauses is not always available, and why we would have to use the morpheme -An in those instances.

In addressing this question, I would like to claim that what is of interest here is not the morphology of the participle per se, but rather whether there is overt agreement morphology present or not. As illustrated in (12), the "regular" morpheme, i.e. -DIK, is followed by (subject) agreement morphology, while the "subject relativization" morpheme -An is not followed by such agreement morphemes.[12] But why should this fact have any significance?

The answer to this question, I suggest, follows from a generalized version of Binding Theory. More specifically, the key to (at least part of) the distribution of the two participle morphemes in Turkish relative clauses comes from a principle roughly of the following sort:

(15)   The A'-disjointness Requirement:

A pronoun must be (A'-) free in the smallest Complete Functional Complex (CFC) which contains it.

This would be a special clause of a generalized version of the familiar Condition B of Binding Theory which requires a pronoun to be (A-) free in its Governing Category (or CFC). If we generalize the domain of the CFC to a CP, and the requirement that the pronoun be A-free to a more general requirement that it be A-free as well as A'-free, we would get a generalized version of Condition B, of which the requirement in (15) would be subclause.

This subclause and/or this generalized version of Condition B have been advocated in

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12   There are some counterexamples to these generalizations, apparent or otherwise. The "regular"
     morpheme -DIK can appear without subject agreement in some frozen expressions; e.g.:
     (i)   um   -ma   -dık   taş   baş   yar -ar
            expect-Neg. -OPart.   stone head   split-Aor.
     'The unexpected stone splits heads' (In usage: 'Things happen when you least expect them'
     However, -DIK is otherwise always followed by agreement morphology.
     On the other hand, -An can be followed by agreement morphology, but only if the latter is not
     "local", i.e. if the agreement is not with the subject or possessor of the domain headed by -An,
     but rather is with a constituent outside of such a domain. For example:
     (ii)   gel   -en   -im   gid-en   -im   yok
            come   -SPart.-1.sg. go-SPart.-1.sg. Neg.Exist.
     'There is nobody who comes to see me' (Literally: 'I have no comer or goer')
     Here, the first person singular agreement marker does not agree with the subject of the verb, but
     rather with a possessor outside of the verbal (or inflectional) projection headed by -An.
     Therefore, the generalization that -An cannot be followed by agreement as belonging to the
     same domain still holds.

a variety of studies; see, for example, Aoun & Li (1989), Borer (1984), Kornfilt (1984) and (1991), McCloskey (1990), and Ouhalla (1993). For Turkish relative clauses in particular, I have advocated this approach in Kornfilt 1984 and 1991. Note that this principle rules out resumptive pronouns in simple relative clauses:

Subject Relativization:

(16)a. [CP[IP (*o$_i$/*kendisi$_i$)   ada -da ben-i   gör-en] Op.$_i$] kişi$_i$
                     he/himself   island-Loc. I-Acc. see-SPart.   person
Intended reading: 'The person who saw me on the island'

Relativizing a non-subject:

(16)b.[CP[IP pro ada   -da (*on-u$_i$/*kendisin-i$_i$) gör-düğ -üm] Op.$_i$] kişi$_i$
                   island-Loc. he-Acc./himself-Acc. see-OPart.-1.sg.   person
'The person who(m) I saw on the island'

Clearly, the generalized version of Condition B, via its clause on A'-disjointness (cf. 15 above), makes the correct predictions: the modifying clause cannot contain a resumptive pronoun, since that pronoun would be bound by an (in Turkish, abstract) operator within the modifying CP, which would be the smallest Complete Functional Complex for that pronoun.[13]

But in what way does any of this bear on the question of the choice between the two "relativization" morphemes found on the modifying participles?

Another typological property of Turkish should help us answer this question. Turkish is a so-called Null Subject Language (NSL), i.e. it can have phonologically unrealized subject pronouns in finite clauses. It is a generally accepted view that the syntactic category of such subject pronouns (usually referred to as **pro**) is that of a regular pronominal, with the features [+pronominal/-anaphoric]. Now, if such a subject **pro** occupies the position of a relativized subject, it would violate the A'-

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[13] In a Kayne-type derivation, it would be the head NP, which moves to Spec/CP, which acts as the operator of the variable, i.e. of the target of relativization. Thus, the principle stated in (15) would have to apply after tne head has moved out of the IP; this would be universally true. On the other hand, since in (surface) SOV-languages, the IP-remnant raises to Spec/DP (or Spec/DemP), the variable contained in it would not be bound by the head after that second movement, given that the head wouldn't c-command the IP any longer. Thus, in a derivation-based model, the variable in the position of the target of relativization must be bound before the movement of IP, and it is at this stage that the condition in (15) must be checked for any violations. Alternatively, in a representation-based model, the trace left by the moving IP would need to be structured, so as to be able to check the condition in (15).

disjointness condition, since it would be a pronoun which is (A'-)bound, and hence not free, in its smallest CFC.

When would the target of relativization be a **pro**? The answer is: whenever **pro** is licensed (as well as identified; cf. Rizzi 1986). In NSLs, this is typically when **pro** is a subject which is licensed by a rich agreement element; that this is indeed so for Turkish (in tensed and nominalized clauses as well as in possessive NPs) is argued for in Kornfilt (1984). Thus, if a relative clause were headed by an agreement element that comes from a rich agreement paradigm, and if the target of relativization were the subject of that clause, then that subject *could* be **pro**, and that **pro** would violate the condition in (15). But *must* such an element be **pro** in all such instances?

The answer to this last question must be in the affirmative; this is motivated in a variety of languages as well as in a variety of syntactic phenomena; while space limitations don't permit me to go into such arguments in detail, I refer the reader to a source where this view is defended and formulated as follows:

(17)   If an empty category is licensed and identified by AGR, it *must* be **pro**. (Jaeggli 1984--emphasis added: JK)

Directing our attention to the morphology of relative clauses in Turkish, we said that the morpheme **-An** cannot be followed by agreement morphology that is "tied" to the subject position. Why should this be, since this prohibition is not a morpho-phonological one (cf. footnote 12, example (ii))? The answer is that the prohibition must be syntactic, and that it is the principle against A'-disjointness stated in (15). As for the morpheme **-DIK**, we also have said that it *must* be followed by agreement morphology (at least in productive contexts--cf. footnote 12). But, if so, it clearly does not qualify as the appropriate morpheme in a relative clause whose target is a subject, since the agreement morpheme attached to **-DIK** would license and identify the gap in subject position as **pro**, and since that **pro** is, at the same time, both a pronominal and a variable, i.e. it is a pronoun which is A'-bound, the restriction in (15) would be violated, leading to ungrammaticality. To exemplify such a situation, I repeat a previous example, with the empty categories included and the indexations shown:

In (20), the phonologically empty variable is not a subject in its own clause; its contents are not identified by agreement; therefore, it is not **pro**. Hence, the ungrammaticality of this example has certainly nothing to do with the A'-disjointness condition in (15). In (22), the variable is, in fact, a subject in a domain headed by overt agreement, and is thus **pro**. However, it is not A'-bound in its smallest CFC, which would be the embedded CP; therefore, condition (15) is not violated; again, there must be another reason for why this example is ungrammatical. Note that we cannot assume that in (22), the **pro** is bound by a putative intermediate operator trace, because if such a trace gave rise to ungrammaticality in (22), we should observe the same ungrammaticality in (21). However, (21) is perfectly grammatical and accepted by all speakers.

We draw the (preliminary) conclusion that the generalization expressed as the "Mother Node Principle" by Hankamer & Knecht (1976) is independent from the A'-Disjointness Effect in (15).

We now turn to the related, second question. Remember that in simple relative clauses, *any* kind of resumptive pronoun leads to ungrammaticality, irrespective of whether it is a personal pronoun, a logophorically used reflexive pronoun or a phonologically unrealized pronoun (i.e. the latter would be **pro**). Some of the following examples show that this is not so in complex relative clauses, where the target of relativization is part of a larger constituent of the relative clause.

The first pair of examples are designed to refresh the reader's memory about simple relative clauses. (25) is a regular simple relative clause, with a non-subject target of relativization, and it is grammatical with that target realized as a phonologically empty category. In contrast, (26), which is the very same construction, but with a personal pronoun occupying the position of the target, is ungrammatical:

(25)   müdür-ün e_i kov-duğ   -u   öğretmen$_i$
       director-Gen.   fire-OPart.-3.sg. teacher
'the teacher who the director fired'

(26)   * müdür   -ün   on-u$_i$ kov-duğ   -u   öğretmen$_i$
         director   -Gen.   he-Acc. fire-OPart. -3.sg.   teacher
Intended reading: 'the teacher who the director fired (him)'

It was such observations that lead us to seek explanations based on considerations based on generalized binding, and, in particular, on A'-Disjointness (and the like).

In complex relative clauses, a perfunctory glance seems to motivate a similar generalization; in the next example, we have an overt pronoun which functions as a variable, and the example is ungrammatical, i.e. the situation is similar to that found in simple relative clauses:

(27) * [[on-un$_i$/kendisin-in$_i$ öğretmen-i   kov-acağ-ı]   hemen
          he-Gen./himself-Gen.   teacher-Acc.   fire-Fut.-3.sg.   immediately
duy-ul   -an]   müdür$_i$
hear-Pass.-SPart.   director
Intended reading: 'The director who (it) was heard immediately that he was going to fire the teacher'

However, focusing the pronominal variable by placing it in the canonical preverbal focus position improves the example considerably, even if it does not make it perfect:

(28) ?(?) [[öğretmen-i   on-un$_i$/kendisin-in$_i$ kov-acağ-ı]   hemen
             teacher-Acc.   he-Gen./himself-Gen.   fire-Fut.-3.sg.   immediately
duy-ul   -an]   müdür$_i$
hear-Pass.-SPart.   director
    'The director who (it) was heard immediately that HE was going to fire the teacher'

Similar changes in word order when focusing the overt, pronominal variable does not lead to a similar improvement of an ungrammatical *simple* relative clause, even where the morphology of the "relative participle" is otherwise the correct one:

(29)   * müdür-ün   on-u$_i$/kendisin-i$_i$ kov-duğ   -u   öğretmen$_i$
            director-Gen.   he-Acc./himself-Acc.   fire-OPart.-3.sg.   teacher
Still bad under the intended reading: 'the teacher who the director fired HIM'

Note that in a complex relative clause, too, it does not help to focus the resumptive pronoun, when the "relative participle" is of the "wrong" type (at least for the restrictive dialect; compare the following example with (28) to see this point):

(30) *[[öğretmen-i   on-un$_i$/kendisin-in$_i$ kov-acağ-ın]   -ın
        teacher-Acc.   he-Gen./himself-Gen.   fire-Fut.-3.sg.-Gen.
duy-ul   -duğ]   -u   müdür$_i$
hear-Pass.-OPart.3.sg.   director

A. Extractions out of larger subjects and non-subjects:

It has been noted in the literature (e.g. Hankamer & Knecht 1976, Kornfilt 1984 and 1991, Underhill 1972) that extracting a subconstituent out of a larger subject gives rise to a "Subject Participle" form heading the complex relative clause (even if the target of the relativization is not a subject in its own phrase or clause), while extracting a subconstituent out or a larger non-subject results in an "Object Participle" form (i.e. a form in **-DIK**), even if the target of relativization is a subject in its own phrase or clause; Hankamer & Knecht 19?? formulate a generalization, which they call "The Mother Node Principle", so as to capture this observation. This principle roughly states that the grammatical relation of the "mother node", i.e. of the larger domain that includes the target of relativization, determines the form of the participle morpheme to be found at the head of the complex relative clause (cf. Hankamer & Knecht 1976).[16] Such extractions out of larger subjects (e.g. out of possessive phrases and clauses which are themselves subjects[17]) are illustrated below:

(19) [[müdür-ün e_i   kov-acağ-ı]   hemen   duy-ul   -an] öğretmen_i
      director-Gen.   fire-Fut.-3.sg. immediately hear-Pass.-**SPart.** teacher
      'The teacher who (it) was heard immediately that the director was going to fire'

(20)*[[müdür-ün e_i kov-acağ-ın]-ın hemen   duy-ul -duğ]-u öğretmen_i
      director -Gen.   fire-Fut.-3.sg.-Gen. immediately hear-Pass.-**OPart.-3.sg.** teacher
      Same intended reading.

(21) [[**pro_i** öğretmen-i   kov-acağ-ı] hemen   duy-ul   -an] müdür_i
          teacher -Acc. fire-Fut.-3.sg. immediately hear-Pass.-**SPart.** director
      'The director who (it) was heard immediately that (he) was going to fire the
teacher'

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16   In some more recent work, it has been observed that the situation is more complex. While the facts as characterized in the text do hold for the standard style of Modern Standard Turkish and are accepted by all speakers, there are some speakers who accept–and produce–relative clauses with **-DIK** in some contexts where the "standard", restrictive dialect allows only forms with **-An** (cf. Barker, Hankamer & Moore 1990, Zimmer 1987 and 1996, Csató 1985, and, as an early work where similar observations are made, Kornfilt 1974). For example, the three ungrammatical examples in the following set of examples in the text are accepted by some of these permissive speakers. In this paper, I shall not be concerned with these more permissive dialects. However, it would be a worthwhile future research project to integrate an account of the standard dialect and an account of these permissive dialects.

17   Sentential Subjects do not generally act as island in Turkish; we shall discuss some instances where they *do* give rise to island effects, however.

(22) *[[**pro_i** öğretmen-i kov-acağ-ın]-ın   hemen   duy-ul   **-duğ]**   **-u**
       teacher-Acc. fire-Fut.-3.sg.-Gen. immediately hear-Pass.-**OPart.-3.sg.**
müdür_i
director
    Same intended reading.

(23)   [**pro_i**   kız   -ı]   okul   -a   gid-**en**]   adam_i
            daughter-3.sg.   school-Dat. go -**SPart.**   man
    'The man whose daughter goes to school'

(24)   *[**pro_i**   kız   -ın]   -ın   okul   -a   git-**tiğ**]-**i**   adam_i
            daughter-3.sg.   -Gen.   school-Dat. go -**SPart.**   man
Same intended reading.

Given these facts of the standard variety of Modern Standard Turkish, two questions arise:

First question: Does the explanation based on the A'-Disjointness Effect carry over? Second, related question: Is the distribution of **pro** versus overt pronouns always the same when these two types of pronominals function as resumptive pronouns? I will address these questions in turn.

Let me first repeat two of the ungrammatical examples above, as well as a grammatical one, to facilitate discussion:

(20)*[[müdür-ün e_i kov-acağ-ın]-ın   hemen   duy-ul   **-duğ]-u**
       director-Gen.   fire-Fut.-3.sg.-Gen. immediately hear-Pass.-**OPart.-3.sg.**
öğretmen_i
teacher
    Same intended reading.

(21) [[**pro_i** öğretmen-i   kov-acağ-ı] hemen   duy-ul   **-an]**   müdür_i
              teacher -Acc. fire-Fut.-3.sg. immediately hear-Pass.-**SPart.** director
    'The director who (it) was heard immediately that (he) was going to fire the teacher'

(22) *[[**pro_i** öğretmen-i kov-acağ-ın]-ın   hemen   duy-ul   **-duğ]**   **-u**
       teacher-Acc. fire-Fut.-3.sg.-Gen. immediately hear-Pass.-**OPart.-3.sg.**
müdür_i
director

(18)a. *[CP[IP   **pro**ᵢ   ada -da   ben-i   gör-**düğ** -ü] Op.ᵢ] kişi[14]
island-Loc. I-Acc. see-**OPart.-3.sg.**   person

Intended reading: 'The person who saw me on the island'

(18)b. *[CP[IP   **pro**ᵢ   ada -da   ben-i   gör-**en**   -i] Op.ᵢ] kişiᵢ
island-Loc. I-Acc. see-**SPart.-3.sg.** person

Intended reading: 'The person who saw me on the island'

In both instances, the reason for the ungrammaticality is the same as that in the examples of (16), namely that there is a resumptive pronoun in a simple relative clause. In other words, we have here a pronominal (albeit a phonologically empty one, i.e. **pro**), which is A'-bound locally, i.e. in its smallest CFC. Thus, no matter which type of morpheme we choose–the result will be bad in either instance, due to the fact that there is agreement morphology in a relative clause whose target is a subject.

It might be claimed that there is an additional reason for ruling out (18)b., namely that the **-An** morpheme is followed by an agreement morpheme, which is a morphologically unpermissible sequence. However, as mentioned earlier (cf. ftn. 12), such sequences *are* permitted in different *syntactic* contexts. Hence, the reason for ruling out this sequence in (18)b. cannot be morphological *or* phonological, but must be syntactic. The most general *syntactic* explanation, on the other hand, is the one we already gave, namely one which is based on the appearance of the agreement morpheme in a relative clause whose target is a subject, which, ultimately, gives rise to a violation of the principle in (15).[15]

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[14] The structure would be somewhat different in a Kayne-type derivation, since the IP would be raised to Spec/DP or to a Spec/DemP. This point does not affect the main line of argumentation here, however.

[15] Up to this point in the discussion, we have been concerned about the question of why we cannot use the participle with **-DIK** for relativizing subjects. But we also have to ask why the so-called subject participle, i.e. the morpheme **-An**, cannot be used to relativize non-subjects. In some sense, we have answered this question earlier, albeit implicitly and incompletely. Namely, the participle with **-DIK** should be regarded as the "elsewhere case" in complementation, since it shows up as the general marker of factive complements everywhere in the language. Therefore, it should be used in relative clauses, as well, unless there is a specific reason against its occurrence. The bulk of the discussion in the text so far has centered around an attempt towards finding just such a reason. Thus, wherever **-DIK** *cannot* be used (due to a violation of the disjointness principle in (15)), **-An** must be used instead.

An additional explanation is based on the Case Filter. Assuming a non-subject has been relativized, the subject will show up as a phonologically realized constituent; given its nature as a nominal DP, the subject will need Case (since otherwise it would violate the Case Filter). If there is no overt agreement element that governs the subject position, such a DP would remain without Case and hence would violate the Case Filter. The following example is a repetition of example (11), but with **-An** instead of **-DIK**, and without any agreement morphology:

(i)   *[Ali dükkân -dan eᵢ al -**an**]   bu güzel çiçekᵢ
Ali   shop   -Abl.   buy-**SPart.** this beautiful flower

In conclusion, I have claimed here that the facts of participle choice in simple relative clauses in the "standard" dialect of Turkish are determined not so much by any property inherent to the participles themselves, but rather by the agreement which shows up with the general nominalization marker -DIK. I have argued that this general marker cannot be used when the target of relativization is the subject, because the agreement marker attached to it triggers application of the A'-Disjointness Condition, i.e. a generalized version of Binding Condition B. This condition was itself further motivated by observing that Turkish does not allow resumptive pronouns in simple relative clauses, irrespective of whether such pronouns are subjects or non-subjects. This motivates formulating the condition in a very general fashion and argues for the view that the "-An strategy" for relativizing subjects is nothing but a special instance of this very general A'-Disjointness Condition, thus prohibiting the use of the otherwise "unmarked nominalization strategy" with the **DIK+Agreement** sequence.

III.   Further instances of the morphological dichotomy in relative clauses:

So far in the discussion, we have limited ourselves to simple relative clauses, in which the target of relativization is either the subject or a non-subject, and we have determined when the participle morphology which was called "Subject Participle" in the examples above must be used, rather than the "Object Participle".

Now, we turn to constructions where the target of relativization is part of a larger subject or non-subject, so as to see whether we find facts similar to those illustrated for simple relative clauses, and ultimately to determine whether similar considerations as those discussed for simple relatives carry over to such more complex constructions.

Intended reading: 'This beautiful flower that Ali bought in the shop'

The result is ungrammatical. I suggest that the explanation is the one outlined earlier, i.e. the fact that, due to lack of agreement, the subject *Ali* remains without Case, which leads to a violation of the Case Filter and, hence, to ungrammaticality. On the other hand, if we use a participle with -DIK, i.e. the "elsewhere" participle, we will also have an agreement morpheme following the participle suffix. As mentioned earlier, the *-DIK–Agr.* sequence is the one found everywhere in the language productively, the reason presumably being also the Case Filter: whether in a relative clause or not, i.e. irrespective of whether there is an operator in the syntactic structure or not, there will be a subject that needs to be assigned Case, and the agreement morpheme is needed as a Case marker. (Thus, once again, we have a syntactic explanation to what looks like a morphological constraint on morpheme sequences.) As we said earlier, -An cannot be followed by agreement locally. Therefore, -An is excluded wherever there is a subject in its domain that needs Case.

For the most part, this paper is interested in finding out why -DIK, i.e. the "elsewhere", "unmarked", participle, cannot be used in certain contexts. This footnote has attempted to explain why, in turn, -An is not used in the "elsewhere" contexts. I view this question as resolved and turn now back to our main concern.

Intended reading: 'The director who (it) was heard immediately that HE was going to fire the teacher'

We conclude that the choice of morphology is dictated by A'-Disjointness in short extraction (i.e. by an attempt to avoid a resumptive pronoun), but not in long extraction.

How, then is the choice of the "relative participle" determined in long extraction?

I would like to make the following suggestion: In long extractions, the choice of morphology is dictated by some sort of Left Branch Condition. More concretely, I suggest that in the formation of Turkish relative clauses, it is not possible to extract out of the left branch of projections headed by strong AGR. (In a Kayne-type derivation, this constraint would have to hold after the complements of functional heads have raised to the left of their heads; in this particular instance, this would be after the T(ense) P(hrase) has risen to the left of AGR.)

At this point, I do not have a satisfying explanation for why the Left Branch Condition should be relevant here. But given the mysterious nature of that condition ever since it was first proposed by Ross (1967), I shall not be deterred by a lack of insight into the Condition itself, but rather will pursue this line of thought, so as to see if the Condition holds for other syntactic phenomena in the language. If this is so, then the proposal will at least not face the charge of idiosyncracy.

The first relevant observation is that, from this particular point of view, the facts about "long" extraction out of larger subjects are reminiscent of A-binding facts concerning anaphors (cf. Kornfilt 1988):

(31)a.   ?? öğrenci-ler$_i$ [birbir-lerin-in$_i$ Ankara-ya gid-eceğ-**in**]-i
            student-pl.   e.o.-3.pl.-Gen.   Ankara-Dat. go-Fut.-**3.sg.**-Acc.
biz-e   anlat-tı (-lar)
we-Dat.   tell-Past-3.pl.
'The students told us that each other was going to go to Ankara'
(31)b.   ??/* öğrenci-ler$_i$ [birbir-lerin-in$_i$ Ankara-ya gid-ecek-**lerin**]-i
            student-pl.   e.o.-3.pl.-Gen.   Ankara-Dat. go-Fut.-**3.pl.**-Acc.
biz-e   anlat -tı (-lar)
we-Dat.   tell -Past-3.pl.
Intended reading the same as in the previous example.

While reciprocal anaphors in subject position of factive clauses are never very good

(for reasons that are not relevant for our present concerns), there is nevertheless a clear contrast between (31)a., where the subordinate clause is headed by a constant, i.e. non-alternating third person *singular* agreement morpheme, rather than the expected full-fledged third person *plural* agreement morpheme exhibited in (31)b. Where the agreement is *genuine* (or *strong*, as termed in Kornfilt 1984 and 1988), as in the latter example, the reciprocal is fully ungrammatical; in contrast, where the agreement is a non-alternating "dummy" element (or *weak*, as termed in Kornfilt 1984 and 1988), the reciprocal subject is of borderline acceptability. Similar contrasts are exhibited when the reciprocal subject is marked for other persons, as well:

(32)a.　 ?? biz$_i$ [birbir-imiz-in$_i$　 Ankara-ya　gid-eceğ-**in**]-i
　　　　　 we　 e.o.-1.pl.-Gen. Ankara-Dat. go-Fut.-**3.sg.**-Acc.
herkes　　 -e　　 anlat-tı -k
everybody-Dat. tell-Past-1.pl.·
'We told everybody that each other was going to go to Ankara'

(32)b.　 *　 biz$_i$ [birbir-imiz-in$_i$　 Ankara-ya　gid-eceğ-**imiz**]-i
　　　　　 we　 e.o.-1.pl.-Gen.　 Ankara-Dat. go-Fut.-**1.pl.**-Acc.
herkes　　 -e　　 anlat-tı -k
everybody-Dat. tell-Past-1.pl.
Intended reading the same as in the previous example.

These contrasts would be expected under the additional assumption that anaphors undergo movement at LF (or after Spell-Out, in the Minimalistic framework proposed in Chomsky 1995). More specifically, suppose that anaphors undergo LF movement (as proposed by some syntacticians, e.g. Lebeaux 1983). In particular, suppose that in Turkish, the constant part of the reciprocal, i.e. **birbir** 'each other', would raise, leaving behind its inflection for person and number (or else, more in line with Lebeaux's proposal, the first **bir**, i.e. 'each', would move at LF, leaving behind the inflected part, i.e. the second **bir** 'other'). In either instance, we would be faced with attempts to extract a subconstituent of a larger subject which is co-indexed with the agreement element which heads the domain. In this sense, these examples are similar to extractions by relativization out of larger subjects, as illustrated previously. The generalization behind both phenomena, otherwise so different, appears to be the following: Where there is *strong*, i.e. genuine, agreement heading the whole domain, it appears to be impossible to extract a subpart of the subject of that domain. Where there is *weak* agreement (or no agreement at all, as is the case with the -**An** participle in relative clauses), a subpart of the domain's subject can be extracted.

Example (44) illustrates relativization into an impersonal passive construction. Impersonal passives are constructions where there is no derived overt subject at S-Structure, because the verb is not genuinely transitive; in other words, the verb is either intransitive or assigns oblique Case, but no structural Case. Since only direct objects with structural (Accusative) Case can become subjects in passive constructions, the passive structures with verbs like *bin* 'board, mount' which assign only oblique Cases have no overt subject, but rather only expletive subjects. Such expletive subjects are **pro** in a Null Subject Language like Turkish.[19]

What dictates the choice of the participial morphology here? It would be appealing to attribute the choice to the A'-Disjointness Principle, if one could claim that the target of relativization is in the subject position of the embedded clause, although that target is not a genuine subject.

However, such a claim cannot be motivated independently, since non-subjects in such impersonal constructions do not exhibit subjecthood characteristics otherwise:

(46)   pro$_{expl}$ otobüs-e bu durak-**lar**-da   bin -il -ir (*-**ler**)
                     bus -Dat. this stop-**pl**.-Loc.   board-Pass.-Aor.-**3.pl.**
       'One boards the bus at these stops'

Agreement facts illustrate only one type of subjecthood behavior; the locative object does not have other subject properties, either (e.g. undergoing ECM, ability of being controlled etc.).

Similar facts also hold for the dative object; in other words, although the dative object does not behave like a subject, its relativization "triggers" the so-called subject participle morphology, rather than the unmarked object-participle morphology.

We know that subjects agree in the features of person and number with the predicate. While, in the case of third person plural subjects, the predicate may lack the

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19   Another type of relative clause where the target of relativization is a non-subject, yet where the standard dialect requires the subject participle (rather than the so-called object participle with its agreement morpheme attached) is found with non-specific subjects. Such subjects do not occupy the canonical subject position, i.e. Spec/IP, but rather must immediately precede the verb (thus sharing a word-order property with non-specific direct objects as well as with any type of focussed constituent). The canonical position of the subject, i.e. Spec/IP, is therefore occupied by an expletive **pro**, just as it is in impersonal passive constructions. Therefore, the discussion in the text that centers around relativization out of impersonal passives is also applicable to relativizations out of clauses with non-specific subjects. I will therefore not discuss the latter type of construction separately.

plurality marker, it is certainly allowed to have it. However, in examples like (46), the predicate is not allowed to agree with the third person plural locative constituent, i.e. the constituent which corresponds to the target of relativization in the previous examples. This shows that the locative constituent in such impersonal passive constructions is not the subject. If so, the target of relativization in the corresponding relative clauses is not a subject, either. In turn, if that target, i.e. the variable, is not a subject in such a relative clause constructed with an impersonal passive clause, that target is not **pro**, and hence the A'-Disjointness Condition should not be evoked.

As a side issue, we should also address the question of how the pro_{expl} in such impersonal constructions is licensed. While interesting in its own right, this question is of interest for our discussion, as well: if the subject position is occupied by a pro_{expl}, then the oblique objects in an impersonal construction cannot occupy the subject position.

In order to address the question of how licensing of empty expletive subjects is carried out in impersonal constructions, we have to look at embedded contexts, since the "dummy", non-alternating agreement morpheme for third person singular expletives is null in the verbal agreement paradigm–and it is that paradigm that we find in root clauses, while the nominal paradigm (found with nominalized subordinate clauses) does have an overt morpheme for third person singular subjects.

The next example gives us a clue in the right direction: we find a third person singular agreement morpheme as part of the embedded clause, yet there is no subject "linked" to it. If we want to say that morphology is syntax-driven, and that the occurrence of morphemes must be motivated, we are led to the claim that such agreement morphemes are there to license a phonologically empty subject, i.e. **pro**. Since that **pro** is obviously non-referential, it acts as an expletive element, i.e. it has the same function that an overt expletive like "it" or "there" in English and "es" in German has.

(47)   [pro_{expl} otobüs-e bu durak-ta   bin -il -diğ -in] -i
                 bus -Dat. this stop-Loc. board-Pass.-FNom.-**3.sg.**-Acc.
bil -iyor -um
know-PrProg-1.sg.
    'I know that one boards the bus at this stop'

The next examples give further motivation for identifying the (empty) subject of a

Branch Condition holds independently of the A'-Disjointness Condition. Although the conclusion that these two conditions are independent of each other complicate the grammar, there is another fact that backs up this result: the fact that all speakers agree on the "correct" choice of participles in simple relative clauses, while there appear to be dialect splits with respect to "complex" relativization out of larger subjects. We can capture the fact that such splits exist by positiong that the A'-Disjointness Condition holds for all speakers, while the (modified) Left Branch Condition holds only for the non-permissive, "standard" dialect.

Having reached these main conclusions, I now turn to additional observations regarding Turkish relative clauses.

IV.   Other relativization facts out of sentential subjects:

It appears that, in order to allow for extraction out of a larger subject, that larger subject must itself be headed by AGR to allow extraction; in other words, while a larger subject which is co-indexed with (*strong*)AGR is an island for both syntactic and LF-extraction, it is also an island if it is not itself headed by AGR:

(40)   [PRO   yazın   deniz-de yüz -mek] güzel-dir
                summers sea   -Loc. swim-Inf. nice -is
     'It is nice to swim in the sea at summertime'

(41)   *[[PRO yazın e_i yüz -mek]   güzel ol-an] $deniz_i$
                summers ·   swim-Inf.   nice be-SPart. sea
Intended reading: 'The sea which it is nice to swim in at summertime'[18]

Such extractions are not possible with the "Object participle", either:

(42)   *[[PRO yazın e_i yüz -mc]-nin   güzel ol-duğ]   -u $deniz_i$
                summers   swim-Inf. -Gen. nice be-OPart. -3.sg.   sea
Intended reading: 'The sea which it is nice to swim in at summertime'

(42) can be explained by the "modified Left Branch Condition", since the sentential subject is co-indexed with AGR, but (41) cannot. In (41), the CP appears to have a Spec which cannot host an operator (or, in a Kayne-type derivation, the raised head), unless it is itself governed by a proper governor (e.g. V). This last modification is needed, because it is possible to extract out of infinitival clauses which are not

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[18]   The initial observation that sentential subjects in Turkish are islands when they are infinitivals
        (and thus are not headed by AGR) is made in Sezer (1986).

sentential subjects, but rather sentential non-subjects:

(43) [Hasan-ın$_j$ geçen yaz [PRO$_j$ e$_i$ git-meğ]-e başla-dığ] -ı ada$_i$
Hasan-Gen. last summer go-Inf.-Dat. begin-OPart.-3.sg. island
'The island which Hasan began going to last summer'

I would like to suggest the following account of these facts: After head-to-head raising, the CP is headed by AGR. Where the embedded clause is an infinitival, that AGR will be null, and thus deficient. As a result, the Spec of the infinitival is deficient (and can host only PRO); after the movement of AGR to C, the Spec of the CP will be deficient, as well, and will not be able to host an operator (which, in a Kayne-type of derivation, will be the head of the relative clause). It is this last type of deficiency which we see at work in the examples of this section.

When a CP which is "deficient" in this sense is governed by a theta-marker, such as a verb, the deficiency is somehow remedied. As a result, infinitival clauses which are not subjects in the higher clause *can* serve as hosts of a target in a relative clause.

Note that this last observation is reminiscent of certain facts in European Portuguese, described in Raposo (1987), insofar as we have a head position here which is potentially able to perform a licensing function (here, an operator would be licensed, while in the Portuguese constructions, a **pro** is–or is not–licensed by AGR), but where this potential is made possible only when the licenser is itself governed.

V. Further facts about choice of morpheme in relative clauses:

As has been noticed in the literature (e.g. Underhill 1972, Hankamer & Knecht 1976), extracting non-subjects out of clauses with (presumably) expletive **pro**-subjects requires the "Subject Participle":

(44) [pro$_{expl}$ e$_i$ otobüs-e bin -il -en] durak$_i$
bus -Dat. board-Pass.-SPart. stop
'The stop where one boards the bus'

(45) *[pro$_{expl}$ e$_i$ otobüs-e bin -il -diğ -i] durak$_i$
bus -Dat. board-Pass.-OPart. -3.sg. stop
Intended reading: The same as in the previous example

Another area where similar facts seem to hold with respect to in-situ WH-questions:

In Turkish, WH-questions are "in-situ", in the sense that the WH-elements do not move to a designated clause-initial position, but rather can stay where they originate. However, there *is* a preferred position where WH-elements or phrases occur; this is the pre-verbal position, where focused elements as well as non-specific subjects and objects are found, as well. Given that this position is not obligatory for WH-elements, and given that movement to that position does not have the properties that WH-movement to Spec/CP has, I shall continue to view Turkish WH-questions as in-situ. However, I shall assume, in accordance with much current literature (e.g. Huang 1982) that such in-situ WH-elements or WH-constituents raise at the level of L(ogical) F(orm), landing in Spec/CP or adjoining to CP, thus having scope over the IP.

In the next examples, we have illustrations of simple WH-questions. While the best versions are those with a constant, non-alternating "dummy" or weak third person singular agreement, it is also possible to have full, "genuine" agreement. Now note that all WH-elements or WH-phrases in the next three examples are subjects. After movement at LF, the trace left behind in those instances where the domain is headed by strong agreement element would be a variable which is, at the same time, **pro**: it is licensed and identified by the strong AGR, and given (17), not only *can* it be **pro**, but it *must* be **pro**. This situation should violate the A'-Disjointness Condition (cf. 15), but apparently it does not.

(33)   Ankara-ya   hangi öğrenci-ler gid-ecek (-ler)?
          Ankara-Dat. which student-pl. go-Fut. (-3.pl.)
          'Which students will go to Ankara?'

(34)   Ankara-ya   kim-ler gid-ecek (??-ler)?
          Ankara-Dat. who-pl. go-Fut. (-3.pl.)
          'Who will go to Ankara?'

(35)   Ankara-ya   hangi-miz gid-ecek (?-eceğ-iz)?
          Ankara-Dat. which-1.pl. go-Fut. (-Fut.-1.pl.)
          'Which one of us will go to Ankara?'

We conclude that the A'-Disjointness Condition does not hold at LF(=after Spell-Out). This claim is also made in Ouhalla (1993); however, the suggestion is made there that this might be due to the possibility that AGR features might get erased at that level.

Note, however, that Ouhalla's suggested explanation for why (15) does not hold at LF cannot be right, as the following two examples illustrate, where LF-movement of WH-constituents has been attempted out of domains headed by strong agreement:

(36)*   [Ankara-ya   hangi öğrenci-ler-in   gid-ecek **-lerin**]-i   herkes -e
             Ankara-Dat. which student-pl.-Gen.   go-Fut. **-3.pl.**-Acc.   everybody
-Dat.
anlat-tı-n?
tell-Past-2.sg.
Intended reading: 'Which students did you tell everybody will go to Ankara?'

(37)*   [Ankara-ya   hangi -miz-in   gid-eceğ **-imiz**]-i   herkes -e
             Ankara-Dat. which -1.pl.-Gen.   go -Fut. **-1.pl.**-Acc.   everybody-
Dat.
anlat -tı   -n?
tell   -Past   -2.sg.
Intended reading: 'Which one of us did you tell everybody will go to Ankara?'

Here, LF-movement of the WH-elements/WH-phrases is markedly worse than either the same type of movement when applied out of a domain headed by *weak* agreement (as illustrated by the next two examples), *or* the same type of movement when applied out of a domain headed by *strong* agreement in simple questions, as illustrated previously in the three examples preceding the two last ones, i.e. in (33)-(36):

(38)   [Ankara-ya   hangi öğrenci-ler-in   gid-eceğ **-in**]-i   herkes-e
            Ankara-Dat. which student-pl.-Gen. go-Fut. **-3.sg.**-Acc. everybody-Dat.
anlat-tı-n?
tell-Past-2.sg.
    'Which students did you tell everybody will go to Ankara?'

(39)   [Ankara-ya   hangi -miz-in   gid-eceğ **-in**]-i   herkes-e
            Ankara-Dat. which -1.pl.-Gen. go-Fut. **-3.sg.**-Acc. everybody-Dat.
anlat-tı-n?
tell-Past-2.sg.
    'Which one of us did you tell everybody will go to Ankara?'

We conclude, then, that the Left Branch "Effect" does appear to hold at LF/after Spell-Out for extractions out of projections of strong AGR. If so, two further conclusions follow: 1. AGR features are not erased at LF; 2. the modified Left

construction with a third person singular agreement marker as an expletive **pro**, as opposed to a PRO, which is the subject of an infinitival clause, where the subordinate predicate has no agreement at all:

(48)	[pro	bu	havuz-da	balık ol-ma	-sı}	ne	güzel!
	this pool-Dat.	fish	be-Nom.-3.sg.	what nice
'How nice it is that there are fish in this pool!'

(49)	[PRO	bu havuz-da	balık ol-mak]	ne	güzel!
	this pool-Dat.	fish	be-Inf.	what nice
'How nice it is to be a fish in this pool!'

These two examples appear very similar at first glance; phonologically, the only difference between them is the agreement morpheme which is contained in (48) and not in (49); in the latter example, there is the last segment, /k/, of the infinitival morpheme, which, in turn, is lacking in (48).

The meanings of these examples are quite different, however; the subject of (48) is understood as an expletive (and thus as lacking a thematic role), while the subject of (49) does have a thematic role (presumably that of experiencer). These properties are exactly those expected from the respective empty subjects we posited here on independent grounds: **pro** can function as an expletive, and it is licensed by an agreement element; moreover, as stipulated by the principle in (17), an empty element licensed by AGR *must* be **pro**. On the other hand, PRO can never be an expletive (cf. Safir 1985a., b. and his EmEx condition, which claims that a phonologically empty expletive element must be governed, thus ruling out PRO as a potential expletive), nor can PRO be governed (cf. Chomsky 1981's PRO Theorem), thus making its co-occurrence with an AGR element impossible.

If the principle in (17) is correct for expletive **pro** *as well as for referential* **pro**, as these examples have argued, i.e. if an empty subject licensed by AGR *must* be **pro**, then the subject in impersonal passives must be **pro** (albeit an instance of expletive **pro**); it follows that the subject in such a construction cannot be one of the overt oblique objects.

This conclusion appears to make it impossible to explain the choice of participle in exactly the same way we did for "subject relativization" in simple relative clauses, given that the variable is not in subject position. I would like to claim here that, despite appearances, the variable nevertheless ends up in subject position, in a sense. While in "regular" impersonal passive constructions, the subject position is

occupied by an expletive **pro**, I would like to claim that in related relative clauses, the variable assigns its index.to the subject position, so as to "cover" the expletive. This movement would be akin to the syntactic process referred to as *expletive replacement* in Chomsky (1986) and is motivated there by a Principle of Full Interpretation (PFI). It is proposed that LF should contain only elements that contribute to the semantic interpretation. Since expletives do not contribute to semantic interpretation, they are not legitimate at LF. Therefore, it is proposed in Chomsky (1986) to replace the expletive subject (in existential constructions) by its "associate", i.e. the post-verbal DP in English.

Coming back to our present concern, however, it is not clear that the account just outlined carries over in a straightforward way. One problem consists of the fact that there is no clear-cut associate of the expletive subject in an impersonal passive. The second problem is that the A'-Disjointness Condition does not hold at LF, as we argued earlier. Therefore, the assignment of the variable's index to the expletive **pro**-subject must take place before LF. As a consequence of these considerations, I would like to propose that there is a principle which dictates that expletives must be replaced as early as possible, i.e. at LF at the latest, but if possible even before LF. Let us call this the General Expletive Replacement Principle (of which expletive relacement at LF would only by a special instance).

Moving an overt constituent to Spec/IP to satisfy this principle would have to obey Procrastination, i.e. it would have to "wait" until LF (or until after Spell-Out). However, if there is an indexed element in the IP, assignment of its index to the expletive subject would be more economical than moving an element and would not need to obey Procrastinate; therefore, when there is an expletive subject in a relative clause, the index of a non-subject variable would be assigned to the subject, thus giving rise to a **pro** subject which bears the index of the operator (or head) of the relative clause. This, in turn, would give rise to a violation of the A'-Disjointness Principle. In order to avoid this, the "Subject Participle" is chosen. Since there is no agreement element attached to that participle, the empty element in subject position cannot be **pro**, and thus the A'-Disjointness Principle is not violated. We thus have now an explanation for these additional instances of the (at first glance, unexpected) choice of the Subject Participle in instances where a *non*-subject is relativized.[20]

We have now reviewed some of the long-standing observations concerning Turkish

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[20] It appears that in permissive dialects, relativizing a non-subject out of constructions with non-specific subjects and out of impersonal passives gives rise to the "Object Participle" (cf. Zimmer 1987 and 1996). For these dialects, I would like to suggest that expletive replacement (or, rather, assignment of the variable's index to the expletive subject) does not take place, and that therefore no violation of the A'-Disjointness Condition arises.

relative clauses, discussed some problems having to do with the choice of the participles in these constructions, and have explained this choice via the connection between overt AGR and **pro** on the one hand and a generalized version of Binding Theory–more specifically, a generalized version of Condition B, the A'-Disjointness Condition–on the other hand. While this approach explains participle choice in simple relative clauses, its extension to other constructions is not obvious. We have claimed that such an extension is possible to constructions where relativizing a non-subject dictates the (surprising) choice of the Subject Participle, if we assume the existence of a process which assigns the variable's index to the expletive **pro** subject in such constructions. On the other hand, we also claimed that such an extension is not possible for other "surprising" occurrences of the subject participle, namely for constructions where *any* constituent is relativized out of a larger subject, i.e. out of a sentential subject or out of a possessive DP which is itself a subject. For those instances, we posited a modified version of the Left Branch Condition, claiming that a domain which forms the left branch of a construction headed by (strong) AGR forms an island. If that AGR is weak or not overt (as is the case with the Subject Participle), however, the Left Branch is not an island, thus being able to host the target of relativization.

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