AN ANALYSIS OF SUBORDINATE CLAUSES IN TURKISH

Ayşe Pamir Dietrich
Cornell University

1.0. This paper is concerned with the status of subordinate clauses and it will offer empirical support for Abney's (1987) claim that in the structure of the noun phrase the determiner is a head of the noun phrase.

In his analysis of English noun phrases, Abney proposes a functional category, namely DP (Determiner Phrase). According to this analysis, the main properties of functional categories are that they are generally clitics of affixes; they are stressless; they allow only one complement; they lack descriptive content. He focuses on the functional element D which is the head of the noun phrase. His DP hypothesis also introduces parallels between the structure of noun phrases and the structure of gerunds in terms of their Genitive case assignment. In light of this analysis I will concentrate on the claim that gerunds are noun phrases, rather than sentences. In this paper, I will deal with three verbal complements in Turkish, namely, Action Nominals (verbal nouns), Factive Nominals (nominalization) and Direct Complements.[1]

1.1. ACTION NOMINALS (VERBAL NOUNS)

Action Nominals are constructed by adding $-mA$[2] to the verbal stem. The subject of the clause, the possessor, takes the Genitive case and a possessive suffix is added to the verbal noun.

(1) Ali-nin   gel-me-si
    Ali-Gen. come-Ger-3sg-Poss.
    'Ali's coming'

Action Nominals do not indicate tense. They usually appear as (a) the object of verbs and (b) the subject of adjectives that deal with actions.

(2) a - Ali-nin   gel-me-si-ni   iste-di-m.
        Ali-Gen. come-Ger-3sg Poss-Acc want-past-1sg
        'I want Ali to come.'

---

[1] In this study I will adopt Kornfilt's terminology.

[2] -Iş, as in (i), is another type of Action Nominal marker with which we will not be concerned. Refer to Kural (1993) for a discussion of this suffix.

(i) Ali-nin   gül-üş-ü
     Ali-Gen. laugh-Ger-3sg.Poss.
     'Ali's laughing'

      b - Ali-nin   ev   al-ma-sı   zor.
           Ali-Gen house buy-Ger-3sg.Poss.Nom. difficult
           'Ali's buying a house is difficult.'

An object of a transitive V (verb) is assigned Accusative case in Turkish. In (2a) above given sentence *Ali'nin gelmesi* is the DO (direct object) of the V *istemek*.

Subject always appears in Nominative case in Turkish sentences. In (2b) *Ali'nin gelmesi* is the subject of the sentence which is marked Nominative.

In Action Nominals the same word order is kept as in the corresponding simple sentences.

    (3) a - Ali geldi.
           S   V
         'Ali came.'
      b - Ali'nin gelmesi
           S   V
         'Ali's coming'
    (4) a - Ali ev aldı.
           S   O   V
         'Ali bought a house.'
      b - Ali'nin ev alması
           S   O   V
         'Ali's buying a house'

1.2. FACTIVE NOMINALS (NOMINALIZATION)

Factive Nominals, like Action Nominals, behave like Noun Phrases. They can be (a) the object of the main verbs (factives) and (b) the subject of the adjectives that deal with facts.

    (5) a - Ali-nin   gel-diğ-i-ni   duy-du-m.
           Ali-Gen come-Ger-3sg.Poss-Acc hear-past-1sg
           'I heard Ali's coming.'
      b - Ali-nin   gel-diğ-i   doğru.
           Ali-Gen come-Ger-3sg.Poss true
           'That Ali came is true.'

Factive Nominals cannot exhibit all tenses. They only distinguish between future and non-future actions. The suffix *-AcAk* is used for the future; the suffix *-dIk* is used in all other cases.

    (6) Ali-nin   otel-de   kal-dığ[1]-ı-nı   bil-iyor-um.
       Ali-Gen hotel-Loc stay-Ger-3sg.Poss-Acc know-prog-1sg.
       'I know that Ali is staying in a hotel.'
                 or 'Ali stayed in a hotel.'
    (7) Ali-nin   otel-de   kal-acağ-ı-nı   bil-iyor-um.
       Ali-Gen hotel-Loc stay-fut.Ger-3sg.Poss-Acc know-prog-1sg
       'I know that Ali will stay in a hotel.'

---

[1] In Turkish final *-k* becomes *-ğ* when it is followed by a vowel.

Like Action Nominals the same word order is kept in the Factive Nominals as shown in the corresponding simple sentences.

(8) a - Ali geldi.
  S   V
  'Ali came.'
 b - Ali'nin geldiğini
  S   V
  'Ali's coming'

The difference between the Action Nominals and the Factive Nominals is that Action Nominals are dependent on the tense of the higher clause.

(9) a - Ali-nin gel-me-si-ni   iste-di-m.
             3sg.Poss-Acc
  'I wanted Ali to come.'
 b - Ali-nin   gel-diğ-i-ni   duy-du-m.
             past-3sg.Poss-Acc
  'I heard that Ali came.'
 c - Ali-nin   gel-eceğ-i-ni   duy-du-m.
             fut-3sg.Poss-Acc
  'I heard that Ali will come.'

In (9a) the Deverbal Noun does not have a tense. The suffix *-mA* is, here, a gerund suffix which is timeless, whereas the *-dIk* and *-AcAk* in (9b,c) are gerund markers which describe a present or past action in (b) and a future action in (c).

1.3. DIRECT COMPLEMENTS

Contrary to gerundive constructions, Direct Complements behave like simple sentences as illustrated in the following examples:

(10) a - SIMPLE SENTENCE
   Ben kitab-ı   oku-du-m.
   I   book-Acc read-past-1sg
   'I read the book.'
 b - DIRECT COMPLEMENT
   Ali [(ben) kitab-ı   oku-du-m]   san-ıyor.
   Ali   I   book-Acc read-past-1sg think-prog-3sg
   'Ali thinks I read the book.'

In (10a) the tense marker is *-dI*. The same tense marker is used in the embedded sentences in (10b). Both the subject of the sentence in (10a) and the embedded sentence in (10b) are assigned Nom. case and the agreement marker on the verb in (10a) is used also on the embedded verb in (11b). As noticed, unlike gerundives Direct Complements are not assigned case.

(11) *Ali [(ben) kitab-ı   oku-du-m-u]   san-ıyor.
   Ali   I   book-Acc read-past-1sg-Acc think-prog-3sg

Also, unlike gerundives, Direct Complements are not restricted to specific persons[1] and tenses.

(12) a - Ali [(ben) kitab-ı oku-du-m]   san-ıyor.
             1sg   past-1sg

    b - Ali [(biz) kitab-ı oku-ru-z]   san-ıyor.
             1pl   Aorist-1pl

    c - Ali [(sen) kitab-ı oku-yacak-sın]   san-ıyor.
             2sg   future-2sg

After this brief discussion we shall first observe the Opacity Condition on Direct Complements and then we shall determine what the finiteness must be in Turkish.

1.4.   OPACITY CONDITION ON DIRECT COMPLEMENTS

In their article "Finiteness and Boundedness" (1981) George and Kornfilt point out that although Direct Complements are tensed, they do not show opacity. However, according to Chomsky's *Tensed S-Condition* they must be opaque.

(13) TENSED S-CONDITION

     No rule can involve X, Y in the structure ...X... [α...Y...]...

     where α is a tensed sentence.

Let us observe the following tensed sentence which does not show opacity.

(14) Biz$_i$ birbir-imiz - i$_i$ viski-yi   iç-ti
     we   each other -our-Acc   Acc   drink-past (no Agr)
     san- ıyor-uz
     believe-pres-1pl.
     'We believe each other to have drunk the whisky'

                              (George & Kornfilt 1981)

According to Principle A of Binding Theory (Chomsky 1981) an anaphor must be bound in its Governing Category (GC) where GC is the minimal domain containing the reciprocal, its governor and an accessible subject/SUBJECT. In this sentence there is no accessible SUBJECT for the subject of the lower clause. The higher clause provides an accessible SUBJECT for the reciprocal. Moreover, in the higher clause the verb is the governor of the reciprocal *birbir-* and it is bound in its GC which is the higher clause. Thus, the grammaticality of the sentence.

In fact, opacity is created by the presence of Agreement (Agr) element as we shall see in the following Direct Complement construction.

(15) *Biz$_i$ birbir-imiz$_i$ viski-yi   iç-ti -k
     we   each other -our   Acc   drink-past-1pl
     san- ıyor-uz
     believe-pres-1pl.
     'We believe each other drank the whisky'

                              (George & Kornfilt 1981)

---

[1]   See section 1.6., part 2.

Dietrich

In (15) the embedded clause is tensed, but the sentence is opaque not because of the Tense, but because of the Agr element attached to the verb.

Consider the following sentences where the reflexive *kendi* is used as the subject of the embedded clause. Notice that the sentence in (17) is also opaque because of Agr.

(16) Ali kendin-i kitab-ı oku-du san-ıyor.
Ali himself-Acc book-Acc read-past believe-prog-3sg
'Ali believes himself to have read the book.'

(17) *Aliᵢ kendiᵢ kitab-ı oku-du san-ıyor.
Ali himself-Acc book-Acc read-past-3sg believe-prog-3sg
'Ali believes himself to have read the book.'

Like the reciprocal *birbir-*, the reflexive *kendi* in a non-finite Direct Complement is bound in its GC. The finite form of the Direct Complement in (17) is the violation of Principle A, since the reflexive *kendi* is not bound in its GC.

1.5. FINITENESS AND NON-FINITENESS OF GERUNDS AND DIRECT COMPLEMENTS

George and Kornfilt point out that Direct Complements and Gerunds share one similarity: they both can be finite and non-finite.[1]

Finiteness is defined as Agreement, rather than tense in Turkish. Thus, for example in (17) the embedded sentence has an Agreement marker, which is 3sg, hence it is finite.

In the following we shall see finite and non-finite forms of Action Nominals and Direct Complements.

FINITE (ACTION NOMINALS)
(18) (Ben) Ali-nin bu kitab-ı oku-ma-sı-nı iste-di-m.
I Ali-Gen this book-Acc read-Ger-3sg.Poss-Acc want-past-1sg
'I wanted Ali to read this book.'

NON-FINITE (ACTION NOMINALS)[2]
(19) (Ben) bu kitab-ı oku-ma-yı iste-di-m.
I this book-Acc read-Ger-Acc want-past-1sg
'I wanted to read this book.'

FINITE (DIRECT COMPLEMENTS)
(20) Ali (ben) kitab-ı oku-du-m san-ıyor.
Ali I book-Acc read-past-1sg believe-prog-3sg
'Ali believes I read the book.'

---

[1] It would be appropriate, however, if we can be more specific about the type of gerunds George and Kornfilt are dealing with. They are Action Nominals, not Factive Nominals, because Factive Nominals can only have finite form.

[2] However, this happens only when subjects of the main and the embeddd clauses are the same.

Dilbilim Araştırmaları 1995

NON-FINITE (DIRECT COMPLEMENTS)
(21) a- Ali ben-i   kitab-ı   oku-du   san-ıyor.
        Ali I-Acc book-Acc read-past believe-prog-3sg
        'Ali believes me to have read the book.'
     b- *Ali ben   kitab-ı   oku-du   san-ıyor.
        Ali I-nom book-Acc read-past believe-prog-3sg

As noticed, in (18) when the Agr marker is present the sentence is finite, the subject of the Action Nominal is assigned Genitive case by Agr. Agr marker is deleted when the main and the embedded subjects are the same, as in (19). The sentence in (20) is finite because there is an Agr marker on the verb. Here the subject is marked Nominative case when Agr marker is present. It is, however, Accusative case marked when the Agr is absent as in (21). The Accusative case, here, is assigned by the transitive verb *sanmak*. This case is referred to as Exceptional Case Marking (ECM) in the literature.[1]

In the following section we will now move to the main area of concern, the claim that gerunds share common traits with noun phrases.

1.6. SIMILARITIES BETWEEN POSSESSIVE NOUN PHRASES AND GERUNDS

1. In possessive noun phrases and gerunds head nouns exhibit agreement with the possessor and this possessor can be dropped.
        (22) (Ben-im)   okul-um   (23) (Biz-im)   ev-imiz
              1sg-Gen school-1s   1pl-Gen house-1pl
              'My school'   'Our house'
FACTIVE NOMINAL
        (24) (Ben-im)   sen-i   gör-düğ-üm-ü   bil-iyor.
              1sg-Gen you-Acc see-Ger-1sg-Acc know-prog-3sg
              'He knows that I saw you.'
ACTION NOMINAL
        (25) (Ben-im)   süt   al-ma-m-ı   ist-iyor.
              1sg-Gen milk buy-Ger-1sg-Acc want-prog-3sg
              'He wants me to buy milk.'

2. Both in possessive noun phrases and gerunds, in those cases in which the 3rd person plural subject is phonologically realized, the number agreement of the head is optional.
POSSESSIVE NOUN PHRASES
        (26) a - Öğrenci-ler-in   kitap-lar-ı
                 Student-pl-Gen book-3pl-Poss
              or

---

[1] For example in the sentence *John believes [IP him to be a liar].* the transitive verb *believe* takes an IP (= S) as a complement. It governs into the maximal projection IP and assigns case to its subject NP.

    b - Öğrenci-ler-in   kitab-ı
        Student-pl-Gen   book-3sg.Poss
        'The students' book'

ACTION NOMINALS

(27) a - Öğrenci-ler-in   kitab-ı   oku-ma-lar-ı-na   sevin-di-m.
       Student-pl-Gen   book-Acc read-Ger-3pl-Poss-Dat happy-past-1sg
       or
    b - Öğrenci-ler-in   kitab-ı   oku-ma-sı-na   sevin-di-m.
       Student-pl-Gen   book-Acc read-Ger-3sg.Poss-Dat happy-past-1sg
       'I am happy that the students read the book.'

FACTIVE NOMINALS

(28) a - Öğrenci-ler-in   kitab-ı   oku-duk-lar-ı-na   sevin-di-m.
       Student-pl-Gen   book-Acc read-Ger-3pl-poss-Dat happy-past-1sg
       or
    b - Öğrenci-ler-in   kitab-ı   oku-duğ-u-na   sevin-di-m.
       Student-pl-Gen   book-Acc read-Ger-3sg.poss-Dat happy-past-1sg
       'I am happy that the students read the book.'

On the other hand, when the plural subject is not phonologically realized, 3rd person plural agreement marker is obligatory.

(29) a - Ø kitab-ı oku-duk-lar-ı-na sevin-di-m.
    b - Ø kitab-ı oku-ma-lar-ı-na sevin-di-m.
       'I am happy that they read the book.'
    c - *Ø kitab-ı oku-ma-sı-na sevin-di-m.
       'I am happy that they read the book.'

The sentence in (29) c is ungrammatical in the intended reading, because it does not indicate plurality.

    3. In possessive noun phrases and gerundives Genitive case assignment to the subject comes from Agr under government. However, there is another type of noun phrase (compound) which has the same structure as possessive noun phrases, except that the subject of the noun phrase does not carry genitive case. The difference between the possessive noun phrases and compounds is that the former is referential and the latter is non-referential. In compounds Agr is missing and therefore Genitive cannot be realized on the subject.

(30) a - Öğrenci-nin   kitab-ı
       Student-Gen book-3sg.Poss
       'The student's book'
    b - Öğrenci kitab-ı
       Student book-3sg
       'The student book'

George and Kornfilt argue that the possessive *-(s)I* in (30a) is not an agreement marker in possessive noun phrases, but is just a compound marker as in (30b). They came to this conclusion by applying the reciprocal test to the lexical noun phrases.

(31) (Biz)ᵢ birbir-imizⱼ-in   tabla-sı-nı   yıka-dı-k.
      We   each other-1pl-Gen ashtray-3sg.Poss-Acc wash-past-1pl
      'We washed each other's ashtray.'

(George and Kornfilt, 1981)

In (31) although there is an Agreement marker the reciprocal *birbir-* is bound by the subject of the matrix clause, and the sentence is grammatical. Thus, they claim that lexical noun phrases and gerundives are identical in their morphological structure, yet they differ in their syntactic properties in the sense that the *-(s)I* is an Agreement marker in gerundives, but a compound marker in lexical noun phrases .

Now let us consider the following gerundive whose subject is a reciprocal.

(32) (Biz)ᵢ birbir-imizⱼ-in   kitab-ı   oku-duğ-u-nu   san-ıyor-uz.
      We   each other-1pl-Gen book-Acc read-Ger-3sg-Acc think-prog-1pl
      'We think that each other read the book.'

As we have noticed, the reciprocal in gerundive is bound with the subject of the higher clause like the reciprocal in noun phrase even if the lower clause has an Agr marker on the verb. Whenever a reciprocal is a possessor the Agr element does not show agreement with its person and number as we can see in (31) and (32). It does not behave as an accessible SUBJECT to the reciprocal, therefore it is weak.[1] However, it still assigns Genitive case. When the Agr behaves as a strong accessible SUBJECT reciprocal is ungrammatical..

(33) a - *(Biz)ᵢ birbir-imizⱼ-in   tabla-mız-ı   yıka-dı-k.
          We   each other-1pl-Gen ashtray-1pl-Acc wash-past-1pl
      b - *(Biz)ᵢ birbir-imizⱼ-in   kitab-ı   oku-duğ-umuz-u   san-ıyor-uz.
          We   each other-1pl-Gen book-Acc read-Ger-1pl-Acc think-prog-1pl

One might argue that since the *-(s)I* is not an Agreement marker in possessive noun phrases, it may also not be an Agreement marker in gerunds. Based on the previously presented facts I will claim that the *-(s)I* is an Agreement marker in both possessive noun phrases and gerunds. Possessive noun phrases and gerunds both share the same morphology and the same syntactic structure, and the *-(s)I* in compounds is realized as a compounding marker.[2] The problem here is that Principle A says nothing about the case we are observing.

1.7. PROPOSED STRUCTURE OF POSSESSIVE NOUN PHRASES AND GERUNDS IN TURKISH

In Abney's analysis of English noun phrases, DP is considered as a functional category.[3] The specifier position of the DP is the position in which Genitive case is assigned to the possessor. Abney's proposed structure for the English noun phrases is shown in (34):

---

[1] See also Kornfilt (1987).

[2] For a similar argument see S. Özsoy, (1988)

[3] Under DP analysis, the noun phrase is DP, not NP

Dietrich

(34)

```
              DP
      DP          D´
    John's          D    NP
               Agr   book
```
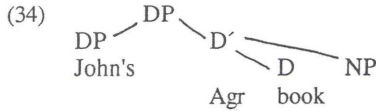
-s is taken as a case marker. It is base-generated as a complement of the noun *John*; it receives the internal θ-role from that noun; and it is raised to SpecD to receive Genitive case from Agr.

Turkish possessive noun phrases differ from their English counterparts in that they carry an overt Agr element which assigns Genitive case to the possessor. It is also a governor with phi-features. Following Abney's analysis I will adopt the following structure for possessive noun phrases in Turkish.

(35) a- Ali-nin ev-i.

'Ali's house.'

b-

```
                DP
      DP          D´
    Ali'nin           D    NP
               Agr   ev
               -(s)i
```
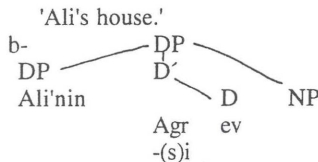
Here, the overt Agr element *-(s)I* assigns Genitive case to the possessor. The *-nin* is a case marker, a functional element. It inherits the descriptive content and referential index of its complement. It selects an NP[1], here *Ali*.

Turkish gerunds, with regard to their internal structure, look like noun phrases in the sense that the subject of gerunds carries Genitive case like the subject of possessive noun phrases. The gerunds differ from noun phrases in that the Agr element selects a VP instead of an NP.

(36) a- Ali-nin gel-diğ-i-ni bil-iyor-um.

'I know that Ali came.'

b-

```
                DP
      DP          D´
    Ali'nin           D    VP
               -i    gel-
```
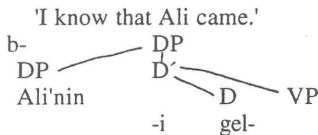
As noted, the gerund is constructed by adding the nominalizer *-dIk* to the verb stem. Naturally, one would expect *-dIk* base-generated within VP as in (37).
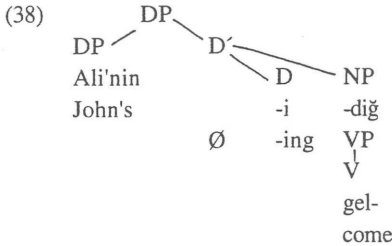
(37)

```
              *DP
      DP          D´
    Ali'nin           D    VP
               -i    gel-diğ
```
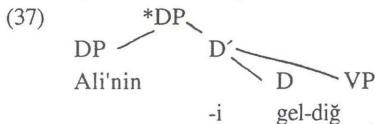
However, the structure shown above would violate the DP phrase structure since D selects an NP, rather than a VP.[2] Then, what could be the scope of the

---

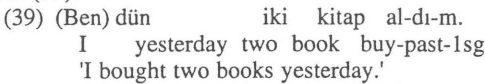[1] Here NP means the maximal projection (c-projection) of N.

[2] See (36).

nominalizer *-dIk*? The *-dIk* is not an independent syntactic head. It affixes to a verbal projection (VP), then it converts it into a nominal category (DP) by transferring its [+N] feature into the VP. I will adopt Abney's proposed structure for gerunds in Turkish and Poss-ing in English.

(38)

```
              DP
        DP          D´
      Ali'nin          D    NP
      John's          -i    -diğ
                   Ø    -ing  VP
                              |
                              V
                             gel-
                             come
```
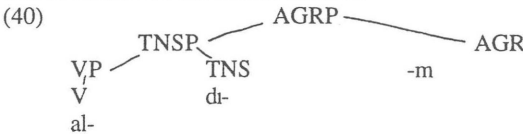
In this structure *Ali* is Genitive case assigned by the nominal Agr *-(s)I*, and the *-dIk* affixes to VP without violating DP's selectional property.

1.8. IS *-DIK* A TENSE MARKER?

To answer this question let us first take a closer look at the internal structure of verbs in Turkish. Turkish is a head-final language. In a simple sentence Agr is always base-generated outside Tense (Tns) and Tns must follow the lexical verb as shown in (39).
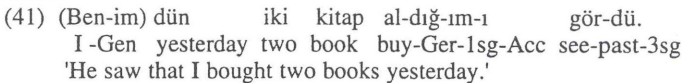
(39) (Ben) dün   iki   kitap al-dı-m.
        I   yesterday two book   buy-past-1sg
        'I bought two books yesterday.'

The derivation of *aldım* is as follows:

(40)

```
                      AGRP
           TNSP                    AGR
      VP        TNS         -m
      V         dı-
     al-
```

In (40) the *-dI* is a tense marker, and it appears under Tns node. The *-m* is an agreement marker, and it is realized under Agr node.

Gerundive constructions keep the same order as corresponding simple sentences as can be seen in (41). Does this indicate that *-dIk* in gerundives is also a tense marker?

(41) (Ben-im) dün   iki   kitap al-dığ-ım-ı   gör-dü.
        I -Gen yesterday two book   buy-Ger-1sg-Acc see-past-3sg
        'He saw that I bought two books yesterday.'

It seems that the *-dIk* in gerunds is ambiguous in contrast to the past tense marker *-dI* in simple sentences in that it can indicate either present or past actions. It also differs from the *-dI* in simple sentences in that it carries [+N] feature, and it appears under NP node.

Dietrich

Kural (1993) states that the morpheme *-dIk* [1] functions only as a past tense marker. According to him, the morpheme *-dIk* is a tense marker, and it is composed of the matrix past *-dI* and an additional *-k* which belong to the C° category. This *-k* occurs with the infinitival *-mA* in PRO control, and the past tense *-dI* in subordinate context.

He proposes the following diagram for gerunds:

(42)

```
        AgrP
    Spec      Agr°
        CP
    Spec      C°
        TP
    Spec      T°
        VP
    Spec      V°
         ...
```
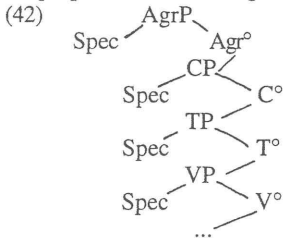
As Kural states, agreement is established under a specifier-head relationship. In his diagram the agreement marker appears outside the C° violating Head Movement Constraint (HMC) and Minimality Condition (MC) which are given in (43) and (44). [2]

(43) HEAD MOVEMENT CONSTRAINT (HMC)

Movement of a zero-level category β is restricted to the position of a head α that governs the maximal projection γ of β, where α θ-governs or L-marks γ if $\alpha \neq$ Comp. (Chomsky, 1986)

(44) MINIMALITY CONDITION (MC)

A antecedent governs B only if there is no C such that (i) C is a potential antecedent governor for B, and (ii) C c-commands B and does not c-command A.

(Rizzi, 1990)

Kural claims that Agr is an exception to HMC and MC, in other words, Agr is not an independent syntactic head in syntax; it is a syntactic feature, therefore, HMC and MC do not have to apply to it. Being a syntactic feature, Agr is picked

---

[1] Kural does not call *-dIk*, *-EcEk*, and *-mEk* constructions gerundives, rather he calls *-Iş* constructions gerundives. I will not deal with the *-Iş* constructions here. However, I do admit that like *-dIk*, *-EcEk* and *-mEk*, *-Iş* is another type of gerundive suffix in Turkish.

[2] Violation of minimality constraint gives rise to a violation of antecedent government which, in turn, gives rise to a violation of ECP. For example:
    (i) a - Why is John happy?
        b - *Why be John AGR/TNS happy?
        c - [CP why C(IP John [I′ AGR/TNS (VP be happy)])]
                (Ouhalla, 1990)
In the (i) b *is* is derived by V-movement directly to C, therefore the verb is not influenced. V-movement directly to C is not consistent with HMC and, consequently, with ECP.

up at VP or TP via feature percolation,[1] and from there it carried to C° by the verb through V-to-C movement.

(45)
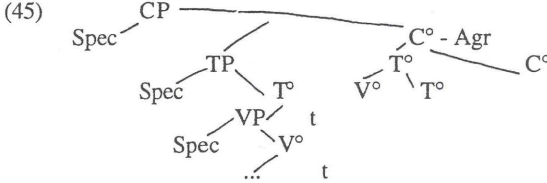
Thus, according to Kural, a verbal complex in Turkish consists of Verb+Tense+Complement, and the verb receives agreement features when it reaches the final head to form this complex. It appears that his analysis is presented to avoid the violation HMC and MC. While Kural's claim that Agr is just a syntactic feature merits further study, I side with Pollock (1989), Chomsky (1991) and Ouhalla's (1990) proposals that Agr is an independent category heading its own maximal projection. Thus I will maintain the claim that like Tns (Tense), Agr is a functional head c-selecting Tns. Like Tns, Agr as a function head does not take argument , that is, it lacks the ability to assign a thematic role. Functional category Agr also has phi-features (person, number) like Tns (past, future). Both Tns and Agr elements are base-generated under the I node and their m-selectional (morphological selectional) properties are satisfied subsequent to V movement to I.

One question that might be asked is "What, then, is the status of the morpheme *-AcAk*?"

As mentioned, the morpheme *-AcAk* in gerunds denotes future action Kural (1993) assumes that since the subordinate *-AcAk* has some future value it must be identical with the future tense morpheme in the matrix clauses.

Now consider the following sentences.

(46) a- *pro*   gid - ecek - ti - k..
          go   INFL past Agr 1pl.
   'We would have gone'

  b - *Ahmet [*pro* gid - ecek - ti [2] - miz] i   söyle - di..
    'Ahmet said that we would have gone'

                                            (Kennelly 1990)

If the *-AcAk* in (46b) is also the future tense marker, why, then, can it not appear with the past tense marker in the embedded sentence, as it appears in the matrix sentence (46a)[3]?

---

[1] A similar argument is also made by Kennelly (1990).

[2] In fact in (47b) we would expect the suffix *tIk* rather than the past tense marker *tI* , because, as mentioned, the suffix *tIk* is only used in embedded sentences. The matrix sentences and the embedded sentences in Turkish cannot have the same structure.

[3] Kural (1990) does not touch on this issue.

Kennelly (1990) answers this question by claiming that "inability of Tense to appear on an embedded verb where there is INFL is clear evidence that Tense and INFL cannot occur under a single XP" She argues that the future morpheme does not appear under Tns node, because it is not a tense marker, rather it is an aspectual marker, therefore it must appear under INFL node.

I agree with Kennelly that the *-AcAk* in (46b) is an aspectual marker, and the inability of the morpheme *-AcAk* to appear in embedded clauses with the morpheme *-dIk* is because the gerund marker *-dIk* cannot appear on the verb with the aspectual marker *-AcAk* in the embedded sentences. The gerund marker can only attach directly to the bare stem of the verb as in (41).

In the following section we shall present some evidence supporting the claim that Gerunds behave like possessive noun phrases, whereas Direct Complements act like simple sentences.

1.9. DIRECT COMPLEMENTS ARE SENTENCES - GERUNDS ARE NOUN PHRASES

Now we shall provide some evidence to the fact that Gerunds are noun phrases.

1. As mentioned before, Direct Complements cannot take case markers, while Gerunds can.

(47) a - GERUND
　　　　 Ali - nin　gel - dig - i - ni　　　　 bil - iyor - um.
　　　　Ali-Gen　come-Ger-3sg.Poss-Acc　know-prog-1sg
　　　　　　'I know that Ali came.'
　　b - DIRECT COMPLEMENT
　　　　　* Ali　gel-di-ni　　　　bil-iyor-um
　　　　Ali　come-past-Acc　know-prog-1sg
　　　　　　'I know Ali came.'
　　c - NOUN PHRASES
　　　　　Ali-nin　ses-i-ni　　　　duy-du-m.
　　　　Ali-Gen　voice-3sg.Poss-Acc　hear-past-1sg
　　　　　　'I heard Ali's voice.'

In (47a) and (47c) Accusative case marking is obligatory. The verb *believe* assigns Accusative case to its complement in (47a) and (47c), but not in (47b).

2. Direct Complements cannot be an object of postpositions.

(48) a - GERUND
　　　　　Ali-nin　okul-a　　　gid-ebil-me-si　　　 için　para　　lazım.
　　　　　Ali-Gen　school-Dat　go-able-Ger-3sg.Poss　for　money　necessary
　　　　　　'Money is necssary for Ali's being able to go to school.'
　　b - DIRECT COMPLEMENT
　　　　　*Ali okul-a　gid-ebil-eced　için　para　lazım.

c - NOUN PHRASE

Ali-nin okul-u için para lazım.

Ali-Gen school-Poss for money necessary

'For Ali's school money is necessary.'

3. Backgrounding of a Direct Complement is not possible. Application of backgrounding to the sentence in (49) is as follows:

(49) a - Bil-iyor-um Ali-nin gel-diğ-i-ni.

b - * Bil-iyor-um Ali gel-di.

Finally, gerunds can be a subject of a noun phrase.

(50) a - [Ali-nin geç kal-dığ-ı] konu-su tartış-ıl-dı.

Ali-Gen late to be-Ger-Poss issue-Comp discuss-pass-past

'The issue of Ali's being late was discussed.'

b - [Ali-nin cimriliğ-i] konu-su tartış-ıl-dı.

Ali-Gen stinginess-Poss issue-Comp discuss-pass-past

'The issue of Ali's stinginess was discussed.'

c - *[Ali-nin geç kal-dığ-ı] -nın konu-su tartış-ıl-dı.

d - *[Ali-nin cimriliğ-i] -nin konu-su tartış-ıl-dı.

The sentences in (50) behave like compound noun phrases. The noun phrase (gerund) cannot have Genitive case assigned because the *-(s)I* is not an Agreement marker in compounds.

1.10.   CONCLUSION

All the evidence we have given above show that Gerunds in Turkish are noun phrases, while Direct Complements are purely sentential. The embedded subject of the Gerunds is assigned Genitive case by the nominal Agr, as in noun phrases. The Agr is a functional element with some phi-features; it is the governor of the subject, hence it is the head of DP. An overt Agr element behaves as strong accessible SUBJECT, whereas a non-overt Agr element, which is weak, behaves as a weak accessible SUBJECT (for reciprocals). Finiteness is defined as Agreement in Turkish; the opacity is created by Agr, rather than by tense.

BIBLIOGRAPHY

Abney, S. (1987) "The English Noun Phrase in Its Sentential Aspect," Thesis, Indiana University.

Chomsky, N. (1973) "Conditions on Transformations," *A Festschrift for Morris Halle.* Eds. S. Anderson and P. Kiparsky. Holt, Rinehart and Winston, Inc., New York.

_____. (1986) *Barriers.* MIT Press, Cambridge, MA.

_____. (1991) "Some Notes on Economy of Derivation and Representation," *Principles and Parameters in Comparative Grammar.* MIT Press, Cambridge, MA.

George, M.I. and J. Kornfilt. (1981) "Finiteness and Boundedness in Turkish," *Binding and Filtering.* Ed. F. Henry. MIT Press, Cambridge, MA.

Dietrich

Kennelly, S.D. (1990) "Theta Government in Turkish," Talk presented at GLOW workshop, London.

Kornfilt, J. (1987) "Case Marking, Agreement, and Empty Categories in Turkish," Thesis, Harvard University.

Kural, M. (1993) "V-TO(-I-TO)-C in Turkish," *UCLA Occasional Papers in Linguistics*, vol. 11.

Ouhalla, J. (1990) *Functional Categories and Parametric Variation.* Croom Helm, London.

Özsoy, S. (1988) "Complementation in Turkish: Possessed Impersonal Infinitives," *Proceedings of the Fourth International Conference on Turkish Linguistics*. Sabri Koç, ed. METU, Ankara.

Pollock, J.I. (1989) "Verb Movement, Universal Grammar and the Structure of IP," *Linguistic Inquiry* 20.

Ritter, E. (1990) "Cross-linguistic Evidence for Number Phrase," to appear in C. Lefebvre, J.S. Lumsden and L. Travis (eds.) *Functional Categories.*

Rizzi, L. (1990) *Relativized Minimality.* MIT Press, Cambridge, MA.