A NOTE ON MOOD, MODALITY, TENSE AND ASPECT AFFIXES IN TURKISH[1]

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The limited goal of this contribution is to analyse the order of the mood, modality, tense and aspect, verbal suffixes of Turkish in the light of my (1999) proposal on the functional structure of the clause. My hope is that the exercise, besides explaining away certain apparent counterexamples to a rigid hierarchy of functional projections, may shed a partly new light on this area of the grammar of Turkish.

In Cinque (1999), I examined the relative order of free (particles) and bound (suffixes) grammatical morphemes corresponding to mood, modality, tense, aspect and voice distinctions in the languages of the world. The recurrent picture that one finds in this domain is that they not only are rigidly ordered with respect to each other (as partly anticipated in such works as Bybee 1985, Foley and Van Valin 1984, and Dik 1989), but that each of the mood, modality, tense, aspect, and voice categories is made up, at a finer level, of a number of distinct heads, which also appear to be rigidly ordered.

The striking match between the order of these grammatical heads and the order of the corresponding adverbs was further taken there to suggest a rich and articulated functional structure above the lexical VP of the clause, where each adverb class corresponds to a mood, modality, tense, aspect or voice head in a one-to-one fashion (as does the specifier to a head in a classical X-bar structure - Chomsky 1970, Kayne 1994).

The order of such X-bar projections is approximately that shown in (1):[2]

(1) $\text{MoodP}_{\text{speech act}} > \text{MoodP}_{\text{evaluative}} > \text{MoodP}_{\text{evidential}} > \text{ModP}_{\text{epistemic}} > \text{TP}_{\text{Past}} > \text{TP}_{\text{Future}} > \text{MoodP}_{\text{irrealis}} > \text{TP}_{\text{anterior}} > \text{ModP}_{\text{alethic}} > \text{AspP}_{\text{habitual}} > \text{AspP}_{\text{repetitive(I)}} > \text{AspP}_{\text{frequentative(I)}} > \text{ModP}_{\text{volition}} > \text{AspP}_{\text{celerative(I)}} > \text{AspP}_{\text{terminative}} > \text{AspP}_{\text{continuative}} > \text{AspP}_{\text{perfect}} > \text{AspP}_{\text{retrospective}} > \text{AspP}_{\text{proximative}} > \text{AspP}_{\text{durative}} > \text{AspP}_{\text{progressive}} > \text{AspP}_{\text{prospective}} > \text{AspP}_{\text{inceptive(I)}} > \text{ModP}_{\text{obligation}} > \text{ModP}_{\text{ability}} > \text{AspP}_{\text{frustrative/success}} > \text{ModP}_{\text{permission}} > \text{AspP}_{\text{conative}} > \text{AspP}_{\text{completive(I)}} > \text{VoiceP} > \text{AspP}_{\text{repetitive(II)}} > \text{AspP}_{\text{frequentative(II)}} > \text{AspP}_{\text{celerative(II)}} > \text{AspP}_{\text{inceptive(II)}} > \text{AspP}_{\text{completive(II)}} > V$

Turkish is particularly interesting from this perspective in that it would seem to provide a number of striking counterexamples to the claim that functional heads (and their corresponding morphemes) are rigidly ordered with respect to each other. So, for example, the modal suffix *-(y)Abil-* appears at first sight to be freely ordered with respect to the negative morpheme *-mA*. Cf. (2):[3]

(2)a oku-**ya-ma**-m   (Kornfilt 1997,375)
    read-**ABIL-NEG**-1sg   'I am unable to/ not permitted to read'

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[2]Although no language (with the possible partial exception of Eskimo-Aleut languages) displays the entire array of functional heads, they do display the entire array of functional specifiers (AdverbPhrases), thus pointing to the universality of such structure.

[3]The *bil* part of the suffix deletes in front of negation. Cf. Kornfilt (1997,374f) for discussion.

   b oku-**ma-yabil**-ir-im (Kornfilt 1997,375)
     read-**NEG-ABIL**-AOR-1sg   'I might not read; it is possible that I do not read'

At a closer look, however, the modal suffix in (2)a and b differ not only in scope with respect to negation, but also in meaning. When it is to the left of the negative morpheme, *-(y)Abil-* is interpreted as a 'root' modal, with the meaning of "ability" or "permission". When it is to the right, it is instead interpreted as an alethic modal, referring to "possibility". This suggests that the same suffix can occur in two different functional heads, one higher than the (*-mA*) negation, corresponding to the $ModP_{alethic}$ of (1), and one lower, corresponding to either the $ModP_{ability}$ or $ModP_{permission}$ of (1).

This is confirmed by the fact, noted in Kornfilt (1997,375), that the two *-(y)Abil-* suffixes can occur simultaneously, separated by the suffix *-mA:*[4](i) He'll   **might   could** do it   (Brown 1992,75)
    FUT **POSSIB ABIL** V

In both cases, the ability (/permission) modal head appears to be closer to the verb (stem) than the possibility modal head.

(3) oku-**ya-ma-yabil**-ir-im
   read-**ABIL-NEG-ABIL**-AOR-1sg
   'I might be unable to read; it is possible that I shall be unable to read'

So far, then, Turkish gives evidence for the order of functional heads shown in (4):

(4) $Mod_{ALETHIC} >$ NEG $> Mod_{ABILITY}$ (> V)

The possibility for a morpheme to fill two different slots (functional heads), with partly different meanings (here *-(y)Abil-*, with the meaning of POSSIBILITY and ABILITY/PERMISSION, respectively), is not unprecedented (see Cinque 1998 for other cases with suffixes, and adverbs).

Before seeing other such cases in Turkish itself, let us procede and try to establish the relative ordering of a number of other suffixes in this language. Granting the essential correctness of Baker's (1985,1988) Mirror Principle, I will assume that an outer suffix corresponds to a functional head higher than that corresponding to an inner suffix, disregarding the insertion of auxiliary verbs to bear (outer) suffixes that for morphological reasons cannot stack onto some inner suffixes, as is the case with POSSIBILITY *-(y)Abil-* and PERFECT *-mi* in (5):[5]

(5) Mary John-un   evlen -mi   ol-**abil-ece** -in -i söyl-üyor (Yava 1980,77)
   M.   J.-gen   get married PERF be-**may/can-FUT**-poss-acc say-PROG
   'Mary says that John may have gotten married (by now)'

Here, *-(y)Abil-* cannot be stacked onto*-mI ,* for reasons that remain to be understood; hence the insertion of the auxiliary to support the outer suffix which otherwise would remain stranded. Ignoring the complication introduced by the insertion of auxiliaries, (5) provides evidence for the order V-(PERFECT)-POSSIBILITY-FUTURE, which in turn suggests that FUTURE tense is higher than ALETHIC modality (which is higher than PERFECT aspect).[6] Adding this relative order to (4), we get the order in (6) (I return below to the position of PERFECT aspect):

(6) FUT $> Mod_{ALETHIC} >$ NEG $> Mod_{ABILITY}$ (> V)

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[4] This order is interestingly matched (in the expected mirror image form) by the order of alethic possibility modals and root (ability/permission) modals in such double modal varieties as Hawick Scots:

[5]See Kornfilt (1996) for arguments that, even in the case of certain suffixes apparently stacked onto another suffix, there is an overt, *-y-*, or abstract, -0-, copula, separating them and supporting the outer suffix.

[6]Note that the order FUTURE > ALETHIC POSSIBILITY is also overtly displayed in the Hawick Scots example (4).

Like the *-mA-* negation suffix, also the PROGRESSIVE aspect suffix *-(I)yor-*, appears to intervene between POSSIBILITY *-(y)Abil-* and ABILITY/PERMISSION *-(y)Abil-,* for it follows ABILITY/PERMISSION *-(y)Abil-* (cf. (7a)), but it precedes POSSIBILITY-*(y)Abil-* (cf. (7)b), and is found between the two, when these cooccur (cf. (7)c):

(7)a oku-**yabil-iyor**-um   (Kornfilt 1997,374)
    read-**ABIL-PROG**-1sg   'I am being able to read'
  b oku-**yor** ol-**abil**-ir   (Kornfilt, personal communication)
    read-**PROG** be-**ABIL**-AOR 'he might be reading'
  c oku-**yabil-iyor** ol-**abil**-ir   (Kornfilt, personal communication)
    read-**ABIL-PROG** be-**ABIL**-AOR   'he might be being able to read'

As shown by (8), *-(I)yor-* follows the *-mA-* negation suffix (which, by the Mirror Principle, indicates that it is located in a head higher than the negative head):

(8) ko **-mu-yor** (van Schaaik 1994,40)
    run-**NEG-PROG**   'he isn't running'

The relative orders of Turkish suffixes seen so far are thus evidence for the order of heads shown in (9):

(9) FUT > Mod$_{ALETHIC}$ > Asp$_{PROGRESSIVE}$ > NEG > Mod$_{ABILITY}$ (> V)

Similarly, the PERFECT aspect suffix *-mI* appears to be outside ABILITY/PERMISSION *-(y)Abil-* ((10)a)and inside POSSIBILITY *-(y)Abil-* ((10)b), and is found to separate them when they cooccur ((10)c):

(10)a oku-**yabil-mi** ol-ur (Kornfilt, personal communication)
     read-**ABIL-PERF** be-AOR 'he has been able to read'
   b oku-mu ol-abil-ir   (Kornfilt, personal communication)
     read-**PERF** be-**ABIL**-AOR 'he might have read'
   c oku-**yabil-mi** ol-**abil**-ir   (Kornfilt, personal communication)
     read-**ABIL-PERF** be-**ABIL**-AOR 'he might have been able to read'

The PERFECT aspect suffix *-mI*, like the PROGRESSIVE aspect suffix *-(I)yor-*, occurs outside the negative suffix *-mA-*. See (11):

(11) Türk-le -tir-il-**me-mi** -ler-den-siniz   (van Schaaik 1994,39)
      turk-become-CAUS-PASS-**NEG-PERF**-pl-abl-2p
 'You are of those who didn't have themselves been turkified'

It thus seems to fall, like *-(I)yor-,* between the modal of alethic possibility and negation:

(12) FUT > Mod$_{ALETHIC}$ > Asp$_{PROGRESSIVE}$ > NEG > Mod$_{ABILITY}$ (> V)
                          Asp$_{PERFECT}$

We can ask what the relative order is between PERFECT aspect and PROGRESSIVE aspect. Quite generally, PERFECT aspect appears to be higher than PROGRESSSIVE aspect. This is shown directly by English ((13)a) and Temne ((13)b), among other languages, and (in the reverse order) by the serialization of the corresponding suffixes in Imbabura Quechua ((13)c):

(13)a John has be**en** winn**ing**   (English)
        J. PRES **PERF PROG**
   b i tè   **po**   **yirè** ke-ko   (Temne - cf. Cinque 1999,193)
     I FUT **PERF PROG** go   'I will have been going'
   c shamu-**ju-shka**-ni (Imbabura Quechua - cf. Cinque 1999,163)
     come-**PROG-PERF**-1sg   'I have been coming'

Turkish in this respect appears problematic. For one thing, the location of PERFECT aspect *-mi* after PROGRESSIVE aspect *-(I)yor* is given as rather marginal by Yava (1980,63) (see (14)a); secondly, the opposite order between the two is judged as perfectly acceptable by Kornfilt (1997,363) (see (14)b):

(14)a ??John dün   çal **- yor** ol-**mu** ol-mal   (Yava 1980,63)
       J. yesterday work-**PROG** be-**PERF** be-must 'J. must have been working yesterday'
   b Hasan böylelikle yar -   kazan-**m**   ol-**uyor**-du (Kornfilt 1997,363)
       H.   thus competition-ACC win-**PERF** be-**PROG**-PAST
       'Hasan was thus being the winner of the competition'

Whatever the reasons for the marginality of (14)a, it appears that the order V-*mI* Aux-*(I)yor* of (14)b receives an interpretation which is rather different from the one expected. Kornfilt (1997,363) glosses (14)b as "..was being the winner", rather than "..was having won..", with what looks like a resulting state reading.
I would like to propose that *-mI* is actually ambiguous between a (marginal) PERFECT aspect interpretation, when it is located higher than PROGRESSIVE aspect (as in (14)a), and a pure RESULTATIVE aspect interpretation, which is lower than PROGRESSIVE aspect (in fact one of the lowest heads, perhaps). In (15), a sentence given by Kornfilt (1997,363), the two (PERFECT-*mI* and RESULTATIVE -*mI*) are found to (marginally) cooccur:[7]

(15) ??Hasan böylelikle yar -   kazan-**m**   ol-**mu** -tu (Kornfilt 1997,363)
     H.   thus competition-ACC   win-**RES(?)** be-**PERF**-PAST 'H. had thus become the winner of the competition'

If correct, then, the order of heads displayed by Turkish so far is:

(16) FUT > Mod$_{ALETHIC}$ > Asp$_{PERFECT}$ > Asp$_{PROGRESSIVE}$ > NEG > Mod$_{ABILITY}$ (> V)[8](i) Hasan fazla çabuk konu -tu -un-u   bil-iyor-du (Kornfilt 1997,357)
      H.   too   fast talk-Fnom-3sg-Acc know-PROG-PAST 'H. knew that he was speaking too fast'
                                                      Asp$_{RESULTATIVE}$

-Mi has another well-known interpretation in Turkish; that of a reportive PAST:[9](i)a John bugün çali -iyor-**mu**   (Yava 1980,44) (inferential, or reportive)
    J. today work-PROG-**INFER** 'Apparently, John is working today'
  b Ne   de çok elbise-m var-**m** ! (Yava 1980,47) (surprise)
    what also a lot dress-my exist-**UNEXP**   'How many dresses I have!'

(17)a Hasan dün   opera-ya git-**mi**
        H. yesterday opera-DAT go-**REP.PAST** 'H. reportedly went to the opera yesterday'

There is some evidence that under this interpretation it occupies a functional head which is higher than that occupied when it has the PERFECT (and, a fortiori, the RESULTATIVE) aspect interpretation.
In its 'reportive (PAST) tense' interpretation it follows the FUTURE tense suffix ((18)a);[10](i) Gianni sarebbe

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[7] The marginality of (15) is perhaps related to that of (14)a. Yava and Kornfilt appear to give to these sentences the same grammaticality judgment (?? rather than *).

[8] The fact that the progressive form of a resulting state is possible in Turkish but not in English is perhaps to be related to the fact that in Turkish the *-(I)yor* form is possible with stative verbs as well (cf. (i)); a fact which may indicate that it is more likely a CONTINUOUS aspect rather than a PROGRESSIVE aspect suffix, as Kornfilt (1997,357) conjectures.

[9] As in other languages, the same form can be used to denote the inferential character of the assertion, or surprise/unexpectedness (its 'admirative', i.e. evaluative, usage). See (i):

[10] The future in the past (or "conditional") form is also used in Italian to convey a report:

morto ieri

G. would have died (future in the past) yesterday 'They say that G. died yesterday' in its PERFECT aspect interpretation, it precedes it ((18)b):

(18)a John Türkiye-ye gid-**ecek-mi**   (Yava 1980,41) (reported)
    J.   T.-dat   go-**FUT-REP** 'Reportedly, John will go to Turkey'
   b John hafta-ya   tez-in-i   bitir-**mi** ol-**acak** (Yava 1980,74)
      J. week-Dat   thesis-Poss-Acc finish-**PERF** be-**FUT**
 'J. will have finished his thesis (by) next week (*Apparently/reportedly J. will finish..')

More generally, as Kornfilt (1997) notes, when "-*mI* for the reported past is the first suffix in a morphological sequence including the conditional form [and other tense markers (p.546,fn59)], its function is that of perfective aspect rather than that of a tense marker" (p.344). Each usage, then, is apparently possible only relatively to a specific position in the sequence of suffixes. A case in point is (19), from Yava (1980,62):

(19)   John çal -**m** -**t**
       J.   work-**PERF-PAST**   'J. had worked (*Apparently/reportedly J. worked)'

In sum, -*mI* can either encode resultative aspect, perfect aspect, or reportive/inferential/evaluative PAST. For the latter usage, it is tempting to propose that -*mI* is generated in T_{PAST} and then raised to either $Mod_{EPISTEMIC}$ (inferential), or $Mood_{EVIDENTIAL}$ (reportive), or $Mood_{EVALUATIVE}$ (surprise/unexpectedness). If so, Turkish would give evidence for the higher functional heads of (1) shown in (20), which combined with (16) gives (21):

(20) ...$Mood_{EVALUATIVE}$ > $Mood_{EVIDENTIAL}$ > $Mod_{EPISTEMIC}$ > T_{PAST} ...

(21) $Mood_{EVALUATIVE}$ > $Mood_{EVIDENTIAL}$ > $Mod_{EPISTEMIC}$ > T_{PAST} > T_{FUTURE} > $Mod_{ALETHIC}$ > $Asp_{PERFECT}$ > $Asp_{PROGRESSIVE}$ > NEG > $Mod_{ABILITY}$ /$Asp_{RESULTATIVE}$ (> V)

To recapitulate, both the -*abIl* and the -*mI* suffixes can apparently occupy, even simultaneously, different slots (heads), each corresponding to a distinct function:[11](i) ??Hasan böylelikle yar -   kazan-**m**   ol-**mu** -**mu**
 H.   thus competition-ACC win-**RES(?)** be-**PERF-REP.PAST** 'H. had reportedly thus become the winner of the competition'

(22) oku-**yabil**-mi   ol-**abil**-ir   (Kornfilt, personal communication)
     read-**ABIL**-PERF be-**POSSIB**-AOR 'he might have been able to read'

(23) Rejim yap-**m** -**m**   (Yava 1980,68)
     diet make-**PERF-REP.PAST** 'Reportedly, he dieted'

(24) ??Hasan böylelikle yar -   kazan-**m** ol-**mu** -tu (Kornfilt 1997,363)
     H.   thus competition-ACC win-**RESULT(?)** be-**PERF**-PAST 'H. had thus become the winner of the competition'

Other suffixes of Turkish appear to occupy different positions, depending on the function they perform.
One of these is the (non reportive) PAST suffix -*DI,* which in addition to this usage apparently has (pace Yava 1980,chapter 2) a usage as an Anterior Tense marker (Aksu-Koç 1988,20; Korfilt 1997,349).[12] The

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[11]From (23) and (24), one should expect the marginal possibility of something like (i), where the three -*mI* occur simultaneously. Jaklin Kornfilt (personal communication) tells me that for her (i) is indeed possible with the same grammaticality status as (24):

[12]"Examples like [*Hasan bal   ye-di* 'H. ate the fish/has eaten the fish'] are systematically ambiguous between a simple past reading (the first translation) and a present perfect reading (the second translation)"

two can, in fact, cooccur, yielding the pluperfect interpretation:[13](i) Bir zaman-lar John ile tani -t -y-d -m
    One time-pl. J. with meet-*DI*-cop-*DI*-1sg   'I once met John'

(25)a Hasan dün saat be -te ödev-in-i bit-ir-**di**-y-**di**   (Kornfilt 1998)
    H. yesterday o'clock five-LOC assignment-3sg-ACC finish-CAUS-**ANT**-y-**PAST**
    'H. had finished his assignment yesterday at five o'clock'

Some indications exist that *-(y)AcAK* too may be ambiguous between two functions: a pure Future Tense interpretation ("will") and a Prospective Aspect interpretation ("be about to/almost"), with, as a consequence, a different location in the hierarchy of (1). Indications to this effect may be I) the double translations that are often assigned to the morpheme (cf. (26)); II) the unequivocal Prospective Aspect rendering of *-(y)AcAK* when it is used as a participle not allowing stacking of *-DI* (cf. (27)b), vs. the Future Tense reading when it allows stacking of *-DI* ((279a)); and III) the sequences "ecek ol-mu -tu" and "ecek ol-uyor" found by Gerjan van Schaaik in his corpus (and pointed out by him in his talk - van Schaaik 1999).[14]
(26) Yarin   ya mur ya -**acak**   (cf. Yava 1980,89)
     tomorrow rain fall-**FUT** or **PROSP** 'Tomorrow it will/is going to rain'

(27)a Dün   gel-**ecek-ti**   (Yava 1980,23)
     yesterday come-**FUT-PAST**   'He was going to come yesterday'
    b Hasan   kap -y   aç-**acak** ol-**du**   (Kornfilt 1997,341)
       H.   door-ACC open-**FUT-PROSP** be/become-**PAST** 'Hasan was about to open/almost opened the door'

Similarly (if not more clearly), the suffix *-(y)-sA* appears to be ambiguous between two functions: one as a conditional complementizer, and one as an irrealis marker. An indication that, depending on interpretation, it fills different positions in the hierarchy of (1) is given by the order of *-(y)-sA* with respect to other suffixes whose position can be determined unambiguously. So, for example, Conditional *-(y)-sA* follows the Reportive PAST suffix (cf. (28)), which follows, among others, the Aspect suffixes and the absolute Future Tense suffix. This suggests that the corresponding functional head is higher than at least T_{PAST}:

(28)a oku-yor-mu -**sa-**m   (Kornfilt 1997,367)
      read-PROG-REP.PAST-**COND**-1sg   'If I am/was said to be reading'

When, on the other hand, *-(y)-sA* precedes T_{PAST} (as in (29)), its interpretation is that of a counterfactual conditional, or a wish referring to the past (cf. Kornfilt 1997,368), which leads me to conjecture that it occupies the lower $Mood_{IRREALIS}$ head:[15](i) oku-**ya**-y-d -m (Kornfilt 1997,372)

(Kornfilt 1997,349, who also refers in this connection to Lewis 1975,127 and Johanson 1971,67).

[13]The 'distant past' interpretation which can be imposed to *-DI* + *-DI* sequences, as in (i) (Yava 1980,16) is not incompatible with taking *-DI* to be both a Past Tense and an Anterior Tense morpheme. The Italian Pluperfect has a similar occasional 'distant past' interpretation (*Avevo pensato ti facesse piacere* 'I thought it would please you'). Other cases where the same morpheme expresses both Past Tense and Anterior Tense are found in Korean (Cinque 1999,53), and in Sranan and Haitian Creole (Cinque 1999,61ff). Cf.also English *-ed*.

[14] In "ecek ol-mu -tu" and "ecek ol-uyor",   *-(y)AcAK* appears lower than PERFECT aspect and PROGRESSIVE aspect, respectively. These are positions inaccessible to a pure (or absolute) FUTURE Tense. The second (of which he found 4 examples) is particularly telling as Cinque (1999,75) documents the order PROGRESSIVE aspect > PROSPECTIVE aspect (and their adjacency) in many languages. Also see Cinque (1999,209n63) for languages in which the FUTURE Tense morpheme is identical to the PROSPECTIVE aspect morpheme. It could turn out, judging from II) and III) in the text, that participial *-(y)AcAK*, which does not allow stacking of other suffixes, is the form specialized for Prospective Aspect.

[15]Alternating with *-(y)-sA* in the position preceding T_{PAST} is the optative suffix *-(y)A* , another Irrealis suffix:

read-**OPT**-y-PAST-1sg   'Would that I had read'

As Kornfilt notes (p.372), (i) can be used also in place of (29)b, and with the same interpretation as (29)b. Eser Erguvanl -Taylan (personal communication) informs me that the structuralist tradition also recognized two separate uses of *-(y)-sA*. *-sA*, for what I called "Irrealis", and *-(y)-sA*, for what I called "Conditional".

(29)a oku-**sa**-y-m   (Kornfilt 1997,368)
    read-**COND**-cop-REP.PAST
    'They say that if he were to read' or 'They say 'If only he would read!''

    b oku-**sa**-y-d -n   (Kornfilt 1997,368)
    read-**COND**-y-PAST-2s   'Had you read/if only you had read!'

Another suffix that appears to have various (related) usages is *-mAlI,* which ranges from a meaning of obligation ((30)a), to a meaning of alethic necessity ((30)b), to an epistemic meaning ((30)c):[16]

(30) a oku-mal -y m
        read-OBLIG-1sg   'I have to read'
     b John hafta-ya   evlen-mi   ol-mal   (Yava 1980,76)
        J.   week-DAT marry-PERF be-NECESS 'John must have gotten married (by) next week'
     c Hasan orada ol-mal   (Kornfilt 1997,376)
        H.   there be-EPISTEM 'Hasan must be there'

What remains to be seen is whether it occupies one or more positions, depending on interpretation. The position of the suffix in its alethic reading of necessity appears to fall in between Mood$_{irrealis}$ and Asp$_{perfect}$ as expected from (1). See the contrast between (31)a and b:[17](i)a Hasan piyano çal-**ar**-d
     H. piano   play-**AOR**-PAST 'Hasan used to play the piano'
   b John   evlen-mi   ol-abil-**ir** (Yava 1980,76)
     J. get married-PERF be-POSSIB-**AOR** 'John may have gotten married (by now)

(31)a ?Git-mi   ol-mal   ol-sa-yd   (Kornfilt, personal communication)
       go-PERF be-NECESS be-IRR-PAST 'Had s/he have to have gone'
     b *Git-mi   ol-sa   ol-mal -yd   (Kornfilt, personal communication)

If the above interpretation of the facts is correct, there may be no real reason to conclude from the apparent variable ordering of certain suffixes in Turkish that "the order among inflectional suffixes is slightly flexible [while] grammatical function changing affixes are rigidly fixed " (in the partial order: V-RECIPROCAL-CAUSATIVE-PASSIVE)(Göksel 1993, 18). Functional heads <u>are</u> rigidly fixed, though one and the same morpheme, by filling different heads (with concomitantly different functions), may give the impression of changing places.

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[16]In (30)b, it can also have an epistemic interpretation.

[17]The "aorist" suffix *-(A)r,* which expresses the generic (and habitual) present, was not discussed here, as it is unclear to me which head, it can fill. From (i)a-b, it would seem it can occupy a head between T$_{PAST}$ and Mod$_{ALETHIC}$ of Possibility (but it could be that it can occupy more than one):

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