I claim that Cinque’s (1999, 2002) Functional Head Hierarchy is able to account for the full distribution of tense, aspect, and modality (hereafter, "TAM") markers in Turkish and, assuming the hierarchy, it is possible to put forth several novel claims about the language.

Turkish is an agglutinative Turkic language with SOV word order. TAM markers in the language are bound morphemes that are affixed either to the predicate or periphrastic units.

THE HIERARCHY

The version of the hierarchy that I will be building on is taken from Cinque (2002), for which the numbering has been added for convenience:

1. MoodP
2. MoodP
3. MoodP
4. MoodP
5. TP
6. TP
7. MoodP
8. TP
9. MoodP
10. AspP
11. AspP
12. AspP
13. AspP
14. AspP
15. AspP
16. AspP
17. AspP
18. AspP
19. AspP
20. AspP
21. AspP
22. AspP
23. AspP
24. AspP
25. AspP
26. AspP
27. AspP
28. AspP
29. AspP
30. AspP
31. AspP
32. AspP
33. AspP
34. AspP
35. AspP
1. MoodP
2. MoodP
3. MoodP
4. MoodP
5. TP
6. TP
7. MoodP
8. TP
9. MoodP
10. AspP
11. AspP
12. AspP
13. AspP
14. AspP
15. AspP
16. AspP
17. AspP
18. AspP
19. AspP
20. AspP
21. AspP
22. AspP
23. AspP
24. AspP
25. AspP
26. AspP
27. AspP
28. AspP
29. AspP
30. AspP
31. AspP
32. AspP
33. AspP
34. AspP
35. AspP

The multifunctional markers are base-generated in relevant projections depending on their function, and if projections #5 and #6 are empty, then there is a present tense reading. Another thing to note is that there is no distinction between mood and modality. Some aspects have dual projection sites, and (1) shows a case where such duality is warranted for the celerative aspect:

   b. Yap-ıver-il-di.
   do-CAU.30-CEL.14-PFV
do-CEL.33-PASS.30-PFV
   'He had it done it rapidly.'
   'It was done rapidly.'

THE COPULA i-

The most important empirical evidence for the hierarchy comes from the copula i-. This copula is considered to be phonologically weak and is optionally pronounced, with no semantic change. It is also realized as a /y/ following stems that end with a vowel.

2. a. gel-miş-ti-m.
   b. gel-miş i-di-m.
   come-PFV-PST-1SG
come-PFV COP-PST-1SG
   'I came.'
   'I came.'

Only a limited number of markers can follow it, and the functions of such markers change when they occur in a pre-copula position, as seen with -DI and -SA in (3):

3. a. gel-di-y-se-∅
   b. gel-se-y-di-∅
   come-PFV-COP-COND-3SG
come-CNTF-COP-PST-3SG
   'If he came'
   ‘If he had come’

THE AUXILIARY OL-

The auxiliary can be used when further suffixification of the verb stem is blocked, as in (4a) and (4b), and also as a strategy to get more TAM possibilities, as in (5a) and (5b):

4. a. *git-miş-meli-yım
   b. git-miş ol-mali-yım
go-PFV-OBL-1SG
go-PFV AUX-OBL-1SG
   'I must have gone'
   'I must have gone'
5. a. gel-miş-ti
   b. gel-miş ol-du
   come-PFV-PST
   come-RES AUX-PFV
   '(s)he came'
   '(s)he ended up coming'

CLAIMS

I claim that a certain class of inflectional suffixes (which are dubbed complex verbs in the philology literature) are in fact aspectual markers. This class includes -Adur (CONTINUATIVE, INCEPTIVE), -Agel (PERFECT), -Agör (CONTINUATIVE), -Akal (DURATIVE), -Akoy
(CONTINUATIVE, INCEPTIVE), -Ayaz (PROSPECTIVE), and -İver (CELERATIVE, non-CONATIVE). The PERFECT marker is exemplified in (6):

6. Şirket-imiz müşteriler-i-ne başarıyla hizmet ver-egel-di-∅.
   company-poss.1pl client-pl-poss.3sg-dat success-inst service provide-pref-pfv-3sg
   'Our company has provided services to its clients with success (so far).'

The perfect marker, which is of the universal type (McCawley, 1971), can be combined with the null present marker as well as the past marker, but it cannot be combined with the future marker -AcAk, which has been treated as a tense or aspect marker in the literature. Another thing to note is that the future marker cannot follow the copula i- as expected from a T head and requires the presence of the auxiliary as a host:

7. a. hasta-y-di   b. hasta-y-miş c. *hasta-y-acak d. hasta ol-acak
   sick-cop-pst sick-cop-evid sick-cop-fut sick aux-fut
   '(S)he was sick.'  '(S)he is (evid.) sick.'  '(S)he will be sick.'  '(S)he will be sick.'

Based on the distributional data given above and the intuitions first put forth by Yavaş (1982), I further claim that the future is exclusively a modality in Turkish.

Several accounts (including Cinque (2002)) treat -mİş as a perfect marker in cases where it precedes the copula. I claim, however, that it is exclusively a perfective marker in a pre-copula position, which only gives experiential or resultative perfect readings in certain contexts.

8. Tabanca patla-yıver-di. O an katil ol-muş-tu-m.
   gun go.off-n-con-pfv that moment murderer become-pfv-pst-1sg
   'The gun just went off. At that moment I became a murderer.'

In cases of -mİş stacking, the result is a dual reading in complimentary distribution:

9. a. gel-miş-miş   b. çal-miş-miş
   come-pfv-evid steal-pfv-dub
   '(S)he has evidently come.'  'Purportedly (s)he stole (it).'</p>

Cinque (2002) treats the perfectives -mİş and -DI as completives and assumes that they are base-generated in projection #29 or #35. He also assumes that non-past (hence pre-copula) -DI is an Anterior Tense (#8) marker. I will show that pre-copula -mİş and -DI are exclusively perfective markers, which is further supported by the fact that T heads are unable to bear sentential stress. Based on (10), I propose that the base-generation site for the perfective is located between 8. TP<sub>ant</sub> and 9. ModP<sub>aethic</sub>. This proposal also accounts for (4) and (5) and shows that the auxiliary initiates a new hierarchical cycle, which is clearly observed in (4b).

10. yap-a-ma-yabil-di-y-di-∅.
    do-abil-neg-alet-pfv-cop-pst-3sg
    (Impossible to faithfully 'It was possible for her/him not to have done it.' replicate in English)

I further claim that the language frequently employs present perfective constructions, even in cases where an event that may have occurred long ago is being referred to:

    ten year ago man kill-pfv-1sg ten year ago man kill-pfv-cop-pst-1sg
    'I killed a man ten years ago.'  'I killed a man ten years ago.'

I propose that Turkish's way of dealing with the present perfective paradox (Malchukov, 2009) is the following: There is a covert operator occupying the T<sub>ant</sub> (#8) head, which gives the construction an anterior (that is, past) reading. T<sub>past</sub> and T<sub>future</sub> projections would still be empty, resulting in present tense. The same operator is also used for other markers that occur without a tense marker, including but not limited to the evidential -mİş.

Finally, I claim that the copula i- is located inside the MoodP<sub>irrealis</sub> (#7). I propose splitting the projection and recategorizing its content depending on the ability to follow the copula (which is the case for conditionals or dubitatives, but not for counterfactuals or optatives).

I will also briefly touch upon the topics of the Progressive-to-Imperfective Shift (Deo, 2015) and the hierarchy's success in accounting for the variation between speakers.