HOW MANY MANIFESTATIONS OF
"copula" CAN A LANGUAGE EMPLOY?[*1]

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Abstract: This article aims to identify the copula in Turkish and other Turkic languages. In the literature, including the most recent work on the Turkish copula (Kelepir 2008, and the references therein) the assumption is that there are multiple manifestations of the copula in Turkish, including multiple overt forms and a null one.   The empirical and theoretical arguments presented in this article support the claim that is no overt copula in Modern Turkish; the overt form *ol* 'be' is either a verb or an auxiliary; the *i-* in free forms and the *-y*-in the clitics (of the Counterfactual, Evidential and Conditional inflection) are not a manifestation of the copula, nor an auxiliary. This analysis conforms to the typological properties of Turkic languages.

INTRODUCTION

The major concern of this article is the identification of the copula in Turkish and other Turkic languages. In the literature, including the most recent work on the Turkish copula (Kelepir 2008, and the references therein) the assumption is that there are multiple manifestations of the copula in Turkish. According to those assumptions, the following example in (1) illustrates the two overt manifestations of the copula, and there is a null counterpart of {-i} in simple substantive predicates (2)

(1)   Gel   -miş   ol   -sa   i-di   -Ø
         come   - perf   **?Cop?** -cond   **?-Cop?** Past/Cf -3sg
         'If (he) had come/arrived, …'

The *i-* surfaces as *–y-* when the past/counterfactual (Cf) morpheme is bound.

(2)   Serdar müzisyen- Ø
         Serdar   musician-?Cop?
         'Serdar is a musician'

  I will question these assumptions and propose that

(3)   a. *ol* 'be' in (1) is not a copula but an auxiliary;

         b. Overt form {*i-*} is *not* a copula, but a phonological part of the morpheme that follows;

             c. *i/y* is a phonological alternation in verbal constructions (as well as substantives as argued in Kornfilt 1996);

The major theoretical implication of this proposal is that the clausal architecture of Turkish allows for an auxiliary verb. Typologically, Turkic languages have a rich Aux system (as well as many light verbs). This analysis conforms to the typological properties of Turkic languages by arguing that Turkish, too, has an overt AUX. The basic assumption regarding the copula is that the copula is a predicational head *without* an event variable (Adger and Ramchand 2003). Section (1) presents the

Turkish facts; section (2) proposes an analysis for the copula in Turk-ish, and discusses particularly the example in (1); section (3) gives a brief review and critique of previous assumptions and analyses of the Turkish copula; section (4) concludes and suggests questions for further research.

1. TURKISH FACTS

The assumption in the literature is that there is a null copula in (2) above (repeated here as (3a), and the form *ol* 'be' in (3b) is an overt manifestation of the copula:

(3)   a. Serdar-Ø   muzisyen-Ø   -Ø (null 'be')
           Serdar-nom   musician-cop   - 3sg
           'Serdar (is) a musician.'

           b. Serdar -Ø   muzisyen   ol-du   -Ø. (overt 'be' *ol* ='become')
           Serdar -nom   musician   become-perf/past -3sg
            'Serdar became/has become a musician.'

(4a&b) below is another minimal pair that illustrates the copula in the present tense, which is the null form (4a), and the overt morphology that surfaces in the past tense (4b).

(4)   a. Serdar -Ø   mutlu-ydu -Ø.   (null 'be' +past)
           Serdar -nom   happy-past -3sg
            'Serdar (was) happy.'

           b. Serdar -Ø   öğretmen-di   -Ø.   (null 'be' +past)
           Serdar -nom   teacher-past/perf -3sg
           Serdar was a teacher.'

In (4a), {**-y-**} is considered to be the copula and {-di} to be the past form (Johanson 1971, Kelepir 2001). However, Kornfilt (1996) right-

fully refutes this analysis of (4), and shows that {-**y**-} is a phonological phenomenon, not a copula: –*i* in the free form *idi* 'Past' becomes a glide when bound to a vowel-final stem, as is clearly seen in (4a), above; it is deleted when bound to a consonant-finalstem (4b).

The verb *ol* 'be'that appears in complex predicates is considered a copula as well:

(5)   Gel   -miş   ol   -malı   -Ø   (overt 'be' *ol*)
        come   -perf   be   -must   -3sg
        '(He) must have come.'

Based on what has been illustrated above, the sentence in (1) (repeated here as (6))manifests two overt copulas, i.e. {-y-} and *ol* (except for Kornfilt 1996)

(6)   (1) above repeated here:

         Gel-miş **ol**   -sa   **-y-**   -di   -Ø
          come- perf **be**   -cond   **Cop**   Cf   -3sg
         'If (he) had come/arrived, …'

 −**y-** ia a copula; so is **ol.**   (Kelepir 2001).

2. PROPOSED ANALYSIS

2.1. THE OVERT 'be' *ol* IN VERBAL STRUCTURES IS AN AUXILIARY

(pertaining to sentence (4))

Major theoretical argument: the syntactic function of the copula

Major empirical argument: morpho-syntactic restrictions in Turkish.

I agree that (3a) bears a null copula; however, the verb 'be' *ol* in sentence (3b) cannot be an overt copula since it is a semantically full even-

tive verb, denoting a process as can be clearly observed in the English gloss: it means 'become'. If it were a copula, it would be difficult to explain why a language would utilize both a null and overt form for the exact same functional element with no obvious phonological or morphological motivation.

The overt *ol* 'be' functions as an auxiliary verb rather than a copula because these structures require an overt functional head, i.e. an auxiliary verb supports to carry the bound epistemic morpheme or the conditional morpheme. If *ol* 'be'is an auxiliary in this structure, then it would be expected to reject an NP complement since it would obligatorily involve an eventuality variable (following Ramchand 1996).

This prediction is attested in (3b) above repeated below as (6a). With an NP/DP complement the only grammatical reading is with the lexical verb 'become' that denotes an event; therefore, the sentence does not have past copular meaning, which would be denoted by a copular structure in the past (6b):

(6)   a. Serdar -Ø   müzisyen   ol   -du   -Ø.
          Serdar -nom   musician   become-perf/past -3sg
         '*Serdar was a musician.'
          'Serdar became/has become a musician.'

        b. Serdar -Ø   müzisyen-di   -Ø.
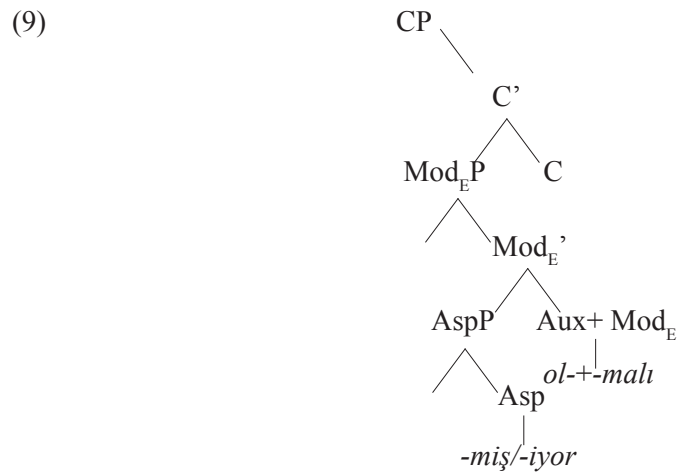   Serdar -nom   musician-past   -3sg
          'Serdar was a musician.'

The aux *ol* 'be' instantiates at the functional head Mod_E/ T^2.This necessity is borne out of a significant property of Turkish morpho-syntax: Aspect morphemes and Epistemic Modal morphemes are in complementary distribution and cannot co-occur (Aygen-Tosun 1998) as in (7b& 8b), and the verbal morphology does not allow more than three inflectional morphemes (including the subject-verb agreement morpheme).

2. This is the traditional Infl head that is commonly argued to be the T head or as argued in Aygen (2004), the Epistemic Modality head since tense is a type of epistemic modality.

Therefore, an Aux *ol* 'be' surfaces in the modal constructions below:

(7)   a. Gel   -miş   ol   -malı   -Ø
           come   -perf   be   -must   -3sg
           '(S/he) must have come/ If s/he has come.'

        b. *Gel   -miş   -malı   -Ø
           come   -perf   -must   -3sg

(8)   a. Gel   -iyor   ol   -malı   -Ø
           come   -prog   be   -must   -3sg
           '(S/he) must be coming/ If s/he were coming..'

        b.*Gel   -iyor   -malı   -Ø
           come   prog   -prog   -3sg

It is perfectly plausible to find an aux above an AsP to support further inflection (as is the case in English).

(9)

```
                    CP
                       \
                        C'
                       /  \
                  Mod_E P   C
                    /  \
                     Mod_E'
                     /  \
                 AspP    Aux+ Mod_E
                  /\        |
                   Asp    ol-+-malı
                    |
                -miş/-iyor
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2.2. TURKISH DOES *NOT* HAVE A COPULA MANIFESTED AS i/y

The   initial *i-* that is part of the free forms of the past/counterfactual
(Cf) *-idi,* the evidential *- imiş,* and conditional *–ise* becomes a glide
-y- when these forms are bound to a vowel final stem (*-ydI*, and*–ymIş*
-ysA respectively). Kornfilt (1996) correctly argues that the occurrence
of the *–y* is a PF process in substantive predicates such as (3a) above.
However, we do not agree with her adopting Lees (1962) analysis and
regarding it a copula in verbal constructions. We argue that it is the
same form in both substantives and verbal constructions, and that the
alternation is a phonological phenomenon. First of all, this analysis
presents a simpler account of facts, i.e. a simpler grammar. Secondly,
this analysis conforms to the diachronic account for auxiliaries.

Consider (10a&b) below:

(10)   a. Gel   -miş   **ol**-sa   **-y** dı   -Ø   // ol -sa   **i**di
         come   - perf be/aux -cond - Cf-3sg   be/aux   -cond Cf
         'If (he) had come/arrived, …'

         b. * Gel -miş   -sa   -ydı   -Ø
            come - perf   -cond   - Cf   -3sg

(10b) is ungrammatical because of a morphological constraint in Turk-
ish (Aygen-Tosun 1998). Due to that restriction, the structure needs an
auxiliary to carry the conditional+ counterfactual morpheme complex.
As such, we have already established the nature of 'be' as auxiliary verb
based on its function of supporting inflectional morphemes. In (10a),
we observe the /i-/ ~ /- y-/ alternation: the former in the free form, the
latter in the bound form of the counterfactual morpheme. The /i/- in the
free form is the and the -y in the bound form is historically traced back
to a verb *i-mek* 'to do' in Turkic languages. As has been observed cross
linguistically (Aygen & Bowern 2002), when verbs lose their internal
arguments in time, they become auxiliary verbs not copula. A bigger
problem for the previous analyses that regard the /i-/ ~ /- y-/ form a
copula would be for the phrase structure: Why would a fully inflected
and eventive verbal form such as *ol* 'become' with an eventuality vari-

able require a copula in the same structure?

In brief, there is no syntactic or semantic motivation for a copula to exist in (10): the *i-* in the (conditional, counterfactual and evidential) free forms that appears on verbal predicates is simply part of the morpheme. It becomes a glide *–y-* for phonotactic reasons when it is bounded to a vowel final morpheme.

3. SOME NOTES ON OTHER TURKIC COPULA

We have already noted that two overt manifestations of the copula: both *ol* 'be' and *–y-* are assumed in a sentence like (1) in previous analyses, which we have argued against (Lees 1962, Kornfilt 1996, Kelepir 2002). Benveniste (1973) argues that the copula manifests itself as a pronoun in Semitic & Turkic.

3.1. BENVENISTE (1973) AND WHAT HAS BEEN OVERLOOKED

In reference to Semitic languages (Aramaic and Arabic) and Turkic languages, Benveniste (1973) claims that a pronoun, usually 3rd person, functions as the overt manifestation of a copula (11-13):

(11)   *Eastern Turkic*:
        Män   yaš   <u>Män</u>
        I   young   I
        'I am young'

(12)   *Old Turkic*
        Ädgü <u>ol</u>
        Good <u>he</u>
        'He is good'

(13)   *Bashkir:*
        Xäsän yadiwsi ul
        Hasan writer he
        'Hasan is a writer'

What has been overlooked is that in Turkic languages the Subject-Verb agreement morpheme is historically derived from subject pronouns. Some Turkic languages still use overt pronouns following the predicate to mark Subject-verb agreement:

(14)   a.*Turkish*
         Serdar-Ø   mutlu   -Ø.
         Serdar-nom   happy   -3sg
         'Serdar (is) happy.'

         b. *Tuvan*
         Serdar   aaskejik ol. = Ol aaskejik ol.
         Serdar -nom happy 3sg   S/he happy 3sg
         'Serdar (is) happy.'   'S/he (is) happy.'

   This is *not* restricted to copular constructions, as may be observed in (15) below with a verbal predicate:

(15)   *Tuvan:*
    Men şkola-da   başkıla-p   turar   men.
    I   school-loc teach-converbn   aux-pres   I
    'I teach at the school.'

Therefore, copula could still be null, and agreement markers overt.

3.2. WHAT HAS BEEN OVERLOOKED

As can be seen from the discussion above, the syntactic function of the copula and the common properties of the Turkic clausal architecture have been overlooked at times while analyzing sentences that may bear the copula. It is also worth noting that cross-linguistic evidence shows that languages do not employ multiple manifestations of copula (Mufwene 2005, Geist 2002).

When we consider the major syntactic function of the copula and the fact that auxiliary verbs are commonly present in Turkic, we see that the

form *ol* 'be' in (2b &5) is not a copula (unlike the proposal in Kornfilt 1996, and Kelepir 2001). It cannot be a copula because the presence of a copula is justified by predication on substantives; it requires the *lack* of an event variable.

 Arguing that the *ol* 'be' is a copula in ((7a&8a) repeated here as (17)) would imply that there is no eventuality in the predicate.

(17)   a. Gel   -miş   ol   -malı   -Ø
             come -perf   be   -must   -3sg
         '(S/he) must have come/ If s/he has come.'

         b. Gel   -iyor   ol   -malı   -Ø
           come   -prog   be   -must   -3sg
          '(S/he) must be coming/ If s/he were coming

The presence of a verbal predicate, a participle contradicts this assumption: the modal and conditional morphemes could occur with any eventive verb independently.

(18)   a.   Gel   -meli   -Ø
                    Come   must   -3sg
                    'S/he must come.'

          b.   Gel   -se   -Ø
                    Come   -cond   3sg
                    'If s/he comes, …'

If we adopt the previous analyses (such as in Kornfilt 1996, and Kelepir 2001, 2008), we would have to posit a null copula in (18a&b) as well.

A major characteristic of Turkic languages overlooked by linguists working exclusively on Modern Turkish is that they (Kazak, Uighur, Tuvan, Altay, among others) employ a rich Aux system including   the cognate of *ol* 'be' , i.e. *bol* in Kazakh (19) and Tuvan (20).[3]

3. See Göksel 2002 for a discussion on Aux in Turkish.

(19)   *Kazakh*
        Kel   -gen   bol   -sa   -ız
        come   -perf   aux   -cond -2pl
        'If you had come, …'
        Literally "If it were the case that you came, .."

(20)   *Tuvan*
         a. Kel-gen   bol-za, …..
            come-perf/past aux-cond
         'If s/he came has come, …'   Non-counterfactual

         b. Kel-gen   tur-gan   bol-za
            come-perf/past aux-past aux-cond
          'Ifs/he had come, …'   Counterfactual

Kelepir (2001) further argues that in verbal constructions with Asp/ Mod, the verb cannot move to T and requires a copula. An argument for her analysis comes from negative constructions. Verbal predicates take a Neg suffix –*mE*, and substantives take a lexical Neg *değil* in Turkish. The problem with such an analysis is that the structures with a substantive negative form are in fact complex structures with a different meaning as may be seen in (21-22):

Note that -*EcEk* is analyzed as a participle modal below:

(21)   *Negative construction*, Kornfilt (1996):

        a.   Gel-ecek *değil-im.*
                Come-fut   Neg-1sg
                'It is not the case that I will come.'

        b.   Gel-me-yeceğ   -im.
                Come-Neg-fut-1sg
                'I won't come'

(22)   *Double negative construction*, Kelepir (2001)

Gel-me-yecek *değil-im*   (assumed to be * in Kelepir 2001)
Come-neg-fut Neg-1sg.
'It is not the case that I won't come.'

The previous analyses argue for a copula in all such root clauses, which
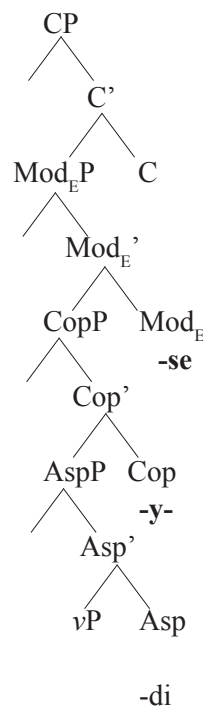unnecessarily complicates the grammar:

(23)   a.   Gel-eceğ(?-ø)-im
                   Come-fut-(?cop)-1sg
                   'I will come.'

         b.   Gel-iyor(?-ø)-um.
                   Come-prog(-?cop)-1sg
                   'I am coming.'

         c.   Gel-meli-(?y)-im.
                   Come-must-(?cop)-1sg
                   'I must come.'

3.3. FURTHER SYNTACTIC PROBLEMS WITH POSITING OVERT COPULAR HEADS

Another problem with positing overt copular heads in Turkish is that
we then have two overt manifestations of the copula in one clause. If
the purpose is to introduce a predicate head, one could not justify both
occurrences. Secondly, positing a copular head either at its own projec-
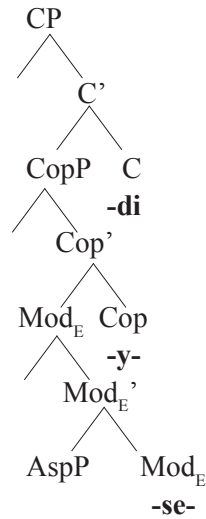tion or at T/Mod$_E$ would require two different positions in the clause.

If –**y-** in (5) were a copula, we would then need to project it in two
syntactic positions: both below and above the Epistemic Modal Phrase
(the equivalent of Tense Phrase in English). In structures like the non-
counterfactual predicates (24), we would need to posit a copular head
below the Epistemic Modal Phrase, where the conditional morpheme
is checked. In similar cases, the copula would be carrying inflectional
material except aspect (evidential, conditional and counterfactual).

(24) a.　Serdar　-Ø　　gel　　-di　　-yse　　-Ø
　　　　　　Serdar –nom　　come　-perf　-cond　-3sg
　　　　　　'If Serdar has come, …'

```
                    CP
                   /
                  C'
                 / \
             Mod P   C
                E
                |
               Mod '
                  E
                 / \
              CopP   Mod
                        E
               /        -se
             Cop'
            / \
         AspP   Cop
          |     -y-
         Asp'
        / \
      vP   Asp

            -di
```

In structures like the counterfactual predicates (25), we would need to assume a head *above* the Epistemic Modal Phrase.

(25) a.　Serdar　-Ø　　gel　　-se　　-ydi　　-Ø
　　　　　　Serdar –nom　　come　-cond　-Cf　　-3sg
　　　　　　'If Serdar has come, …'

```
                    CP
                   /\
                     C'
                    /\
                 CopP   C
                  /\    -di
                 Cop'
                 /\
             Mod_E  Cop
              /\    -y-
             Mod_E'
              /\
          AspP   Mod_E
                 -se-
```

If we were to follow the previous analysis, we would have an unmotivated and inexplicable structure above.

4. CONCLUSIONS AND FURTHER QUESTIONS

In this paper we have argued that

(i) there is no overt copula in Modern Turkish;

(ii) the overt form *ol* 'be' is either a verb (2b), or an auxiliary (4);

(iii) the *i-* in free forms and the *-y-*in the clitics (of the Counterfactual , Evidential and Conditional inflection) are not a manifestation of the copula, nor an aux (5). They are part of the clitic or the free form.

The clausal architecture of Turkic languages employs a rich Aux system; Modern Turkish has at least one Aux in its grammar. There is no copula in verbal constructions but there may be an auxiliary verb as illustrated below:

(25)   Kibo-Ø   şanssız ol   -sa   -ydı   -Ø
        Kibo-nom   unlucky   aux   -cond   -Cf-3sg
        'If Kibo were/happened to be unlucky, …'

A further question that deserve further research regarding this topic that is whether there is a universal restriction or a parametric variation in terms of the manifestation of the copula.

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