Evidentiality from Anterior Aspect: A Unified Analysis of Turkish *-mIş*

Despite extensive work on evidentiality across information-source, modal, and temporal views (Willett 1988; Faller 2004; Matthewson et al. 2007, a.o), its typological link to perfect/anterior aspect remains understudied (Izvorski 1997; Bowler 2018, a.o). This gap is striking in Turkish, a canonical evidential language where *-mIş* has both evidential and anterior uses but received limited attention (Yavaş 1980; Slobin & Aksu 1982; Şener 2011, a.o.). This study shows that Turkish evidentiality is temporal in nature, with *-mIş* encoding anterior aspect only. Drawing on Koev (2011, 2017) and Murray (2014), I argue that indirect evidential inference arises as a conventional implicature from a null Tense introducing a non-future learning time and *embedding* anterior aspect.

Empirical Picture Turkish has two morphemes for expressing past events: the past *-DI* and the so-called evidential *-mIş*. *-DI* generally conveys that the speaker has direct evidence for the event (1), while *-mIş* encodes an indirect evidential interpretation, arising from reported or inferred information (2). [Contexts for (2): Mert told me so. (hearsay)/ I am seeing or saw Cem's sweaty gym clothes. (inference)] But this generalization is not uniform, as outlined below (Yavaş 1980; Slobin & Aksu 1982; Izvorski 1997; Şener 2011; Johanson 2018, a.o).

(1) Cem koş-tu.
     Cem run-PST
     'Cem ran.'

(2) Cem koş-muş.
     Cem run-EVID
     'Cem ran, as I heard/inferred.'

① *-mIş* & non-past readings: Like *-DI*, *-mIş* can embed aspectual morphology such as the imperfective *-Iyor* and the prospective *-AcAK*, without losing its indirect evidential reading, as shown in (3). However, in these cases, *-mIş* is no longer confined to past interpretation: (2) can only receive a past reading, but (3a) can be past or present and (3b) can be past or future.

(3) a. Cem (dün   eve   geldiğimde / şuanda) dışarıda **koş-uyor-muş**.
         Cem yesterday home when.I.came   now   outside run-IMPRF-EVID
         'Cem was running outside (when I came home yesterday), as I heard/inferred.'
         'Cem is running outside (now), as I heard/inferred.'
     b. Cem (dün   eve   dönmeden önce / yarın)   dışarıda **koş-acak-mış**.
         Cem yesterday home returning before   tomorrow   outside run-PROS-EVID
         'Cem was going to run outside (before returning home), as I heard/inferred.'
         'Cem will run outside (tomorrow), as I heard/inferred.'

② *-mIş* & pure anteriority: *-mIş* can also occur under higher TAM markers, where the indirect evidential inference disappears and *-mIş* contributes only anterior aspect, locating the event time before the reference time. In (4a), it appears under *-DI*, placing the event before a past reference time. In (4b), *-mIş* is under the prospective aspect, placing the event before a future reference time.

(4) a. Serpil Ankara'ya vardığında, Cem **koş-muş-tu**.
         Serpil Ankara.to arrive.when Cem run-ANT-PST
         'When Serpil arrived in Ankara, Cem had run.'
     b. Serpil Ankara'ya vardığında, Cem **koş-muş ol-acak**.
         Serpil Ankara.to arrive.when Cem run-ANT COP-PROS
         'When Serpil arrives in Ankara, Cem will have run.'

③ *-mIş* & obligatory evidentiality: *-mIş* cannot yield a strictly aspectual interpretation (i.e., present-perfect) without giving rise to indirect evidentiality when it is not embedded under another TAM morpheme. For example, (2) cannot simply mean 'Cem has run.'

These facts pose *a central puzzle*: why does *-mIş* behave as an evidential in matrix uses, yet surface as a purely anterior marker when embedded under higher TAM morphology?

Analysis I argue that *-mIş* is an anterior aspect marker (5) (cf. Şener 2011). Adopting views in which transition from events to times occurs below Aspect (i.e., encoded in the VP), thus severing it from this mediating role (Coppock & Champollion 2025), the Anterior head (ANT) takes a predicate of times P to return a predicate of times t if t is preceded by a time t' at which P is true (Demirok & Sağ 2023, cf. Pancheva & von Stechow 2004). Consider its combination with *-DI* in (4a) [see (6)]. Past tense fixes the reference time t_R prior to the speech time t_s. When *-mIş* is embedded under *-DI*, the result asserts a time interval $t_R < t_s$ that is preceded by the run time $\tau(e)$ of an event e of Cem running **(fact ②)**. *koş-muş-tu*: [[VP + ANT] + T_{PAST}]: $\tau(e) < t_R < t_s$

(5) $[\![\text{ANT}]\!] = \lambda P.\, \lambda t.\, \exists t'\,[\,t' < t \,\wedge\, P(t')\,]$

(6) $[\![(4a)]\!] = \exists t\,[\,t < t_s \wedge \exists t'\,[\,t' < t \wedge \exists e\,[\,\tau(e) = t' \wedge run(e) \wedge Ag(e) = Cem\,]]]$

Inspired by Koev (2011, 2017), I propose that, alongside the plain past tense *-DI*, Turkish has a null tense (T_{EVID}) that is anchored to a learning event preceding or coinciding with the speech time (7) and that obligatorily embeds an anterior AspP. Indirect evidentiality arises not from *-mIş* itself, but from the temporal configuration created when *-mIş* appears under T_{EVID}, and only in that configuration. To illustrate, consider (2) [see (8)]. The null T_{EVID} introduces a learning event time $\tau(L_e) \leq t_s$ and composes with ANT AspP. The result asserts the existence of a time, at which Cem's running event occurs and precedes $\tau(L_e)$. *koş-muş*: [[VP + ANT] + T_{EVID}]: $\tau(e) = t_R < \tau(L_e) \leq t_s$

(7) $[\![T_{EVID}]\!] = \lambda Q.\, \exists t\,[\,t \leq t_s \wedge \tau(L_e) = t \wedge Q(t)\,]$

(8) $[\![(2)]\!] = \exists t\,[\,t \leq t_s \wedge \tau(L_e) = t \wedge \exists t'\,[\,t' < t \wedge \exists e\,[\,\tau(e) = t' \wedge run(e) \wedge Ag(e) = Cem\,]]]$

The *past* reading arises due to ANT locating the event time before the learning time, which precedes or overlaps with t_s. The *evidential* reading arises from the reference time preceding the learning time. In clauses with T_{EVID}, t_R is the time that ANT places before $\tau(L_e)$ introduced by T_{EVID}. Thus, in (2), t_R *is* the event time and, preceding the acquisition of the information, it corresponds to a stage of speaker ignorance. That is, *indirect evidential inferences require a reference time that precedes the learning time and relates to the event time. This amounts to viewing the event from a time prior to the speaker's learning of it.* Crucially, t_R need not equal the event time (contra Koev's assumption). We see this when the ANT+T_{EVID} bundle embeds another aspect. In (3a), t_R precedes the learning time via ANT and is contained in the event time via the imperfective aspect (9). Since the event time itself need not precede the learning time, it may extend into the speech time, yielding a present reading, or culminate before it, yielding a past reading **(fact ①)**. *koş-uyor-muş*: [[[VP + IMPRF] + ANT] + T_{EVID}]: $t_R \subseteq \tau(e)$ & $t_R < \tau(L_e) \leq t_s$ (With prospective (3b), t_R precedes $\tau(L_e)$ and $\tau(e)$, yielding future or past readings based on where $\tau(e)$ is placed relative to t_s.)

(9) $[\![(3a)]\!] = \exists t\,[\,t \leq t_s \wedge \tau(L_e) = t \wedge \exists t'\,[\,t' < t \wedge \exists t''\,[\,t' \subseteq t'' \wedge \exists e\,[\,\tau(e) = t'' \wedge run(e) \wedge Ag(e) = Cem\,]]]]$

This makes *-mIş* felicitous even when the speaker *ultimately witnesses* the event: after failing to find Cem in the house and then seeing him running outside, the speaker may utter (3a) (in the present tense interpretation). This is predicted since t_R, contained in $\tau(e)$ and preceding $\tau(L_e)$, corresponds to a non-aware stage for the speaker, from which the event is viewed. The same structure also permits mirative uses of *-mIş*, where the learning event is simply accompanied by surprise/exclamation, explaining this puzzling aspect of evidentials (cf. Smirnova 2013, a.o.).

Matrix *-mIş* cannot have a strictly aspectual (present-perfect) use without also yielding indirect evidentiality **(fact ③)** because Turkish lacks present tense (Yavaş 1980). This contrasts with forms like *koş-uyor* (run+IMPRF), which also lack overt tense but receive present readings ('(s)he is running'). In the absence of tense, t_R is assumed to default to t_s: $\tau(e)$ contains t_s and thus yields a present reading. Following Kehler (2002), ANT cannot rely on default anchoring, thus requires Tense for t_R to be related to t_s or a higher Asp for the default anchoring to be established (4b).

Evidential Inferences are not-at-issue conventional implicatures (Potts 2005; Murray 2014; Koev 2011, 2017). The evidential component is not directly challengeable: in (2), the response *hayır, doğru değil* ('no, it's not true') targets only the at-issue content (that Cem ran). It also projects under operators like negation: *Cem koşmamış* 'Cem didn't run, as I heard/inferred.' Unlike presuppositions, evidentials are informative (cf. Sauerland & Schenner 2007; Şener 2011): "hey, wait a minute" reactions (von Fintel 2004) (e.g., *Bir dakika ya, bunu duyduğunu/anladığını bilmiyordum* 'hey, wait a minute, I didn't know you heard/inferred this') are infelicitous following (2).

Conclusion This study identifies anteriority as a key component of Turkish evidentiality. This is obtained without encoding information source (cf. Şener 2011) or spatial distance between the learning and described events (cf. Koev 2017), accounting for evidential uses of *-mIş* even when the speaker *ultimately witnesses* the event (see also late realization cases; Koev 2011). The analysis neither requires nor rules out modal enrichment; future work may explore such interactions.

(The number of extra lines due to glossing is 12.)

References. *All references are hyper-linked in text.*

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