

The Phenomenon of Speaker Ghosting and the Cancellability Feature of the Turkish *-mİş* Forms

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The paper deals with the phenomenon of speaker ghosting in Modern Turkish and the cancellability of -mİş forms. The approach is based on findings in several publications by Krasimir Kabakčiev on speaker ghosting in Bulgarian, in which the reason for the non-grammaticality of certain types of Bulgarian sentences with two witnessed verb forms is established and explained. For such sentences to become grammatical, they must be re-phrased using perfect verb forms in the dependent clause – which are cancellable. Cancellability roughly means “either true or not true”, whereas Bulgarian preterit verb forms (aorist, imperfect) are witnessed and hence non-cancellable, meaning “only true”. After being found in Bulgarian, speaker ghosting was soon found by Bulatović to exist also in Montenegrin, a language similar to Bulgarian but different in its tense paradigm. This paper reports the existence of speaker ghosting in a third Balkan language, Turkish. Sentences of the Bulgarian type discussed above with two -DI verb forms in Turkish are witnessed and non-grammatical as in Bulgarian, and their incorrectness is again due to speaker ghosting. In order to become grammatical, they must be re-phrased using cancellable verb forms in the dependent clause as in Bulgarian and Montenegrin. Definitively established on data from three Balkan languages already, the regularity receives the status of a Balkansprachbund trait.

Keywords: *speaker ghosting in Turkish; cancellability of -mİş forms; non-cancellability of -DI forms; witnessing and non-witnessing*

Introduction

Issues related to the typology, semantics and pragmatics of the perfect (present perfect) in the languages around the world are some of the most complex and debatable in linguistics. The literature is superabundant and describes many of the formal and semantic manifestations of the perfect in hundreds of languages (see, Comrie 1985: 24; Bybee et al 1994; Dahl 1985). But there is lack of clarity as to its nature, its *raison d'être*, and this leads to disputes and to generalizations that the inconsistencies in the descriptions of the perfect are rooted not simply in the lack of terminological clarity:¹ difficulties in the observation and interpretation primarily arise from the semantics and the grammatical realization of the perfect in separate languages where differences and discrepancies are frequently observed.

There exist numerous descriptions of the semantics of the perfect in cross-language terms, but from the point of view of its formation it is most frequently a

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¹Many alternative terms have been used to refer to the perfect, for example, anterior (Bybee et al. 1994: 51–105), resultative, etc.

periphrastic verb form consisting of a past (active) participle of the full verb preceded by a present-tense auxiliary which is either *have* (as in English, etc.), or *be*, as in Bulgarian (*sam* ‘be’), etc. English: *I have traveled*, Bulgarian *patuval sam* ‘I have traveled’. Described in the literature are many instantiations of the perfect – formal and semantic, in numerous languages (Comrie 1985: 24, Bybee et al. 1994; Dahl 1985). The status of the perfect from the point of view of universal grammar in Chomsky’s (1957, 2015) terms appears clear, in the sense that it emerged and developed in certain languages because it was necessary – and did not emerge and develop in languages in which it was not necessary. However, given the fact that there are languages, many, in which the perfect **does not exist**, the semantics encoded by it – whatever it is or could be, ought to be treated as superfluous from the point of view of universal grammar. A serious question arises: why and when is the perfect necessary?

It is worth noting that just as the manner of its formation in the world’s languages is remarkably similar (from a past participle preceded by an auxiliary *be* or *have*),² so are the descriptions of its semantics in languages that are otherwise genealogically very different. For such languages, see Dimitrova et al. (2025) – about Greek, Georgian and Bulgarian. The striking similarities between languages that are genealogically rather different support a conjecture that the reason for the cross-language existence of the perfect is **not** what it is thought to express – most often “current relevance” (some consequence of a situation realized in the past), but something totally different. Precisely this conjecture is explored here on Turkish material and put to the test.

The definitions of the perfect as denoting “current relevance” are maintained by the majority of researchers (Comrie 1985: 24, Bybee et al. 1994: 61, Aarts et al. 1994: 300, Huddleston and Pullum 2002: 143, Downing and Locke 2002: 361) but some explain the perfect as signifying “resultativity” or similar meanings like “indefinite past”, “embedded past”, “continuative past”, “preterit”, “extended now”, “expanded now” (Lindstedt 1985: 96, McCoard 1978, Fenn 1987, McCawley 1988: 226, Elsness 1997: 67–68, Holton et al. 1997: 300, Musan 2002, Androutsopoulos 2002: 36, Aikhenvald 2004: 112, Eul 2008: 99, 106). All these explanations and definitions of the perfect are **very unclear** and produce many serious issues – in essence and terminological. The description of the semantics of the perfect suffers from grave defects characteristic of the grammars of all or almost all languages and leading to a situation where authors systematically label the perfect “mystery”, “puzzle” and “riddle”, (Klein 1992, Pancheva and von Stechow 2004, Higginbotham 2009: 160). The special circumstance that in English the perfect excludes adverbials of past time adds to its “mystery”; most other languages do not manifest this feature. The semantics of the perfect hinges on differences between the perfect and the preterit and the literature is full of such assertions – but the explanations are poor. The attempts fail to explain the essence of the perfect, including the feature considered to be the major one, “current relevance”, understood as countering a situation denoted by the corresponding preterit verb form and interpreted – otherwise adequately – as separated from the present.

²In some languages, e.g., German, Dutch, Danish, both auxiliaries (*be* and *have*) are used.

General language typology with the innumerable publications available describing the perfect leads researchers to assume that the so-called *current relevance* of a past situation can perhaps be viewed as “the prototypical meaning of the perfect”, a thesis maintained by many (Comrie 1985: 24, Bybee et al 1994: 61, Aarts et al 1994: 300, Lindstedt 2000: 378, Huddleston and Pullum 2002: 143, Downing and Locke 2002: 361). A smaller group of authors maintain that “the meaning of the perfect”, i.e., the central one, is that of *resultativity*. But in one of the first monographs on the perfect, McCoard (1978: 5) lists four major concepts covering the “meaning of the perfect”, namely, current relevance, indefinite past, extended now and embedded past. Resultativity is absent. Indeed, McCoard maintains that “current relevance” expresses a present state *resulting* from past action, but obviously this cannot be equalled to the idea that the perfect expresses result or resultativity in general. Dahl (1985: 132–133) lists four major prototypical uses of the perfect, the first one being “perfect of result”. However, indicatively, the author also calls it “stative perfect” – and, again, it stands to reason to maintain that the idea of stativity is distanced from the notion of resultativity.

Soon after Dahl, Moens raised the strongest criticism ever about “the semantics of the perfect”, pointing out that

the descriptive accounts of the Perfect are vague, they make unprincipled distinctions between different uses of the Perfect, without explaining why the Perfect should fulfil such an arbitrary looking collection of functions.”

Moens (1987: 94). This criticism is fully valid today. There are no essential differences between the attempts at characterizing “the semantics of the perfect”. More recently, Lindstedt (2000: 378) argued in a similar vein that there are no perfects that only have (what he calls) a “current relevance function”. The idea of result or resultativity in the “meaning of the perfect” is also discussed in some newer publications (Plungian 2016: 9–14, Yao 2024). In both it is *not* found to be revealing of some “global semantics of the perfect”. Plungian (2016: 9–15) is critical of the idea of resultativity as its main feature, arguing that interpreting the perfect as a resultative has many vulnerable points. In her brand-new book on cross-language features of the perfect, Yao (2024: 39–43) refers to what she calls “variability in perfect uses” and to “resultative uses” of the perfect, pointing out that along with “resultative uses” there are also “experiential” ones. Thus Yao’s (2024: 43–45) publication also provides no opportunity for finding some “unified meaning of the perfect”.

In the descriptions of the *typology* of the perfect, three sets of problems (at least) can be outlined, related to: (i) the definition of the “semantics of the perfect”: how “the perfect meaning” of the verb form is determined; (ii) the role of the perfect in the system of other verb categories; (iii) the diachronic aspect of the development of the perfect (Plungian 2016: 7–26). Plungian reaches the following generalizations: there is no universal formula for determining the semantics of the perfect where polysemy is observed, and its contextual use, even in closely related languages, is rather different.

Concerning the problem field related to the place of the perfect in the system of other verb categories – in the grammatical systems of particular languages with

the presence of perfects in them and in the universal classification of verb categories, one of the key questions asked is whether the perfect is “aspect” or “tense”. The answers given are either absent or unclear. Some analyses place the perfect in the aspect zone, as a special type of resultative, or in the taxis-tense zone as a form pointing to a precedence relative to a reference point. As for English grammars in particular, in the previous century they used to entertain the idea of the perfect as an aspect (Quirk et al. 1980). As pointed out recently (Kabakčiev 2020: 127), the “second nature” of the English perfect – apart from its tense value (a mixture between present and past) was then sought in three directions, the first of which was labeled “aspect” – together with the indefinite tense forms and the progressive ones. Today this understanding is discarded as wrong and outdated. The progressive is an aspect but the perfect and the indefinite tense verb forms are not.

As a summary of this introduction, what is certain is that the perfect is one of the most widespread grammatical verb forms (according to the data in Dahl 1985; Bybee et al. 1994), observed in at least one third of the languages around the world. The analytical perfect is a characteristic feature of languages in the European area, and the perfect formed with the auxiliary *have* is considered to be a major typological feature of the languages of the European type (Dahl 1985, 2000, Thieroff 2000, Haspelmath 2001, Cysouw 2011).

A BRIEF Overview of how the perfect, or, rather, the perfect-like *-mİs*³ Verb Forms, are treated in Turkology

Before considering in more detail the perfect in Modern Turkish, some major theses in Turkology with respect to its verb paradigm must here roughly be recalled. As is well-known, the Turkish tense-aspect-modality (TAM) paradigm contains rich semantic distinctions indicated by a complex verb inflection system where a single suffix may simultaneously express two or more tense, aspect, modality (evidential) categories, while complex TAM perspectives are compositionally expressed by a combination of these suffixes (Erguvanlı 2011). Tense and modal relations in Turkish can be expressed through morphological grammatical categories (tense and mood of the verb form) or lexical/phraseological means such as adverbials and particles (Tosun 1998, Özsoy and Taylan 1993, Taylan 2000). It must be noted that grammatical markers of verbs do not always have a differentiating function, whereby a certain verb flexion may express simultaneously tense/aspect and/or mood (Aksu Koç and Slobin 1982, Aksu Koç 1988, Kornfilt 1997, Taylan 1997); or, in other words, a morpheme may express different semantic categories – and these are called syncretic morphemes.

According to the general approach developed in the last decades of the 20th century, the perfect is described as a special tense verb form, a crosslinguistic gram type concentrating four meanings (types) attributed to the perfect in the languages of the world: (i) perfect of result; (ii) experiential perfect; (iii) perfect of persistent situation; (iv) perfect of recent past (Comrie 1976: 56–61, Dahl 1985, Bybee et al.

³The capitalized vowel indicates alternations in vowel quality due to vowel harmony. Capitalized consonants indicate changes due to phonological rules such as devoicing.

1994, McCawley 1971, Dahl 1985: 132, Ritz 2012: 883, etc.). But it is worth emphasizing that traditional grammars of Turkish do not deal with the perfect in this way and in such detail. The majority of specialized publications do not recognize it as part of the Turkish grammatical system or in the generally accepted sense of the perfect as a periphrastic verb form comprising of an auxiliary *have/be* in the present and a past active participle of the main verb (as in English, etc.). Instead, certain verb forms are described that can be related to “perfect meanings” as in the theoretical frameworks developed by Comrie (1976), Dahl (1985) and Bybee et al. (1994). Turkological specialized publications view “the perfect” as a special verb form comprising aspectual and temporal (tense) meanings, and the *-miş* past-tense morpheme is regarded as a perfect or quasi-perfect grammeme. Its semantic nature and the devices used for the relevant encoding are described within the framework of the general verb paradigm and are presented in the section of the indicative mood – a controversial solution, where terms such as *öğrenilen geçmiş zaman* ‘heard/learned past tense’, *duyulan geçmiş zaman* ‘heard past tense’, *miş’li geçmiş zaman* ‘past tense with *-miş*’, *belirsiz geçmiş zaman* ‘indefinite past tense’ are used.⁴ Employed in the specialized literature are also terms such as praeteritum-perfectum, preterit, perfect, past indefinite (dubitative, renarrative, narrative), etc. Descriptive terms are also used, such as “past *-miş* tense” and “past *-DI* tense”, *-miş* participle as a predicate, etc. (Emre 1945: 281, Swift 1963, Gencan 1979: 362, Lewis 1967: 122, Ediskun 1999: 176, Göknel 2012: 170, etc.). The large Russian-language specialized Turkological literature also abounds in such terms: (Rus.) *proshedshee rezultativno-neochevidnoe vremya* ‘past resultative-nonwitnessed tense’ (Korkina 1970: 81), *proshedshee neochevidnoe* ‘past nonwitnessed’ (Kononov 1956: 231), *proshedshee subektivnoe* ‘past subjective’ (Kononov 1956: 231, Scheka 2007: 202, Geniş 2007: 45), *absentiv-perfect* ‘absentive-perfect’ (Sorokin 2009: 134), *proshedshee-nastoyashchee* ‘past-present’ (Dmitriev 1960: 50).

A “historical perfect” is often mentioned as characteristic of the Oghuz languages, see Tenishev as editor of the Turkic Grammar (2002: 183–185). Along with other researchers, he calls *-miş* “the leading form of the perfect” for Turkic languages (*ibid.*), with Modern Turkish seen as having developed a whole class of verb forms with a *-miş* formant. In his understanding of the verb paradigm, this affix serves to obtain an aspecto-temporal form constituting a binary opposition with the so-called past categorical tense (a preterit formed with a *-DI* affix) and is associated with two major semantic values: *absentivity* – a semantic value in which the speaker is not a direct witness of the situation and infers about the information in it or about its result on the basis of reports of a third party (third parties); and *perfectness* – a semantic value in which the situation precedes the moment of utterance or some other point of reference, whereby at the relevant moment/point there occurs some result of the situation, most frequently in the form of a state (static perfect, i.e., a grammatical construction signifying a permanent state occurring as a result of a

⁴Classifying *-miş* forms as belonging to an indicative paradigm is as controversial and wrong as classifying Bulgarian aorists and imperfects as belonging to an indicative paradigm – which is the traditional Bulgarian grammatical explanation. From the point of view of theoretical linguistics, if certain verb forms are witnessed – in this case aorists and imperfects – undoubtedly they are modal forms and do not, and cannot, belong to an indicative paradigm.

previous situation), see also Sorokin (2017: 1036). A conclusion made with respect to the ancient Uyghur language that “it cannot be maintained that it had “pure” forms of the resultative perfect, because the semantic area of the perfect has unclear borders that intersect with the aspect meanings of the resultative and the completive and include an evidential seme” (Telitsin and Alieva 2023: 337) can also be made with respect to Modern Turkish.

Finally, as argued by Erguvanlı (2011: 102), the verbal affixes *-DI* and *-mİş*, which are in a paradigmatic relation, occupying the same place in the tense paradigm, are always contrasted in their modal functions (factive vs evidential) but are not always contrasted in the aspect or the tense value(s) that they carry – an argument that corresponds to a recent thesis (Kutsarova 2025) describing the Turkish *-DI* and *-mİş* preterit verb forms as having an aspectually ambivalent nature.

Methods and Aims of the Study

This investigation of the cancellability feature of the Turkish perfect-like *-mİş* forms will use a mixture of methods: (i) analysis of Turkish data – a semantico-syntactic and pragmatic investigation of sentences containing Turkish *-mİş* forms against *-DI* verb forms; (ii) analysis through the prism of the idea of cancellability vs non-cancellability of the Turkish *-mİş* and *-DI* verb forms; (iii) use of English and partly Bulgarian as metalanguages for understanding the *raison d'être* of cancellability; (iv) comparative analyses between Turkish and Bulgarian data; (v) employment of a deductive approach to the Turkish data – described in Dimitrova (2021) and consisting in initially formulating universal features widely found across natural languages. A search is then initiated for their realization to be revealed in and across languages.

The major aim includes, first, an analysis of a recent theoretical model, represented in publications by Kabakčiev (2017; 2018; 2020; 2022) and based on the discovery of the so-called speaker ghosting phenomenon on Bulgarian data, according to which the perfect *has no semantics of its own* but exists in order to exercise certain structural functions – in a way similar to the functions of articles and gender. The second aim is to apply this theoretical model to Turkish language data to check whether the model is valid for Modern Turkish. The third aim is to compare the data found about the Turkish language to data about the perfect in other languages, particularly English and partly Greek, in order to outline certain possible paths of carrying out typological research related to the characteristics of the perfect.

The Phenomenon of Speaker Ghosting – discovered on Bulgarian Data

The phenomenon of speaker ghosting was found on Bulgarian data and initially reported in three publications (Kabakčiev 2017: 209–216, 2018, 2019) using the notion of cancellability. The notion “cancellability of the perfect” was first used and explained in Kabakčiev (2017: 246–259) but, obviously due to the fact that this publication is a grammar, no reference is found in it to Grice’s (1975/1989) notion

of cancellability. Reference to Grice's (1975/1989) notion is made in Kabakčiev (2018: 239), whereby Kabakčiev's notion is similar to Grice's but differing in some details. The Bulgarian sentence (1a), non-grammatical, was the first one used to explain speaker ghosting:

- (1) a. *Petar kaza_{AORWITN}, che Maria pristigna_{AORWITN}
 'Peter said that Maria arrived'
 b. Petar kaza_{AORWITN}, che Maria e pristignala_{PERFECTNON-WITN}
 (literally) 'Peter said that Maria has arrived'

Bulgarian sentences with *verba dicendi* such as (1a), belonging to the *X said that* [content of *that*] semantico-syntactic schema, are non-grammatical – along with many other structurally and semantically similar sentences, e.g., (2a). The reason for the non-grammaticality, initially roughly presented, is the following. The two verbs in (1a) *kaza* 'said' and *pristigna* 'arrived' are perfective aorist forms which are witnessed: the speaker personally experienced (saw or heard, etc.) the two situations. The non-grammaticality of (1a) and (2a) is due to the violation of a strict requirement for the second part of the *X said that* [content of *that*] schema to contain a cancellable verb form, i.e., one which is either true or not true (Kabakčiev 2018; 2019). Thus, in order to become grammatical, the sentences (1a) and (2a) must be changed to (1b) and (2b) with perfect verb forms – which are cancellable. But it is not that the relevant sentences are non-grammatical simply because of the presence of two witnessed verb forms. As can be seen in (2a), there exist similar Bulgarian sentences with one witnessed verb form – only in the dependent clause, which are, however, also non-grammatical. On the other hand, there are sentences with two witnessed verb forms which are fully correct, cf. (2b):

- (2) a. *Spored Petar Maria pristigna_{AORWITN}
 'According to Peter Maria arrived'
 b. Petar vidya_{AORWITN}, che Maria pristigna_{AORWITN}
 'Peter saw that Maria arrived'

See below for detailed reasons why.

Very soon after the discovery of speaker ghosting on Bulgarian data, Bulatović (2018) found the phenomenon in Montenegrin. Sentences identical to Bulgarian (1a), non-grammatical, are non-grammatical in Montenegrin too, compare (3a) vs the grammatical (3b) with a perfect verb form, cancellable:

- (3) a. *John reče_{AORWITN} da stiže_{AORWITN}
 'John said he arrived'
 b. John reče_{AORWITN} da je stiga_{PERFECTNON-WITN}
 (literally) 'John said he has arrived'

Speaker ghosting, as described in Kabakčiev (2018), consists in the following. In a Bulgarian non-grammatical sentence such as (1a) with two witnessed verb forms (in this case aorist), the speaker knows that Maria arrived because he/she

witnessed (saw/heard) her arrival. But, apart from asserting that Maria arrived – through the dependent clause, the speaker also asserts Peter’s words that Maria arrived. Maria’s arrival thus becomes problematic. Because if we solely rely on the words of a third party that Maria arrived, Maria may not have arrived. What is more, the proposition of (1a) contains not one but two speakers: one speaker is saying that Peter said that Maria arrived, another is saying that he/she witnessed Maria’s arrival. But if one speaker is saying that Peter said that Maria arrived, this opens two possibilities: for Maria to have arrived or not to have arrived, and the second of these possibilities is canceled by the second speaker’s assertion that Maria arrived. Arguably, it is the second speaker’s words, who saw Maria’s arrival, that ought to be trusted. Conversely, the first speaker, who reported Peter’s words about Maria’s arrival, ought to be regarded as a fake (illegitimate) speaker, a ghost speaker (Kabakčiev 2018: 229ff). As for sentences such as (2a), their non-grammaticality again rests on the first clause which, despite the absence of a verb form in it, also requires that the second part of the whole sentence contains a cancellable verb form.

Speaker Ghosting explained on Turkish Data

Seven years after the discovery of the extremely intriguing phenomenon of *speaker ghosting* on Bulgarian data and soon after that confirmed on Montenegrin data, it can now be reported that the phenomenon also exists in Turkish, another language in the Balkansprachbund. Turkish (4a) is a non-grammatical sentence, just like Bulgarian (1a). In order to be correct, it must contain a *-miş* verb form, which is cancellable:

- (4) a. *Petır söyledi ki Maria geldi
 ‘Peter said that Maria arrived’
 b. Petır söyledi ki Maria gelmiş
 (literally) ‘Peter said that Maria has arrived’

Compare another sentence of this type in Turkish, (5a), again non-grammatical. Re-phrased by using a perfect verb form – which is cancellable, it becomes grammatical, (5b):

- (5) a. *Annem söyledi ki kardeşimi bir inek tekmeledi⁵

⁵Dependent clauses with the conjunction *ki* are more typical of the colloquial style in Turkish. They are understandable for the native speakers who, however, regard as more natural dependent clauses obtained from a non-finite construction with a deverbal noun, *-DİĞİNİ* ‘that (the cow) kicked (my brother)’; factive nominal; derived with past tense + nominalizer suffixes; in combination with a case affix, for example: *Annem, ineğin kardeşimi tekmelediğini söyledi* ‘My mother said that a cow has kicked my brother’. Ediskun (1999: 309) provides the following examples: *Biliyorum ki beni seviyor* ‘I know (that) he/she loves me’ = *Beni sevdiğini biliyorum* ‘I know (that) he/she loves me’; *Görülüyor ki çalışmamışsınız* ‘It looks like you haven’t worked’ = *Çalışmadığınızı görüyor* ‘It looks like you are not working’. For the purposes of this paper, sentences containing the conjunction *ki* ‘that’ are used, because they are a literal translation of the English and Bulgarian equivalents and represent more clearly the phenomena analyzed.

‘My mother said that a cow kicked my brother’
 b. Annem söyledi ki kardeşimi inek tekmelemiştir
 (literally) ‘My mother said that a cow has kicked my brother’

A comparison using a direct translation from Turkish into Bulgarian – of (5) into (6) – reveals that the two languages demonstrate the same regularity in a perfect fashion:

- (6) a. *Mayka mi kaza, che krava ritna brat mi
 ‘My mother said that a cow kicked my brother’
 b. Mayka mi mi kaza, che krava e ritnala brat mi
 ‘(lit.) My mother said that a cow has kicked my brother’.

The Bulgarian sentence (6a) is non-grammatical exactly in the same way as its Turkish translation correspondence (5a). And any other sentence like (5a) in Turkish will be non-grammatical, whereby grammaticality will have to be achieved by replacing the witnessed verb form in the dependent clause with a non-witnessed one – hence cancellable.

The Traditional View in Turkology of the difference between *-miş* and *-DI* Forms

Turkish does not have exactly the same type of perfect verb forms as English does. Simple past tense forms in Turkish with suffixes *-dı, -di, -du, -dü; -tı, -ti, -tu, -tü* and reported (renarrated) past tense forms with suffixes *-miş, -miş, -muş, -müş*, function, very generally speaking, as either present perfect or past tense forms in English:

- (7) a. Berna odasını temizledi
 ‘Berna cleaned/has cleaned her room’
 b. Berna odasını dün temizledi
 ‘Berna cleaned her room yesterday’
 c. Berna odasını temizlemiştir
 ‘Berna has cleaned her room’
 d. Berna odasını temizlemiştir
 ‘Berna had cleaned her room’

In (7a) the simple past form *temizle-di* (from *temizle-* ‘to clean’ + *-DI*) is morphologically past tense. In isolation, however, it may correspond either to an English simple past (‘cleaned’) or to a present perfect (‘has cleaned’). The choice of translation depends on the pragmatic context. If the emphasis lies on the result still being relevant (e.g., the room is now clean), an English present perfect is appropriate. If the event is located at a definite time in the past, the English simple past is more natural. Thus, (7a) illustrates the underspecification of *-DI* between perfect and past readings.

The presence of the adverbial *dün* (‘yesterday’) in (7b) anchors the event to a specific past time. This temporal anchoring blocks a present perfect interpretation in English, since English perfect forms are incompatible with explicit past time adverbials.

Consequently, the only natural English equivalent is the simple past ('cleaned'). The Turkish *-DI* form remains formally identical to (7a), but the temporal adverbial narrows its interpretation to a definite past reading.

In (7c) the verb bears the suffix *-mİş*, marking the reported past. This morpheme encodes indirectivity, inference, or non-witnessed information, and it may also carry mirative nuances ('apparently, surprisingly'). Semantically, it often overlaps with the English present perfect in contexts where the focus lies on the present relevance of a past action. Thus, (7c) can be rendered as 'Berna has cleaned her room', especially if the speaker is inferring the action from evidence (e.g., the room looks tidy). Unlike *-DI*, the *-mİş* form does not simply indicate a past fact but signals the speaker's stance toward the source of information.

The combination of *-mİş* with the pluperfect marker *-DI* (*-mİş-tİ*) in (7d) yields a form that functions as a past perfect. This construction locates the reported or inferred event as anterior to another past reference point, analogous to the English past perfect ('had cleaned'). Importantly, the *-mİş* element retains its inferential/reported value, but the *-DI* suffix shifts the temporal perspective backwards, producing a meaning close to the English pluperfect.

Examples (7a–d) demonstrate that Turkish expresses meanings covered in English by simple past, present perfect, and past perfect through a system that relies primarily on the opposition between *-DI* (witnessed past) and *-mİş* (reported past), with additional combinations (e.g., *-mİş-tİ*) for relative past reference. The mapping between Turkish and English is therefore not one-to-one: while Turkish forms are morphologically simpler, their interpretation depends heavily on discourse context, temporal adverbials, and the evidential value of *-mİş*.

Where does Modern Turkish stand in the landscape of languages with perfects? Let us discuss Arslan-Kechriotis' (2006) reasoning. This author, along with many other Turkologists, asserts that evidentiality in Turkish is coded by the verbal suffix *-(I)mİş*⁶. What is meant by "evidentiality" here is its instantiation (only one of many) as non-witnessing. Quoting Comrie (1976: 56–61) and Iatridou et al. (2001) among others, Arslan-Kechriotis lists four different types of perfect: (i) universal, (ii) experiential, (iii) perfect of result, and (iv) perfect of recent past, whereby Iatridou et al. (2001) use the term *existential perfect* as uniting the latter three. Various other aspects of the "semantics of the perfect" have been analyzed in many publications, see Johanson (1971, 1994, 2000); Grunina (1976); Comrie (1976, 1985); Aksu-Koç (1988); Izvorski (1997); Erguvanlı (1997, 2001); Kornfilt (1997); Keleşir (2000); Cinque (2001); Iatridou et al. (2001); Şener (2011), etc. But all these studies fail to propose a reasonable explanation of the "semantics of the perfect" or of its "functional features", in contrast to Kabakčiev's papers (2018; 2019; 2020; 2022; 2023) which offer a completely novel insight on the essence of the perfect, its *raison d'être* – on a language, Bulgarian, which has been in contact with Turkish for many centuries. It could be hypothesized – though it would be difficult to prove – that the non-witnessed nature of the Bulgarian perfect results from language contact:

⁶The literature provides two approaches in this regard. The first one affirms that *-mİş* and *-Imİş* are two distinct suffixes with distinct functions in Turkish. According to the second one, there is only one morpheme *-(I)mİş*. This discussion is beyond the scope of the present paper, for more detail see Gül (2006).

a borrowing in Bulgarian grammar from Turkish grammar. Analogously with the Turkish *-DI* forms: they feature the value “witnessed” just like the Bulgarian preterit verb forms (aorist and imperfect) do.

And there remains a crucial question about both languages: why did it happen so that they developed witnessed verb forms, on the one hand, and non-witnessed ones, on the other. Actually, this question is easy to answer. If a language has non-witnessed verb forms, it is absolutely logical for it to have witnessed verb forms too. And vice versa, if a language has witnessed verb forms, it is logical for it to have also non-witnessed ones. Communication would be practically impossible in a language with only witnessed verb forms – or with only non-witnessed ones.

The Turkish non-witnessed *-miş* Forms as Exponents of the Feature Cancellability versus the witnessed *-DI* forms

The prevailing view in Turkish linguistics is that the suffixes *-miş* and *-DI* encode “the speaker’s source of information for a given statement” but in the descriptive grammars of Turkish and in the general linguistic literature these morphemes are also classified as “expressing tense and aspect meanings”: a description that is broad and unclear. Many authors (Gencan 1979: 275–276, Ediskun 1999: 175–176, Hengirmen 2006: 220, Korkmaz 2009: 584–599) label *-miş* “a past tense suffix” and a “hearsay past marker”, taking *-DI*, the “narrated past tense marker”, as its counterpart. The otherwise considerable amount of research on the morphosyntactic properties of verbal and nominal inflectional affixes in Turkish (Lewis 1967, Underhill 1976, Johanson 1971, Kuruoglu 1986, Aksu-Koç 1988, Erguvanlı 1988, 1996, Slobin-Aksu 1982, Yavaş 1980, 1982, Kornfilt 1997, Şener 2011, Yordanova 2015: 94, among others) does not provide a clear picture of how these properties relate to the general TAM systems of better studied languages such as English.

A brief comparison of the Turkish TAM system and its *-miş* and *-DI* verb forms with the Bulgarian TAM system shows full or almost full parallelism: (1) Turkish *-DI* verb forms encode witnessing in the past domain – which in Bulgarian corresponds to the witnessing encoded by aorist and imperfect forms; (2) conversely, non-witnessing in Turkish, encoded in the past domain by *-miş* verb forms, corresponds in Bulgarian to the non-witnessing effectuated by perfect and renarrative verb forms (for further detail on Bulgarian, see Kabakčiev 2023).

More on the cancellability of the Turkish *-miş* Forms⁷

Widely used in linguistic theory is the notion of *speaker*, which has the notion of *hearer* as its counterpart; *speaker* and *hearer* are entities present in every meaningful sentence in every language. As argued in Kabakčiev (2019), in this case it is mainly the speaker that we should be interested in. Let us analyze sentences (8) and check the status of the speaker in sentence (8b): a grammatical one corresponding to the non-grammatical (8a).

⁷The analysis is based on Kabakčiev’s (2019: 275–276) theoretical framework, applied to Turkish.

- (8) a. *Annem söyledi ki kardeşimi inek tekmeledi
 ‘My mother said that a cow kicked my brother’
 b. Annem söyledi ki kardeşimi inek tekmelemiş
 (lit.) ‘My mother said that a cow has kicked my brother’.

(8b) comprises two clauses, *Annem söyledi* ‘My mother said’ and *kardeşimi inek tekmelemiş* ‘a cow has kicked my brother’. The speaker producing (8b) first reports that a person, *annem* ‘my mother’, said something and that the speaker personally perceived (witnessed) what this person said. This is effectuated through the verb form *söyledi* ‘said’, which is a past witnessed form (*görülen/-Dİ’li geçmiş zaman* ‘witnessed past tense’) encoding the personal witnessing by the speaker of the situation reported. Phrased in the simplest way, *söyledi* ‘said’ is a witnessed form. Now let us discuss the clause *kardeşimi inek tekmelemiş* ‘a cow has kicked my brother’, the second part of (8b). The verb form is past and non-witnessed, termed *öğrenilen/-miş’li geçmiş zaman geçmiş zaman* ‘reported past tense’. This means that the speaker ascribes to a third party the assertion that a cow kicked my brother, contrary to *Annem söyledi* ‘My mother said’ where the speaker personally witnessed the happening – that my mother told me something.

Let us now discuss the problematic (non-grammatical) sentence (8a). The two sentences in (8) are the same in their first part, hence let us focus on the second part, where the dependent clause (8a) contains not a past non-witnessed form, *tekmelemiş* ‘has kicked’, but a witnessed one, *tekmeledi* ‘kicked’. It is worth asking now whether it is possible for the non-grammaticality of (8a) to be due simply to the witnessed form *tekmeledi* ‘kicked’? Let us reason. The first part of the sentence contains a speaker who witnessed my mother’s saying something; the second part contains a speaker who witnessed the event of a cow kicking my brother. These two speakers ought to be one and the same person: sentence (8a) ought to have a single speaker, or at least the assertions in the two clauses ought to be non-controversial. A question arises: is there a controversy in that the speaker saying *Annem söyledi* ‘My mother said’ was a witness to what my mother said, and is also a witness to the event of a cow kicking my brother? There should **not** be a controversy: there are many similar sentences in which two witnessed forms enjoy a “happy co-existence” which does not trigger any non-grammaticality:

- (9) a. Annem gördü ki kardeşim Simge’yi öptü
 ‘My mother saw that my brother kissed Simge’
 b. Hakim anladı ki tanık doğruyu söyledi
 ‘The judge understood/realized that the witness told the truth’

Therefore, the non-grammaticality in (8a) clearly **does not** result from the mere presence of two witnessed verb forms. But if non-grammaticality is not due to the simultaneous presence of two witnessed verb forms, what is it due to then? The non-grammaticality can be explained (as in Kabakčiev 2018) in the following way.

If we take a sentence like (8a), in which the speaker personally witnessed that a cow kicked their brother, yet begins the sentence by reporting that their mother said this, a problem arises regarding what is actually being asserted. Why? Because

when the speaker uses *Annem söyledi* ‘My mother said’ to report that their mother said a cow kicked their brother, it implies that the event may not have occurred: relying on a third party’s words inherently introduces uncertainty. When we report something on someone else’s authority – whether it concerns past, present, or future events – there is always the possibility that it didn’t happen, isn’t happening, or won’t happen.

Consequently, the proposition expressed by a sentence like (8a) appears to involve not just one speaker, as one might expect, but two. More than that, these two speakers actually contradict one another. The speaker in the main clause reports what their mother said – that a cow kicked their brother, while the speaker implied by the embedded witnessed form (*tekmeledi*, ‘kicked’) asserts that they themselves saw the event occur. This results in two competing interpretations: either the brother was indeed kicked by a cow, or he wasn’t. But the ambiguity introduced by the matrix clause is resolved by the evidential in the embedded clause, which conveys direct witnessing and thus confirms that the brother was indeed, truly, kicked by a cow.

Thus, sentence (8a) contains not one but two speakers. The first one produces the main clause *Annem söyledi* ‘My mother said’; the second one produces the embedded clause *kardeşimi bir inek tekmeledi* ‘a cow kicked my brother’. Whom must we trust? It is logical to assume that, if the second speaker personally witnessed how a cow kicked my brother, this assertion ought to be believed. As for the first speaker, who saw or heard my mother saying that my brother was kicked by a cow but did not see how he was kicked, s/he ought to be treated as a ghost (fake, illegitimate) speaker. It can be taken for granted that a given meaningful sentence in a given natural language **must not host two speakers**. And especially in the – perhaps – unlikely or possible presence of two speakers, these two speakers must not be allowed to contradict themselves, as is the case here. Therefore, the Turkish sentence (8a) is deemed to be non-grammatical. Because it not only hosts two speakers, these two speakers **substantially contradict each other**.⁸ The mystery of the non-grammaticality of sentences such as (8a) which reigned for many decades in Bulgarian grammar was revealed in Kabakčiev (2018). Soon after the discovery of the speaker ghosting phenomenon in Bulgarian it was found to exist in Montenegrin too – by Bulatovic (2018). The non-grammaticality of sentences such as (1a) is due to speaker ghosting, and more particularly to the presence in such sentences of two separate speakers contradicting each other: one in the matrix clause, the other in the embedded clause.

In some recent papers Kabakčiev (2020, 2022, 2023) pointed out the necessity for removing the witnessing feature of the aorist and imperfect grammemes, emphasizing that the major function of the perfect is the **elimination of witnessing**, not only in languages such as Bulgarian, in which witnessing is grammaticalized, but also in languages such as English, where it is the case that not only is witnessing **not grammaticalized**, it is generally considered in the literature – wrongly – **not to**

⁸Sometimes there appear to be two speakers in one and the same sentence, as in *Yesterday Albena was sad, today she is joyful*. The status of the speaker/speakers in this type of sentences must be such that there are either two speakers present in two different temporal domains, one of which in the domain “yesterday”, the other in the domain “today”. Or there is only one speaker with a special capacity: capable of moving along the time axis from the location “yesterday” to the location “today”. But in any case, without trying to decide which of the two variants is a correct one, the assertions of the two speakers or the two assertions of a single speaker must not contradict each other.

exist. Thus elimination of witnessing is observed in Turkish sentences such as (4), whereby in (4a) there is non-grammaticality, which is, as a rule, eliminated by the perfect-like verb form *gelmiş* in (4b). Compare again the non-grammatical sentence (4a) and the grammatical (4b):

- (4) a. *Petır söyledi ki Maria geldi
 ‘Peter said that Maria arrived’
 b. Petır söyledi ki Maria gelmiş
 (literally) ‘Peter said that Maria has arrived’

Sentences such as (4a) with *verba dicendi*, non-grammatical, have as counterparts sentences such as (10a) in which non-grammaticality is triggered by the phrase *Petır’a göre* ‘according to Peter’ – and by similar phrases. The non-grammaticality is again eliminated by using a *-miş* verb form, see (10b):

- (10) a. *Petır’a göre Maria geldi
 ‘According to Peter, Maria arrived’
 b. Petır’a göre Maria gelmiş
 ‘According to Peter, Maria has arrived’

The non-grammaticality of sentences in Bulgarian such as (4a) and their normalization (grammaticalization) through (4b) are described in detail in Kabakčiev (2018) and Kabakčiev (2019, 2023). Following Kabakčiev’s (2020) analysis, it is reasonable to maintain that there is an interplay also between the perfect and the preterit in languages like English where the preterit serves to signify witnessing by default, while the perfect is a non-witnessed form in itself. In other words, there is an interplay between different grammatical categories and grammemes, and this interplay is a reason for their existence. A hypothesis could even be raised that this interplay does not exist in separate grammatical categories and grammemes in a certain language only (in certain languages) but is a general principle of the existence of grammatical categories and grammemes.

Kabakčiev’s (2020, 2022) thesis concerning the perfect, adhered to in this work, is that the present perfect has no own semantics at all: it exists and functions not in order to express something but in order *not to express something*, namely, witnessing. Thus it serves structural functions – that are residual and similar to those of grammatical gender and articles – *a*, *the*, zero article (Kabakčiev 2019). For gender and articles it is common knowledge that they possess no real (full-fledged) own semantics but serve structural functions.

In Turkish non-witnessing is realized by the *-miş* verb forms, hence these forms encode cancellability. In a similar observation made a long time ago, Kornfilt (1997: 337) argued that Turkish *-miş* forms signify that what the speaker says is either true or not true. Here are some more examples demonstrating the non-grammatical use of *-DI* forms in the *X said that* [content of *that*] semantico-syntactic schema and the correct use of *-miş* forms in this schema:

- (11) a. *Öğretmenim söyledi ki Sinan bu sınavı kazandı
 My teacher said that Sinan passed this exam
 b. Öğretmenim söyledi ki Sinan bu sınavı kazanmış
 (lit.) My teacher said that Sinan has passed this exam

The Turkish data in (11) and (12)–(13) below demonstrate once again the systematic contrast between *-DI* witnessed past tense forms and *-mİş* non-witnessed/reported past tense forms when embedded under verbs of saying and some similar ones. Just as in example (8), the contrast between the grammatical sentences with *-mİş* and the non-grammatical sentences with *-DI* can be accounted for in terms of the speaker’s status and the phenomenon of *speaker ghosting* (Kabakčiev 2018, 2019).

Sentence (11b) above is grammatical, while (11a) is not. In (11b), the verb *söyledi* ‘said’ is in the witnessed past (*-DI*), signaling that the speaker personally witnessed the act of the teacher saying something. The embedded clause, however, contains *kazanmış* ‘has passed’, a non-witnessed past (*-mİş*). Here the speaker does not commit to having witnessed Sinan’s success in the exam, but attributes this information to the teacher. Thus, there is a single speaker perspective consistently maintained: the speaker saw the act of saying, but does not assert personal witnessing of the exam outcome. By contrast, (11a) contains *kazandı* ‘passed’, a witnessed past form in the embedded clause. This construction implies that the speaker personally saw Sinan pass the exam. Yet the sentence is framed as a report of what the teacher said. Hence, two contradictory speaker perspectives emerge: (i) the speaker witnessed the teacher’s saying something, and (ii) the speaker also witnessed Sinan’s passing the exam, though the matrix clause presents this as knowledge mediated by the teacher. The two speaker roles cannot be reconciled, and thus the sentence is non-grammatical. This is a clear case of *speaker ghosting*: the embedded clause introduces a *ghost speaker* who contradicts the reporting frame.

A similar pattern is visible in (12):

- (12) a. *Fatih inanmıyor ki Işıl gitti
 Fatih does not believe that Işıl left
 b. Fatih inanmıyor ki Işıl gitmiş
 ‘Fatih does not believe that Işıl has left’

The correct variant is (12b), with *gitmiş* (‘has left’, non-witnessed). The matrix verb *inanmıyor* ‘does not believe’ marks the speaker’s impression that Fatih does not believe something, yet, of course, this something might also be true. The embedded clause contains non-witnessed *gitmiş* which allows the perspective to remain consistent: the speaker reports Fatih’s cognitive act, while attributing the content “Işıl has left” to Fatih’s hesitation whether Işıl left or not without committing to having witnessed Işıl’s departure. In (12a), conversely, the embedded verb *gitti* (‘left’, witnessed) conflicts with the reporting frame. The witnessed form signifies that the speaker personally saw Işıl leaving. The result is a contradiction: two speaker perspectives are present, one asserting that the speaker witnessed Işıl’s departure, and the other implying that this knowledge is uncertain, derived through Fatih’s hesitation

whether Işıl left or not. Again, the clash between the two speaker roles produces non-grammaticality.

A similar explanatory mechanism applies in (13):

- (13) a. *Bildirildi ki yeşil araba kırmızı ışıkta geçti
 ‘It was reported that the green car passed through the red light’
 b. Bildirildi ki yeşil araba kırmızı ışıkta geçmiş
 (lit.) ‘It was reported that the green car has passed through the red light’

In (13b), the embedded clause contains *geçmiş* (‘has passed’, non-witnessed), aligning with the fact that the speaker did not witness the event of the car crossing the red light. Instead, the information is attributed to an act of reporting. The matrix verb *bildirildi* ‘it was reported’ is in *-DI*, witnessed, and represents a speaker’s direct perception of a report about a car passing through red light. Sentence (13a), however, contains *geçti* (‘passed’, witnessed) in the embedded clause, which signifies that the speaker themselves saw the green car run the red light and not that a report stated the event. This conflicts with the framing: the sentence asserts that there was a report of a car passing through red light; the speaker covers the report but does not, and cannot, commit himself/herself to the truth or untruth of the report. As in the previous examples, the result contains two competing speaker perspectives – one, the report, witnessed by the speaker but not validating its truth, the other producing a *ghost speaker* effect and thus non-grammaticality.

Thus the data in (11)–(13) confirm the generalization established in (8): embedded clauses under verbs of saying plus some other verbs and syntactic structures require the use of the non-witnessed *-miş* past tense form. When a witnessed *-DI* form appears there instead, the sentence becomes non-grammatical because two different, competing speaker perspectives are introduced, one in the matrix and one in the embedded clause, and they contradict each other.

The phenomenon is explained through the mechanism of *speaker ghosting*: the presence of two speakers within a single sentence, one explicit and one implicit. Since natural language requires a consistent speaker perspective, such ghosting leads to non-grammaticality. The Turkish data here thus support Kabakčiev’s (2018, 2019, 2020, 2022, 2023) thesis that the primary function of the perfect is to *eliminate witnessing*. In languages where witnessing is grammaticalized, such as Turkish (with *-DI* vs. *-miş*), this elimination is directly observable in the contrast between grammatical and ungrammatical sentences like those in (11)–(13).

Conclusion

The analysis carried out here of the non-grammaticality of sentences such as (1a), (4a), (5a), (8a), (10a), (11a), (12a) and (13a) shows that Turkish *-DI* verb forms represent non-cancellable content, which underlies the non-grammaticality of the sentences. Sentences of type (4b), (5b), (8b), (10b), (11b), (12b) and (13b) containing *-miş* forms are grammatical, because they have a reducible content with no internal contradiction, no *speaker ghosting* effect. As for the non-grammaticality of sentences

such as (8a), they contain witnessed forms that also feature non-cancellable content, and this enters into a contradiction with the requirement contained in the first clause in the *X said that* semantico-syntactic schema for the second part of the sentence (the *that* phrase) to contain cancellable content verb forms. But the major reason for the non-grammaticality of the Turkish sentences of type (8a) and for the non-grammaticality of other similar sentences can be defined as the presence in each of them of a *ghost speaker*.

The approach in linguistic writings – otherwise massive – according to which generalizations are made about *-mİş* forms expressing current relevance, resultativity and similar notions, is non-productive. If the expression of current relevance, resultativity and other similar notions were necessary for communication between people, all natural languages would feature present perfect verb forms. The fact is that there are hundreds of languages on the planet with no present perfect verb forms – and without any perfect verb forms at all.

It can be considered that the perfect and in particular the present perfect serves structural functions related to the lack of witnessing characteristic of the perfect and to the necessity to eliminate the non-grammaticality of certain types of sentences. The elimination of non-grammaticality of certain sentences is also related to the presence of the phenomenon of *speaker ghosting*, proved previously to exist in two languages only: Bulgarian and Montenegrin. Based on the analysis here, a conclusion is made that Modern Turkish, like Bulgarian and Montenegrin (see Kabakčiev 2018, 2023, Bulatović 2018), also features the phenomenon of *speaker ghosting*. It appears in certain non-grammatical sentence types that require grammaticalization, i.e., correction into an acceptable grammatical form, typically achieved through the use of *-mİş* forms. While this phenomenon is found in Turkish and in two other Balkan languages, its presence should not be labeled as some special feature of the Balkansprachbund. It may turn out that this phenomenon reflects a much broader tendency, possibly universal. Future research will need to determine whether the functions of the perfect, and those of the Turkish *-mİş* forms in particular – are central to this pattern, or whether some other, more fundamental cross-linguistic factors might also be at play.

It becomes clear that while in Bulgarian the use of the perfect is not merely possible but obligatory – in its absence non-grammaticality arises due to the phenomenon of *speaker ghosting*, and the same is true for Turkish. In both languages the perfect is **grammaticalized**, and in embedded clauses the use of perfect forms (*-mİş* in Turkish, the perfect in Bulgarian) is required. Failure to use them often results – in the relevant types of sentences, in contradiction between speaker perspectives, which lead to non-grammaticality. By contrast, perfect verb forms in Greek and English are not grammaticalized in this way. Their use in embedded clauses after *verba dicendi* is possible but not mandatory.⁹ This is because in these languages the semantics of cancellability (*revocability*) can be coerced onto the dependent clause by the matrix clause (e.g., *I understand/hear that ...*) or by adverbials such as

⁹In sentences with *verba dicendi* such as English *Peter said that Maria arrived* and its Greek equivalent *O Pétros eípe óti i María éftase*_{AOR}, using the perfect is as good as using the past simple (in English) and the aorist (in Greek).

probably or *reportedly*, which require cancellability of the subordinate proposition. Since the Greek aorist and imperfect and the English preterit are not grammatically marked for non-revocability, they can occur in embedded contexts without producing non-grammaticality.

All this confirms the hypothesis (see Kabakčiev 2022: 399) that while non-witnessedness and cancellability are grammaticalized values expressed through perfect forms in Bulgarian – and by extension in Turkish, in Greek and English they seem to be only pragmatically signaled and not systematically encoded. While witnessedness and non-revocability are not grammatically marked in Greek and the aorist and the imperfect merely imply them by default, in Bulgarian and Turkish they are ***an essential part of the grammar***: the simple past forms (-*DI* in Turkish, the aorist and the imperfect in Bulgarian) encode witnessedness directly, whereas the perfect (-*mİş*, *perfect periphrasis*) eliminates it. Thus, in Turkish – as in Bulgarian – the perfect serves as a grammaticalized means of ***eliminating witnessing and encoding cancellability***, while in Greek and English and in similar languages these values remain implicit, context-driven, non-grammaticalized.

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