

On the Grammaticalization of Two Types of *ki* in Turkic

Türk Dillerinde İki Tür *ki*'nin Dilbilgiselleşmesi Üzerine

Éva Á. CSATÓ¹ , Lars JOHANSON² 



ABSTRACT

This article outlines various grammaticalization paths of the two types of the Turkic particle *ki*: the modal particle *ki* and the copied junctor *ki*. The element *ki* has been employed in Turkic languages in all documented historical periods, serving various semantic and syntactic functions as particles and junctors, i.e., subjunctions, conjunctions or adjunctors. Typological studies often blur any distinctions between semantic and syntactic properties by giving priority to semantic/cognitive criteria, which are easily applicable in large-scale comparative studies, e.g., Cristofaro (2003). Cross-Turkic comparison of the grammaticalization of *ki* elements shows that structures sharing semantic/cognitive properties may be syntactically different. *Ki* plays a special role in high-copying Turkic varieties that have throughout replaced typical Turkic bound junctors by free junctors (Johanson 2000, 2002, 2010). Areal linguistic features have influenced the grammaticalization processes.

Keywords: Turkic linguistics, clause combining, junctors, Code-Copying, grammaticalization

Öz

Bu makalede Türk dillerindeki kısaca şu iki tür *ki*'nın çeşitli dilbilgiselleşme yolları incelenecaktır: kiplik parçacığı *ki* ve kopyalanmış bağlayıcı *ki*. Türk dillerinin belgelenmiş bütün dönemlerinde parçalık veya bağlayıcı yani altasırالayıcı, sıralayıcı ya da bağlayıcı zarf olarak çeşitli anlamsal ve sözdizimsel işlevlere hizmet eden bir *ki* ögesi kullanılmıştır. Tipolojik araştırmalar, büyük ölçekli karşılaştırmalı çalışmalarında kullanmaya elverişli anlamsal/bilişsel ölçütlerde öncelik vermek suretiyle çeşitli anlamsal ve sözdizimsel özellikler arasındaki ayırmalar genellikle bulanıklaşır, örn. Cristofaro (2003). *Ki* ögelerinin dilbilgiselleşmesinin Türk dilleri arasında karşılaştırılması, anlamsal/bilişsel özellikleri paylaşan yapıların sözdizimsel olarak farklı olabileceğini gösterir. *Ki*, Türk dillerinin ek halindeki bağlayıcıları bağımsız bağlayıcılarla değiştirmiştir, yoğun kopya bulunduran varyantlarında özel bir rol oynar (Johanson 2000, 2002, 2010). Bölgesel dil özellikleri dilbilgiselleşme süreçlerini etkiler.

Anahtar kelimeler: Türk dilbilimi, cümle birleştirme, bağlayıcı, kod kopyalama, dilbilgiselleşme

¹Corresponding author/Sorumlu yazar:
Éva Á. Csató (Prof.),
Uppsala University, Department of Linguistics
and Philology, Uppsala, Sweden
E-mail: eva.csato@lingfil.uu.se
ORCID: 0000-0002-8252-1373

²Lars Johanson (Prof.),
Uppsala University, Disciplinary Domain of
Humanities and Social Sciences, Faculty of
Languages, Department of Linguistics and
Philology, Uppsala, Sweden
E-mail: johanson@uni-mainz.de
ORCID: 0000-0001-6731-8855

Submitted/Başvuru: 13.09.2021

Revision Requested/Revizyon Talebi:

26.09.2021

Last Revision Received/Son Revizyon:

27.09.2021

Accepted/Kabul: 14.10.2021

Citation/Atıf: Csató, Éva Á., Johanson, Lars.
"On the Grammaticalization of Two Types of *ki* in Turkic." *Türkイヤt Mecmuası-Journal of Turkology* 31, Özel Sayı (2021): 1-14.
<https://doi.org/10.26650/iuturkiyat.994834>

Introduction

Two types of *ki*

A consistent distinction has to be made between two types of *ki* particles: the modal particle *ki* and the copied junctor *ki*. These two types have different etymologies and they have undergone different grammaticalization processes. It is, however, clear that the grammaticalization processes have been influenced by the fact that the two types are homonymous.

There is also a third type, the accentable relational suffix {+KI(n)} which can take on possessive and case markers. This type also has a wide distribution and occurs in most Turkic languages. It can be added to locative forms or to adverbs to express local and temporal affiliation, e.g., East Old Turkic *balık-da-ki* ‘the one in the town’, *öy-rä-ki* ‘the previous one’. It attaches to the genitive of pronouns, e.g., Turkish *ben-im-ki* ‘mine’, and even to certain converbs, e.g., Turkish *buraya gel-ir-ken-ki hava* ‘the weather during the time when we came’. This suffix will not be dealt with here.

Methodology: A typology of clause junctors

A short account of the types of junctors used in the typological framework applied in this article is due here. Clause junctors are defined as connective devices, products of various grammaticalization processes, combining neighboring predications within or beyond the sentence and establishing the relations between them more or less explicitly. They can be bound or free. Thus, a Turkish verbal nominal suffix such as {-DIK} can function as a bound junctor, whereas English ‘that’ is a free junctor.

Clause junctors may be classified in three dimensions: integration, accuracy, and elaborateness (Johanson 1993, 2010). The dimension of integration concerns the syntagmatic structure, the degree of intimacy of the two predications. The relation between the two predications may be indicated by different types of junctors, i.e., subjunctions, conjunctors and adjunctors (Johanson 2010, 2013).

Subjunctions

We apply two criteria for identifying subordinated clauses (Johanson 1975):

- (i) Subordinated clauses expressing two predications can be incorporated together as part of a superordinate clause, e.g. *I know [that John cannot come because he is working]. Ich weiss, [dass John nicht kommen kann, weil er arbeitet]*.
- (ii) Subordinated clauses expressing two predications can be coordinated with each other by means of conjunctors such as *and* and *or*, e.g., *John cannot come [since he is working or since he is sleeping]*.

Subjunctions, free or bound, serve as relators between the subordinated clause and its matrix clause.

Typical Turkic complementizers serving as subjunctors in complement clauses are bound verbal inflectional morphemes of the action nominal or participant nominal types, e.g., Turkish {-DİK}. This subjunctor can be used in complement clauses. Complement clauses are core arguments. Main clauses carry markers expressing viewpoint aspect, mood, tense, and person-number. Non-finite complement clauses are deranked in the sense that they lack some categorial distinctions relevant to main clauses.

- (1) Ali *çalış-tı̄ğ-i içīn* *gel-eme-dīğ-in-i* *bil-iyor-um.*
 Ali work-AN-POSS3 POSTP.FOR come-NEG.POSSIBLE-AN-POSS3-ACC know-INTRA-1SG
 ‘I know that Ali cannot come since he is working.’

Conjunctors

Conjunctors link predication without incorporating one of them into the other, e.g., *John cannot come for he is working*. *John kann nicht kommen, denn er arbeitet*. Turkish uses free conjunctors such as *çünkü* ‘for’; see (2).

- (2) Turkish
- | | | | |
|---------------------------------------|----------------------------|--------------|-------------------|
| Ali | <i>gel-em-iyor</i> | <i>çünkü</i> | <i>çalış-iyor</i> |
| Ali | come-NEG.POSSIBLE-INTRA3SG | for | work-INTRA3SG |
| ‘Ali cannot come, for he is working.’ | | | |

The criteria valid for subordination do not apply in such syntactic constructions. The clause cannot be incorporated together as part of a superordinate clause and cannot be coordinated with each other by means of conjunctors such as *and* and *or*.

Adjunctors

Adjunctors or adverbial junctors, e.g., conjunctional adverbs, connect two predication across sentence boundaries. They are neither coordinative nor subordinative, e.g., *John is working; therefore, he cannot come*, *John arbeitet, deshalb kann er nicht kommen*.

- (3) Turkish
- | | | |
|--|-------------------|----------------------------|
| Ali <i>çalış-iyor,</i> | <i>onun içīn</i> | <i>gel-em-iyor.</i> |
| Ali work-INTRA3SG | therefore | come-NEG.POSSIBLE-INTRA3SG |
| ‘Ali is working, therefore, he cannot come.’ | | |

The first type: The modal particle *ki*

The modal particle *ki* goes back to East Old Turkic *är-ki, which is derived from the verb *är-* ‘to be’; see Johanson (2000), and Karakoç (2009, 2013).

According to Erdal (2004: 276), East Old Turkic är-ki expresses modal nuances. It is employed as a modal sentence particle, for instance in questions meaning ‘apparently’, ‘obviously’, rendering modal nuances.

According to Johanson, *är-ki* is a rhetorical particle (2021). Clauson (1972: 223) writes about it: “except on the rarest possible occasions, to be used only at the end of questions to indicate that a categorical answer is not expected”.

The Old Uyghur and Karakhanid epistemic particle *är-ki* may express speculation, skepticism, likelihood, e.g., Old Uyghur *Män kärgäk är-dj-m är-ki* ‘I guess I was useful’. It is often used in interrogative main clauses, e.g., *Kanda är-ki ol* ‘Where may X be?’, *Ol käl-ir mū är-ki* ‘I wonder whether X is coming’, following the interrogative clitic {mU}. It expresses skepticism or attenuation, tones down the question, giving it meditative or timid overtones in the sense of ‘I wonder if ...’. The reason for this usage may be politeness or the wish to formulate a rhetorical question that does not request a response. The type *är-ki* is reflected in the Tuvan emotional-expressive particle *ir-gi*, which renders questions soft and polite. It only occurs in interrogative clauses, e.g., *Kažan käl-ir ir-gi?* ‘I wonder when X will come’, *Bar jr-gi bā?* ‘I wonder if X is there’. The Turkish rhetorical particle *ki* has a similar function in content interrogative clauses, e.g., *Var mı ki?*, where it corresponds to the adverb *acaba* ‘I wonder if’. It has its origin in *är-ki* and shows the form *iki* in some Old Anatolian Turkish and Ottoman texts (Johanson 2021).

Karakoç (2005) presents a detailed analysis of the corresponding Noghay copula particle *e-kän*. She points out that the Turkish copula form *ol-a* has a similar function like the modal *ki*, e.g., *O gel-di mi ol-a?* or *O gel-di mi ki?* ‘Has X well come?’

Johanson (2004) suggests that the Hungarian affirmative response *igen* ‘yes’ might go back to Turkic *er-kän*. It can be a selective copy of the Turkic evidential or emphatic rhetorical particle *er-kän* ‘evidently’, ‘obviously’, ‘apparently’, ‘as it turns out’, ‘as it appears’, ‘indeed’ used as part of the predicative core and/or as a post predicative element to convey consenting or admitting answers.

Examples of the uses of the modal particle *ki* in Turkish

Used in rhetorical questions as a modal particle:

(4) Turkish

<i>Gel-di</i>	<i>mi</i>	<i>ki?</i>
come-TERM3SG	Q	KI
‘Has X apparently come?’		

Used as a modal particle emphasizing the speakers positive or negative attitude:

(5) Turkish

<i>Bugün</i>	<i>o kadar harika</i>	<i>ki!</i>
today	so much wonderful	KI
‘Today is so wonderful!’		

Used as a post-predicate conjunctive *ki* connects to a finite predicate having, for instance, a causal meaning:

- (6) *Ne yap-ti-n ki, polis sen-i ar-iyor.*
 what do-TERM-2SG KI police you-ACC look for-INTRA3SG
 ‘What have you done, the police is looking for you.’

Attached to a nominal predicate the conjunctive *ki* connects to a finite predication:

- (7) *Turkish*

<i>İyi</i>	<i>ki</i>	<i>gel-di-n!</i>
good	KI	come-TERM-2SG
‘It is good that you have come!’		

- (8) *Ne yazık ki gel-me-di!*
 what pity KI come-NEG-TERM3SG
 ‘What a pity that X has not come!'

Grammaticalization of the modal particle *ki*

The grammaticalization of copula forms as modal particles is well documented in Turkic, e.g., the grammaticalization of the post terminal copula {i-mış} as an evidential particle, analogous to Noghay {e-kän}. See the description of the different uses of {e-kän} in Karakoç (2005: 21-31). Modal particles, similar to sentence adverbials, are normally attached to the predicate, as e.g., *ki* in (4) and (5). However, sentence-initial use may also occur under specific circumstances. In Cypriot Turkish, the copula particle {mış} can be used sentence-initially, rendering a reportative meaning.

- (9) *Cypriot Turkish*

<i>Miş</i>	<i>Ahmet okul-a</i>	<i>git-me-yecek yarin.</i>
COPULA PARTICLE	Ahmet school-DAT	go-NEG-PROSP3SG tomorrow

Standard Turkish

<i>Güya/söyledigine göre</i>	<i>Ahmet</i>	<i>yarin</i>	<i>okul-a</i>
supposedly/according to what he said	Ahmet	tomorrow	school-DAT
<i>git-me-yecek-mış.</i>			
go-NEG-PROSP3SG-COPULA.IMIŞ	(Demir 2018: 62).		

In example (7, 8), *ki* functions as a conjunctive, attached to the first predication, connecting the first predication with a following finite predication that represents a cause, reason, or some other circumstance. In these examples, the finite predication following *ki* is not subordinated, but it is an argument in the semantic sense of the first predicate. This construction can develop through reanalysis into an elaborated lexicalized conjunctive; see below.

GRAMMATICALIZATION PATH

**är-ki* > modal/rhetorical particle > conjunctor

The second type: the junctor *ki* copied from Iranian

Turkic-Iranian language contacts go back to the earliest times of the documented history of Turkic languages. The copied junctor *ki* is typical of Turkic languages in contact with Iranian. For instance, it is not typical of Kazakh. A main difference from the first type is that this *ki* does not convey any modal meaning.

Examples of different uses of the copied junctor *ki*

Used as a post-predicate quotation particle connecting *verba dicendi* clauses with a following finite clause. In this function *ki* is a conjunctor.

(10) Turkish

<i>De-di-m</i>	<i>ki</i>	<i>Allah-im</i>	<i>çok</i>	<i>yalnız-im.</i>
say-TERM-1SG	KI	Allah-POSS1SG	very	lonely-COP1SG

‘I said [ki], my God, I am very lonely’.

Used as a relative conjunctor (relativizer):

(11) Irano-Turkic

<i>O</i>	<i>kız-i</i>	<i>ki</i>	<i>isti-l-ler</i>	<i>al-al-lar.</i>
that	girl-ACC	KI	want-AOR-3PL	take-AOR-3PL

‘They take the girl who pleases them’

Bulut (2006: 193).

Used as a post-predicate conjunctor marking the relation between a clause and a following volitional (subjunctive) clause; see (12). The second clause presents an argument in the semantic sense of the predicate of the first clause without being syntactically subordinated.

(12) Ottoman Turkish

<i>Iste-r-im</i>	<i>ki(m)</i>	<i>gel-sin!</i>
want-AOR1SG	KI(m)	come-VOL3SG

‘X wants [ki] Y to come’.

Used in absolute sentence-initial position, e.g., introducing a volitional clause; see (13) expressing a wish.

(13) Karaim

<i>Kí bol-yey</i>	<i>savlux!</i>	/	<i>Meń kl'e-y-m</i>	<i>ki</i>	<i>bol-yey</i>	<i>savlux!</i>
KI	be(come)-OPT3SG		I	want-PRES-1SG	KI	be(come)-OPT3SG

‘(I wish) good health!’

Used in absolute sentence initial-position, introducing a following non-volitional clause:

(14) Turkish

<i>Altında</i>	<i>sat-il-an</i>	<i>damla-lar</i>	<i>var-di</i>	<i>piyasa-da...</i>
below	sell-PASS-AN.PART	drop-PL	existing-COP.TERM3SG	market-LOC
<i>Ki</i>	<i>san-ır-im</i>	<i>hala</i>	<i>var...</i>	
KI	believe-AOR-1SG	still	existing	

‘Under it there were drops to sell in the market. And I think there are still...’

(15) *Karar-in-i*

<i>uygula-mak-tan</i>	<i>başka</i>	<i>çare</i>	<i>kal-maz.</i>
carry out-INF-ABL	other	solution	remain-NEG.AOR3SG
<i>Ki o da</i>	<i>çare</i>	<i>ol-ma-yan</i>	<i>çare-dir.</i>
KI that also	solution	be(come)-NEG-AN.PART	solution-COP.DIR

‘There is no other solution than to carry out his decision. And that solution is also a “non-solution”.’

<i>Bir çocuk ses-i...</i>	<i>Ki bu ses-i</i>	<i>yıl-lar-dir</i>	<i>bekl-iyor-um.</i>
a child voice-POSS3	KI this voice-ACC	year-PL-COP.DIR	wait for-INTRA-1SG

‘It is a child’s voice. And I have been waiting for this voice for years’.

Used as a temporal junctor:

(17) Azeri

<i>Səs-i</i>	<i>ki</i>	<i>eşid-dı</i>	<i>pənҗäre-nı</i>	<i>ač-ar.</i>
voice-ACC	KI	hear-TERM3SG	window-ACC	open-AOR3SG
‘When she hears the voice, she opens the window.’				(Kıral 2001: 122).

Used as subjunctor in syntactic copies of non-Turkic right-branching constructions:

(18) Karaim

<i>Severina ayt-tı</i>	<i>ki Artur bıl-mä-dı</i>	<i>ki ol käl-dı</i>
Severina say-TERM3SG	KI Artur know-NEG-TERM3SG	KI X come-TERM3SG
<i>da ki ol halä bunda.</i>		
and KI X still here.		

‘Severina said [ki] Artur did not know [ki] X came and [ki] is now here’.

In (18), *ki* functions as a subjunctor. As subordinated clauses, constituting a syntactic unit together their matrix clause can be further subordinated and coordinated.

Grammaticalization of the copied junctor *ki*

Ki as a quotation particle

Postpredicative *ki* particles have been grammaticalized as quotation particles, connecting *verba dicendi* clauses with a direct quotation. In this usage, *ki* lacks a modal meaning, but it is syntactically an element cliticized to the verbal predicate. The clause *Allahım, çok yalnızım* in (10) is a direct quotation. Here, *ki* is a conjunctive, connecting the two predications across sentence boundaries. The predications are syntactically not subordinative. In a semantic sense, the second clause is an argument of the first predicate.

Clause initial *ki* as a relative conjunctive

In (11), *ki* is used as a clause-initial conjunctive, establishing a relation between the noun *kız* ‘girl’ and a finite clause. The clause is not subordinated in Turkish, i.e., it does not comply with the criteria defined above. The semantic relation of modification can correspond to that of a subordinated non-finite relative clause based on a bound subjunctive. Functionally, the Uyghur example (19) is an alternative to a non-finite relative clause.

(19) Uyghur

<i>Alim</i>	<i>aⱡayip</i>	<i>bala</i>	<i>ki</i>	<i>hičkim-nij</i>	<i>söz-i-gä</i>	<i>pärwa</i>	<i>kıl-ma-y-du</i> .
Alim	strange	boy	KI	anybody-GEN	word-POSS3-DAT		care-NEG-PRES3SG
'Alim is a strange boy who never cares about what others say.'							

Ki as a conjunctive in subjunctive volitional clauses

Volitional predicates can take complements based on an optative verb form, e.g. (12). This type of right-branching complement clause can be introduced by a *ki* which functions as a conjunctive. These structures are very old (Johanson 2011). Note that the complement clause is not subordinated. This type of wish clause is grammaticalized, e.g., in Iran-Turkic languages such as Kashkay and Balkan Turkish (Brendemoen 2013, 2014).

(20) Turkish in Bulgaria

<i>Gerek-ir</i>	<i>ki</i>	<i>gid-e-yim.</i>	
be.necessary-AOR3SG	KI	go-OPT-1SG	
'I have to go.'			Brendemoen (2013).

In the Karaim example (13), the sentence-initial *ki* introduces a clause expressing a wish, but the volitional meaning is rendered by the optative verb form. The construction can be regarded as an elliptic one in which a volitional predicate is lacking.

Ki as a clause-initial conjunctive

In modern Turkish, sentences introduced with *ki* are relatively frequent. The National Turkish Corpus lists about 450 occurrences. The function of *ki* in examples such as (14-16) is to signal a vague relation to the previous sentence or wider context in a sense similar to ‘and’. Syntactically, this *ki* is therefore an adjunct.

Grammaticalization of *ki* as a subjunction

Turkic free subjunctions mostly go back to interrogative-indefinite pronouns. Many languages use *ki* or *kim*. Turkish Balkan dialects employ *nä* ‘what’. The use of Macedonian Turkish *nä* is thus modeled on Macedonian *što*. Cypriot Turkish uses the pronoun *ošu* as a subjunction. In some languages, relative clauses are preceded by forms of the interrogative *kayı*, e.g., Khakas *χay(z)i* ‘which’. Also, the Gagauz relativizers *ani* and *angı* go back to interrogatives. Interrogatives based on *kayı*- or *närä*- + locational case markers are employed to relativize spatial circumstances.

Old Uyghur displays postposed relative clauses with the relativizer *kim* and also asyndetic constructions lacking a relativizer (von Gabain 1941). Kuman shows similar patterns; see (21).

(21) Codex Cumanicus

<i>ata-mız</i>	<i>kim</i>	<i>kök-tä-sän</i>
father-POSSIPL	kim	heaven-LOC-2SG
‘our father who is in heaven’		
(Latin <i>Pater noster, qui es in caelis.</i>).		

Chaghatay possesses right-branching relative clauses of the Iranian type, often nonrestrictive constructions. The relativizer *kim* is later mostly replaced by *ki*.

(22) Chaghatay

<i>bu</i>	<i>söz-lär</i>	<i>ki</i>	<i>de-dj-ηjz</i>
this	word-PL	KI	say-TERM-2PL
‘these words which you said’.			

When non-first arguments are the target of relativization, resumptive pronouns are often added. Relative clauses with generalized meanings have similar structures, e.g., *här ne kim ayt-sam* ‘whatever I say’. Ottoman relative clauses are preceded by *kim* and *ki*, e.g. *bu türk-lär ki gäl-dj-lär* ‘these Turks who arrived’.

Concerning the alternative use of *ki* and *kim*, see the comments on the distinction between restrictive vs. non-restrictive relative clauses, and the use of resumptive pronouns (Bulut 1997, 1998, 2006).

An interesting example is the language of Karaite Bible translations. Here, a *ki* element occurs as the translational equivalent of the Hebrew conjunction and particle *ki*. The functions

of the Hebrew model were easily copied onto the homonymous Turkic element *ki*. This Karaim particle *ki* renders all functions and meanings of the Hebrew particle *ki* ‘that’, ‘because’, ‘for’. In the following example *ki* can be rendered with ‘that’.

(23) Biblical Hebrew

<i>s̄āmū</i>	<i>ki</i>	<i>-²attə^h</i>	<i>yhw^h(²ādōnāy)</i>
they heard.V:QAL.PRF3PL	that	you.PRN:MASC2G	Lord
<i>bəqērēb</i>	<i>hā²ām</i>		<i>hazze^h</i>
in midst	the people.DEF.N:MASC.SG.ABS		the this.DEF.ADJ:MASC.SG

of.PREP.N:MASC.SG.CONST

‘they have heard that thou, O LORD, art in the midst of this people’ Num. 14:14

(24) Halich Karaim

<i>Ešit-ti-lär</i>	<i>ki</i>	<i>sān</i>	<i>ey</i>	<i>ha</i>	<i>toχta-y-sān</i>	<i>orta-sīn-da</i>
hear-TERM-3PL	KI	you(SG)	oh	lord	reside-PRES-2SG	middle-POSS3-LOC
<i>ol</i>	<i>ulus-nun</i>	<i>ol</i>	<i>uspu.</i>			

this people-GEN

the this

‘They have heard that you, o lord, are in the midst of this people.’ (Olach 2013).

Jankowski (1997: 65) was the first to point out that this type of *ki* in Karaim Bible translations is a copy from Hebrew and must be distinguished from *ki* which is a copy from Iranian. In the Code-Copying Model (Johanson 2002), this can be described as a selective copy of the combinatorial and semantic properties of the Hebrew particle onto the existing *ki* element in Turkic.

Modern Turkic varieties such as languages of Iran, Karaim, Gagauz, Balkan Turkish, strongly influenced by non-Turkic languages, have copied non-Turkic clause-combining properties. The elements that have become grammaticalized as subjunctions are often interrogative pronouns. For instance, *ki*, as a Karaim subjunction, shares syntactic properties with the Gagauz subjunction *ani < hangi* ‘which’ of pronominal origin (Menz 1999, 2001, Csató 2002).

(25) Gagauz

<i>Anä-nïn</i>	<i>haber-i</i>	<i>ol-mär</i>	<i>ani</i>	<i>o</i>	<i>zarar ed-är</i>	<i>bun-a</i>	<i>da.</i>
mother-GEN	idea-POSS3	be(come)-NEG.AOR3SG	that	she	damage-AOR3SG	this-DAT	also

‘Mother has no idea that she is damaging him’

(Menz 1999: 142).

As subordinated clauses constitute syntactic units together with their matrix predication, they can be further subordinated and coordinated, e.g., Karaim (16). In certain Turkic varieties, *ki* occurs in free variation with Turkic *kim*. In Karaim biblical translations and in Armeno Kipchak texts, *ki* occurs combined with interrogative pronouns, such as Karaim *nečik ki* ‘when that’; see (25).

(26) Karaim

<i>nečik</i>	<i>ki</i>	<i>buyur-dü</i>	<i>ha</i>	<i>anar</i>	<i>ayt-ma</i>	<i>alar-ga</i>
when	KI	command-TERM3SG	lord	X.DAT	tell-INF	they-DAT
'as the Lord commanded him to tell them'.						

Grammaticalization as a temporal junctor

Azeri employs the junctor *ki* in many different functions. A special case occurs when *ki* is used as a temporal junctor attached to a prepredicate constituent of the temporal clause as in (16). A temporal junctor *ki* may be in absolute clause-intial position in Iraq Turkmen (Bulut 2006).

(27) Iraq Turkmen

<i>Ki</i>	<i>kapi-ni̥</i>	<i>aš-ti̥</i> ,	<i>bu</i>	<i>oyla:n-i̥n</i>	<i>hava:r-i̥</i>	<i>hara</i>	<i>ged-ir-i̥</i> .
KI	door-ACC	open-TERM3SG	this	boy-GEN	cry for help-POSS3	where	go-PRES3SG
'As soon as/when she has opened the door, the boy's voice is heard everywhere.'							

Alternatively, *ki* may follow a constituent:

(28)	<i>Oylan</i>	<i>ki</i>	<i>kapı</i>	<i>sə:s-i̥</i>	<i>eşit-ti̥</i>	<i>ver-di̥</i>	<i>fızā:hi:</i>
	boy	KI	door	sound-POSS3	hear-TERM3SG	give-TERM3SG	cry
'As soon as the boy heard the sound of the door, he cried out, (Bulut 2006: 191).							

This type of construction occurs in many Eurasian languages such as Russian, Persian, Karaim, and Hungarian. See examples in Csató (1999).

(29)	<i>Az</i>	<i>iskola</i>	<i>amikor/hogy</i>	<i>kezdődik</i>	<i>haza</i>	<i>kell</i>	<i>utazzunk.</i>
	theschool	WHEN/WHAT		begin-PRES3SG	home	must	go-SUBJUNCTIVE-1PL
'When the school starts we have to go home.'							

***Ki* in complex sentence adverbials/adjunctors**

A number of Persian sentence adverbials including *ki* have been copied into some Turkic languages, e.g., Turkish *madem-ki* 'since, while', *meğer-ki* 'unless', 'provided that', *bel-ki* 'perhaps', 'maybe'. Analogous Turkic expressions have been introduced as selectively copied, e.g., Turkish *hal-bu-ki* 'however', *oy-sa-ki* 'whereas', 'however'. A common feature of these adverbials is that they mostly occur clause-initially and take a whole proposition into their scope.

(30) Turkish

Bu iş bit-me-yecek meğer-ki siz de yardım ed-e-siniz.
this work end- NEG-PROSP3SG unless.KI you also help-OPT2PL
'Diese Arbeit wird nicht fertig, es sein denn, Sie helfen auch' (Ersen-Rasch 2004: 114).

The particle *ki* is cliticized to sentence-initial constituents in expressions such as *yazık ki* + clause ‘it is a pity that’, *tabii ki* ‘of course’.

Several sentence adverbials are grammaticalized as conjunctors, e.g., *çünkü* in *Ali gel-em-iyor çünkü çalış-iyor* ‘Ali cannot come for he is working’. *Nasıl ki* means ‘just as’, ‘so’.

(31) Turkish

Nasıl ki ben acı çek-ti-m, sen de acı çek-ecek-sin.
how KI I suffer-TERM-1SG you also suffer-PROSP-2SG
'Just as I have suffered you will suffer.'

GRAMMATICALIZATION PATHS

- copied junctor *ki* > quotation particle
- copied junctor *ki* > conjunctive
- copied junctor *ki* > subjunctor (analogue to the corresponding grammaticalization of interrogative pronouns)
- copied junctor *ki* > temporal junctor
- lexical element + copied junctor *ki* > lexicalized complex sentence adverbial/clause initial adjunct

Observe the similarities with Friedman’s dental modal subordinator, in our terms junctor. “One of the ‘classic’ features which is often said to contribute to the definition and distinction of the Balkan languages is the use of a finite clause in place of earlier non-finite constructions. This finite clause is introduced by a monosyllabic modal (or modal-aspectual) subordinator (particle, word, etc.) beginning in a dental or alveolar consonant: Albanian *të*, Bulgarian *da*, Greek *ná*, Macedonian *da*, Romanian *să*” (Friedman 1986: 39).

Summary

This study presents a review of the different functions of the modal particle *ki* and the copied junctor *ki*, illustrated with examples from different Turkic languages. The two types must be consistently distinguished, since they have different origins and have undergone different grammaticalization processes. It has been pointed out and demonstrated that pure semantic criteria are not sufficient for characterizing the syntactic structure of various clause types with *ki*.

Abbreviations

>	develops into
AN	action nominal
DAT	dative
INTRA	intraterminal
NEG	negation
OPT	optative
POSS	possessive
POSSIBLE	possibility
PROSP	prospective
Q	question particle
X	he, she, it

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors have no conflict of interest to declare.

Grant Support: The authors declared that this study has received no financial support.

References

- Brendemoen, Bernt 2013. “The infinitive in *-me/-ma* in the Balkan dialects”, *Turkic Languages* 17 (2013), 31-37.
- Brendemoen, Bernt 2014. “Some remarks on the infinitive in *-mA* in 17th century Ottoman Turkish”, Demir, Nurettin & Karaköç, Birsel & Menz, Astrid (eds.) *Turcology and Linguistics. Éva Ágnes Csató Festschrift*. Hacettepe Üniversitesi Yayımları. 103-113.
- Bulut, Christiane 1997. *Evliya Çelebis Reise nach Van*. (Turcologica 35.) Wiesbaden: Harrassowitz.
- Bulut, Christiane 1998. “Copied strategies of clause combining”, *Turkic Languages* 2 (1998), 171-197.
- Bulut, Christiane 2006. “Syntactic traces of Turco-Iranian contiguity”, Johanson, Lars & Bulut, Christiane (eds.) *Turkic-Iranian language contact areas. Historical and lingusitic aspects*. (Turcologica 62.) Wiesbaden: Harrassowitz. 165-206.
- Clauson, Gerald 1972. *An Etymological Dictionary of Pre-Thirteenth Century Turkish*. Oxford: Clarendon Press.
- Cristofaro, Sonia 2003. *Subordination*. Oxford: Oxford University Press.
- Csató, Éva Á. 1999. “Analyzing contact-induced phenomena in Karaim”, *Twenty-Fifth Annual Meeting of the Berkeley Linguistic Society, Special Session: Caucasian, Dravidian, and Turkic Linguistics. Berkely Linguistic Society* 25S, 54-62.
- Csató, Éva Á. 2002. “Karaim: A high-copying language”, Jones, Mari C. & Esch, Edith (eds.) *Language Change. The Interplay of Internal, External and Extra-linguistic Factors*. [Contributions to the sociology of language 86]. New York & Berlin: Mouton de Gruyter. 315-327.
- Demir, Nurettin 2018. “Cypriot Turkish”, Bulut, Christiane (ed.) *Linguistic Minorities in Turkey and Turkic-speaking Minorities of the Peripheries*. (Turcologica 111). Wiesbaden: Harrassowitz.
- Erdal, Marcel 2004. *A Grammar of Old Turkic*. Leiden & Boston: Brill.
- Ersen-Rasch, Margareta 2004². *Türkische Grammatik für Anfänger und Fortgeschrittene*. Ismaning: Max Hueber.

- Friedman, Victor 1986. “Romani *te* in a Balkan context”, *Językowe studia balkanistyczne* 1. Wrocław: Polska Akademia Nauk. 39-48.
- Gabain, Annemarie von 1941. *Alttürkische Grammatik*. Leipzig: Harrassowitz.
- Jankowski, Henryk 1997. “Bible translation into the Northern Crimean dialect of Karaim”, *Studia Orientalia* 82 (1997), 1-84.
- Johanson, Lars 1975. “Some remarks on Turkic ‘hypotaxis’” *Ural-Altaische Jahrbücher* 47 (1975), 104-118.
- Johanson, Lars 1993. “Typen türkischer Kausalsatzverbindungen”, *Journal of Turkology* (Szeged) 1 (1993), 213-267.
- Johanson, Lars 2000. “Traces of a Turkic copula verb”, *Turkic Languages* 4 (2000), 235-238.
- Johanson, Lars 2002. *Structural Factors in Turkic Language Contacts*. [With an introduction by Bernard Comrie.] London: Curzon.
- Johanson, Lars 2004. “On the Turkic origin of Hungarian *igen* ‘yes’”, *Acta Orientalia Academiae Scientiarum Hung.* 57 (2004), 93-104.
- Johanson, Lars 2010. “Three kinds of clause junctors”, Ziegelmeyer, Georg & Cyffer , Norbert (eds.) *Aspects of Co- and Subordination. Case Studies from African, Slavonic and Turkic Languages*. Köln: Rüdiger Köppe. 9-14.
- Johanson, Lars 2011. “Mood meets mood”, Stolz, Thomas & Vanhove, Martine & Urdze, Aina & Otsuka, Hitomi (eds.) *Morphologies in Contact*. (Studia Typologica 10.) Berlin: Akademie Verlag. 203-211.
- Johanson, Lars 2013. “Selection of subjunctions in Turkic non-finite complement clauses”, *Bilig* 67, 73-90.
- Johanson, Lars 2021. *Turkic*. (Cambridge Language Surveys) Cambridge: Cambridge University Press.
- Karakoç, Birsel 2005. *Das finite Verbalsystem im Nogaischen*. (Turcologica 58.) Wiesbaden: Harrassowitz.
- Karakoç, Birsel 2009. “Mutmaßungen über die Etymologie des türkischen Suffixes {KI}”, Boeschoten, Hendrik & Rentzsch, Julian (eds.) *Turcology in Mainz/Turkologie in Mainz* (Turcologica 82.) Wiesbaden: Harrassowitz. 155-166.
- Karakoç, Birsel 2013. “Types of copular clauses following *ki* in Old Ottoman Turkish”, *Turkic Languages* 17, 38-64.
- Kıral, Filiz 2001. *Das gesprochene Aserbaidschanisch von Iran. Eine Studie zu den syntaktischen Einflüssen des Persischen*. (Turcologica 43.) Wiesbaden: Harrassowitz.
- Menz, Astrid 1999. *Gagauzische Syntax. Eine Studie zum kontaktinduzierten Sprachwandel*. (Turcologica 41.) Wiesbaden: Harrassowitz.
- Menz, Astrid 2001. “Gagauz right-branching propositions introduced by the element *ani*”, *Turkic Languages* 5 (2001), 234-244.