

## 15. Modals in Turkic

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### 1. Introduction

The present chapter deals with grammaticalized expressions of volition, necessity and possibility in the Turkic languages, in particular cases of contact-induced renewal of old modal categories. It is organized as follows: Section 2 provides basic information concerning the Turkic family. Section 3 deals with the expression of volition, necessity and possibility by means of bound inflectional markers reflecting advanced stages of grammaticalization. Section 4 deals with analytic (periphrastic) devices consisting of nominal or verbal predicates with nonfinite forms as complements. The devices may have emerged, or their use may have been corroborated, under foreign influence. Section 5 deals with the "subjunctive" function of modal suffixes used to signal modality in dependent clauses, probably under the influence of Persian, Slavic, Greek, etc. Section 6 summarizes the observations concerning the degrees of grammaticalization of the devices dealt with in Sections 3-5 and their use in stylistic registers. It is noted that the copied devices represent less advanced stages of grammaticalization than their respective originals in the model languages.

### 2. The Turkic family

Turkic is first documented in sources of the 8th century AD. The oldest written languages include stages of East Old Turkic, mostly simply referred to as "Old Turkic": varieties originating in the Turkic eastern steppe empires, e.g. Orkhon Turkic, documented in inscriptions found in the territory of today's Mongolia, and Old Uyghur, used from the 9th century on in the territory of today's Xinjiang. According to some scholars, "Old Turkic" also comprises Karakhanid, the first Turkic written language of the Islamic era (11th century, center Kashgar). Other older written languages include Khorezmian Turkic, Chaghatay, Ottoman Turkish, etc.

The modern Turkic-speaking world is comprehensive: It extends from the Southwest, Turkey and neighboring areas, to the Southeast, to Eastern Turkistan and farther into China. From here it stretches to the Northeast, via South and North Siberia up to the Arctic Ocean, and finally to the Northwest, across West Siberia and East Europe. The Turkic family presently comprises about twenty standard languages, the most important being Turkish, Azeri, Uzbek, Tatar, etc. More than a dozen Turkic languages are spoken in Europe.

In the following brief sketch, special attention will be paid to Circum-Anatolian Turkic, i.e. Irano-Turkic and Balkan varieties, with frequent comparisons with Siberian Turkic, i.e. Tuvan, Khakas, Altay Turkic and Yakut. Language contacts have played an essential role for the renewal of the Turkic modal expressions of volition, necessity and possibility. Turkic varieties spoken in intense communication areas of Central Asia, Iran, South Siberia and the Balkans have copied morphosyntactic features of this kind from Indo-European languages, in particular from Iranian and Slavic, thus creating structural compatibilities with the modal systems of these languages.

### **3. Synthetic devices**

Turkic languages basically express the modal categories volition, necessity and possibility synthetically by means of bound inflectional markers, suffixes. Most of these are attested in similar forms at the oldest known stage of the development of Turkic documented in the East Old Turkic inscriptions. These old markers already represent advanced stages of their respective grammaticalization processes. The expressions of volition and necessity are all of unknown origin, i.e. they cannot be traced back to independent lexical elements. Whatever the lexical sources may have been, they have already undergone the changes typical of grammaticalization: extension of occurrence, desemanticization, decategorialization and material erosion. There is no indication that these devices have been copied from other languages.

The modal markers in question will be presented cursorily with some examples from older and more recent stages of Turkic. Though it is difficult to define original functions for these markers, attempts will be made to give an idea of certain basic notions from which the various usages may be derived.

## 3.1. Volition

Volition is expressed by voluntative, optative and hypothetic markers, meaning 'it is desirable that', etc., suggesting that the action in question be carried out. The notions include demands, requests, directives, commands, impositions, entreaties, admonitions, warnings, exhortations, proposals, recommendations, advice, encouragement, incitement, etc. They also include desiderative, precative, permissive, promissive, intentional senses of wish, hope, desire and willingness. The volitional content may be realizable or unrealizable.

The devices used are not imperatives in the sense of direct commands to second persons. They do not define relations between participants and the realization of the action. They are thus not agent-oriented, i.e. objective moods that denote the will of the subject referent, but rather subjective moods. This does not, however, mean that they are necessarily speaker-oriented in the sense of expressing the speaker's own will. The desiderability may also be conceived of as impersonal, representing a general or higher will.

Three types of markers signal volition: voluntative, optative and hypothetic markers.

(1) Voluntative markers express a strong wish, request, command, advice or permission. They mostly suggest that the realization of the action is conceived of as dependent on the cooperation of the subject referent or another participant, i.e. they are used to encourage or incite someone to action. The meaning of strong wish gives rise to expressions of intention, promise and willingness, especially in the first person. As mentioned, it is not necessarily the speaker's wish that is expressed. The desiderability may be conceived of as impersonal. Identity of speaker and subject referent is represented in the first person, e.g. *I will/shall act = I want myself to act*.

Markers of this kind are found at the oldest known stages of Turkic, e.g. Old Uyghur:

- 1 p. sg. *-(A)yIn*, e.g. *bar-ayin* [go-VOL.1SG] 'I will/shall go'.
- 1 p. pl. *-(A)lIm*, e.g. *bar-alim* [go-VOL.2SG] 'we will/shall go'. This marker may have adhortative function, expressing an appeal to carry out an action together, 'let us go'.
- 3 p. *-zUn*, e.g. *bar-zin* [go-VOL.3SG] 'he/she/it shall go'. This marker may have jussive function, expressing a command concerning a third person, 'let him/her/it go', but it is not an imperative according to the definition given above.

Modern Turkish displays rather similar suffixes:

-(y)*AyIm*, e.g. *gid-eyim* [go-VOL.1SG] 'I will/shall go, let me go'.

-(y)*Allm*, e.g. *gid-elim* [go-VOL.2SG] 'we will/shall go, let us go'.

-*sin*, e.g. *git-sin* [go-VOL.3SG] 'he/she/it will/shall go, let him/her/it go'.

The voluntative suffixes are of unknown origin, they cannot be traced back to lexical sources. It is possible that the first-person markers are residues of old indicatives representing secondary functions of an old low-focal (general) present marker, whose primary function was renewed by a new focal present tense in vowel + *r* (the so-called "aorist"). The latter has now, in turn, been defocalized itself and is a non-focal present conveying modal shades of meaning, e.g. *at-ar* [throw-NFPRS.3SG] 'tends to throw, will throw'. For the notions of focality and defocalization see Johanson (2000: 38-39, 89-95, 99-101).

(2) The optative is a more purely desiderative mood in most Turkic languages. Optative markers express wish, desire or hope, mostly without suggesting that the realization of the action is dependent on the cooperation of the subject referent or another participant. Again, what is expressed is not the will of the subject referent and not necessarily that of the speaker. Speaker and subject referent coincide in the first person, e.g. *may I act* = *I want myself to act*.

Examples: the Old Uyghur marker *-GAy*, e.g. *bar-γay* [go-OPT] 'may he/she/it go'; the modern Azeri marker *-(y)A*, developed from *-GA(y)*, e.g. *géd-e* [go-VOL.3SG] 'may he/she/it go', *gède-k* [go-VOL-1PL] 'may we go'. The optative suffixes are of unknown origin; they cannot be traced back to lexical elements.

Besides their primary function of 'wish' the optative markers may also serve to express predication, potentiality, necessity and obligation as secondary functions. The Old Uyghur optative expresses wish, necessity, etc. Since the action can only be realized in the relative future, optative markers are sometimes referred to as future markers. Ottoman Turkish possessed a complete and formally transparent optative paradigm based on the marker *-(y)A* and conveying "souhait" and "incitation" (Deny 1921: 416). This paradigm has almost totally vanished in Standard Turkish, probably due to the close semantic similarity to the voluntative. In the Turkic languages of the Siberian group, optatives also express deontic and epistemic necessity or probability, obligation, permission, request, etc. The

primary meaning of the Yakut optative is the assessment of an action as possible (Böhtlingk 1851: 307).

(3) Hypothetic markers express an imaginative mood in the sense of supposed events, and may as such convey desiderative meanings: desire, wish or hope in the sense of 'imagine it is the case', 'what if it were the case?'.  
 The marker *sa(r)* may be used in this way when occurring in independent sentences, e.g. Ottoman Turkish *bak-sa-m* [look-HYP.1SG] 'I will look', 'what if I look?', *kör-se-ñiz* [see-HYP-2PL] 'may you see', 'what if you see?', Uzbek *kél-sá-ñ* [come-HYP-1SG] 'if you only would come', 'what if you came?', *ye-sá-k* [eat-HYP-1PL] 'what if we ate?' (Kononov 1960: 397-398).

This marker, later known as a conditional marker, was previously used as a voluntative mood. According to C. Brockelmann, this is the oldest Turkic modal form to express a wish (1954: 378). Though it is of unknown origin, there have been attempts to trace it back to some form of the verb *sa-* 'to count, to think'.

The desiderative use is nowadays infrequent; the marker is mostly used in dependent clauses expressing hypothetical conditions ('if it happens be the case').

### 3.2. Necessity

Necessity is expressed by various markers meaning 'it is necessary that'. The conditions motivating the necessity for the subject referent to carry out the action may be physical or social. The markers may be used to express directives that impose or propose that the action be carried out, to compel, incite or encourage to action. Expressions of necessity can develop into a sense of desire or intention. They normally also express deontic obligation in terms of moral, legal or social norms. The obligation may be strong, compulsive, in the sense of *must*, *have to*, *need to*, or weaker, obligative or advisory, in the sense of *should*, *ought to*.

Old Uyghur displays the marker *-GU*, e.g. *saklan-yu ol* [protect.oneself-NEC COP] 'one must protect oneself'. According to A. von Gabain, it had an abstract basic meaning from which necessitative, potential and purposive meanings developed: "Aus seiner abstrakten Grundbedeutung entwickelte sich ein Müssen, Können und ein Zweck" (1959: 36). The meaning 'one must' is normally expressed by the extended form *-GU-IUK*, e.g. *bil-gülük*

[know-NEC] ‘necessary to know’. According to M. Erdal, the suffix *-IUK* appears to have been added to make the necessitative meaning explicit (2004: 303).

Modern Azeri uses *-(y)A-sI*, derived from a similar old verbal noun + *-sI*, e.g. *yaz-ası-yam* [write-NEC-1SG] ‘I should write’; for Kashkay see Csató (2006: 219-210). This necessitative, often referred to as an ancient future suffix, has vanished in Turkish except for some expressions employed for cursing, e.g. *kör ol-ası* [blind become-NEC.3SG] ‘may he/she become blind’ (Lewis 1967: 115).

Some languages, e.g. Turkish and Azeri, use the necessitative marker *-mAll*, e.g. Turkish *oku-malı-yım* [read-NEC-1SG], Azeri *oxu-malı-yam* [read-NEC-1SG] ‘I should/must read’, Turkish *ver-meli-sin* [give-NEC-2SG], Azeri *ver-meli-sen* [give-NEC-2SG] ‘you should/must give’.

Markers such as *-mAll* may also be used for necessitative expressions that do not contain any element of will, e.g. *memnun ol-malı* [satisfied be-NEC.3SG] ‘he/she must be satisfied (for example, judging from his happy smile)’.

### 3.3. Possibility

Turkic languages use certain devices to express possibility in the sense of ability, i.e. inherent modality distinctions containing no element of stance, but defining relations between a participant and the realization of the action in the sense of ‘to be able to’. The devices may be used to represent internal and external (physical or social) enabling conditions for the subject referent with respect to the action.

Markers used to express ability have in general also developed modal functions in a deontic and/or epistemic sense. As deontic markers they contain an element of will, expressing an evaluation in terms of norms, i.e. stating whether the action is acceptable, permissible, unacceptable or forbidden, e.g. *you can/may go now*. As epistemic markers they indicate the extent to which the speaker is committed to the truth of the proposition. They may express possibility, i.e. that the proposition may possibly be true, or probability, i.e. that it is more likely to be true.

Ability to carry out the action is expressed in some early East Old Turkic texts by the lexical verb *u-*, negated *u-ma-*. It is normally expressed by postverbs consisting of a converb marker, *-U* or *-GAll*, and a following auxiliary verb, *u-* ‘to be able’, *bol-* ‘to become, to be’, e.g. *eşit-geli bol-*

[hear-CVB be] 'to be able to hear'. East Middle Turkic displays hypothetical mood *-sA + bol-* and *-U bil-* with the auxiliary *bil-* 'to know how to, to be able to'.

Later languages use postverbs with *bil-* 'to know', *al-* 'to take' or *bol-* 'to become' as auxiliary verbs, e.g. Uzbek *oqi-y-âl-* [read-CVB take] 'to be able to read', Khakas *sarna-p pol-* [sing-CVB become] 'to be able to sing', Azeri *gel-e bil-* [come-CVB know], Turkish *gel-e-bil-* [come-CVB know] (univerbation) 'to be able to come'.

Negated forms are, in some cases, less transparent, e.g. Turkish *-(y)A-mA-* in *gel-e-me-* [come-CVB-NEG] 'not to be able to come'. In Azeri, Iraq Turkic, etc. *-(y)Abil-* has the negation *-(y)Abilme-*, e.g. *vêr-e bil-me-m* [give-CVB know-NEG-1SG] 'I cannot give'.

Markers of ability may, as mentioned, also express deontic possibility, 'it is acceptable/missible that', and epistemic possibility, i.e. express the speaker's uncertainty about the truth-value, suggesting that the proposition may possibly be true, 'it is probable/possible that'. This is true of markers such as Turkish *-(y)Abil-* (Boeschoten 1990: 84-87) and Azeri *-(y)A bil-*. However, *-(y)Abil-* in Gagauz, a Balkan language closely related to Turkish, only expresses ability (Menz 1999: 58). We will come back to analytic devices that express possibility of other kinds.

Not all Turkic languages use ability markers for epistemic possibility. For this purpose, East Old Turkic and many other languages use special modal particles which convey some kind of stance, a cognitive or affective attitude towards the events described: meanings of subjective reasoning and belief, personal involvement, emotions, evaluations, judgments concerning the propositional content. Turkic is generally considered to have few adverbs expressing concepts of this kind. Qualifiers evaluating the actuality of the action as certain, probable, possible, improbable, impossible, etc. ('really', 'actually', 'indeed', 'absolutely', 'probably', 'maybe', 'possibly', etc.) have very often been copied from contact languages. On the other hand, Turkic possesses native devices that form systems of grammatical stance categories, for example epistemic particles such as *erki*, which occurs in Old Uyghur and Karakhanid, an uninflected utterance-final presumptive particle. It may express speculation, skepticism, likelihood, etc., e.g. *Men kergek er-d-im erki* [I necessary be-PST.COP-1SG PFL] 'I must have been useful, I guess I was useful'; see Johanson (2004) and (2008). According to G. Clauson, the best translation of it is a periphrasis like 'do you suppose that ...' or 'it is likely that' (1972: 223).

A very common grammaticalized device to express possibility is the old intraterminal (present/imperfect) aspecto-temporal item in *-(V)r*, often rather confusingly referred to as “aorist”. In the course of its development, it has been defocalized (see Johanson 2000: 38-39, 89-95, 99-101) to a non-focal present that has almost totally lost its indicative value and has taken over modal functions in the sense of disposition, inclination, tendency, potentiality, prospectivity, etc., e.g. Tatar *kil-er* [come-NFPRS.3SG] ‘he/she/it may/will/can come’, Turkish *ol-ur* [become-NFPRS.3SG] ‘it is possible’.

Also other grammaticalized expressions of deontic and epistemic modality are observed. In the Turkic languages of the Siberian group, markers that are formally ‘optatives’ may, as already noted, express possibility, probability, permission, etc.

### 3.4. Comments

The modal notions dealt with so far are expressed by old inflectional suffixes, still alive in almost all Turkic languages. It is unknown whether these markers go back to constructions with auxiliary elements of lexical origin. They may have been predicates expressing, as part of the propositional content, ‘objective’ modalities, i.e. relations between a participant and the realization of the action, e.g. desire (‘to want to’), willingness (‘to be willing to’), obligation (‘to have to’), necessity (‘to need to’), ability (‘to be able to’), permission (‘to be allowed to’). Predicates of these kinds often develop into moods. Such expressions may have grammaticalized, evolving into volitional, necessitative and potential moods, gradually taking on inflectional expression.

As mentioned, the voluntative, optative, hypothetic, necessitative and possibility markers are not exclusively speaker-oriented. The desiderability, necessity or possibility does not always express the speaker’s own stance, but may often be interpreted in a more general impersonal sense, e.g. ‘it is desirable, wanted, requested, conceivable, necessary, probable, possible, acceptable, permissible that’. The voluntatives and optatives may be less dependent on the speaker’s own will, the hypothetic mood less dependent on the speaker’s own imagination, the necessitative and possibility moods less dependent on the speaker’s own assessment.

The moods are often also, particularly in older languages, open to different interpretations with respect to the subject, when this is not

expressed explicitly. The subject may have a specific referent or be impersonal. A late remnant of this is even found in modern Turkish, where the third-person necessitative marker has personal but also impersonal uses, e.g. *gel-meli* [come-NEC.3SG] ‘he/she/it ought to come’ or [come-NEC] ‘it is necessary to come, one must/should come’. It is sometimes claimed that the Gagauz necessitative lacks personal suffixes, e.g. *ben gel-meli* ‘I must/should come’, etc. (Pokrovskaja 1964: 214). However, Astrid Menz confirms that her informants use forms with personal suffixes, e.g. *gel-meli-yim* [I come- NEC-1SG] (Menz 1999: 54).

The East Old Turkic necessitative marker *-GU* is an example of a similar vagueness, since it can refer to both agents and patients, e.g. *bér-gü* ‘someone who shall give’ or ‘something that shall be given, something to give’. Erdal refers to it as a “projection participle”, used for presenting projections of expectations, evaluations and intentions (2004: 303).

#### 4. Analytic devices

Turkic languages display various analytic (periphrastic) devices for expressing volition, necessity and possibility: nominal or verbal predicates with nonfinite forms as complements.

The synthetically expressed moods are, as mentioned, semantically vague, e.g. open to various interpretations. The analytic devices can be used to convey more specific information.

The analytic constructions basically express ‘objective’ modalities, but they have also played an essential role in the renewal of the ‘subjective’ modalities expressing volition, necessity and possibility. Language contacts have played an essential role for this renewal. It is impossible to claim that all these analytic devices have emerged under foreign influence, but their use has undoubtedly been corroborated or expanded by foreign models.

The following survey will illustrate some of the analytic devices, which primarily express ‘objective’ modalities, but have also participated in the renewal of the corresponding ‘subjective’ moods.

##### 4.1. Volition

Volition can be expressed with verbs meaning ‘to want’ plus a nominal form of the lexical verb as complement. Turkish *iste-* ‘to want’ takes the

verbal nouns (infinitives) in *-mA* and *-mAk* as complements, e.g. *git-mek iste-* [go-VN want] ‘to want to go’, *git-me-si-ni iste-* [go-VN-POSS3SG-ACC want] ‘to want him/her/it to go’. In most Turkic languages the subject of the complement clause can be marked with a possessive suffix, a possible overt subject taking the genitive case, e.g. Turkish *Ali'nin git-me-si-ni iste-* [Ali-GEN go-INF-POSS-3SG-ACC want] ‘to want Ali to go’.

Even Gagauz, which tends to copy volitional patterns of the Balkan type, with extensive “infinitive loss”, prefers infinitival patterns in same-subject constructions, e.g. *iste-r git-me:* [want-NFPRS go-INF] ‘he/she wants to go’, *iste-di git-me:* [want-PST go-INF] ‘he/she wanted to go’.

#### 4.2. Necessity

Necessity can be expressed with adjectives meaning ‘needed, necessary’ plus a nominal form of the lexical verb.

Old Uyghur uses the adjective *kergek* together with participles, *-GU kergek* and *-mİš kergek*, e.g. *muni bil-miš kergek* [this know-PTCP necessary] ‘one must know (have learnt) this’. The subject can be referred to with a possessive suffix, e.g. *bil-miš-im kergek* [know-PTCP-POSS1SG necessary].

Modern Turkish uses *gerek* or *lazım*, the latter ultimately of Arabic origin. The lexical verb occurs in the impersonal infinitive form in *-mAk*, e.g. *bil-mek gerek/lazım* [know-INF necessary] ‘it is necessary to know, one must know’. Personal forms take the verbal noun suffix *-mA* plus possessive suffixes, e.g. *bil-me-m gerek/lazım* [know-INF-POSS1SG necessary] ‘it is necessary for me to know, I must know’, *bil-me-si gerek/lazım* [know-INF-POSS3SG necessary] ‘it is necessary for him/her to know’. As in most Turkic languages, an overt subject stands in the genitive, e.g. Turkish *Ali'nin git-me-si gerek/lazım* [Ali-GEN go-VN-POSS3SG necessary] ‘Ali must go’. Modern Turkish can also use the verb *gerek-* ‘to be necessary’, e.g. *git-me-m gerek-iyor* [go-VN-POSS1SG be.necessary-PRS] ‘I must go’. The *gerek / lazım* construction is very frequent in modern Turkish.

In Ottoman, the subject could also be expressed by a dative constituent, e.g. *biz-e bil-mek gerek* [we-DAT know-INF necessary] ‘it is necessary for us to know, we must know’. The predicate *gerek* could also be used in the sense of ‘obliged’, e.g. *bil-mek gerek-sin* [know-INF necessary-2SG] ‘you must know’.

Patterns of these kinds are observed in many Turkic languages. In South Siberia, Tuvan *xerek* 'necessary' combines with a participle, e.g. *čaya: čorud-ar xerek* [letter send-PTCP necessary] 'it is necessary to send a letter'. Khakas *kirek* 'necessary' combines with the infinitive to express 'it is necessary, one should/must/ought to', e.g. *uzi-rya kirek* [sleep-INF necessary] 'one must sleep', *al-arya kirek* [take-INF necessary] 'one must take'. A possible overt subject is in the dative, e.g. *saya: ügren-erge kirek* [you-DAT learn-INF necessary] 'you must learn'.

These analytic constructions may be corroborated by foreign influence. The last Khakas sentence just cited can be compared to Russian *tebe nado učit'sja* [you-DAT necessary learn-INF]. The adjective meaning 'necessary' is often a borrowed item. Modern Azeri uses *la:zīm* and *va:jīb* 'important, urgent, necessary, requisite', both ultimately of Arabic origin. Yakut uses *na:da*, a copy of Russian *nado* 'necessary', e.g. *üören-iexxe na:da* [learn-INF necessary] 'it is necessary to learn', *suruy-uoxxa na:da* [write-INF necessary] 'one must write'; cf. Russian *nado pisat'* [necessary write-INF]. A similar Yakut item is *ba:r* 'existing', e.g. *il-iaxxa ba:r* [take-INF existing] 'one must take'. The words *na:da* and *ba:r* can also be used as nouns meaning 'necessity', e.g. *bar-ar na:da-m suox* [go-PTCP necessity-POSS1SG nonexisting] 'I don't need to go'.

In Gagauz, analytic constructions with *la:zīm* 'necessary' are the predominant expressions of necessity. Infinitival constructions with the lexical verb in the *-mA:* form are common, e.g. *sor-ma: la:zīm* [ask-INF necessary] 'one must ask'. A possible overt subject is in the nominative. An alternative pattern corresponds to the Russian combinational pattern *dolzjen* 'obliged' + postposed infinitive, e.g. *la:zīm sor-ma:* [necessary ask-INF] 'one must ask'. A possible overt subject is in the dative, e.g. *san-a la:zīm sor-ma:* 'you must ask' [you-DAT necessary search-INF]. This construction is restricted to the written language.

It should be noted that the so-called "infinitives" used in the Khakas, Yakut and Gagauz examples above are nominal forms of the verb provided with dative suffixes: *al-ar-ya*, *üören-iex-xe*, *sor-ma:* (< *sor-ma-ya*). They have thus originally had purposive meanings reminiscent of the subjunctive functions to be dealt with under 4.

Turkic varieties under strong Iranian influence use constructions reflecting Iranian patterns. Iranian languages use impersonal necessitative expressions, e.g. Persian *la:zīm ast*, Kurdish *la:zīm e* 'it is necessary'. The situation is similar in other Turkic varieties spoken in Iran and in Iraq Turkic (Bulut 2000).

The analytic constructions have strongly restricted the use of the necessitative suffixes.

For example, Gagauz *-mAlI* has a very low frequency, and Azeri has lost its corresponding necessitative mood (Caferoğlu and Doerfer 1959: 303).

#### 4.3. Possibility

Possibility, in particular deontic possibility, is often expressed by forms of *bol-* 'to become, to be', e.g. Turkish *olur*, Uzbek *bolâdi*, Khakas *polar*, Tuvan *bolur* [be-NFPRS] '(it is) possible'. The lexical verb often occurs in a converb form, e.g. Tuvan *kir-ip bol-ur be?* [enter-CVB be-NFPRS Q] 'is it possible to enter?'.

Khakas also exhibits forms of the verb *čara-* 'to be right, to be suitable': *čar-ir* 'it is possible/missible', 'one may', and *čara-bas* 'it is impossible', 'it is not allowed', 'one must/should not' together with the so-called infinitive in *-(V)rGA*, originally a purposive marker containing a dative suffix *-GA*, e.g. *al-arya čar-ir* [take-INF be.suitable-PRS] 'one may take', *al-arya čara-bas* [take-INF be.suitable-NEG-PRS] 'one must not take'. A possible overt subject stands in the dative, e.g. *saya:* 'to you', *maya:* 'to me'. Altay Turkic has a similar construction, e.g. *taŋkila:-rya jara-r ba?* [smoke-inf be.suitable-prs q] 'is it possible to smoke?'. This pattern is similar to Russian patterns with *možno* 'it is possible, allowed' and *nel'zja* 'it is impossible, forbidden' and with overt subjects in the dative, e.g. *tebe* 'to you', *mne* 'to me'. It was, however, used early in languages that had no intense contact with Russian, e.g. Ottoman Turkish (from the 14th century on) *yara-r* 'it is suitable, permissible, possible', negated *yaramaz* (Clauson 1972: 956).

The adjective meaning 'possible' may be a borrowed item such as *mümkün*, *mümkün*, ultimately of Arabic origin, e.g. Turkish *gir-mek mümkün mü?* [enter-INF possible Q] 'is it possible to enter?', Uzbek *kör-iş-im mümkün-mi?* [see-INF possible-Q] 'can/may I see?' (Kononov 1960: 399).

Gagauz uses *var* 'there is' + *nasil/nije (l)* 'how', a copy of a Bulgarian pattern containing *ima kak* 'it is possible' (*ima* 'there is', *kak* 'how'), e.g. *girme: var mi nije?* [enter-INF there.is Q how] 'is it possible to enter?'. The spoken language tends to contract *var* + *nije* to *varinja*. Impossibility is expressed by *yok* 'there is not' instead of *var*; cf. Bulgarian *njama*. The

question particle *mI* stands between *var/yok* and the word for 'how'. In the written language, the lexical verb may be preposed, e.g. *girme: var mī niže?* [enter-INF there.is Q how] 'is it possible to enter?'. Unlike *-(y)Abil-*, these very frequent constructions express deontic possibility. In impersonal constructions the verbal noun in *-mA:* is used. It is, like the Khakas so-called infinitive in *-(V)rGA*, originally a purposive marker containing a dative suffix.

### 5. Subjunctive function of modal suffixes

The relevance of areality for the renewal of the modal constructions is obvious. It is necessary to look at their use in a contact-linguistic and areal perspective. An important result of intensive language contact in Turkic varieties spoken in Central Asia, Iran, the Balkan area, etc., is the combinational-semantic copying of certain morphosyntactic patterns from Indo-European languages, in particular from Iranian and Slavic.

The features acquired are imitations of syntactic subordination, in which finite verb forms, marked with optative, voluntative, hypothetic or necessitative suffixes, come to be used as a syntactic "modus subjunctivus". Markers primarily signaling mood in independent sentences, occur in dependent clauses, often in connection with junctors such as *ki* and *kim*. This use of the moods will be referred to as their subjunctive function.

This contact phenomenon has been present for a millennium in certain Turkic varieties. The new constructions were first copied into Middle and Late Old Uyghur translated texts. They were further developed as a phenomenon of Iranicization under the strong influence of Persian, and are present to varying degrees in Chaghatay, Ottoman, Azeri, Uzbek, etc. Balkan Turkish displays similar patterns as a result of copying from non-Turkic languages, mainly Slavic. The patterns copied formed systems analogous to the systems of the contact languages.

The new patterns changed basic syntactic structures in the affected varieties. There is a wide range of frequently used constructions with synthetic modal markers in subjunctive function. Thus, in Turkic varieties spoken in Iran, modal constructions of volition, necessity and possibility are essentially semantic-combinatory copies of Persian patterns with modal auxiliaries (Kıral 2005). Balkan Turkish differs strongly from Standard Turkish through the high frequency and wide range of these modal constructions. Subjunctive clauses in West Rumelian Turkish, East Rumelian

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Turkish and Gagauz are calques on constructions in non-Turkic Balkan languages. West Rumelian Turkish patterns are copied from subordinate clauses in Macedonian and Albanian with subjunctive, optative, and conditional markers (Friedman 1985).

Dialects of Cyprus Turkish display similar patterns. They are certainly due to old Iranian influences, but also to the corroborating force of Greek, with which the varieties have had long and intensive contacts.

One result of this contact phenomenon is the preference of finite verb forms over nonfinite verb forms. West Rumelian Turkish, East Rumelian Turkish and Gagauz tend to eliminate nonfinite forms by substituting inflected modal forms for them. This is often ascribed to typical the Balkanism which consists of absence or low frequency of infinitives. Gagauz has replaced infinitive constructions in favor of the Bulgarian modal word + *da* construction with the lexical verb in the optative. The verbal noun in *-mA*: is, however, used in impersonal and same-subject complement clauses.

As far as the markers are concerned, Chaghatay, Koman and some other older languages preferred the optative in *-GAy*. Modern Uyghur and Iranicized Uzbek varieties use the hypothetic marker *-sA*, seldom *-GAy*. Ottoman preferred the optative in *-(y)A*, though at older stages also other modal markers were used. In Balkan Turkish, the optative predominates, though the hypothetic marker can also occur, at least in southwestern Macedonia (Kakuk 1972, Mollova 1968).

The use of an oblique mood for a subjunctive function is a grammatical agreement phenomenon and does not provide more information than the modal verb itself does. The choice of a subjunctive mood is often determined by the clause type and its relation to the superordinate predicate. The obligatory use in subjunctive function changes the function of the modal marker into a purely syntactic one and makes it semantically redundant, in a sense like a case governed by an adposition.

In many cases, the foreign influence consists in reinforced, increased or expanded use of preexisting patterns. In the framework of the Code-copying model (see, e.g., Johanson 2002), this is regarded as a result of frequential copying, which may lead to increased or decreased occurrence of a feature. The copying may be facilitated by the existence of similar patterns in the model code.

## 5.1. Volition

Several Turkic languages have copied analytic constructions in which a modal verb meaning 'to want' occurs with a dependent clause with a finite predicate in a subjunctive mood. In different-subject constructions, the dependent clause can be preceded by a junctor. The constructions are thus rather similar to French patterns such as *il veut qu'elle vienne* 'he wants her to come'.

The subjunctive function is mainly copied from Iranian patterns. It is characteristic of the old Turkic literary languages of Central Asia and of spoken languages that have been in long and intensive contact with Persian and Kurdish. For example, Persian volitional constructions are formed with *xāstan* 'to want' plus a finite verb in the subjunctive, e.g. *mi-xa-m ber-a-m* [want-PRS-1SG go-SBJV-1SG] 'I want to go' (colloquial; see below).

Ottoman Turkish used, under Persian influence, the optative in the subjunctive function, e.g. *dile-r-im [ki] ... gel-e-m* [want-NFPRS-1SG [JUNCT] come-OPT-1SG] 'I want to come', *dile-r-im [ki] ... gel-e-sin* [want-NFPRS-1SG come-OPT-2SG] 'I want you to come' (literally 'I want may you come'). In the spoken language, these constructions were asyndetic or employed the particle *dE* 'also, and' as a junctor.

The third-person volutative suffix *-sUn* was used from the 14th century on instead of the optative suffix *-(y)A*, e.g. *buyur kim ... vèr-me-sün-ler* [order-IMP.2SG JUNCT give-NEG-VOL-3PL] 'order them not to give' (Adamović 1985: 241).

Colloquial Turkish registers may still use patterns of this kind, almost exclusively with a third-person subject of the dependent clause, e.g. *git-sin iste-di-m* [go-VOL.3SG want-PST-1SG] 'I wanted him/her/it to go' or *iste-mi-yor-um git-sin* [want-NEG-PRS-1SG go-VOL.3SG] 'I don't want him to go'. Subjunctive constructions have, however, almost completely disappeared from Standard Turkish.

In Azeri varieties spoken in Iran, volitional constructions normally contain *iste-* 'to want' plus a subordinated verb in the optative, e.g. *ist-ir al-a* [want-PRS.3SG take-OPT.3SG] 'he/she wants to take'. The Azeri optative corresponds to the Persian subjunctive. Corresponding Persian volitional constructions are formed with the modal verb *xāstan* and a following verb in the subjunctive, e.g. *mi-xa-m be-ra-m* (< *mi-xa:h-am be-rav-am*) [PRS-want-1SG go-SBJV-1SG] 'I want to go'. The particle *ki* can be used as a junctor, e.g. *isti-r ki* [want-PRS.3SG JUNCT]. This type has ousted the construction *-mA(k) + iste-*, which is still in use in Northern Azerbaijan

(Kıral 2001, 2005). For corresponding constructions in Kashkay, see Csató (2005).

Similar patterns are found in other Turkic varieties spoken in Iran. Kowalski noted that the Eynallu dialect frequently uses *ise-* 'to want' with a subjunctive construction which is certainly copied from Persian ("... die sicher dem persischen *x"āstan* mit dem Subjunktiv nachgebildet ist" (1937: 66). Khorasan Turkic exhibits similar patterns, e.g. *iste-r-em gel-e-m* [want-NFPRS-1SG come-OPT-1SG] 'I want to come'.

Iraq Turkic prefers constructions such as *ist-ir-em ki gel-e-siz* [want-PRS-1SG ki come-OPT-2PL] 'I want you to come' (cf. Standard Turkish *gel-me-niz-i isti-yor-um* [come-VN-POSS2PL-ACC want-PRS-1SG]), *ist-ir-i yè:-sin* [want-PRS.3SG eat-VOL.3SG] 'he/she wants to eat' (cf. Standard Turkish *ye-mek isti-yor* [eat-INF want-PRS.3SG]). The verbal noun in *-mA* is not used, and the functions of *-mA* are heavily restricted (Bulut 2000).

Turkish varieties of Cyprus display the same patterns, e.g. *isde-r-im gid-e-siñ* [want-PRS-1SG go-OPT-2SG] (cf. Turkish *git-me-ni isti-yor-um um* [go-VN-POSS2PL-ACC want-PRS-1SG]); see Demir (2002).

In Balkan Turkish, the pattern *-mA* plus possessive suffix has vanished in different-subject constructions, being replaced by patterns with voluntatives, optatives, conditionals or the old necessitative *-(y)AsI*, e.g. *ben sen-i iste-r-im gel-e-sin* [I you-ACC want-NFPRS-1SG come-OPT-2SG], *ben seni iste-r-im gel-esi* [I you-ACC want-NFPRS-1SG come-NEC] 'I want you to come'. In all Turkish dialects of Bulgaria, these analytic patterns are also found in same-subject constructions.

The Balkan Turkic language Gagauz, closely related to Turkish, has similar constructions, e.g. *iste-r-im öl-e-yim* [want-NFPRS-1SG die-OPT-1SG] 'I want to die'. In different-subject constructions, the lexical verb must be in the optative. The construction with *-mA* plus possessive suffix is completely lost in Gagauz.

The frequency of the analytic constructions has increased strongly under the impact of constructions such as Bulgarian *iskam da* + finite verb or *xotet' čtoby* + finite verb. All Turkish dialects of Bulgaria have this kind of same-subject optative construction (Németh 1965: 123; Kakuk 1960). In Gagauz as spoken in Moldova it is almost lacking, probably due to the influence of Russian (Menz 1999: 50).

## 5.2. Necessity

A similar phenomenon is the subjunctive use of voluntative, optative and hypothetic suffixes in analytic necessitative constructions.

In several older and more recent Turkic languages, an adjective meaning 'necessary' is used together with a hypothetic marker in a kind of subjunctive function, e.g. Karakhanid *-sA kerek*, Tuvan *-sA xerek*, Uzbek *-sâ kerâk* (Kononov 1960: 398) 'he/she/it must'. Also in Ottoman, the hypothetic marker *-sA* was used, e.g. *al-sa-m gerek* [take-HYP-1SG necessary] 'I should/must take', *al-sa gerek* [take-HYP.3SG necessary] 'he/she/it should/must take'. This pattern was used less and became unusual after the 18th century (Adamović 1985: 286). It is, however, still used in modern Turkish to express expectation, presumption or probability, e.g. *bugün gel-se gerek* [today come-HYP.3SG necessary] 'he/she/it should/ought to come today'.

It is difficult to decide whether the phenomenon just mentioned is contact-induced, but this is undoubtedly the case with certain patterns found in Turkic varieties under strong Iranian or Slavic impact, where an adjective meaning 'necessary', *kergek*, *gerek*, *la:zim*, etc., is followed by a clause with the finite verb in an oblique mood. The modal markers are used like the subjunctive in the Iranian or Slavic constructions. One pattern found in Ottoman is *gerek* + optative, e.g. *gerek var-a-sin* [necessary go-OPT-2SG] 'you should go'.

Modern Azeri displays the same pattern, e.g. *gerek oxu-ya-k* [necessary read-OPT-1PL] 'we must read, we need to read'. In Azeri varieties spoken in Iran, necessitative constructions are expressed by *gerex* 'necessary' plus optative, e.g. *gerex ged-a-x* [necessary go-OPT-1PL] 'we must go'. This corresponds to the Persian construction with *ba:yad* 'necessary' plus a verb in the subjunctive. Instead of *gerex*, the adjective *bâ:yed* (< Persian *ba:yad*) may be used, e.g. *bâ:yed oxi-ya* [necessary read-OPT.3SG] 'he/she must read'. Negation and aspectotemporal markers are added to the verb, e.g. *gerex gör-m-ir-di-m* [necessary see-NEG-INTRA-PST.COP-1SG] 'I should not see'. Persian uses the negative prefix *na-* before *ba:yad*, while the verb remains in the affirmative form. This is also the case with Azeri patterns containing the copy *nebâ:yed* (Kıral 2005).

Iraq Turkic displays constructions such as *gerek éd-e-sen* [necessary do-OPT-2SG] 'you must do' and *la:zim-di sor-u:-m* [necessary-PST ask-OPT-1SG] 'I must ask' (Bulut 2000).

The situation of the Balkan Turkish varieties is similar. The necessitative suffix *-mAll* has been given up. Under the influence of Bulgarian and Macedonian, Balkan Turkish exhibits patterns with voluntatives and optatives in subjunctive function. We find constructions such as *o la:zīm git-sin* [he/she/it necessary go-VOL.3SG] ‘he/she/it must go’, *sen lazīm gid-e-sin* [you necessary go-OPT-2SG] ‘you must go’, *la:zīm-dir çaliş-alim* [necessary-COP work-VOL.1PL] ‘we must work’. Compare the Slavic pattern *treba da* + subjunctive, e.g. Macedonian *treba da odam* ‘I must go’ (= *la:zīm gid-e-yim*).

Turkish varieties of Cyprus exhibit patterns such as *lazīm al-alim* [necessary take-VOL.1PL] ‘we must take’.

Gagauz exhibits similar patterns such as *o la:zīm-dī oku-sun* [he/she necessary-PST.COP read-VOL.3SG] ‘he/she had to read’, in which the combinatory properties of the Bulgarian *da* construction with the invariable form *trjabva* plus finite lexical verb are copied. Gagauz *-mAll* is almost totally ousted by analytic patterns with an oblique mood.

### 5.3. Possibility

Possibility may be expressed by constructions containing a modal word and a verb in an oblique mood with subjunctive function. This is also an effect of foreign influence.

For example, Uzbek may use the construction *bolādi* ‘(it is) possible’ with the hypothetic mood in *-sa* as a subjunctive, e.g. *yāz-sā-m bol-ā-di* [write-HYP-1SG become-PRS-3SG] ‘I can write’.

Azeri varieties of Iran, use *ēli-ye bil-* [do-CVB know] ‘to be able to do’, followed by a verb in the optative. This construction, which can express ability and other kinds of possibility, is influenced by Persian constructions consisting of the modal verb *tava:nestan* plus a verb in the subjunctive, e.g. *ēli-ye bil-er mašin apar-a* [do-CVB know-NFPRS car drive-OPT.3SG] ‘he/she can drive a car’; cf. Persian *mī-tun-e ma:šīn be-bar-e* [PRS-be.able-3SG car SBJV-drive.3SG]. Negation can be expressed by *ēli-ye bil-me-* [do-CVB know-NEG] or by the impossibility marker *-(y)AmA* added to *ēle-* ‘to do’ (Kıral 2005: 288-291).

Iraq Turkic has a special periphrastic construction for impossibility. The verb *ēt-* ‘to do’ in combination with *-(y)Abil-* expresses ‘to be unable to’ and is followed by the lexical verb in the optative or voluntative, e.g. *ēd-ebil-m-ir-i yiylā-sin* [do-POS.NEG-PRS-3SG cry-VOL.3SG] ‘he/she cannot

weep', literally 'he/she cannot that he/she shall weep'. The corresponding Iranian periphrastic constructions consist of a modal verb (Persian *tava:nestan*, Kurdish *karin*), followed by the lexical verb in the subjunctive, e.g. Kurmanji *ni-kar-um bi-gir-um* [NEG-be.able-1SG SBJV-weep-PRS.1SG] 'I cannot weep', literally 'I cannot that I shall weep' (Bulut 2000: 165-166).

Balkan Turkish displays interesting copies of Slavic possibility constructions with subjunctives. In West-Rumelian Turkish, the verbal form *olur* 'it becomes, (it is) possible' corresponds to Slavic *može* 'can' and combines with clauses in which a finite lexical verb carries an optative or voluntative marker. Bulgarian and Macedonian possess constructions expressing ability and possibility, in which verbs derived from the Slavic verb *\*mogti*, e.g. Bulgarian *moga* 'to be able', are complemented by clauses preceded by the conjunction *da* 'that' and carrying a finite lexical verb in the subjunctive mood. Nonfinite forms of the lexical verb do not occur. The corresponding West-Rumelian Turkish constructions are clearly modeled on this areal pattern. Thus *olur* corresponds to *može da* 'it is possible' and *olur mu* to *može li da* 'is it possible?'

Gagauz displays possibility constructions containing a finite lexical verb in a subjunctive mood and introduced by the elements *var nasil* and *var niže* (often contracted to *varinja*) 'there is + how', e.g. *ben varinja gid-i:m* [I there.is.how go-VOL.1SG] 'I can go'. The elements used in the sense of 'possible' are copies of Bulgarian *ima* 'there is' and *kak* 'how'. Impossibility is expressed with *yok* 'there is not', which corresponds to Bulgarian *njama*. The question particle *mi* can stand between *var/yok* and the following word for 'how', e.g. *var mi nasil gid-i:m* [is there how go-VOL.1SG] 'can/may I go?'

## 6. Levels of grammaticalization

The phenomena dealt with above raise several questions regarding the degree of grammaticalization. On processes and parameters of grammaticalization, see Lehmann (1995), Heine and Kuteva (2002, 2005). Let us briefly summarize our findings.

Stage I. The old synthetic devices, most of which are still employed, represent an advanced degree of erosion of their material shape and of desemanticization, suggesting more general meanings open to various interpretations.

Stage 2. The analytic devices reflect much less advanced degrees. They hardly show any signs of formal erosion, and they can convey more precise meanings than the synthetic ones.

Stage 3. The use of dependent clauses containing finite subjunctive verb forms represents a lower degree of grammaticalization than the use of nonfinite forms.

In varieties where Stages 1 and 2 coexist, the analytic devices are preferred in more objective register, i.e. those that require less ambiguous modes of expression. The synthetic devices are more suited for subjective registers which tolerate relatively vague modal and other attitudinal devices (see Johanson 2006).

The frequency of Stage 3, analytic constructions with subjunctive moods, has decreased in some modern languages. The Persian influence during the Ottoman Turkish period has ceased in the modern Turkish period, partly due to a puristic language policy in Turkey. The Persian impact on Azeri is still much stronger. The standard language, however, is based on varieties in the northern part of the Azeri-speaking area that are less Persian-dominated. On the spoken language of Tebriz, see Kırıl (2001). The present status of Balkan Turkish is too weak to allow clear statements on the direction of the development.

One intricate problem concerns so-called contact-induced grammaticalization. What is the relation between originals and copies in terms of stages of grammaticalization?

Grammaticalization proceeds unidirectionally from less to more grammaticalized items. As for the contact-induced renewal of Turkic modal expressions, the copies represent less advanced stages of grammaticalization than their originals. There are differences with respect to semantic, combinational and frequential properties. The copies that make use of subjunctive markers imitate Indo-European subordination, without being subordinative themselves; the dependent clauses are not embedded into a matrix clause. The use of these constructions is often contextually restricted and optional rather than obligatory. Heine and Kuteva, who take contact-induced grammaticalization to follow the same principles of grammaticalization as changes not involving language contact, note: "wherever there is sufficient evidence, it turns out that the replica construction is less grammaticalized than the corresponding model construction" (2005: 101).

While grammaticalization can obviously be a result of language contact in areal contexts, the copying act itself is not a grammaticalization process.

What is copied is the result of a code-internal process of the model code construction at a specific stage of its path of grammaticalization. The replica construction is less grammaticalized than the model construction. If copying would involve grammaticalization processes, we would, in these cases, be confronted with instances of reverse directionality, i.e. violations of the unidirectionality principle assumed for such processes (see Johanson *forthc.*).

### Transcription

In transcriptions of morphemes, capital letters represent morphophonemes: *V* = vowel, *I* = high unrounded vowel, *U* = high rounded vowel, *A* = non-high unrounded vowel, *G* = velar *g* / *ɣ*. Hyphens are used to indicate morpheme boundaries.

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