

The development and functions of the inferential marker *chogʻi* in Uzbek

MELIKE ÜZÜM^{1,2*}

¹ Johannes Gutenberg University, Germany

² Baskent University, Turkey

Received: March 24, 2022 • Revised manuscript received: January 5, 2023 • Accepted: January 23, 2023

© 2023 Akadémiai Kiadó, Budapest



ABSTRACT

In the evidential system of Uzbek, the speaker has different grammatical options in marking the source of information, such as *-ibdi*, *ekan*, *emish*, etc., although it is not compulsory to mark this category in the utterance. In addition to these established markers, new markers have developed into evidentials, and they encode specific sub-categories of evidentiality. In this study, after a brief overview of grammatical markers of evidentiality in Uzbek, the marker *chogʻi* is examined with a syntactic and semantic approach based on a corpus of selected texts. Its development into an inferential marker is evaluated with special attention to sources of evidentials.

KEYWORDS

Uzbek, indirectivity, inference, the source of evidentials, grammaticalization

1. INTRODUCTION

In the languages of the world, speakers can express the source of information acquired in different ways such as by seeing, hearing, inferring, tasting, etc., by various grammatical or lexical means. Considered a functional category by linguists, the source of information is

* Corresponding author. Johannes Gutenberg-Universität, Institut für Slavistik, Turkologie und zirkumbaltische Studien (ISTziB), Abteilung Turkologie Hegelstraße 59, D–55122, Mainz, Germany; Eskişehir Yolu 18. km, Başkent Üniversitesi Fen Edebiyat Fakültesi Türk Dili ve Edebiyatı Bölümü, D320, 06790, Ankara, Türkiye. E-mail: melikeuzum@gmail.com

examined under evidentiality with a general subdivision into direct and indirect evidence, which include the subcategories inference, hearsay, perception, and assumption in most of the world languages (Aikhenvald 2004; Cornillie 2009; de Haan 1999). Evidentiality is not only related to the nature of evidence but also has a deictic component, expressing the speaker's presence or absence during the reported event (de Haan 2001, 216).

The relationship between evidentiality and epistemic modality in classifications and analyses of these categories has been explained with different approaches, but in this study, different from Palmer's (2001), evidentiality is accepted as a category separate from epistemic modality, with an extensional epistemic value. This approach follows the view that evidentiality allows an epistemic reading in some utterances and may have epistemic overtones, depending on the nature of evidence (see van der Auwera & Plungian 1998; de Haan 1999; Johanson 2000a, 2000b, 2021; Cornillie 2009; Rentzsch 2010, 2011; Aikhenvald 2004).

Turkic languages are among those languages that use evidentials optionally in an utterance. In this language family, evidential markers can be lexical items or grammatical forms, depending on the specific evidentiality system of different branches of the language family. In general, the main grammatical markers of evidentiality identified in Turkic languages by Johanson (2018) are *-GAN*, *-IBDIR*, *-MIŠ*, *ÄRKÄN*, and *ÄRMIŠ*. Although evidential categories in Turkic languages have been investigated in various studies, many aspects of evidentiality in individual languages still call for an investigation. For instance, in Uzbek, the existence of multiple options for the speaker (*ekan*, *emish*, *-ibdi*, etc.)¹ and the use of newly formed evidentials at the end of a sentence (such as *chog'i*, *bolip*, *shekilli*,² etc.) needs to be discussed in terms of the emergence of evidentials and development of the system (see Johanson 2003, 278; Rentzsch 2015, 26–27).

In this study, I focus on the marker *chog'i* in order to conduct a detailed analysis. In dictionaries, *chog'i* is registered with translations such as '1. as if, it seems; 2. approximately, about' (1. aftidan, shekilli 2. taxminan, qariyb, chamasi, Akobirov et al. 1981, 380; 1. Kažetsja, kak budto, pohože na to, čto; 2. Priblizitel'no, okolo, Borovkov 1959, 528). However, note that dictionary definitions of evidentials and the difficulty of matching with an equivalent in another language or the same language are separate topics of discussion, which are beyond the scope of the current study. In the present paper, after a literature review, the use of *chog'i* will be analyzed syntactically and semantically with a corpus-based methodology and evaluated with regard to the marking of evidentiality. The data have been collected from the modern Uzbek literature. The research questions that guide the analysis are: What are the syntactic and semantic features of *chog'i*? Can this item be defined as an evidential? How can the origin and development of the marker be determined etymologically? How can this marker be evaluated in terms of a grammaticalization process with a semantic approach? The major objective of the research is to present new findings on the development of evidentials, as well as semantic and syntactic properties of the markers of evidentiality in Uzbek, through the investigation of the use of *chog'i*. In line with this purpose, the findings will contribute to the general linguistic study of evidentiality and will provide further data on the appearance of the evidential system in Uzbek.

¹Compared to the evidential markers commonly seen in Turkic languages, *-GAN* does not primarily have an evidential function in Uzbek. According to Johanson (2018, 514), it presents the event from a postterminal perspective but it can be read with slight evidential connotations depending on the context, e.g. *Yozgan* 'S/he has written'.

²Yaman (2012, 73–76) evaluates *shekilli* as a lexical epistemic marker and states that it marks inferential and subjective modality.



Taking into consideration the literature on the sources of evidentials, I have identified the uses of *chog'i* that meet the semantic and functional properties in the development of deictic elements and also show that elements of subordinate clauses can become an element of the main clause. Following these principles, I argue that temporal uses of *chog'i* are crucial in the development of the evidential marker.

2. METHODS AND CORPUS

The present study was designed as a corpus-based analysis. The samples selected from a corpus of Uzbek literature are presented in the official Uzbek Latin alphabet. First, the usages of *chog'i* identified in the corpus were analyzed with a syntactic and semantic approach. Next, the interpretations of the usage of this item in daily life were discussed with native speakers of Uzbek. To determine the development of the marker, the views on the use of related items in Old Turkic and Chaghatay, the Middle Turkic predecessor of Uzbek, were evaluated.

In the theoretical framework, the studies, and opinions of [Plungian \(2001\)](#) and [Johanson \(2000a, 2000b, 2003, 2018\)](#) about evidentiality were taken as a basis for analysis. The term inferential has been used including the concepts of assumptive or presumptive, which are based on general knowledge or common sense as a type of inference in the literature ([Palmer 2001](#); [Aikhenvald 2004](#)). Accordingly, inferential uses are discussed on the basis of three different types of evidence: observable evidence, i.e. traces or signs of the event in the proposition, general knowledge, and personal knowledge.

3. LITERATURE REVIEW

In the literature, the appearance of evidentiality in languages is discussed in the context of typology and language contact. The development of evidentials is explained with historical reasons in typology studies. According to these studies, evidential systems can develop or disappear, and existing evidential systems can change because of language contact ([Matras 1995](#), 95–98, 119–120; [Johanson 1996, 1998](#); [Lazard 2001](#), 360; [Aikhenvald 2004](#), 288–302; [Friedman 2018](#), 126–129). In these discussions, Turkic languages play an important role due to the existence of grammatical markers of evidentiality and they provide the opportunity to investigate the topic in historical texts. The sources of evidentials have been determined on the basis of the available data, and the scarcity of studies focusing on the diachronic development of evidentials has been pointed out in previous studies ([Aikhenvald 2004](#), 287–297; [Friedman 2018](#)).

The first evaluation of evidentiality in Turkic languages is based on *Divānū Luġāt-it-Türk: ol maṇa kälmiš* 'He came to me, but I did not know of it'; *bardi* 'He went, and I saw him go with my own eyes' ([Dankoff & Kelly 1982–1985](#), 412).³ Since this text is from the 11th century, it is considered one of the oldest sources illustrating the appearance of an evidential system ([Aikhenvald 2018](#); [Friedman 2018](#)). By referring to these historical texts, the contrast between *-DI* and *-mİš* is attested in Turkic. According to this opposition, *-mİš* expresses inferential and reported/hearsay sources, and *-DI* marks direct access to the action. This division is widely accepted in the

³[Johanson \(2000a, 65\)](#) is of the opinion that *-DI* is unmarked in terms of evidential value in East Old Turkic.



literature (Slobin & Aksu 1982, 186–187; Aksu-Koç & Slobin 1986, 159; Palmer 2001, 47) and even diachronically, Friedman claims that usages in the *Orkhon Inscriptions* written in the 8th century support this view (2018, 127). However, Johanson argues that the contrast between an indirect experience (indirect evidence) *-mİš* and direct experience (direct evidence) *-DI* is not applicable in Turkic. Rather, in this opposition, *-DI* represents a neutral value, so Johanson (2018, 512, 519) considers the use of *-DI* as unmarked in terms of evidentiality.⁴ According to this view, the opposition between marked and unmarked seems more appropriate in Turkic languages (Johanson 2000a, 2000b, 2018). The most persuasive argument to verify this claim is the use of *-DI* in the narrative of history and for unwitnessed actions (*Büyü-dü-n* ‘You have grown’) (Lazard 2001, 363; Johanson 2000a, 2000b, 74, 2003, 282–283, 2018, 519). Building on these conceptualizations, I argue that *-DI* does not necessarily contrast with direct and indirect evidence, taking into account its use in unwitnessed situations such as historical events, but this item can be used when speakers do not want to express the source of information.

Indirectivity with grammatical and copular markers in Turkic languages, their semantic domain and their relationship with modality, and their acquisition, have been discussed from various perspectives in previous research (Johanson 2000a, 2000b, 2003, 2018; Csató 2000; Straughn 2011; Aslan Demir 2013; Rind Pawlowski 2014; Demir 2012; Simon 2018; Karakoç & Herkenrath 2019; Tuğlacı 2020). Evaluating Turkic languages from a comprehensive perspective, Johanson (2018) presents a classification dividing Turkic systems of evidentiality into three groups. In this classification, he considers Uzbek in the same group with Kazakh, Uyghur, and Turkmen under the “system type 1”. The general features of this system are the presence of two copular particles (*ÄRKÄN*: tends to mark perceptive and inferential uses, *ÄRMİŠ*: tends to mark reportive use), and an inflectional past *IBDIR* which always expresses indirectivity (Johanson 2018, 517). With a different approach, Aikhenvald (2004, 29–31) classifies Turkish and many Turkic languages as the type of A2 (non-firsthand knowledge versus everything else) suggesting that information is acquired by hearsay and inference of all types. Comparing the two classifications, while Aikhenvald determines a place among the world languages with a general aspect, Johanson provides a detailed classification focusing on the Turkic languages. However, specific uses seen in Turkic languages are not included in Aikhenvald’s classification. In some occurrences of evidentials, it is seen that even if the proposition is marked with indirectivity, it can be read as direct evidence depending on the actionality (aktionsart) or context, e.g. Turkish *Oturmuş* or Uzbek *O’tiribdi* ‘S/he has sat down or is sitting’ (simultaneously with the point of observation or hearsay) (see Johanson 2000a, 2000b, 65). Additionally, in the context of the first person, evidentials can also express notions such as lack of awareness or consciousness, and inability to control the event (Johanson 2018, 520). For this reason, such uses are excluded when Turkic languages are evaluated under *non-firsthand versus ‘everything else’*.

As can be seen in Johanson’s classification, Uzbek has developed a more comprehensive evidential system compared to other branches of the Turkic languages (e.g. the Southwestern branch with Turkish *-mİš*, *imiš*), resulting in the existence of more than two grammatical markers in Uzbek.⁵ However, *chog’i*, as discussed in this study, shows that the system has been

⁴It can refer to the future, the present, or the past (Rentzsch 2010, 272–273).

⁵Johanson (2018, 517) emphasizes that the different tendencies in the use of these markers in Turkic languages can sometimes be limited to dialects or individual speakers.



changing, and new items have begun to be used as a result of grammaticalization. For this reason, new developments in the Turkic languages and the question of whether markers are used for different subcategories of evidentiality calls for further investigation.

4. THEORETICAL FRAMEWORK

4.1. General overview of evidentiality in Turkic languages

Linguistic area, language contact, and typological features of languages are important in terms of the development of evidentiality. Looking at the area where Uzbek is spoken, Central Asian and Inner Asian regions are accepted as important centers for developing evidentiality through transmission or diffusion, and as an important area to study the diachronic development of evidentiality (Friedman 2018, 126). Regarding language contact, evidentiality is considered as an attractive category for diffusion due to the importance of the source of information in communication (Johanson 2002, 99). As an example of this, Johanson (2018, 522) states that Northern Tajik,⁶ taking Uzbek as a model, has developed a comprehensive evidential system through a reinterpretation of existing forms.⁷ The widespread uses of *-mİš* also demonstrate this phenomenon. Therefore, Turkic languages, in particular, play an important role in the spread of evidentiality among other languages (Aikhenvald 2018, 163).

In the Turkic languages, the source of information is expressed by referring to it as indirectly received (including the first person⁸) by a conscious subject or recipient, and indirectivity can be expressed by different means within a certain system (Johanson 2018, 511). Moreover, although the markers primarily indicate the source of the information in the proposition, they have connotations such as surprise and doubt because of the semantic features of non-confirmative items (Friedman 2018, 132).

Evaluating Turkic languages, Johanson (2018, 511–512) divides the evidentials into three subcategories: *reportive uses*, *inferential uses*, and *perceptive or experiential uses*.⁹ In perceptive uses, indirectivity markers indicate that the effect of the event or situation emerges, manifests itself, becomes visible, or is grasped through one of the senses, and thus becomes accessible to the perception of the receiver.¹⁰ In addition, Johanson draws attention to the fact that there is a distinction between *reported* and *non-reported* in Turkic evidential systems. For instance, the speaker's preference between *ekan* (non-reportive; inferential, perceptive) and *emish* (reportive) is related to the tendency of markers to point to the source of information, either reported or

⁶While evidentiality is very rare in Persian, Tajik, which is a Central Asian variety of Persian, has a comprehensive evidential system (Soper 1987, 59–61, 80–82; Johanson 2018, 522). A similar system is also seen in languages outside this area, such as Bulgarian and Armenian (Lazard 2001, 361).

⁷Aikhenvald (2018, 162) calls the copying of the evidentiality marker from another language *direct diffusion*, and the semantically and functionally equivalent of an element in another language *indirect diffusion*.

⁸In Turkic languages, the indirective markers can also be combined with the first person, e.g. *Uxla_{sleep}-b_{CVB} qol_{AUXV}-ibman_{EVID}* 'Apparently, I fell asleep'. The semantic domain that arises in the use of the first person can be the subject of a separate study on first person effect in evidentials.

⁹Other views also include mirativity markers (Lazard 2001, 361).

¹⁰It should be noted in this explanation that the speaker expresses evidence indirectly regardless of whether he has direct or indirect access to the effects, traces, consequences of the event (Johanson 2000a, 2000b, 65).



non-reported in Uzbek.¹¹ In this context, it can be argued that *chog'i*, which is the focus of this paper, developed into a non-reportive marker.

Morphological markers expressing indirectivity in Turkic are either *postterminal suffixes* or *copular particles*. The first type of marker contains *MIŠ*, *GAN* and *IB-DIR* (<*B *tur-ur*). Post-terminals directly attached to verb stems indicate past events of present relevance with an aspectual way of envisaging the event after the transgression of its relevant limit (Johanson 2000b, 29, 32–33, 2018, 513). However, high-focal postterminals focus on the aspectual orientation point and establish a relationship between this viewpoint and the event, therefore they focus more on the results of the event than on the event itself (Johanson 2000b, 109, 2021, 651). This feature is significant to explain the deictic characteristics of evidentials which are related to time and place of the evidence evaluated by the speaker. The postterminal view implies that the speaker was not present consciously while the event was happening. Therefore, high-focal postterminals tend toward indirective readings or develop into indirect markers through reinterpretation. In other words, due to a point of view focused on the results of the event, high-focal postterminals can gain evidential function as the content of the event remains valid after the transgression of the relevant limit, although the speaker does not witness the event while it takes place (Rentzsch 2011, 117).

The second type of marker is exemplified by clitics such as *ermiš*, *erken*, *{-(y)-mİš}* or *i-miš* (Johanson 2018, 515).¹² The main difference between these markers is that aspect suffixes always have an aspectual/tense reading as well, while the copula particles are neutral to aspect/tense (Csató 2000, 37; Rentzsch 2010, 277).¹³ Considering the appearance of these markers in historical varieties of Turkic, *-DI* and *-mİš* are testified in Old Turkic, while *-GAN* and *IP-DIR* take on the function of *-mİš* in later stages (Johanson 2000a, 72–73). The evidential values of these markers are different as well. Furthermore, speakers can also use lexical markers¹⁴ in the same utterance together with morphological markers (Aikhenvald 2004, 3). This double marking is common in Uzbek, which may be related to the fact that markers can indicate different sub-categories of evidentiality. In the analysis section below, double marking will be briefly addressed in examples.

¹¹In addition to these markers, lexical markers can indicate that the information is obtained reportedly, inferentially, and perceptually, or a lexical marker can contribute to the clarification of meaning in combination with the grammatical marker.

¹²Friedman (2018, 127) states that in Chuvash, evidence is marked with *-sA*, which is related to the hypothetical conditional marker in Turkic languages. In more detail, Johanson (2018, 514) reveals the evidential function of *-nI* as indirective postterminal used in narrative styles while considering *-sA* as the Upper Chuvash counterpart of it.

¹³Rentzsch (2011, 117) draws attention to the fact that *-mİš*, which does not have to be interpreted as evidential in Turkish, is used in Baburnama with evidential content as part of its semantic core. On the other hand, *-(V)ptur* with postterminal content requires evidential interpretation. In Turkish, *-mİš* as a postterminal indicates that the relevant limit of the event has been passed, e.g. *Öldü.müşPOST*: 'S/he died or is dead' (see Johanson 2021, 625). However, such uses can also be interpreted as an indirect statement of perceptive evidence: "Evidence is perceived by a conscious subject". If used alone, its function becomes clear in context but the combination of *-mİš* (+POST–EVID) *-Imİš* (–POST+EVID) in Turkish clearly confirms this view.

¹⁴In the literature, lexical markers can refer to particles, prepositions, and conjunctions as units (Wiemer 2007, 175). The criteria in this study to accept a marker as a lexical unit are that it scopes over the whole sentence; it has a lexical meaning; and it functions as a sentential adverb syntactically.



4.2. The source for evidentials

In world languages, evidentials tend to be formed by the grammaticalization of verbs. However, as mentioned above, in Turkic languages, evidentials usually develop from postterminal aspect forms. Regarding the general situation in world languages, while reportive evidentials appear in relation to verbs such as *to say*, etc., perceptual evidentials can develop from the verbs *to hear*, *to feel*, etc., and, albeit to a lesser extent, also other semantic domains, such as deictic elements (Aikhenvald 2004, 271–276). With inferentials, there is a tendency to develop from verbs related to visual observation, or from postterminality (Willet 1988, 61; Rodríguez-Somolinos 2017, 112–113). In addition, nouns, participles, future markers, deictic and locative markers have evolved into inferentials (Aikhenvald 2004, 284–285; Friedman 2018, 136).¹⁵ The deictic properties of evidentiality can be highlighted when looking at their development from different sources, because the evidentials serve the function of indexing an individual who conceptualizes evidence in a specific time and place, depending on how the recipient acquires information (Mushin 2000, 928).

Considering the origin of *chog'* (+i POSS.3SG > *chog'i*) and its uses in the utterances, this marker developed from an item with deictic content and it indicates the inference based on the speaker's observation of signs.

4.3. Inferential use

Inferentials rely on reasoning and deduction of facts (pure reflection, signs), not on direct observation of an action; the basis of knowledge is an abstract thought and available evidence (Johanson 2000a, 2003; de Haan 2001, 193). Under the general definition, Aikhenvald (2004, 2–3) determines two different types of inference, depending on whether the evidence is clear or not (the degree of the relation of the evidence to the event or situation, the degree of accessibility, etc.) and on the degree of reasoning: 1. *Inferred evidentials* refer to available evidence, which can be observed, 2. *Assumed evidentials* rely on reasoning based on general knowledge or on common sense (ultimately conjecture).

The logical conclusion or reasoning in inference can be considered essential for both types, as the evidential evaluation does not result from observing the event in the proposition but from knowing something or observing another state associated with it. In these situations, speakers can mark the proposition with inferential or assumptive (presumptive) (Plungian 2001, 352). Furthermore, evidence in reasoning may be related to reported (hearsay, quotative), visual or non-visual information in different contexts (Willet 1988, 57;¹⁶ Aikhenvald 2004, 163–165). However, speakers indicate that the proposition is inferential/assumptive: *It is obvious that... or as far as the speaker (recipient) understands/understood...*

Languages that have large evidential systems can mark inference separately based on results, pure reflections, or signs, as well as assumptions. If there is only one marker, this marker covers the meaning of both categories (Aikhenvald 2004, 174). These two types can be evaluated

¹⁵There are different sources of reportive evidentials: the information reported by a direct witness or non-witness, the information based on oral culture, traditional or general knowledge (Willet 1988, 57–96; Palmer 2001, 40–41; Lazard 2001, 365). Moreover, epistemic modality markers can gain evidential value.

¹⁶Involving either observable evidence (results) or a mental construct (reasoning).



separately in terms of epistemic reading, as they involve observed evidence or lack thereof (see Kittilä 2019, 1273–1274). The observable evidence here should not be confused with the perceptive uses included in Johanson's (2000a, 65–66) classification. In the use of *chog'i*, it is obvious that the recipient does not refer to perceptual evidence (cf. *Issiqqina ekan* 'It is hot' evidence is based on touching, see Tuğlacı 2020, 183). On the other hand, signs and traces can be distinguished between observed evidence types (Plungian 2001, 354). According to this distinction, propositions marked with *chog'i* indicate the presence of signs (*I can observe some signs of P*), while evidential postterminals indicate the presence of traces (*I can observe some traces of P, results, or a consequence of P*). The difference between these two types of evidence is related to the temporal proximity and the form of evidence. Signs occur at or close to the time of the speech, and the propositional event is present at the time of speech. That is, the signs and the propositional event are simultaneous, or they have temporal proximity. Traces occur after transgression of the relevant limit of the event and the speaker perceives these traces of the propositional event. Therefore, there is a distance between the propositional event and the speaking time. In other words, the propositional event based on traces implies a retrospective dimension.

In future studies, inferentials as a common subcategory of modality and evidentiality merit further attention. Since inferentials indicate the existence of certain clues or evidence, they are associated with evidentiality, and they are also associated with epistemic modality, as they are based on weak evidence and the speaker's subjective judgement. Especially inferentials are evaluated with different approaches under modality and evidentiality (see Palmer 2001, 28–29; Johanson 2003, 274–275; Aikhenvald 2004, 18, 23; Panov 2020, 39–40). The views of van der Auwera & Plungian (1998, 85–86) and Cornillie (2009, 48–49) can be cited briefly to determine the place of inferentials in the evidential system and epistemic modality. Van der Auwera and Plungian consider the overlap of the categories of epistemic modality and evidentiality in this subcategory. However, Cornillie is of the view that markers have various readings besides their semantic core, and evidentials do not primarily mark epistemic possibility. Here, indirectivity and the uncertainty or probability caused by it must be considered. In this regard, it must be noted that *chog'i* is interpreted with a relatively low epistemic value, since the evidential evaluation is based on clues and signs. However, as will be shown in the course of this paper, the item displays a stable evidential reading; this is why it is considered in the context of evidentiality here.

5. FINDINGS AND DISCUSSIONS

The marker *chog'i* expresses “synchronous inference” and “reasoning” (*I can observe some signs/pure reflections of P; I have some experience and information about P*) according to the corpus.¹⁷ Since these two concepts overlap in the same marker, they are evaluated under inferential evidentiality.¹⁸ In the synchronic inference, speakers directly observe another

¹⁷According to Plungian's classification, in contrast to evidentials like *chog'i*, which marks synchronic evidence, postterminals in Turkic languages, which are used as inferentials, can be considered as “retrospective inference”: *I can observe some traces behind after the event*.

¹⁸While Palmer (2001, 24–25) defines the deductive modality based on observable evidence and the assumptive modality based on general knowledge, Aikhenvald (2004, 3) makes similar definitions for inferred and assumed evidentials.



situation that provides the evidence and utter the proposition interpreting the event. The evidence in question can be “pure reflections, signs, logical conclusions” about the proposition (see Plungian 2001, 354; Johanson 2003, 274). Furthermore, an epistemic reading emerges from the interpretation of evidence. Other reasons supporting this view are related to the origin of the marker, its core meaning and semantic extensions of it, and its reading in terms of epistemic possibility based on evidence. Additionally, *chogʻi* is mostly used in the third person, which is common for inferential uses (see Johanson 2018, 520). Unlike markers that develop from postterminality to evidentiality, it can be considered as a different encoding of indirectivity: *synchronous inference* (*chogʻi*) vs. *retrospective inference* (evidential postterminals). For these reasons, I argue that *chogʻi* is an inferential marker within the evidential category of indirectivity, but epistemic possibility is established with reference to its extensional meaning.

5.1. *chogʻi* as an inferential

In propositions, the marker *chogʻi* indicates evidence based on the recipient’s general knowledge (including personal experience), or signs emerging from another situation related to the propositional content where the evidence is not clear. These uses can be interpreted in two ways: 1. “The speaker has observed another situation that s/he interprets as pointing toward proposition”, 2. “The speaker simply knows something that suggests that the proposition is probable” (Plungian 2001, 352). Additionally, the utterance containing *chogʻi* will illustrate the polysemy and simultaneous functions of evidentials. In this context, first, I evaluate, examples to show its use as a noun with an inflectional suffix that can be read on the meaning ‘time’, then examples of clauses for its use with deictic functions and propositions where it is used as an inferential.

- (1) *Bahor chogʻ-i, navroʻz yaqin-lash-ayapti, oʻyna-b*
 spring time-POSS3SG navruz close-DV-INTRA.3SG play-CVB
kel-a-miz.
 come-PRS-FUT.1PL
 ‘It is spring time, Navruz is approaching, we will play.’ (BX, 70)

In the above utterance, the noun *chogʻ+i* is used in a noun phrase together with *bahor* ‘spring’, resulting in the meaning of ‘in the spring, spring time’. In the texts, *shu chogʻ(da)* is also used as ‘at the moment’ (BX 25, KK 67¹⁹), which is derived from the different meanings of the word’s sememe (a semantic unit of meaning) (see Section 5.3). Such uses coincide with the polysemy of evidentials, which Aikhenvald mentions among the sources for evidentials. These meanings of *chogʻi* can be interpreted as ‘particular time, moment, bang on time’ or as a particle referring to a specific point, in which its function resembles locative markers, which are common in Uzbek.

¹⁹*Shu chogʻda Zebining koʻnglidan ogʻir bir togʻ koʻchgan edi.* ‘At that moment, a weight lifted from his shoulders’ (lit. A heavy mountain had moved from Zeb’s heart). (KK 67)



In the following, the use of the item in adverbial clauses will be discussed. Semantically, the clauses including *chog'* are used to construct a hypothetical clause in a *counterfactual statement* in (2), an expression of *wish* in (3), and a statement marked evidentially that indicates *inference* in (4). In terms of factuality, these uses are nonfactual statements because the speaker expresses an unreal state of affairs or a false proposition (Hengeveld & Wanders 1997, 255). In these nonfactual statements, the adverbial clauses are composed of an aspect marker + *chog'(i)* and relate to the main clause as a whole, so the construction can be accepted as a structure that combines with the main sentence. Additionally, *chog'* functions as a grammatical morpheme in this structure (see Thompson et al. 2007, 238).

- (2) *Men o'l-ar chog'-i-da ham siz-ga bir*
 I die-DN moment-POSS3SG.LOC even you-DAT NONDEF
tuhmat to'qi-r-mi, deb qo'rq-qan e-di-m.
 slander make.up-AOR3SG-Q CONJ fear-POST COP-PST-1SG
 'I was afraid they would slander you even at the moment of the death.' (OK, 153)

The use of *-ar chog'-i-da* in the example refers to a specific point in time because it composes a referential signifying utterance (Hall & Caponigro 2010, 553–554). It should be noted here that its use with *-ar* is not very common.²⁰ The structure allows referring to the event itself exactly by placing the event in a certain time and space. This close relationship between space and time is typical for this structure, which is equivalent to the *when* (or *time*) *clause* in English (Hall & Caponigro 2010, 556). The important point in its use in adverbial sentences is that it operates like high focal aspect markers which focus on the aspectual orientation point and establish a relationship between this viewpoint and the event (see Johanson 2000b, 109).

The following examples will illustrate the use of *-gan + chog'ingda* and *chog'i* in non-finite sentences. As can be understood from these two uses, *chog'* is combined with *-DA* in the second person, but not systematically so in the third person. Therefore, the noun must have started to be used like a particle in the 3rd person, with a possessive suffix but without the locative in the adverbial clause, because this combination connects the agent to the time and place of the event. On the other hand, Kononov (1960, 379) states that such uses can occur with or without the possessive suffix as *-gan + chog'da/chog'imda*.²¹ This may be related to indicating the orientation point of the event in the subordinate clause, while the subject points to the agent.

In Turkic languages, non-finite sentences formed with *-(X)rdA*, *-AGAndA*, *-(X)šdA*, etc. are considered “synchronic” or “intraterminal”, while *-GAndA* expresses postterminality in the adverbial clause in terms of aspect (Aydemir 2020, 54–56). In the examples below, *-gan chog'i* is used like *-ganda* in Uzbek (see Öztürk 2005, 84).

²⁰Öztürk (2005, 76) states that the use of *-ar* in Uzbek is uncommon, and in some uses it functions as a derivational suffix.

²¹Similarly, *vaxti (ki)* ‘when’ (< Persian *vaqti ke*) sentences appear in Azerbaijani, but with a different syntax. Aydemir (2020, 73) gives examples of this copied conjunction under the example of subordination. The use of this structure in Uzbek is different from Azerbaijani. However, similar lexemes are preferred for the same function. Kononov (1960) gives the construction of such sentences in Uzbek, showing different choices as *-gan/-(i)š + zaman*, *chog'*, *vaxt*, *payt*, *zaman*. As can be seen, what is needed is ‘time’ or a lexeme with similar meaning.



- (3) *Sen men-i o'ris-lar-ga ushla-b ber-d-ing!*
 you I-ACC Russian-PL-DAT hand.over-CVB give-PST-2SG
Iloyim, qari-gan chog'-ing-da tentak bo'l,
 dear.God become.wrinkled-PTCP time-POSS2SG-LOC silly be.IMP.OPT
ayol-ing-ni uch taloq qo'y, el-ga
 wife-POSS2SG-ACC three taloq put-IMP.OPT people-DAT
ermak, xalq-qa shaloq bo'l-ib o'l,
 laughing.stock community-DAT dishonorable be-CVB die.IMP.OPT
ollohu akbar!
 God greatest
 'You handed me over to the Russians! Dear God, be idiotic when you get old, divorce your wife (by uttering the word *taloq* three times, as Islamic law prescribes it), be the laughingstock of people, die as a fool of the people, God is the greatest!' (OQD, 18)
- (4) *Odam o'tir-ma-gan-i uchun-mi uy birmuncha sovuq*
 man live-NEG-NMLZ-POSS3SG POSTP-Q home quite.a.few cold
ekan. Sa'dulla oyog'-i-ni sandal-ga tiq-d-i.
 COP.EVID Sadulla foot-POSS3SG-ACC fire.table-DAT put-PST-3SG
"Mehmon kel-a-di, deb ayt-ib qo'y-gan chog'i,
 guest come-PRS.FUT-3SG CONJ say-CVB put-POST PAR
olov sol-ib qo'y-ipti-ku."
 flame make-CVB put-EVID.POST-PAR
 'The house is quite cold (perceptive), probably because no one is living in it. Sadulla put his foot in the *sandal* (fire table). "Just when it was said a guest will come, he must have started the fire."' (EO, 52)

In these utterances, *chog'i/chog'ingda* 'when, just when' indicates relative time (*relatives Tempus*, previous, after or synchronous) (see Johanson 1991, 104–105). Considering in terms of postterminality by combining *-gan* and *chog'* (like focal aspect), in this structure, the aspect marker determines the viewpoint and the structure, while *chog'i < chog'+i* locates the event in a specific timepoint and place (at that time), associating with the agent in (hypothetical) statements. These uses are similar to those in Aikhenvald's studies. Aikhenvald (2004, 275) states that in the development of deictic elements into evidentials, it is expected that items indicating a specific point in time, demonstrative pronouns and the third person pronouns develop into different types of evidentiality, and that they are the sources for evidentials. For this reason, I consider such uses of *chog'(i)* in adverbial clauses a phase of grammaticalization. The linguistic element has become related to the time and place of speaking (synchronous) while locating the event in a certain time and place. Furthermore, adverbial clauses play an important role in the development of *chog'i*, in that they convey the meaning of imagining the event from a focal viewpoint, and provide the semantic domain to associate all these meanings with the speaker by subjectification. Pragmatically, the main clause also affects the meaning of the clause formed with *chog'i*. Depending on the main clause predicates, adverbial clauses attribute to hypothetical situations, so the adverb clause can be read as a hypothetical situation.



In the following utterance, the inferential *chog'i* will be discussed.

- (5) *Sadulla: Nazar-im-da, noo'rin savol ber-d-im*
Sadulla opinion-POSS1SG-LOC baseless question give-PST-1SG
chog'i. Og'ir bot-d-i-mi...
 EVID heavy hurt-PST-3SG-Q
 'Sadulla [thought]: In my opinion I have asked an inappropriate question, obviously (my inference is based on signs). Is she upset?...' (EO, 12)

The above example shows the use of *chog'i* combined with the lexical marker *nazarimda* 'in my opinion'. The recipient states that he is making a judgement based on evidence and his commitment to the proposition is marked by using a separate marker. This type of combination which includes a confidence marker and an inferential is called a *harmonic combination* (Halliday 1970, 330–331;²² Hyland 1998, 150; Palmer 2001, 35). The epistemic marker that can be used in this context is restricted by uncertainty and doubt. This kind of marker appears when the speaker wants to reinforce or reduce her/his commitment to the proposition. Therefore, the epistemic extension of evidentiality comes to the foreground when epistemic markers are used together with the evidentials that express inference (see Aikhenvald 2004, 165). The recipient refers to the presence of signs and their factual value associated with the proposition at the time of speaking. If only the epistemic marker were used, the source of the information that forms the basis of the judgement would not be specified. In this utterance, the use of *nazarimda*²³ and *chog'i* can be considered to express the existence of evidence supporting belief and it can be said that *chog'i* increases the degree of epistemic certainty of the utterance.

All uses of *chog'i* in the utterances examined can be divided into *synchronous inference* and *reasoning* depending on the type of evidence (Plungian 2001, 354). Propositions based on general knowledge or experiential knowledge are evaluated as reasoning, while others are evaluated as a synchronous inference based on signs. In its scope, it also carries deductive/inferential and assumptive modal meanings (see Palmer 2001, 8–9).

- (6) *Soldat-lar u yoq-bu yoq-qa yur-ib*
 soldier-PL DEM side-DEM side-DAT walk-CVB
*tur-ish-ibdi.*²⁴ *Sekin goch-a-miz.*
 AUXV-COOP-EVID.POST slowlyrun-PRS.FUT-1PL
Xotir-im-da yo'q, soldat-lar ikki-uch kun-dan
 memory-POSS1SG-LOC nonexistence soldier-PL two.three day-ABL
keyin Yangishahar-ga qayt-ib ket-d-i chog'i.
 after Yangishahar-DAT return-CVB go-PST-3SG EVID

²²It is important here that Halliday (1970) draws attention to the use of nonverbal (lexical item) with different patterns, and that they are not equivalent to each other.

²³Expressions like 'In my view', etc., are also considered to be related to evidence, based on belief, and having a low degree of factuality (Chafe 1986, 266).

²⁴Johanson (1995, 93, 97) gives this as focal intraterminal.



‘Soldiers are moving back and forth. We leave silently. I don’t remember, as far as I know, the soldiers returned to Yangi Shahar in two or three days (my inference is based on my personal knowledge).’ (BX, 201)

In this example, the recipient makes reasoning on the facts that s/he knows, that is, from his personal knowledge. The statement ‘I don’t remember’ before the utterance marked with an inferential confirms that inference is based on his own knowledge. In the following utterance, the inference is based on personal experience. Here, “experience” is the recipient’s own knowledge in relation to general knowledge, but it has been used as a concept that includes the limitation of the recipient.

- (7) *Bil-ma-d-im...* *Xumson-dalig-i-da* *har* *o’n besh*
 know-NEG-PST-1SG *Xumson*-DNOM-POSS3SG-LOC each fifteen
kun g’irilla-b xabar kel-ib tur-ar-di, chog’i.
 day rush-CVB news come-CVB AUXV-AOR-3SG EVID
 ‘I don’t know... Obviously, in Humson, rumors come out every fortnight (my inference is based on my experience and knowledge).’ (BX, 35)

In example (7), the recipient deduces by reasoning from his own knowledge. Unlike the usages that will be given below, it does not refer to the existence of signs, but bases the proposition on the repeated experience of the same situation. However, it can be said that some signs prompt inference here as well. The aspect marker *-(a)r*, with which it is combined, is also effective in the emergence of this meaning.

Examples (6) and (7) can be associated with an assumption, which is a subcategory of inference, since the speaker’s previous knowledge, general knowledge, or experience in similar situations can be the source of information (see Aikhenvald 2004, 175). Furthermore, they can be paraphrased that the speaker knows something, which suggests that the proposition is probable (see Plungian 2001, 352).

- (8) *–Shu jussa-ngiz bilan ikki kishi-lik, yo’q, uch*
 DEM body-POSS2PL POSTPtwo person-DNOM no three
kishi-lik norma-ni bajar-a ol-ar-mikin-siz?
 person-DNOM output-ACC fulfil-CVB MOD-AOR-MOD-2PL
–Pul-i to’la-n-sa bo’ldi, har qanday ish-ni
 money-POSS3SG pay-PASS-HYPO okay any kind work-ACC
epla-b ket-a-ver-a-miz, deya dangal javob ber-d-im.
 manage-CVB go-CVB-AUXV-PRS.FUT-1PL CONJ fearlessanswer give-PST-1SG
Po’lat Damirovich men-i pul uchun o’z-i-ni tom-dan
 Polat Damirovich I-ACC money POSTP self-POSS3SG-ACC roof-ABL
tashla-ydigan chapani-lar-dan deb o’yla-d-i chog’i
 throw-PTCP hustler-PL-ABL CONJ think-PST-3SG EVID
yo dil-i-ga boshqa bir niyat-ni
 or heart-POSS3SG-DAT different NONDEF intention-ACC



tug-d-i-mi, *har qalay:- Bo'pti, biz rozi,* *– de-d-i*
 knot-PST-3SG-Q in.any.case fine we consenting say-PST-3SG
biroz yumsha-b.
 little calm-CVB

‘Can you really fulfil the rate of output of two people, no, the output of three people with this body? –All we must do is pay, and we will do whatever it takes, I said fearlessly. Obviously, Polat Damirovich thinks I am one of those people who throw himself off the roof for money (my inference is based on the signs), or does he have another intention in his heart, in any case, –Fine, deal, he said calmly.’ (MG, 49)

In the above dialogue, the recipient expresses his inference based on what was said, behavior, or gestures with *chog'i*. The situation expressed in the proposition is simultaneous with the time of speaking. In the continuation, he utters his subjective evaluation (doubt and hesitation) with a question structure that does not expect an answer. This usage exemplifies synchronous inference, unlike the two types of usage given in examples (6) and (7). As is obvious, the existence of signs and inferences based on them are expressed by associating with the time of speaking. Similar usages are given in examples (9), (10), (11), (12).

- (9) *Husan men bilan tortish-ish be-foyda*
Husan I POSTP discuss-VN PREF-benefit
e-kan-lig-i-ni, *o'z-i yoq-la-gan taraf-ni*
 be-NMLZ-DNOM-POSS3SG-ACC self-POSS3SG direction-DV-PTCP side-ACC
hech qachon ber-ma-ydigan
 never whenever give-NEG.PTCP
chiran-chiq-lig-im-ni fahm-la-d-i chog'i,
 struggle-DN-DNOM-POSS1SG-ACC understanding-DV-PST-3SG EVID
inda-may qo'y-a qol-d-i.
 say.a.thing-PTCP stop-CVB AUXV-PST-3SG
 ‘Obviously, Husan realized that it was useless to argue with me and I would never support his side (my inference is based on signs) and stopped talking.’ (MG, 5)

In example (9), the speaker receives Husan's silence and other behaviours as signs and makes his judgement based on these. There is no clear evidence, so the recipient needs to conclude logically.

- (10) *Arza-ning bir yer-i-ga zakot-chi-ning*
 petition-GEN NONDEF place-POSS3SG-DAT zakat-DNOM-GEN
ot-i tush-ar ekan, nechqa qayta so'ra-sa
 name-POSS3SG put.up-AOR3SG EVID some time ask-HYPO
ham bil-ma-d-im un-dan keyin aft-i
 also know-NEG-PST-1SG DEM-ABL after face-POSS3SG
13ashara-si-ni uq-dir-ib e-d-im,
 appearance-POSS3SG-ACC understand-CAUS-CVB be-PST-1SG
tusmol-la-b bittasi-ni yoz-d-i, chog'i.
 reckoning-DV-CVB someone-ACC write-PST-3SG EVID



mood (see Karakoç 2005, 25–31;²⁵ Rentzsch 2010, 267–269; Johanson 2018, 522). However, in these usages, it is seen that the suffix *-di* forms declarative sentences with neutral values to take an evidential marker. Additionally, the aspect marker *-di* is also a suitable choice for revealing the meaning in terms of being able to observe the signs in the use of *chog'i* by marking the recent past (Öztürk 2005, 50–51; Landmann 2010, 53).

- (12) *Narigi xona-da hech kim-ning ovoz-i*
 far house-LOC no who-GEN sound-POSS3SG
eshit-il-ma-d-i. *Feruza Ulug'bek-ningkiyim-i-ni*
 hear-PASS-NEG-PST-3SG *Feruza Ulugbek-GEN clothes-POSS3SG-ACC*
almash-tir-yapti chog'i, ha ha, aman mana, bo'ldi-bo'ldi, deb
 exchange-CAUS-INTRA3SG EVID yes right.here okay.okay CONJ
qo'y-a-di. Sa'dulla horg'in tovush bilan so'ra-d-i.
 put-PRS.FUT-3SG Sadulla tired sound POSTP ask-PST-3SG
 – *Mehmon-lar qani?*
 guest-PL where
 'Nobody's voice could be heard near the house. Obviously, Feruza is changing
 Ulugbek's clothes (my inference is based on signs), yes, yes here, that's it. Sadulla asks
 wearily. – Where are the guests?' (EO, 128)

In example (12), the signs indicating the presence of evidence for the speaker (narrator) are the voices. There is no sound first and then sounds are heard. This context makes it clear that the recipient does not obtain the evidence directly, because he doesn't see or hear anything uttered in the proposition, and he interprets certain signs. Additionally, the combination *-yapti chog'i* refers to the propositional event and evidence being placed at the same time.

According to Aikhenvald (2004, 253), Turkic languages (and other languages such as Eastern Pomo, Baniwa, etc.) may have no evidentiality choices in dependent clauses. However, evidentials can be used in non-finite clauses that contain a proposition in themselves. Such sentences marked *-mİš* in Turkish are governed by *gibi* (Johanson 2018, 520–521). Below, an example of a similar structure in Uzbek with *chog'i* will be examined. In the utterance, the combination of *chog'i* after a participle + *ekan* is different from the other uses discussed so far. The interpretation was also discussed with and confirmed by native speakers.

- (13) *Sukunat-ni ona-si buz-d-i:*
 silence-ACC mother-POSS3SG break-PST-3SG
 – *Ota-ena-si bor-mi, nima ish qil-a-di?*
 father-mother-POSS3SG existing-Q what job do-PRS.FUT-3SG
Ota-si-ning xayol-i-da ham shu savol
 father-POSS3SG-GEN mind-POSS3SG-LOC also DEM question

²⁵Karakoç (2005, 25–31) explains the sceptical uses in Nogay with examples and states that the structure *question particle* + *eken* and *person* + *eken* (e.g. *-mAn eken*) is seen. Additionally, it reveals how the order affects the meaning by showing that indirectivity appears in the expression when the person statement comes after the *eken*. A similar use is also seen in Uzbek. There is a difference between *ekanmi* and *mi(e)kan*: *ekan* EVID + *mi* Q; *mi* Q + (*e*)*kan* (sceptical and rhetorical connotations)



<i>charx</i>	<i>ur-ayotgan</i>	<i>ekan</i>	<i>chog'i</i>	<i>yalt</i>	<i>et-ib</i>	<i>Sa'dulla-ga</i>
wheel	flash-PTCP	EVID	PAR	sudden	do-CVB	Sadullah-DAT
<i>qara-d-i.</i>	– <i>Bor</i>		<i>ota-ena-si...</i>			<i>Ena-si</i>
look-PST-3SG	existing		father-mother-POSS3SG			mother-POSS3SG
<i>bog'cha-da</i>	<i>ish-la-y-di...</i>			– <i>Ota-si-chi?</i>		
Garden-LOC	work-DV-PRS.FUT-3SG			father-POSS3SG-PAR		
– <i>Ota-si</i>	<i>bir</i>		<i>xizmat-chi-da...</i>			
father-POSS3SG	NONDEF		service-DNOM-PAR			

‘His mother broke the silence: – Does she have parents, what do they do? As if the same question flashed through his father’s mind, he suddenly glanced at Sadulla. – She does have parents ... Her mother works in the garden ... – What about her father? – Her father is a servant ...’ (EO, 65)

In the utterance that exemplifies the use of evidentials in non-finite sentences, the use of *-(a)yotgan ekan chog'i* can be thought of as an equivalent of *-(I)yor-(i)mIş gibi* in Turkish. The participle *-(a)yotgan* indicates intraterminality, while *ekan chog'i* refers to evidence with extensional epistemic meaning. When evaluated in terms of context, similar to other uses, the observed situation related to the evidence is given after the statement is marked with an evidential. This way of expression is similar in the Turkish language, so it can be said that there is a tendency to use this structure: cf. Tr. *Aklından bu soru geçiyormuş gibi*²⁶ *aniden Sadullah'a baktı*.²⁷ Therefore, the situation (carrying signs) observed and composed of this structure is connected to the evidential statement. An important point to note here is that the utterance marked with *ekan* refers to different types of evidence due to the characteristic feature of the marker. Double marking of the information source is also seen in world languages depending on certain systems (Aikhenvald 2004, 93). It can be paraphrased as ‘I access to evidence (*ekan*), and that is observable (*chog'i*) which ...’. It is possible to express a similar meaning without *ekan* in finite sentences: *Otasining xayolida ham shu savol charx urdi chog'i*. In regard to epistemic modality, such uses are considered to have low reliability (see Chafe 1986, 263, 267; Willet 1988, 61–62).

As a result, the use of *-(a)yotgan + ekan chog'i* can be evaluated as an inferential which the recipient can use when the evidence (sign) is not clear and when he prefers to express the evidence in a non-finite sentence combining the situation observed.

²⁶The marker *chog'i* has common properties with the item *gibi* in Turkish < OT *kib* ‘1. shape, 2. similar (Oghuz)’ -i POSS3SG in different aspects: it adds the meaning ‘at once, immediately’ to the subordinate clause; it functions as evidential in finite sentence referring to observable evidence (Dankoff & Kelly 1982, 359, 1985, 102). After nominal relative clauses, the postposition *gibi* refers to the short time elapsed between two events, as the noun *chog'* means ‘the moment’: *O gittiği gibi işe başladı*. ‘S/he started work as soon as s/he arrived’. Additionally, it is considered as a bound morpheme with meanings ‘similarity, sameness based on the appearance of something’ in Turkish (see Hirik 2017).

²⁷There is the use of *-ganday* in a similar sense in the corpus. However, in these uses, the recipient does not refer to evidence, but indicates that a condition correlates to another situation by comparison. The combination *-ganday* is used with *bo'ldi* in the statements which have evidential meaning: *Kimlardir nimalardir deganday bo'ldi*. ‘It seems that someone is saying something’ (cf. Barak *suv quyganday jim bo'lib qoldi*. ‘Barak was as silent as water.’ MQ, 24).



- (14) – *Nega xomush to'xta-d-ing, Qobil? Akun²⁸ jarchi-ng nima deb*
 why silent stay-PST-2SG Qobil brother caller-POSS2SG what CONJ
vaqir-la-y-di? Qobil javob-siz bosh-i-ni
 croak-DV-PRS.FUT-3SG Qobil answer-DNOM head-POSS3SG-ACC
chayqa-d-i. –Gapur,– de-d-i Sharif.
 shake-PST-3SG speak say-PST-3SG Sharif
 – *Mirzo Anvar, osiy Anvar, de-yapti chog'i? Qobil yana*
 Mirzo Anvar sinner Anvar say-INTRA3SG EVID Qobil again
Javob ber-ma-d-i.
 answer give-NEG-PST-3SG
 '– Why are you silent, Qabil? Brother, what does the bellman shout? Qabil shaded his head without answering. – Speak up, said Sharif. – Mirzo Anvar, the rebellious Anvar, he says, obviously (I'm retrieving it from what's been said)? Qabil did not answer again.' (MCh, 139)

In this context, the bellman announces that a friend of Mirzo Anvar will be executed. Sharif hears what the bellman says, but does not fully understand it, and this dialogue takes place after the announcement. The recipient reports his inference from the weak evidence (signs) in an unexplained situation. The important factor here is the meaning 'I am reasoning from the signs/evidence or as far as I understood'. It takes place within the context that highlights the epistemic interpretation of inference. It is seen that the speaker asks a question and does not get an answer and then he utters his own inference ('as far as I understood'), but the narrator may have used the question marker here to emphasize the lack of information.

Considering examples (5) to (14), the recipient expresses that s/he deduces propositions based on evidence. The signs referred to by the evidential marker may be related to hearing or seeing, but the way of accessing evidence is indirect (general knowledge, signs), and the event in the proposition is not observed. Another point, the speaker has a certain level of personal involvement while deducting because s/he draws herself/himself into the deictic sphere of the event by using observable evidence (de Haan 2001, 217–218). Obviously, propositions marked with *chog'i* exemplify some of the features of inferentials: reasoning based on the certain signs, relying on abstract thought (Johanson 2003, 274–275), based on observing other situations or general information²⁹ in cases where the evidence is weak (Willet 1988, 53; Aikhenvald 2004, 2–3). In addition, all utterances are hypothetical situations through this marker (supposed occurrence) (see Willet 1988, 61).

5.2. The place of *chog'i* among evidential markers

Within the framework of the semantic domain, the difference of *chog'i* from other markers in the evidential system in Uzbek can be evaluated comparatively. Considering the usages in

²⁸Used for *oshna* in Bukhara dialect (Fayzulmas'a 2016, 180).

²⁹General knowledge is discussed under the concept of *ego evidence* as a separate category of evidentiality consisting of the speaker's personal knowledge. According to this view, it is usually associated with direct evidence (Kittilä 2019, 1273–1275).



<i>-mlš</i>	Turkish	Inferential, perceptive, and reported evidential, mirativity, meaning “unprepared mind” (Slobin & Aksu 1982, 187; Johanson 2003, 282), assumption, future-oriented wishes (Erkman Akerson & Ozil 2015, 227).
<i>imiš</i>		Reportive evidential, mirativity and hesitation (Özmen Veld 2006), inference, reported and other subcategories of evidentiality (Aksu-Koç 1986, 251), hesitation and surprising (mirativity) (Underhill 1986, 16), only evidential function not covering aspect and tense (Csató 2000, 37).
<i>-(l)mlš gibi</i>		Evidentiality in non-finite sentence (Johanson 2018, 521), disagreement marker (see Aikhenvald 2004, 183).
<i>emish</i>	Uzbek	Reportive evidential (Johanson 2018, 517; Straughn 2011, 108; Tuğlacı 2020, 184), dream (OBQ, 32).
<i>-ibdi</i>		Perceptive, inferential (Johanson 2018, 515), reportive, perceptive (mostly visual) and inferential evidentiality (Tuğlacı 2020, 179-180).
<i>ekan</i>		Perception, mirativity, speculation and sceptism in questions (like <i>är-ki(n)</i>) (Johanson 2018, 516-517, 520, 523), inference, assumption, and hearsay (Kononov 1960, 272-274;30 Straughn 2011, 90, 158).
<i>chog’i</i>		Inference and assumption based on logical conclusion, signs, pure reflections, personal knowledge.
<i>ekan chog’i</i>		Inference from weak evidence in non-finite sentences.

Figure 1. General features of evidentials in Turkish and Uzbek

Uzbek, Johanson (2018, 517) states that *ekan* and *emish* tend to express inferential/perceptual evidence and reported evidence, respectively. This distinction is the most obvious one among evidentials, and it also applies to *chog’i* which is not used for reported/hearsay evidentiality. However, it is remarkable that the evidential *ekan* can indicate different types of evidentiality (inferential, reported, perceptive) and has strong evidential connotations in certain situations, such as surprise and speculation. For this reason, the source of information is not clearly communicated to the receiver with *ekan*.

In Figure 1, the general tendencies and connotations of evidentials in Turkish and Uzbek are given based on the corpus and opinions in the literature.

While the placement of a speech act in time and place creates a factual statement of the situation, removal from them reveals the meaning of accessing information indirectly (non-confirmative). Thus, it is often seen that evidential markers evolve from postterminals and refer to evidence associated with the results of an event: *-ibdi*, *-mlš*, *-gan*. However, Lazard (2001, 363) states that this is not always the case, based on the markers of mirativity, and that they can refer to the present tense in Tajik. As seen in the comparison given in Figure 1, Csátó (2000, 37) also clearly states that *imiš* has no time or aspect value. In line with this information, it can be said that the marker *chog’i* does not carry postterminal aspect content as an evidential and it expresses synchronic evidence in the speaking time.

Evidentials are seen to mark different subcategories of indirectivity, so they can be combined with lexical markers to make the meaning clear. In the uses of *-(i)b(di)* and *ekan*, the inference is made explicit with lexical markers such as *demak*, and reported evidential is disambiguated with (*Odamlarning*) *aytishicha*, etc.: *Aytishlaricha, tuyalari semiz, yaltirab turar ekan* (BX, 33) ‘Camels are said to be fat and shiny’; *Demak, bugun tushda «nonxo‘rak»ka uyga kelmas ekan, deb o‘ylayman ichimda*. ‘Apparently, she won’t be coming home for lunch today at noon, I thought to myself.’ (BX, 21); *Demak, Salima yuvib, tozalab qo‘yipti-da* (EO, 55) ‘Apparently, Salima have washed and cleaned.’



There is one example of the use of a lexical marker of evidentiality in combination with *chog'i* in the corpus. In this example, the lexical marker *demak* is also of the type that supports the inferential use. There is a letter in the context, and it is not clearly given what it says. The speaker observes the sadness of the person reading the letter and makes the following inference based on the gestures and a few words that are uttered by the other person.

- (15) *Demak,* *u* *boshqa* *birov-ga* *turmush-ga* *chiq-yapti*
 apparently PRON other someone-DAT marriage-DAT get-INTRA3SG
chog'i.

EVID

'Apparently, she marries someone else.' (my inference is based on signs) (EO, 34)

As stated above, *emish* in Uzbek stands out with its use in reported expressions, unlike the others. On this subject, Willet (1988, 58) points out that there is a tendency to use separate markers in the sub-categories reportive and inference, but if there is only one indirective marker, it will cover both. What draws attention in Willet's studies is that if a language has three or four markers, these markers function mostly as reportive and inferential. Turkish has *-mlš* and *imiš* for indirectivity, while Uzbek has more options. Regarding the general situation in languages, the development of this marker as an inferential can be associated with the general tendency of evidentiality in languages. As a preliminary finding, I argue that Uzbek needs such particles to distinguish inference from other types because it is clearly seen in the corpus that speakers indicate inference based on synchronic signs by choosing *chog'i*. Considering the sources of the inference, contexts based on general knowledge or signs acquired by hearing or seeing were determined. In addition to the relation or overlapping of inference with epistemic modality, some of the evidentials are also interpreted as "evidence-based prediction" (see Aikhenvald 2004, 275–276). The main issue in these uses is that the speaker points to the evidence, and other semantic fields are included extensively. For this reason, while explaining the function of *chog'i*, this possibility content should not be ignored in terms of the meaning it adds to the proposition. One might also consider the question of why inferential markers are needed. In response to this question, Willet's (1988, 61) view also describes the situation in the identified samples. He explains the nature of inference stating that "inferentials arise from the need to assign causes to observed situations". In the examples, many things can be acceptable as signs in context. However, especially the situation given following the proposition marked by *chog'i* contains the evidence for the propositional content.

In the examples examined, *chog'i* is used with intraterminal viewpoint in usages based on general knowledge, while in others it is used with *-di*, an item which locates events in the recent past and does not have evidential value (declarative sentence). The relation of the combination of *-di*, *-gan* and *-(i)b* with *chog'i* in finite sentences can be evaluated as follows. In Uzbek *-gan* is considered as a present perfect marker that expresses the postterminal viewpoint and the connotation of evidentiality sometimes arises in its usages (Bodrogligeti 2003, 694; Johanson 2018, 514). In the literature, a difference is pointed out in terms of confirmativity between these

³⁰Evaluating its different uses, Kononov (1960, 273–274) states that *ekan* is used in situations where the reliability of a fact cannot be determined. In its inferential uses, he gives the equivalents 'inferred, apparently (Vidimo..., okazyvaetsya...)'.



three markers: *-di* (+Confirmative, –POST),³¹ *-gan* (Ø Confirmative, +POST) and *-(i)b* (–Confirmative, +POST)³² (Straughn 2011, 157). In the utterances examined, it can be argued that *-di* is preferred because it is unmarked in terms of evidentiality, rather than confirmative, and therefore provides the basis of a declarative sentence to mark with evidential. This neutral value and indicative mood do not report any limit values such as observing after the action is over (see Rentzsch 2010, 272–274). Therefore, the combination of *-di* and *chogʻi* can be analyzed as the evidential added to the declarative sentence. It is important to note that there is no aspect/tense distinction in languages for inference, and only the event from which the inference is made must occur to provide evidence before the moment of speaking. In Uzbek *-di* satisfies this condition (Aikhenvald 2004, 261, 264–266).

5.3. The origin of *chogʻi*

Evidentials can develop from different sources through grammaticalization. The use of *chogʻ*, which is asserted as the root of *chogʻi* in Uzbek in different meanings and functions, makes it difficult to determine its origin. In this study, *chogʻi* is accepted as the continuation of *čaq*³³ which is attested to Old Turkic.

In the entry *čāg* with the Turkic origin, Doerfer (1967, 25–28) gives it the meaning ‘time’³⁴ by showing the development of ‘Zeit allgemein’ (time in general) < ‘Maß einer Sache’ (measure of one thing). The word gives rise to an abundance of special meanings. First, in Old Turkic, Doerfer evaluates it as a particle, considering its use in the *Suvarnaprabhāsa*, and gives an etymology ‘eben, genau dies < recht bemessen dies’ (Eng. ‘just, exactly this < rightly measure this’). Likewise, Erdal (2004, 343–344) considers it as a preposed empathic particle and points out its temporal use in the meanings ‘exactly, just, no other’ with time adverbs (*čak amti*, etc. ‘right now’, *Suvarnaprabhāsa* 612, 20; *čaq bo koluta y(e)mä šākimuni* ... ‘Right at this moment, now, *Šākyamuni*’, *Daśakarmapathāvadānamālā*). Doerfer cites the view of Zajaczkowski (1958) to compare these usages with the ‘Maß; angemessenes quantum und Zeit; Angemessenheit’ content of the measure. In the *Divānū Luġāt-it-Türk*, Dankoff & Kelly (1982–1985, 264) also identify a particle that means “the essence and exact identity of a thing”.

Regarding the emergence of these two uses, Clauson (1972, 403–404) states that the word *čag* ‘time’ replaced *ö:d* ‘time’ because of language contact with Mongolian.³⁵ Noting that this word may have extended the meaning of (i) *čak*, he provides the subentry (ii) *čak*: Adv. ‘exactly,

³¹In Uzbek *-DI* is considered as definite past tense, the speaker expresses with it that he is sure of the occurrence of the action in the past (Bodrogligeti 2003, 667).

³²Straughn (2011, 157) points out that *ekan* is nonconfirmative and sometimes refers to the past. For this reason, he states that the focus of evidentiality is not “past tense” but nonconfirmativity. Non-confirmative *-(i)b* can mean non-firsthand information, surprise, doubt, and non-awareness.

³³The item under investigation is transcribed in various forms such as *čaq*, *čāg*, *čak*, *čag*, *čāg*, *čak* in the literature. While the original transcription of the sources is maintained in this article, I assume that all of these items belong to the same etymon **čaq*.

³⁴While he draws attention to common usage in the meaning ‘time’, he also states that it meets different units of time such as ‘time, measure of time, point in time’.

³⁵In Turkish, a lexeme *çağ* is used only for extended periods of time *evlenme çağı* ‘marriage time/age’, *okul çağı* ‘school time/age’, etc.



precisely’ e.g. *çak ortasında* ‘bang in the middle’.³⁶ Its appearance in Turkic languages is approached the same way by Clauson and Doerfer, but Doerfer’s etymological explanation is convincing.³⁷ By associating the meaning of ‘time’ with its origin, Doerfer accepts this word as Turkic with its semantic extension and verifies its earlier usages in Turkic. In addition, in this study, it can be argued that as a result of collocation, the particle *çaq* gains the meaning of ‘time, moment’.

In Chaghatay, a derivative *çağlıg*³⁸/*k* (*çağ* ‘ölçü’, Eng. ‘measure’) with the meaning of ‘as, like’ (the equivalent in Turkish *gibi*) is given by Eckmann (1988, 90): *ölüm çağlıg uyat* ‘shame like death, lethal sense of shame’. The use of *çağlıg* with the meaning ‘as, like’ can be associated with quantity, however, it also has the meaning of ‘being the same as something’ pointed out in *DLT* (cf. *ót-ça* ‘like fire’ < *ót-ça* ‘in the mass of fire’, Doerfer 1967, 28). There are more postpositions used in a similar function in Chaghatay: *bigin*, *dek*, *kebi(n)*, *teg*, etc. (Bodrogligeti 2001, 72, 73, 75, 77). On the other hand, other uses in Old Turkic continue in Chaghatay: *bir yerni çağ qılıp atmaydurlar* ‘they do not shoot at any particular place’ (Baburnama, Doerfer 1967, 25); *...osol zaman oq kim aftar olturur çağ edi*. ‘... just as the sun was setting’ (Thackston 1993, Part I, p. 123). Considering these uses, it is seen that *çağ* ~ *çağ* adds a particular place and time meanings depending on the items with which it affects pragmatically. Its use of quantity is also related to the meaning of *çaq* ‘the essence of something or exactly’ since the speaker relates the properties of one thing to another by picturing it in her/his mind.

These different uses appear as *chog’(+i)* in Uzbek, too. Evaluating its function and meaning, Bodrogligeti (2003, 337) states that as a “quasi-postposition”, it is used as *chog’li* (derived form of *chog’* ‘time, season’) with cardinal numbers in the meaning ‘about, approximately’ to express an approximation based on a guess or a personal assessment. The explanation given by Bodrogligeti is debatable. Regarding the polysemy of the word, it seems more appropriate to accept the primary meaning of the word as ‘the essence of something’. Doerfer’s approach offers a broader perspective, however, he noted that it is difficult to distinguish between the reading ‘time, moment’ and the reading ‘measurement of something’ in some usages, so there are different readings for *çak amti* ‘period, time, exact’ in Old Turkic (see Doerfer 1967, 25; Caferoğlu 1968, 58).³⁹ It is noteworthy that this particle is used with time adverbs in Old Turkic. Based on this, because of collocation, *çaq*, which was treated as a particle, may have acquired the meaning of ‘time’ and become lexicalized.

Bodrogligeti (2003, 1041) also places *chog’i* among “particles of doubt”, interpreting their use as giving the meaning of utterance based on appearance rather than on the factual status of an action. However, he gives two examples for this function, and one shows the same function with quasi-postpositions: *u biroz qo’rqdi, chog’i* ‘It seemed as if he was afraid a little’; *o’ttiz mingga chog’i* ‘close to thirty thousand’. According to these explanations, *chog’li* and *chog’i* can be used together

³⁶He compares its meaning with *bang on*, which is used to mean ‘precisely right, etc.’ in English.

³⁷Similar semantic extensions are seen in French for the word *mesure* ‘measure’: time measurement; absolute, relative measure, capacitance, size, length measurement; angle, force, amount, etc. (CNRTL)

³⁸Thackston (1993, 849) gives the meanings ‘time’ for *çağ* and ‘flourishing, hale’ for *çağlıg*: *Mışr u Şam körgän munça çağlıg yer nişan bermäydürlar*. ‘Travelers who have seen Egypt and Syria cannot point to its equal.’ (Part I, p. 102–103).

³⁹Another view is that *chog’i* developed from the meaning of ‘measure’, but the actual meaning of the word is ‘time’ (Rahmatullayev 2000, 436).



with numbers. This shows that the marker *chog'i* is not used with numbers systematically. The fact that its use with numbers was not found in the corpus of this research led us to ask the question in which stage it included the possessive suffix. Doerfer (1967, 26) gives the possessive structure in Uzbek with the meaning of 'its measure' without any example. However, this usage occurs in structures that are read as 'time or moment' and it is a component of the adverbial clause as a part of expressing unreal situations. For this reason, I argue that while it refers to the event itself, the situation at that time in the meanings of 'time, moment' in nonfactual statements, it has also developed into an item denoting that the situation is nonfactual (irrealis) at the time of speaking. As is known, a nonfactual situation occurs in the mind, so it is accessible only through imagination (see Palmer 2001, 1). In short, the main sentence is a non-factual statement and the use of *chog'i* in this context has been effective in the development of its meaning.

5.4. Grammaticalization of the particle

Grammaticalization, in general terms, is the linguistic change that occurs as a result of a change in the morpho-syntactic states of bound and free morphemes. This change affects the meaning and function of the morpheme (Eckardt 2011, 1; Traugott 2008, 234–235). From another perspective, grammaticalization is defined as the transition from a lexical category to a functional category (Haspelmath 1999, 1044). In the narrow sense, this term refers to the linguistic item becoming more grammatical, indicating a directional process of change (Himmelmann 2004, 25–26). It is seen that the *chog'i* discussed in this study has developed into an evidential through both semantic and syntactic changes (i.e. by undergoing a change in function). The word *chog'i* developed from *čaq* ['time, moment' < 'the essence and exact identity of a thing']. The linguistic area of which Uzbek forms part has a motivating role in this development. In the studies on Southeast and East Asian languages, it has been observed that such particles in this area encode epistemic modality, evidentiality, mirativity, etc. at the end of the sentences (Panov 2020, 24). The widespread use in the linguistic area and the typological features of the language provide the appropriate environment for such developments to occur in Uzbek.

Syntactic and semantic criteria can be used to explain the grammaticalization process of *chog'+i* as an evidential: the position of the marker in the syntax, the aspect-time markers it is used with, the meaning it adds to the sentence, and its scope (wide scope < narrow scope). In terms of syntax, its position in the sentence indicates that *chog'i* is in the same position as other evidentials. It can be defined as a particle due to its systematic use at the end of a sentence, changing the function of the possessive suffix by the fossilization of the word and its adaptation to different conjugations of the verb in accordance with the finite structures. The most important feature is that the marker is used in a position to scope over the whole sentence.

The use of *chog'i* in non-finite sentences appears to be the second stage of this development (cf. Turkish *-diğında*, *-diği zaman* 'when'). This usage shows the relation of deictic and locative markers with evidentiality because, similar to tense-aspect markers, the source of evidence is located by the speaker at a specific time and place (Aikhenvald 2004, 275). It is necessary to specify the stage of becoming associated with the speaker, considering varying degrees of sub-judification as the development from neutral meaning to speaker-related or speaker-oriented meaning in grammaticalization (Traugott 1995, 32).

As mentioned above, an important point of grammaticalization is that an item of the subordinate clause acquires new status with a wider scope covering the entire clause (Aikhenvald



2004, 275–276, 281–284). Thus, the function of the linguistic unit also changes both semantically and syntactically. As a result, it becomes an evidential marker, which evolves from referring to the time and place of the event to the time and place of the evidence. Regarding its uses, it is not fused with tense and person, so it implies only that there is evidence (synchronous signs) accessed at the time of speaking. Considering formal types of evidentials, it behaves as a non-bound marker combinable with lexical markers (see example (15)). Its lexical content formed the basis for its development from lexical meaning into grammatical meaning, but its grammaticalization process can be evaluated as on-going (see Bybee & Pagliuca 2011, 69, 75). Additionally, its position cannot change in a similar way to copula particles that mark pure evidentiality.

6. CONCLUSION

The corpus analysis and the findings show that, as a result of the grammaticalization of the structure *chog'*+ *POSS3SG*, *chog'i* has evolved into an evidential marker that encodes inference. It has been shown that it is used to mark inference based on synchronous signs and general knowledge or personal knowledge through reasoning. It also has an epistemic reading, resulting from a lower certainty of inferentials. Semantically, all utterances combined with *chog'i* are hypothetical situations.

The stages in its semantic and functional development can be described as follows: First, *chog'* (OT *čaq*) which was seen as an item used with time adverbs, was lexicalized with the meaning 'time, moment' < 'the essence and exact identity of a thing' (encompasses the characteristics of the event or situation at the specified time). In the second stage, it was used in adverbial clauses pointing to a certain point of time (deictic usage) as a part of nonfactual statements or unreal situations expressed in the main sentence. In the last stage, it developed into an evidential by subjectification. In this process, it was grammaticalized with the third person possessive suffix to highlight a specific time determined by the speaker, and gained a wide scope. In fact, the deictic function is common to all of these usages.

chog' NOUN + *i* *POSS3SG*

a particle used with time adverbs > *a component of adverbial clause* > *evidential* (with extensional epistemic meaning)

In the development of the evidential, it has become associated with the time and place of evidence located by the speaker, while in pointing to the time and place of the event it is similar to the *when clause*. That is, the emergence of *chog'i* as a marker of evidentiality is related to the deictic component, and this type of development into an evidential is accompanied by subordination and subjectification. Regarding its deictic component, the recipient at the same time and place observes another situation which provides the evidence as a basis of the inference, but s/he does not witness the event uttered in the proposition itself. However, the role of the main sentence (nonfactual) in this development cannot be ignored. Considering the relationship between adverbial clause and main sentence, while *chog'+i* was a component of the adverbial clause in a nonfactual utterance, it has come to scope over the whole sentence in a nonfactual utterance by grammaticalization. Both the sentence types here are supposed occurrences, not factual.



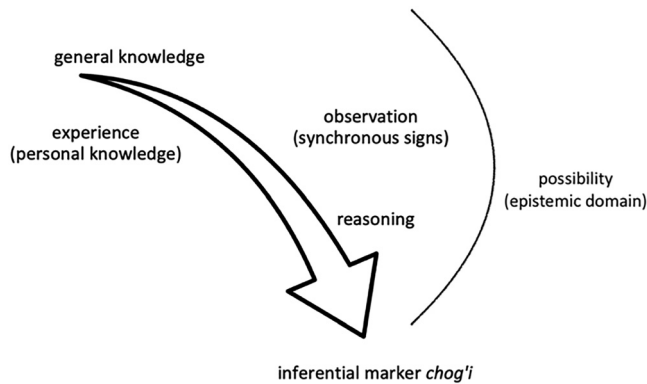


Figure 2. Evidential value of *chog'i* with epistemic extension

Figure 2 illustrates the different sources of marking inference and possibility as an extensional meaning through the marker *chog'i*. However, as has been shown in this study, it is mostly used to mark the existence of synchronic signs, and the speaker is present at the same time and place as an observer of the evidence.

In the use of *chog'i* in finite clauses, the characteristics of inferentials are clearly seen such as moving from signs related to the event expressed in the proposition, based on the speaker's reasoning while the event itself is not observed. The feature that distinguishes it from inferential uses of other evidentials is that *chog'i* refers to synchronic signs and general or personal knowledge. I argue that its evolution is motivated by the need to express synchronic indications of evidence in communication. The development has occurred in accordance with the characteristics of indirectivity in the Turkic languages. In addition to its evidential function, other functional domains of the original word *chog'* (derived from *čaq*) continue in Uzbek: its use in the sense of 'time, moment', its use in adverbial clauses, or meanings of 'ability, strength, etc.' which are said in the literature to be a semantic extension.

ACKNOWLEDGMENT

The research for this paper was made possible by a grant from the Alexander von Humboldt Foundation in 2021–2022 (Ref 3.3-1214240-TUR-GF-P).

ABBREVIATIONS

ABL	ablative
ACC	accusative
AOR	aorist
AUXV	auxiliary verb
CAUS	causative



CONJ	conjunction
COOP	co-operative
COP	copula
CVB	converb
DAT	dative
DEM	demonstrative
DLT	<i>Dīvānū Luġāt-it-Türk</i>
DN	deverbal noun
DNOM	derived nominal
DV	denominal verb
EVID	evidentiality
FUT	future
GEN	genitive
HYPO	hypothetical mood
IMP	imperative
INTRA	intraterminal
LOC	locative
MOD	modality
NEG	negative
NEG.AOR	negative aorist
NMLZ	nominalizer/nominalization
NONDEF	nondefinite
OPT	optative
OT	Old Turkic
PAR	particle
PASS	passive
PL	plural
POSS	possessive
POST	postterminal
POSTP	postposition
PREF	prefix
PRON	pronoun
PRS	present
PST	past
PTCP	participle
Q	interrogative clitic
SG	singular
VN	verbal noun

CORPUS

KK: Abdulhamid Sulayman Cho'lpon (1936, 2000). *Kecha va Kunduz*. Toshkent: Sharq Nashriyoti. 288 p.
 MCh: Abdulla Qodiriy (1929). *Mehrobdan Chayon*. Semerkand: Öz Neshir. 248 p.



- OK: Abdulla Qodiriy (1922, 1926, 2004). *O'tkan Kunlar*. Toshkent: Sharq. 384 p.
- EO: Mamatqul Xazratqulov (1995). *Eshiklar ochiq*. Toshkent: G'afur G'ulom nomidagi nashriyot-matbaai-jodiy uyi. 197 p.
- OBQ: O'lmas Umarbekov (1970, 2018). *Odam Bo'lish Qiyin*. Toshkent: Yoshlar Nashriyot uyi. 213 p.
- BX: Oybek (1963). *Bolalik Xotiralarim*. Toshkent: Hikmet Neşriyat. 273 p.
- OQD: Tog'ay Murod (1993). *Otamdan Qolgan Dalalar*. Toshkent: Sharq Nashriyot. 272 p.
- MG: Zulfiya Qurolboy qizi (1966, 2010) *Mashaqqatlar girdobi*. Toshkent: G'afur G'ulom. 208 p.

REFERENCES

- Aikhenvald, Alexandra Y. 2004. Evidentiality. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2018. Evidentiality and language contact. In A.Y. Aikhenvald (ed.) *The Oxford handbook of evidentiality*. Oxford: Oxford University Press. 148–172.
- Akobirov, F. S. et al. 1981. O'zbek tilining izohli lug'ati II, C–X [Explanatory Dictionary of Uzbek]. Moscow: Rus tili nashriyoti.
- Aksu-Koç, Ayhan and Dan I. Slobin. 1986. Psychological account of the development and use of evidentials in Turkish. In W. Chafe and J. Nichols (eds.) *Evidentiality: The linguistic coding of epistemology*. Norwood, NJ: Ablex Publishing Corporation. 159–167.
- Aslan Demir, Sema. 2013. Türkmencede kanıtsallık [Evidentiality in Turkmen]. In Ü. Gürsoy, Y. Kartallıoğlu, F. Ersoy, Feyzi et al. (eds.) *Leyla Karahan Armağanı*. Ankara: Akçağ Yayınları. 409–420.
- Aydemir, Ahmet 2020. Çağdaş Türk dillerinde altsıralama stratejileri [Subordinating strategies in contemporary Turkic languages]. Ankara: Grafiker Yayınları.
- Bodrogligeti, András J. E. 2001. *A Grammar of Chagatay*. Munich: LINCOM.
- Bodrogligeti, András J. E. 2003. *An academic reference grammar of Modern Literary Uzbek*, Vol. 1–2. Munich: LINCOM.
- Borovkov, A. K. 1959. *Uzbeksko-russkij slovar'*. Moskva: Gosudarstvennoe izdatel'stvo inostrannykh i nacional'nykh slovarnej.
- Bybee, Joan L. and W. Pagliuca. 2011. Cross-linguistic comparison and the development of grammatical meaning suppletion in word-formation. In J. Fisiak (ed.) *Historical semantics – Historical word-formation*. Berlin & New York, NY: De Gruyter Mouton. 59–84.
- Caferoğlu, Ahmet. 1968. *Eski Uyğur Türkçesi sözlüğü* [Dictionary of Old Uyghur]. Ankara: Türk Dil Kurumu Yayınları.
- Chafe, Wallace. 1986. Evidentiality in English conversation and academic writing. In W. Chafe and J. Nichols (eds.) *Evidentiality: The linguistic coding of epistemology*. Norwood, NJ: Ablex Publishing Corporation. 261–272.
- Clauson, Sir Gerard. 1972. *An etymological dictionary of pre-thirteenth-century Turkish*. Oxford: Clarendon Press.
- CNRTL = MESURE: Définition de MESURE. n.d. Retrieved October 5, 2021, from <https://www.cnrtl.fr/definition/mesure>.
- Cornillie, Bert. 2009. Evidentiality and epistemic modality: On the close relationship between two different categories. *Functions of Language* 16(1). 44–62.
- Csató, Éva Agnes. 2000. Turkish MIŞ and İMIŞ-items. Dimensions of a functional analysis. In L. Johanson and B. Utas (eds.) *Evidentials: Turkic, Iranian and neighbouring languages*. Berlin, New York, NY: Mouton de Gruyter. 29–44.



- Dankoff, Robert and James Kelly. 1982–1985. *Maḥmūd al-Kāšġarī: Compendium of the Turkic dialects (Dīwān luḡāt at-Turk) 1–3 (Sources of Languages, Oriental and Literature 7)*. Cambridge, MA: Harvard University Printing Office.
- De Haan, Ferdinand. 1999. Evidentiality and epistemic modality: Setting boundaries. *Southwest Journal of Linguistics* 18. 83–101.
- De Haan, Ferdinand. 2001. The place of inference within the evidential system. *International Journal of American Linguistics* 67. 193–219.
- Demir, Nurettin. 2012. Türkçede evidensiyellik [Evidentiality in Turkish]. *bilig* 62. 97–118.
- Doerfer, Gerhard. 1967. *Türkische und mongolische Elemente im Neupersischen [Turkish and Mongolian Items in New Persian]*, Vol. III. Stuttgart: Franz Steiner Verlag.
- Eckardt, Regine. 2011. Grammaticalization and semantic change. In H. Narrog and B. Heine (eds.) *Handbook of grammaticalization*. Oxford: Oxford University Press. 1–13.
- Eckmann, Janos. 1988. *Çağatayca el kitabı [Chagatay Manual]* (Günay Karağaç, trans.). Istanbul: Edebiyat Fakültesi Basımevi.
- Erdal, Marcel. 2004. *A Grammar of Old Turkic*. Leiden: Brill.
- Erkman Akerson, Fatma and S. N. Şeyda Ozil. 2015. Türkçede niteleme [Modification in Turkish]. Ankara: Türk Dil Kurumu Yayınları.
- Fayzulmas'a, D. 2016. “Mehrobdan Chayon” romanida dialektizmlarining qo'llanilishi [The Uses of Dialects in the novel “Mehrobdan Chayon”]. In *Milliy Til Taraqqiyoti-Millet Istiqbolining Garovi*. Toshkent. 178–181.
- Friedman, Victor. 2018. Where do evidentials come from? In A. Y. Aikhenvald (ed.) *The Oxford Handbook of Evidentiality*. Oxford: Oxford University Press. 124–147.
- Hall, David P. and Ivano Caponigro. 2010. On the semantics of temporal when-clauses. *Proceedings of SALT 20*. 544–563.
- Halliday, M. A. K. 1970. Functional diversity in language as seen from a consideration of modality and mood in English. *Foundations of Language* 6(3). 322–361.
- Haspelmath, Martin. 1999. Why is grammaticalization irreversible? *Linguistics* 37(6). 1043–1068.
- Hengeveld, Kees and Gerry Wanders. 1997. On the use of subjunctive and indicative verb-forms in adverbial clauses. In J. Gvozdanović (ed.) *Language change and functional explanations*. Berlin & New York, NY: De Gruyter Mouton. 249–272.
- Himmelman, Nikolaus P. 2004. Lexicalization and grammaticization: Opposite or orthogonal? In W. Bisang, N. Himmelman and B. Wiemer (eds.) *What makes grammaticalization? A look from its fringes and its components*. Berlin & New York, NY: De Gruyter Mouton. 21–44.
- Hirik, Seçil. 2017. *Gibi* biçimbiriminin işlevsel dilbilgisi bakımından çok işlevli görünümü [The Multifunctional View of the Morpheme “gibi” in terms of Functional Grammar]. *Karadeniz Araştırmaları* 53. 205–222.
- Hyland, Ken. 1998. *Hedging in scientific research articles*. Amsterdam: John Benjamins Publishing Company.
- Johanson, Lars. 1991. Zur Typologie türkischer Gerundialsätze [On the typology of Turkish gerunds]. *Türk Dilleri Araştırmaları* 1. 98–110.
- Johanson, Lars. 1995. Mehrdeutigkeit in der türkischen Verbalkomposition [Ambiguity in Turkish verbal composition]. In M. Erdal and S. Tezcan (eds.) *Belâk Bitig: Sprachstudien für Gerhard Doerfer zum 75. Geburtstag (Turcologica 23)*. Wiesbaden: Harrassowitz. 81–101.
- Johanson, Lars. 1996. On Bulgarian and Turkic indirectives. In N. Boretzky, W. Enninger and T. Stolz (eds.) *Areale, Kontakte, Dialekte: Sprache und ihre Dynamik in mehrsprachigen Situationen*. Bochum: Universitätsverlag Dr. N. Brockmeyer. 84–94.



- Johanson, Lars. 1998. Zum Kontakteinfluss türkischer Indirektive [On the contact influence of Turkish indirectives]. In N. Demir and E. Taube (eds.) *Turkologie heute-Tradition und Perspektive: Materialien der dritten Deutschen Turkologen Konferenz*, Leipzig, 4–7 October 1994. Wiesbaden: Harrassowitz. 141–150.
- Johanson, Lars. 2000a. Turkic indirectives. In L. Johanson and B. Utas (eds.) *Evidentials: Turkic, Iranian and neighbouring languages*. Berlin & New York, NY: Mouton de Gruyter. 61–87.
- Johanson, Lars. 2000b. Viewpoint operators in European languages. In Ö. Dahl (ed.) *Tense and aspect in the languages of Europe*. Berlin & New York, NY: Mouton de Gruyter. 27–187.
- Johanson, Lars. 2002. Structural factors in Turkic language contacts. Richmond: Curzon.
- Johanson, Lars. 2003. Evidentiality in Turkic. In A.Y. Aikhenvald and R.M.W. Dixon (eds.) *Studies in evidentiality*. Amsterdam & Philadelphia, PA: Benjamins. 273–290.
- Johanson, Lars. 2018. Turkic indirectivity. In A.Y. Aikhenvald (ed.) *The Oxford handbook of evidentiality*. Oxford: Oxford University Press. 511–525.
- Johanson, Lars. 2021. *Turkic*. Cambridge: Cambridge University Press.
- Karakoç, Birsal and Annette Herkenrath. 2019. Understanding retold stories: The marking of unwitnessed in bilingual Turkish. *Turkic Languages* 23. 81–121.
- Karakoç, Birsal. 2005. Das finite Verbalsystem im Nogaischen [The finite verbal system in Nogay] (*Turcologica* 58). Wiesbaden: Harrassowitz.
- Kittilä, Seppo. 2019. General knowledge as an evidential category. *Linguistics* 57(6). 1271–1304.
- Kononov, A. N. 1960. *Grammatika sovremennogo uzbekskogo literaturnogo jazyka* [Grammar of modern Uzbek literary language]. Moscow: Izdatel'stvo Akademii Nauk.
- Landmann, Angelika. 2010. *Usbekisch: Kurzgrammatik* [Uzbek: the brief grammar]. Wiesbaden: Harrassowitz Verlag.
- Lazard, Gilbert. 2001. On the grammaticalization of evidentiality. *Journal of Pragmatics* 33. 359–367.
- Matras, Yaron. 1995. Verb evidentials and their discourse function in Vlach narratives. In Y. Matras (ed.) *Romani in contact: The history, structure and sociology of a language*. Amsterdam: Johan Benjamins. 95–123.
- Mushin, Ilana. 2000. Evidentiality and deixis in narrative retelling. *Journal of Pragmatics* 32. 927–957.
- Özmen Veld, Neslihan. 2006. Anlamsal ve edimsel düzlemde Türkçede tanıtıcılık. *Dil ve Edebiyat Dergisi* 3(2).
- Öztürk, Rıdvan. 2005. *Özbek Türkçesi el kitabı* [Uzbek Manuel]. Konya: Çizgi Kitabevi.
- Palmer, F. Robert. 2001. *Mood and modality*. Cambridge: Cambridge University Press.
- Panov, Vladimir. 2020. Final particles in Asia: Establishing an areal feature. *Linguistic Typology* 24(1). 13–70.
- Plungian, Vladimir A. 2001. The place of evidentiality within the universal grammatical space. *Journal of Pragmatics* 33. 349–357.
- Rahmatullayev, Shavkat. 2000. *O'zbek tilining etimologik lug'ati* [Etymological dictionary of Uzbek]. Toshkent: Universitet Nashriyoti.
- Rentzsch, Julian. 2010. Why Turkic DI is not [+PAST]. In M. Kappler, M. Kirchner and P. Zieme (eds.) *Trans-Turkic studies: Festschrift in honour of Marcel Erdal* (*Türk Dilleri Araştırmaları Dizisi* 49). Istanbul: Mehmet Ölmez. 267–279.
- Rentzsch, Julian. 2011. Modality in the Baburnama. *Turkic Languages* 15. 78–123.
- Rentzsch, Julian. 2015. Modality in the Turkic languages: Form and meaning from a historical and comparative perspective. Berlin: Klaus Schwarz Verlag.
- Rind Pawlowski, Monika. 2014. Text types and evidentiality in Dzungar Tuvan. *Turkic Languages* 18. 159–188.



- Rodríguez-Somolinos, Amalia. 2017. From visual perception to inference in the French evidential markers *il m'est avis que*, *apparemment*, and *il paraît que*. *Journal of Historical Linguistics* 7(1–2). 111–133.
- Simon, Camille. 2018. Evidential modalities in Salar. The development of a Tibetan-like egophoric category. *Turkic Languages* 22. 3–35.
- Slobin, Dan I. and Ayhan A. Aksu. 1982. Tense, aspect and modality in the use of the Turkish evidential. In Paul J. Hopper (ed.) *Tense-aspect: Between semantics & pragmatics*. Amsterdam & Philadelphia, PA: John Benjamin Publishing Co. 185–200.
- Soper, John David. 1987. *Loan syntax in Turkic and Iranian: The verb system of Tajik, Uzbek, and Qashqay*. Bloomington: Eurolingua.
- Straughn, Christopher A. 2011. *Evidentiality in Uzbek and Kazakh*. Ph.D. dissertation. The University of Chicago, Chicago, IL.
- Thackston, W. M., Jr. 1993. Zahirüddin Muhammad Babur Mirza: Bâburnâme: Chaghatay Turkish text with Abdul-Rahim Hanhanan's Persian translation. In Ş. Tekin and G.A. Tekin (eds.) *Sources of Oriental Languages & Literature* 18, Part I: 1–245, Part II: 246–537, Part III: 538–904. Cambridge, MA: Harvard University.
- Thompson, Sandra A., Robert E. Longacre and Shin Ja J. Hwang. 2007. Adverbial clauses. In T. Shopen (ed.) *Language typology and syntactic description*. Cambridge: Cambridge University Press. 237–300.
- Traugott, Elizabeth C. 1995. subjectification in grammaticalisation. In D. Stein and S. Wright (eds.) *Subjectivity and subjectivisation: Linguistic perspectives*. Cambridge: Cambridge University Press. 31–54.
- Traugott, Elizabeth C. 2008. Grammaticalization, constructions and the incremental development of language: Suggestions from the development of Degree Modifiers in English. In R. Eckardt, G. Jäger and T. Veenstra (eds.) *Variation, selection, development—Probing the evolutionary model of language change*. Berlin & New York, NY: Mouton de Gruyter. 219–250.
- Tuğlacı, Gülşah. 2020. Özbekçe de dolaylılık kategorisi [Indirectivity in Uzbek]. *Dil Araştırmaları, Bahar* 26. 175–192.
- Underhill, Robert. 1986. Turkish. In D.I. Slobin and K. Zimmer (eds.) *Studies in Turkish Linguistics*. Amsterdam & Philadelphia, PA: John Benjamins Publishing. 7–21.
- van der Auwera, Johan and A. Plungian Vladimir. 1998. Modality's semantic map. *Linguistic Typology* 2. 79–124.
- Wiemer, Björn. 2007. Lexical markers of evidentiality in Lithuanian. *Rivista di Linguistica* 19(1). 173–208.
- Willet, Thomas. 1988. A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language* 12. 51–97.
- Yaman, Süveyda. 2012. Özbek Türkçesinde kiplik belirteçleri ve fonksiyonları [Modal adverbs and their functions in Uzbek]. MA thesis. Gazi Üniversitesi, Ankara.

