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Editorial note

Turkic Languages, Volume 15, 2011, Number 1

The present issue of TURKIC LANGUAGES contains contributions to various problems of general Turcology.

An-King Li publishes the first part of an article concerning the meaning structure of Turkic denominal verb formatives, taking a cognitive approach to the topic.

David Brophy deals with Mongolic-Turkic language contacts in 18th century Xinjiang, analyzing the Mongolic vocabulary of a hagiographical work written in the Ili valley.

Mária Ivanics investigates the origins of a specific motif (“the donkey turned into a girl”) found in the preface to the Book of Dede Korkut.

Julian Rentzsch deals with expressions of modality attested in the Baburnama, the autobiography of the Timurid ruler Babur, classifying them according to functional and semantic criteria.

Fikret Turan reports on a symposium concerning dictionary compilation and lexicographic studies, arranged by the Kubbealtı Foundation, Istanbul.

Astrid Menz reviews the collective volume “Exploring the eastern frontiers of Turkic”, edited by Marcel Erdal and Irina Nevskaya and containing papers on South Siberian Turkic and Yellow Uyghur.

Heidi Stein presents Hendrik Boeschoten’s “Alexander stories in Ajami Turkic”, a text containing a “striking mixture of Oghuz and East Turkic features”.

Abdurishid Yakup reviews Gunnar Jarring’s “Central Asian Turkic place-names”, a monumental work of extremely high linguistic value.

The same reviewer discusses a grammar of modern Uyghur published by Frederick De Jong.

Finally an important note: The journal TURKIC LANGUAGES has been added to an archive of digital open-access journals, which will make it accessible online with a ‘moving wall’ of one year. Previous issues have been retrodigitized and will, provided the authors give their permission, be added to the archive. The web address is: http://www.digizeitschriften.de/openaccess/.

Lars Johanson
Modality in the Baburnama

Julian Rentzsch


This article registers common and more unusual linguistic expressions of modality that are attested in the Baburnama, accounting for grammatical, idiomatic and arbitrary items, which are classified according to functional and semantic criteria. Although the objective of this study is mainly descriptive, typological remarks on modality, particularly in the Turkic languages, are added and diachronic issues are addressed as well. The article also includes a brief outline of the most important concepts and terms.

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1. Introduction

This study describes types of expressions of modality in the medieval Chaghatay Turkic text commonly referred to as the Baburnama, which is the autobiography of Zahiruddin Muhammad Bābur (1483–1530), a Moghul prince of Timurid descent with shifting realms in Transoxania, Afghanistan and India. The manuscript consulted for this article is the Hyderabad manuscript (Beveridge 1905, Thackston 1993), which probably dates from ca. 1700 (Beveridge 1922 [1975]: 38). While most of the linguistic features of the text, especially those pertaining to morphology and morphosyntax, will certainly reflect the situation in the first half of the 16th century, we must reckon with certain (unintended) modifications by the copyist, which will mainly concern orthography. I will return to this issue at a later point. Given that comparatively much is known about the author, e.g. that he spent the decisive years of language acquisition in a Turki and Persian (but not Qipchaq or Oghuz Turkic) speaking municipal environment in the Ferghana valley, and given that the style of writing is not very formal, this text is a quite well datable and localizable example of a rather natural language and offers a comparatively variegated inventory of modal expressions. Needless to say, the language of the Baburnama does not represent colloquial language and is principally firmly rooted in the norms of the contemporary Eastern Turkic literary tradition.

2. Theoretical issues

As there is no commonly accepted uniform model of description of modality (cf. e.g. Nuyts 2006; de Haan 2006), some concepts and terms that are employed for descriptive purposes in this study need to be explained first. While modality is ultimately defined on semantic grounds, it is convenient to subdivide the domain of
modality on a functional basis\(^1\) with respect to its scope relation to the category of aspect (viewpoint aspect, Johanson 2000a). This renders three classes of modality (Rentzsch 2010a):

Modality\(_1\) (MOD-1): Modal items potentially in the scope of aspect; these include among other things the Potential in -\(E\) al- ‘to be able’, the Necessitative in \(<\text{VN-(POSS)}=k\text{rek}>\) ‘must’ as well as several morphological and morphosyntactic items denoting ‘to want’.

Modality\(_2\) (MOD-2): Modal items sharing the same functional layer with aspect; these comprise the moods and the so-called Future.

Modality\(_3\) (MOD-3): Modal items outside the scope of aspect.

While it is a matter of dispute whether or not evidentiality constitutes its own class separate from epistemic modality (and consequently, whether or not it belongs to the domain of modality at all; cf. Nuysts 2006: 11, de Haan 1999), it will be included in the present discussion, albeit as a separate functional class.

The functional subdivision of the field of modality is relatively straightforward and unambiguous, although there may be cases of doubt between MOD-1 and MOD-2, as both these classes operate on the actional phrase (henceforward AP; Johanson 2000a: 40), i.e. the linguistic unit that encodes the semantic properties of a given actional content, consisting of the verb (including possible actionality operators) and its arguments and satellites (“obligatory and facultative complements”, Johanson 2000a: 66).\(^2\)

Moreover, not all MOD-1 items, for reasons rooted in combinational features of the morphological material involved, actually must take inflectional (i.e. aspect or MOD-2) suffixes, which blurs the distinctiveness of the two categories in individual cases. However, while MOD-1 operates on and modifies the AP,\(^3\) MOD-2 only operates on the AP, but does not modify it. MOD-1 items are part of the AP; they both

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\(^1\) This has been done before, especially within larger grammatical models, e.g. by Dik (1997\(^2\)). Many approaches to modality, however, are exclusively semantic.

\(^2\) The actional phrase is characterized by a specific internal phase structure (IPS), which is defined by the aspect-sensitive semantic oppositions \([\pm \text{TRANSFORMATIVE}], [\pm \text{DYNAMIC}]\) and \([\pm \text{MOMENTANEOUS}]\) as well as the distinction between finitransformative and initio-transformative (Johanson 2000a: 58–66). While Johanson’s design of the IPS features is aimed at describing the mechanisms of aspecto-actional interaction, phase structure features turn out to be relevant in the interaction with modal items as well. For example, the use of the Imperative (which is a MOD-2 item) normally implies that the final limit of the AP is not yet attained at \(V\), which may produce different readings with respect to the validity of the action at \(V\) for different IPSes (e.g., an AP with IPS [\(+t\)] may already be effective at \(V\), while an AP with IPS [\(+t\)] may not). Johanson’s term actional phrase, although originally coined to designate an aspect-sensitive entity, will therefore be adopted in the present study as a functional term for the shared operandum of aspect and MOD-2.

\(^3\) The same is true for actionality operators of the type described in Rentzsch 2006.
operate on the AP and, at the same time, form a new, more complex, AP. Those MOD-1 items that do not obligatorily take inflectional verb suffixes can be made accessible to verb inflection (aspect, MOD-2) by means of a carrier auxiliary. Depending on the inflectional suffix they take, MOD-1 operators can be part of both finite and non-finite clauses, which distinguishes them from MOD-3 and some MOD-2 operators.

As for the semantic subclassification of the field of modality, the following terminology will be applied here. The widely accepted term epistemic modality will be used for items denoting that the speaker or another conscious subject S evaluates the truth-value of a given core sentence (i.e. the core sentence is evaluated as impossible, improbable, possible, probable, certain, etc.). By virtue of its evaluative moment this type of modality is subjective; hence an appropriate alternative term would be subjective modality.

The non-epistemic domain comprises modalities modifying the actional phrase (henceforward AP-modifying modality, which is typically MOD-1), the moods and the “Future” (MOD-2). AP-modifying modality is event-oriented and “factual” in that it assigns an objective modal feature to the actional phrase (i.e. the AP is characterized as necessary, possible, desired, etc.). An alternative term would be objective modality, provided that we bear in mind that the objective moment pertains to a semantic feature of the actional phrase rather than to the “source” of the modality. With these characteristics, AP-modifying modality is compatible with the notion of indicativity.

Among the moods common in the Turkic languages are the categories traditionally referred to as Imperative, Voluntative, Optative and Conditional. Of these, the


5 I.e. the minimal autonomously meaningful sentence core that includes the AP and an aspect or MOD-2 marker or a nominal predicate. The term proposition is avoided here as this notion has no clear formal correspondence in the Turkic languages.

6 The use of the terms subjective and objective for epistemic and event modality has been criticized by Lyons (1977: 792) for reasons that I do not approve of.

7 Other comparatively widespread terms are event modality (Palmer 20012: 7 et passim) and agent-oriented modality (Bybee & Perkins & Pagliuca 1994: 177 et passim). For the Turkic languages at least there is no obvious linguistic reason to maintain the distinction between dynamic and deontic modality, which is drawn by Palmer (20017: 9; 70). Items with deontic meaning are distributed on different functional layers in the Turkic languages, e.g. <VN-POSS=kērek> “must” (MOD-1) and -GĒy “should etc.” (MOD-2).

8 For the purpose of this article, indicativity is defined as the mode of presentation that declares the content of the sentence as valid.
first three are emotive,⁹ i.e. they express an emotional or moral attitude of a conscious subject S towards the action, i.e. an attitude about the desirability, permissibility or necessity of the action to take place, which is presented without the intermediate step of manipulating the actional phrase by adding an objective semantic feature to it. Emotives are semantically distinct from AP-modifying modals in that they do not express an objective, factual feature of the AP but rather a modal view towards the AP. Different from AP-modifying items they are incompatible with the notion of indicativity. Their “viewing” character links these items semantically to the category of aspect. The orientation point at which the modal perspective is anchored will be called (modal) viewpoint in this study.

The Conditional seems to originally have had meanings like ‘provided that’ and ‘suppose’, which makes it a hypothetical mood. These meanings are the foundation for derived usages of the Conditional as requests, which are frequently found in the Turkic languages. The Conditional has also developed more “realistic” secondary meanings, rendering it eligible for usages in so-called real conditional clauses (‘if’). Another derived usage is the temporal usage (‘when’). The Conditional, contrary to the emotives, can easily be integrated into superordinate matrix clauses.

The Turkic-style Future is a highly unspecific modal item, actually an extension of the domain of aspect. It is a non-indicative non-intraterminal and non-postterminal [-IND (-INTRA)(-POST)] item. Its “unmarkedness” accounts for the strikingly broad spectrum of pragmatic usages that it is capable of.

There is a relationship between the functional classes and semantic types of modality, but this relationship is not bijective. The data in the Turkic languages show that some MOD-1 operators, besides their core domain, can also produce epistemic and emotive readings (this phenomenon is familiar from European languages as well, cf. Lyon’s elaboration on possible interpretations of English must, 1977: 788–793). Some MOD-2 operators can produce epistemic readings as well. On the other hand, genuine MOD-3 items will never be interpreted as AP-modifying or emotive. Evidentials frequently have epistemic secondary readings, as information obtained through a source is often conceived of as being less reliable, and genuine epistemic items may have evidential readings, as a subjective evaluation of a sentence frequently relies on some kind of evidence. Needless to say, these “readings” of modal items pertain to the domain of pragmatics rather than semantics.¹⁰ We must therefore distinguish carefully between actual meaning in terms of linguistic features on the one hand and secondary readings of these features, which naturally may be employed in discourse as a communicative strategy, on the other.

⁹ Marty (1908), from whom I adopt the term, uses this label in a much broader sense and for pragmatic rather than semantic purposes.
ⁱ⁰ However, these secondary readings can develop into actual semantic features as a result of grammaticalization processes.
The formal linguistic representations of the modal categories outlined above range from operators and satellites to complex syntactic structures, including such with matrix and subordinate clauses. Parentheticals (“tags”, e.g. English *I think*) represent a transitional stage between matrix clause and satellite. Adjectives can express modal and evidential notions as well (compare Engl. *necessary, probable, alleged*), but they will be left unconsidered in this study except where they are part of complex modal structures.

Operators need not be monomorphemic, but can be complex items including lexical material, as long as these complexes have been grammaticalized. Operators can even be discontinuous. Satellites can either be plain lexemes or complex structures involving lexical and morphological material (e.g. converb clauses).

3. MOD-1 items

The MOD-1 items that occur in the Baburnama can be subdivided semantically into items that express various shades of possibility, necessity and wish. The formal (i.e. morphological or morphosyntactic) representation of these concepts ranges from bare suffixes (*-mEKči*) to contiguous postverbal constructions entailing a converb and an auxiliary verb (e.g. *-E al-*), contiguous constructions involving a verbal noun, sometimes with possessive marking, and an auxiliary noun (e.g. *-mEK kērek*), and more complex discontinuous periphrastic constructions (e.g. *mumkin ēmes kim ... X-GEy*). These options are not distributed equally throughout the semantic subgroups of modality1; expressions of possibility tend to resort to verbal strategies of formation, while expressions of necessity usually employ nominal strategies.

3.1. Possibility

The most prominent possibility operator in the Baburnama is the one in *-E al-* (cf. Blagova 1994: 328–329). It comprises an intraterminal12 converb *-E* (with the surface variants *-e* and *-a* (depending on the stem vowel) after stems ending in consonants, and the variant *-y* after stems ending in vowels) and an auxiliary *al-*, originally ‘to take’, the meaning of which is bleached. The origin and development of this form is obscure (cf. Clauson 1972: 124). As a marker of possibility, this form

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11 The question “What makes grammaticalization?” (cf. Bisang & Himmelmann & Wiemer 2004) cannot be discussed in detail here. Suffice it to say that formal change is not a necessary epiphenomenon of grammaticalization (cf. Bisang 2004). For instance, the Uzbek sentence *Men haroratingizni bilishim kerak* ‘I have to check your temperature’ contains a grammatical operator `<[SUB]+VN-POSS=kerak>` ‘must’, one indicator of the grammaticality of which is the fact that the subject is in the direct case (in an arbitrary construction, it would have to be in the genitive); but the corresponding Turkish construction `<[SUB-GEN]+VN-POSS=gerek>` is no less grammaticalized, although it agrees completely with the underlying arbitrary structure.

12 See Johanson 2000a for the terminology.
seems to be unattested before the Middle Turkic era (Schönig 1987: 2–3), and the rare earlier attestations of the construction do not allow for a secure assessment of the meaning. The earliest attestation of this form as a possibility operator seems to be in a Khwarezmian Turkic text from the first half of the 14th century (cf. Eckmann 1959a: 128). -E al- has developed into one of the most prominent possibility operators (“Potential”) in the Turkic languages which is spread especially throughout the languages of the Northwestern and Southeastern subgroup (Schönig 1987: 3; Schönig 1996: 213) in non-fused (e.g. Tatar, Kazakh and Kirghiz) and fused variants (e.g. Uzbek -al- with stems ending in consonants, while in the variant after stems ending in vowels the non-fused form -y al- is preserved; the odd Uyghur item -yElE- is most probably also derived from -E al-).

In the Baburnama, the bulk of occurrences of -E al- are in negated form (-E alma-) as in example (1), but positive forms occur as well (2):

(1) Taš qorjanni berkite almaslar, qoyarlar [215a2]
   ‘They cannot fortify the stronghold, they abandon it.’

(2) Nė imkän ulkim ketkenidin šikâyat qila aţgaymên [75b10–11]
   ‘How could I complain about his leaving?’ (lit.: ‘What possibility is there that I could complain?’)

In the Hyderabad manuscript, the operator -E al- shows first signs of fusion that anticipate the situation in modern Uzbek. The main verb and the auxiliary appear either in separate or in connected writing. Sometimes, the Arabic madda sign, originally indicating length but in Turkic words (in Chaghatay) virtually without systematic function, is written above the letter alif of the element al- (transcribed below as <ā>). As these features pertain to the niceties of Chaghatay orthography and may easily be neglected under the process of copying, we may infer that these details probably do not reflect the situation at the time of writing of the original text but are to be ascribed to the copyist (ca. 1700). The spelling variants found in the Baburnama represent the complete set of possible combinations:

(A) Separate writing with madda, e.g. qila ālmay ‘without being able to do’ [374b12], qošula ālmaydurlar ‘they cannot join’ [375a9–10], uyqulay ālmadim ‘I could not sleep’ [344b6]14.

(B) Separate writing without madda, e.g. hêc iš qila almadi ‘he could not do anything’ [17b3], berkite almadı ‘he could not fortify it’ [230b6], xaţt bittiy almas edim ‘I could not write’ [242a6].

13 That is, the negation of the possibility (¬◊p, cf. Kaufmann & Condoravdi & Harizanov 2006). There are no examples for ◊¬p in the domain of MOD-1 in the Baburnama.

14 The post-vocalic variant -y al- occurs only in separate writing in this text.
(C) Connected writing with madda, e.g. turālmaidik ‘we could not stay’ [117b6], bērālmaidilār ‘they could not give’ [184a10], atlāndurālmaslār ‘they could not get him on the horse’ [246a4].

(D) Connected writing without madda, e.g. ōtalγay ‘one can traverse’ [195a14], kirālmaidilār ‘they could not enter’ [211b1], boldūralmādi ‘he could not make it happen’ [230b5].

Needless to say, cases with an intervening item15 between the converb and al- do not apply for connected writing, e.g.

(3) Uruša ham almādi, tanbal mardak qača ham almādi [156b2–3]
   ‘He could not even fight; that fat manikin could not even flee.’

Given the negligibility of the madda sign in Chaghatay Turkic texts, it is unclear whether we may regard it in the instances quoted above as an erratic indicator of some phonetic feature (either vowel length or rounding, or both) that ultimately resulted in the rounded vowel (/å/, <o>) of Modern Standard Uzbek.16 We may expect a long vowel at an initial stage of contraction of this morphologic complex: -E al- > -āl- > -āl-. Thus, we may speculate that at least the writings listed under (C) represent an early contracted stage *-āl-.17 The contracted writings as a whole on the other hand, i.e. (C+D), are a secure indicator of phonetic fusion, although we cannot be sure about the exact phonetic shape (i.e. rounded or unrounded, long or short). What the data do allow us, however, is to date fused variants of *-E al- no later than circa 1700 for some Turkic varieties of Transoxania.18

Another frequent marker of possibility in the Baburnama is the combination of the Conditional in -sE with the auxiliary bol- ‘to become, to be’ (cf. Schönig 1996: 216–217). “Simple Present Tense” forms (i.e. non-anterior non-focal intraterinals,

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15 This can only be a particle.
16 Uzbek regularly has /å/ for long /ā/ in Arabic and Persian loans, and some (but not all) instances of Uz. /ā/ coincide with Old Turkic long /ā/. However, the history of the vowels is one of the most intricate chapters of Uzbek language history and strongly dependent on the dialects.
17 The writings listed under (D) might represent that same early or a more advanced state with a short vowel.
18 -E al- is also involved in an interesting periphrastic construction for AP-modifying modality, of which there is only a single occurrence in the Baburnama: Bola alγay mu kim mēn barsam ham Kičik Xān damānī körsem ham mulāqāt qīlmāqa vāsiṭa ve sā‘ī bolsam ‘Could I go and see my uncle Kichik Khan and be intermediary and messenger for a meeting?’ [101b13–14]. In this example, the Potential of the verb bol- ‘to become, to be’ combines with the Conditional in -sE to form a complex, non-contiguous MOD-1 operator. This construction, in spite of its scarcity, is clearly grammaticalized, as the conditional forms in the subordinate clause can hardly be explained other than resulting from government by bola al- ‘can be’.
Modality in the Baburnama

[–PAST (+INTRA–FOC)], cf. Johanson 2000a) of the verb *bol- are frequently employed in the Turkic languages to express a general unspecific possibility and/or acceptability, e.g. Turkish olur ‘it will do, alright’, Uyghur bolidu ‘dto.’, Turkish olmaz ‘it is impossible, one may not do it’. Usages like these are attested in the Baburnama as well:

(4)  Mundaq bile bolmas [114b3]
    ‘It is not possible so.’

The underlying meaning of the construction -sE bol- is therefore ‘If one X-es, it will do’, and the resulting operator consequently covers meanings ranging from possibility (‘can’) to permission (‘may’). Most of the occurrences in the Baburnama pertain to possibility proper, like (5), but there are also instances in which the operator indicates acceptability rather than possibility in a restricted sense (6). The item can be negated (7), although the vast majority of the occurrences in the Baburnama are un-negated.

(5)  Kābuldin bir künde andaq yërge barsa bolur kim hargiz qar yamnas; ikki sā’at-i nujūmida andaq yërge barsa bolur kim hargiz qari ńksümes [129a13–14]
    ‘From Kabul, you can reach within one day a place where there is never snow; within two astronomical hours you can reach a place where the snow is never lacking.’

(6)  Sinnān anarlariga terēh qilsa bolur [3a14–3b1]
    ‘One can/may prefer it to the pomegranates of Sinnān.’

(7)  Uşmundin özge Sind suyidin heč yörde qemisz öse bolmas [131a10–11]
    ‘Except there, one cannot cross the Indus anywhere without a boat.’

There are no occurrences of non-third person variants of the operator -sE bol- in the Baburnama. As the Turkic Conditional is capable of taking personal markers, it would be possible to personalize the modality expressed by that operator. This is in fact frequently done in modern Turkic languages e.g. Uzbek Sizga ishonsam bolam? ‘Can I trust you?’ (Qodiriy 1926 [1994]: 343). The fact that there are only third person occurrences of -sE bol- in the Baburnama is probably not attributable to a principal inability of this operator to express personalized modality at that stage of language development, but rather to the general inclination of the author to express things impersonally. This inclination is manifest everywhere in the text (e.g.
we rarely find këldük ‘we came’ but rather këlildi ‘it was come,’ etc.). The absence of instances of -sE bol- with person markers seems to be purely coincidental.19

There is, however, another possibility marker (or rather, an impossibility marker), where impersonality is inherent to the marker, and this is the item -lp bolma- (Blagova 1994: 75), which consists of the aspectually neutral [(−INTRAF] (−POST)] verb -lp and the negated stem of the verb bol- ‘to be, to become’. In the Baburnama this operator combines only with the non-focal intraterminal aspect, rendering the invariable form -lp bolmas (which may combine with the past marker ğedi). Schönig’s (1996: 214) claim that this item “rather expresses a general impermissibility than an objective impossibility to realize a state of affairs” (translation J.R.) is not verified by the data. Compare ex. (8)–(9), which could in fact be translated with ‘may not’ or ‘should not’, with (10)–(12), which cannot:

(8) Alarni ham ‘ayb qilip bolmas [264b3–4]
‘One cannot blame them.’

(9) Daraxti xayli baland bolmas, balki daraxt dęp ham bolmas [282b14–283a1]
‘Its tree does not become very tall, maybe one even cannot call it a tree.’

(10) Bad-kalān ģedi, xözini fi‘l-bāl anlap bolmas ģedi [26a9–10]
‘He was not eloquent, and it was not possible to understand immediately what he was saying.’

(11) Su ulug bolğandin oṣüp bolmas [130b13]
‘Because the water is deep, one cannot cross.’

(12) Xākān arıği ulug şähşyyur ve čuqur aqar. Her yérīdin kēçip bolmas [107b5–6]
‘The Xākān Ditch is a huge major channel, and it flows deeply. It cannot be crossed everywhere.’

In several modern Turkic languages, the construction -lp bol- seems to have broadened its usability, e.g. being used without negation and with personal markers (Schönig 1987: 6). In Modern Uzbek, it can be used with or without negation, but only impersonally (cf. Kononov 1960: 201–202, 402). There is a homonymic actionality operator that marks fini-transformativity, i.e. assigns a final limit to the actional phrase (cf. Kononov 1960: 265; on the corresponding Uyghur item, see

19 There are no instances of -mEsE bol- ‘to be alright not to X, needn’t X’ or -mEsE bolma- ‘not to be alright not to > to have to’ in the Baburnama, which are frequent in several modern Turkic languages and, using other morphological material, in many non-Turkic languages of Central and East Asia (Mongolic, Korean, Japanese).
Rentzsch 2006: 202). There are no clear attestations of this usage in the Baburnama.20

Schönig (1987: 5; 1996: 215) cites another potential possibility operator -E bol- to be found in the Baburnama. However, this combination is extremely scarce in the text, and there is not a single unambiguous occurrence. This item will therefore be disregarded here.

Another rare construction that obviously signals possibility (or rather, impossibility), is -GÜnčE bolma-, consisting of the converb -GÜnčE ‘until, instead of’ (Bodrogligeti 2001: 274–275) and the negated stem of bol-:

(13) Köp ve azini tabğiq qiqunca bolmadi [114a11–12]
‘It was impossible to establish their number.’

The Persian translation renders this passage Bisyär-u kam-i išān tabğiq natavānis-tām kard ‘We could not establish their number’, which confirms the reading as a Potential. One possible origin of this item is from the idiomatic expression X-GÜnčE furṣat bolma- ‘there is/was no chance to X’ which occurs frequently in the text,21 but it is also not inconceivable that -GÜnčE bol(ma)- is of independent origin.

Other frequent expressions of possibility and impossibility involve the adjective mumkin ‘possible’ (ex. 14, 15, 18) and the noun imkān ‘possibility’ (ex. 16, 17, 19), both derivations from the Arabic root <m-k-n> (Wehr 1985 5: 1216–1217). These words are either combined with verbal nouns (formally entering a subject-predicate relation or a genitive-possessive relation with the actional phrase they modify, ex. 14–17) or form complex sentences with a complementizer (18–19).

(14) Anda barmaq xud mumkin ēmes [115b13]
‘Going there is not possible.’

(15) Xusrav Šāhni nöker-süderidin avrip mundaq zabūn qilmasam ēdi, Kābili ni Zū’n-nūnīn oğlı Muqīmīn almasam ēdi, barip Mīrzāni körmekleri mumkin ēmes ēdi [155a12–14]
‘Had I not weakened Xusrav Shah by separating him from his fellows, and had I not taken Kabul from Zū’n-Nūn’s son Muqīm, it would have been impossible for them to go and see the Mīrzā.’

See, however, the example from folio 16b quoted and discussed by Schönig (1996: 215), where kēčip bol- might instantiate this usage. However, the interpretation of this example is insecure.

For example. Yüküngüč e furṣat ham bolmadi ‘He had not even the opportunity to kneel down’ [102b4–5]; Mēn ēlni tēgünč e furṣat ham bolmadi ‘I had not even the opportunity to reach the people’ [104b10]; cf. also Blagova 1994: 371.
(16) Tüz baqmaqli yə söz qatmaqliniq xud imkənî yoq edî [75b14–76a1]
‘It was impossible to look straight at him or to say something.’

(17) Agar yüz miŋ bahār olsa22 ačılmagi nə imkəndur [202b1]
‘Even if there were a hundred thousand springs, what possibility is there of its opening?’

(18) Nève ğhatdin mumkin èmès edî kim alarğa bərlige [51b10–11]
‘Under several aspects it was impossible that it be given to them.’

(19) Munča ibtiyāt kim boldi ul nə imkəndur kim kəlgeye [265a3–4]
‘As he is so cautious, what possibility is there that he will come?’

(14) and (15) represent the same construction, except that in (14) there is no possessive marker at the verbal noun, which makes it an impersonal expression. Likewise in (16), the logical subject of the verb could be marked by possessive suffixes at the verbal noun, e.g. qatmaqliq-i-niŋ for the third or qatmaqliq-im-niŋ for the first person singular. In fact, as the context makes clear, Babur himself is the person who is unable to look and speak; hence the impersonal construction is just an unmarked expression for an understood first person referent here. In terms of the syntactic construction, (17) is more or less identical with (15), replacing mumkin èmès with nə imkən ‘what possibility’ (approximating imkānsız ‘impossible’). (18) and (19) are virtually identical in terms of semantics to (14) and (17) respectively but differ in the formal strategy of expression, integrating a subordinate clause predicated by an Optative verb form (which functions as a subjunctive here) by means of the complementizer kim.

Patterns like those exemplified in (14)–(19) look quite arbitrary. Yet, some of them actually represent very stable conventionalized patterns that survive in the same or a similar form in Modern Uzbek and other Turkic languages of the area. For example, Uzbek Unitish mumkin emas ‘I cannot forget her’ (lit. ‘It is not possible to forget’; Qodiriy 1926 [1994]: 27) closely parallels (14), while Uzbek Uning bu binog’a iltifotsiz qarashi mumkin emas edî ‘He could not look at this building indifferently’ (Qodiriy 1926 [1994]: 246) is very similar to (15). The main difference between Uzbek and Babur Turkic is that in Uzbek, the verbal noun in -mEK tends to be replaced by another verbal noun in -(I)š (formerly a derivational suffix, cf. the discussion by Wiemer & Bisang 2004: 7–8 of derivation vs. inflection and their role in grammaticalization processes). Although the items in (14)–(19) are less compact

22 This line is taken from a Ghazal that Babur wrote in 1506/1507. The Oghuz form olsa is employed here instead of Chaghatai bolsa in order to suit the meter (Hazavi sâlim, avoidance of overlength).
than the markers in (1)–(13), they are strongly conventionalized morphosyntactic complexes that do carry grammatical meaning.

However, with these items we have arrived at the lower end of the scale of grammaticality. Besides grammatical items and arbitrary constructions, modal notions can also be expressed by idiomatic expressions:

\[(20) \text{Torğaqaqdin23 ʿāǰżdurmēn [190b13]}\]

‘I cannot carve [the goose].’

This is an example of an idiomatic expression of a notion for which grammatical items exist as well. This expression is far from having the same grammatical status as an item like -E al-. Nevertheless, it is not arbitrary at all, but a stable pattern for expressing modal notions that survived four hundred years and can be found in Modern Uzbek as well, e.g. Bunga ham sizning bilan bo’lg’an oshma’ilim ko’mak berganlikidan sizga minnatdorlik qilishdan ojizdirman ‘I cannot thank you enough for the fact that my acquaintance with you has helped me in this matter, too’ (Qodiriy 1926 [1994]: 253), which is structurally completely identical to the Chaghatay construction except that it employs an updated verbal noun.

There are other idiomatic expressions that denote possibility as ēlîgîn kêlgenê ‘when it is possible’ (lit. ‘to come from the hand’) [59a5], which also represents a stable and common pattern, cf. Turkish elinden gel-, Uzbek qo’lidan kel-, German von der Hand gehen ‘to be capable’. While no AP-modifying instance of ēlîgîn kel- is attested in the Baburnama, there is in principle nothing that would prevent this expression from taking actional phrases into its scope, e.g. by means of the verbal noun -mEK.26

3.2. Necessity

The expressions of necessity in the Baburnama are highly variegated in the actual formal representation, but quite uniform in the underlying principle. The most common patterns consist of a verbal noun (potentially combined with possessive suffixes to indicate the personal referent of the modality) with a noun or adjective denoting necessity. These constructions parallel the possibility operator in verbal noun plus

23 Torğa- < togra-.
24 Cf. example (52) below.
25 With replacement of the lexeme ēlîg ‘hand’, which has fallen into disuse, by *qo:l, originally ‘upper arm’ (Clauson 1972: 614), in Modern Uzbek (and adjacent languages) ‘arm, hand’.
26 Constructions like -(I)sh qo’lidan kel- (i.e. with another VN) can actually be found in Uzbek, e.g. Qizingiz uchun haqorat bo’lg’an bu so’zni ayish manim qo’limdan keladigan ish emas ‘To tell your daughter this matter, which is an offence to her, is a thing I cannot accomplish’ (Qodiriy 1926 [1994]: 149).
mumkin mentioned above and are common, with a great deal of variation in detail, almost everywhere in the Turkic world. In contrast to possibility, there is no auxiliary verb for necessity in the Baburnama,\(^{27}\) which limits the set of possible constructions.

The modal nouns and adjectives that are employed in the Baburnama in order to signal necessity are kérek (ex. 21–24) and ihtiyāf (ex. 29–30) ‘necessity’ as well as lāzım (ex. 25) and vāǰb (26), ‘necessary’. Kérek is originally Turkic (OT kergek), while ihtiyāf, lāzım and vāǰb are borrowed from Arabic.\(^{28}\) At least kérek is also capable of covering related notions of “moral” or “advisable” necessity (‘should’, ‘had better’), see ex. (23)–(24).

(21) Bir kurōhqa yavuq daban čiqmaq kérek tä Panįf [Kūra] 19niŋ kěntlerige kiši yěkey [220a1–2]
‘One has to climb mountain passes nearly one kurōh in order to reach the villages of Panj Kūra.’

(22) Čān munča kēlibturbiz barmaq kérek [61a3–4]
‘As we have come so far, we must move on.’

(23) Xān bile tamām yakrō bolmaq kérek ēdi [51b13]
‘It was necessary to be completely loyal to the Khan.’

(24) Köprükke kiši qoymaq kérek ēdi köprükke ham kiši qoymadük [111a10–11]
‘We should have put some people on the bridge, but we did not put people on the bridge, too.’

(25) Baži vilā yatlar yağya yavuq väqī bolgan üçün kũllı madadlar qilmaq lāzım ēdi [270a1–2]
‘As some provinces were situated close to the enemy, it was necessary to give them comprehensive support.’

(26) Munīŋ fiqrini būlūliaq kim ulusni [hanūz] 30 yaxši basmavdūr ve köp ulğaymdūr qilmaq lāzım ēdi [101b8–9]
‘It is necessary to think about that now while he has not yet subdued the nation properly and grown too strong.’

27 Such verbs do exist in some Turkic languages, e.g. the Turkish verb gerek-.
28 The roots are <ḥ-w-j>, <l-z-m> and <v-j-b> respectively (Wehr 1985: 301–302; 1150–1152; 1375–1376).
29 <krwh>.
30 Reading by Thackston (1993). The visible part is <...wr> (which could very well represent -ûz).
The (almost) synonymous adjectives vájib and lázim occur also in the combined form vájib ve lázim ‘necessary and indispensable’, see ex. (27)-(28). It is a fairly conventionalized pattern; for example, the components never occur in inverted order.

(27) Bu jhättin bu tağ eli bile yaxşı ma’âş qilmaq vájib ve lázim édi [223b14]

‘Therefore it was necessary to live on good terms with these mountain tribes.’

(28) Alarğa ta’dibâ qilmaq ve göşmâlê bêrmek vájib ve lázim köründi [244b–7]

‘It seemed necessary to teach them a lesson and to give them a chastisement (lit. “ear-rubbing”).’

A slightly different pattern consists of the verbal noun in -mEK with the noun ỉhtiyâf ‘need, necessity’ (mostly in negated form). In terms of syntax, the verbal noun phrase, which is terminated by -mEK, functions as the subject, while ỉhtiyâf is the predicate (‘X-ing is a necessity’).

(29) Andin soğ aşı su bêrmek ỉhtiyâf émes [273b11–12]

‘After that there is never need of irrigation.’

(30) Ariq qazmağî ve band baglamağî ỉhtiyâf émes [274b8–9]

‘There is no need for them to dig ditches and to build dams.’

Another, completely different pattern, which does not build on verbal nouns, consists of the Conditional with the noun kerek (-sE kerek, lit. ‘it is a necessity if one X-es’). Personal markers can be added to the Conditional marker in order to indicate the referent of the necessity (32). The pattern is not very frequent in the Baburnama but highly common in the modern Turkic languages. It covers the core domain of necessity as well as less strong modal notions (‘shall/should’). Provided the context allows for it, it can be interpreted epistemically, but the original function is without doubt AP-modifying, see ex. (31).

(31) Xaṭṭ bitip yibersün kim agar ixlâs ve yahîhatliq maqamidadurlar xud yazaq þavâb kelse kêrek [368b5–6]

‘He shall write a letter that in case they are faithful and on our side, a quick answer must come.’

(32) Uşmunça bile qutulsalar minnatlar tutsalar kêrek [64a11–12]

‘If they get off with that much, they have to be grateful.’
As can be seen from examples (29)–(30), the necessity can be negated by adding the particle for nominal negation, \( \neg p \) (\( \neg \square p \), Kaufmann & Condoravdi & Harizanov 2006). It is also possible to put the negation into the scope of the modality operator (rendering \( \square \neg p \)), although this rarely happens in the Baburnama:

(33)  \( \text{Iš qapuğa kēlgen maḫallda fiđd-u ihtimānnī taqṣīr qilmamaq kērek} \) [109b5–6]  
‘When the opportunity comes to one’s door, one may not fail in sternness and carefulness.’

An interesting issue is the marking of the personal referent of the necessity (the (logical) “subject”) in the Baburnama. Explicit marking of the personal referent is quite rare in this text, owing to the author’s general tendency to express matters impersonally. However, the few cases of overt marking display an interesting set of options. One option, which has already been mentioned, is the addition of possessive suffixes to the verbal noun, rendering structures like \( <X-\text{VN-POSS}=\text{kērek}> \), literally ‘P’s X-ing is necessary’ (where P is 1/2/3.SG/PL depending on the possessive suffix). This is the most common strategy in the Turkic languages. If it becomes necessary to indicate the referent explicitly, most Turkic languages give it either in the Genitive (e.g. Turkish) or in the Nominative (e.g. Uzbek). The Baburnama has overt Nominative (but not Genitive, it seems) subjects as well, but in the case of overt subject marking, the possessive marker (which in this case is redundant, but usually present in modern Turkic languages) is dropped:

(34)  \( \text{Bir kiši uyni haydamaq kērek, bir kiši dalv suyini tökmek kērek} \) [274a8]  
‘One person must drive the cattle, another person must pour the water from the bucket.’

(35)  \( \text{Pādišāh atlanmaq né iḥtiyāj[}]65a7–8\)  
‘What need is there for the king to mount the horse?’

Another option, which does occur here and there in Turkic varieties but is usually regarded an aberration of the “norm” triggered by language contact (a view which may be correct but is by no means proven), is subject marking at the auxiliary adjective/noun rather than at the verbal noun, i.e. \( <(P-\text{Ø}) \text{X-VN-Ø}=\text{kērek}=P> \):

(36)  \( \text{Kiši umēdēqe qoymay özüm og barmaq kērek édim} \) [325a9–10]  
‘I should have gone myself, not place my hope on other people.’

31 \( \text{OT} \text{ermez} \) ‘is not’.
32 E.g. in the Middle Oghuz text Dede Qorqut (manuscript from the 16th c.): Baba, bu sözü sen mana dememek gerek idin ‘Father, this you should not have told me’ (Tezcan & Boeschoten 2001: 125).
In this example, the referent is both overtly mentioned in the Nominative (özüm) and represented in the personal marking at the past tense copula ėdim. A structure conforming better with our image of the Turkic “norm” would be *özüm(nüñ) barmaqim kērek ėdi ‘my own going would have been necessary’, with possessive marking at the verbal noun.

A last option found in the Baburnama is mentioning the referent of the modality in the dative. In this case, there is no possessive marker at the verbal noun, i.e. <P-DAT X-VN-Ø=kērek>, lit. ‘X-ing is necessary for P’, which we find (with läzim) in the following example:

(37)  Xurāsān jānībī ‘azīmat qilmag bizge nēčče fihattin läzim boldī [162b13–14]
     ‘Venturing to Khorasan became necessary for us for several reasons.’

This type of construction is also not uncommon in the Turkic languages, cf. Kazakh
Mayan qazaq tilin üyrenüw kerek ‘I have to learn Kazakh’.

Similar to the situation with possibility, there are also alternative periphrastic constructions expressing necessity, although they are rarely encountered in the Baburnama. In the following two examples, kērek combines with a Conditional (38) and a Voluntative (39) form in a subordinate clause, which is integrated in the matrix structure by means of the complementizer kim:

(38)  Kērek kim burunraq istiqbāğa kēlseler ėdi [185b14]
     ‘They should have come to meet me earlier.’

(39)  Kērek kim ušbu xaṭṭyečke uṣul haftada har nēč qalsalar albatta čiqsunlar
     [360b1–2]
     ‘It is vital that when this letter has arrived, they set out in the same week at all costs, however delayed they may be.’

Two interrelated structures for the expression of necessity that turn up in the Baburnama in several passages involve the noun žarūrat ‘necessity’ or the adjective žarūr ‘necessary’. One of these structures transcends the sentence borders and consists of an asyndetic sequence of two sentences, the first of which expresses necessity and the second the necessary action (40)–(42):

(40)  Žarūr boldī mēn ham yanīb Xuʃandغا kēldīm [55b12]
     ‘It was necessary [that] I returned to Khujand as well.’

(41)  Žarūrat boldī bu yosunluq sulḥ boldī [74a9–10]
     ‘It was a necessity [that] such a peace agreement was made.’

(42)  Žarūrat boldī şulhgaña qilīb kečēdīn ikki pahar bola yavasub ėdi kim sayxzāda darvāzasidin čiqildī [95a9–10]
'It was a necessity to make a kind of peace and to leave through the Shaykhzada Gate close to the second watch of the night.'

While the segment zarar(at) boldi and the subsequent sentence are strictly speaking independent sentences, they are very neatly linked by virtue of their discourse pragmatic configuration. Sentence pairs introduced by zarar(at) boldi are obviously not accidental, arbitrary phenomena but conventionalized asyndetic chains in which zarar(at) boldi functions as a parenthetical, very much like the English (epistemic) tag I think (cf. Traugott 2006: 107; 125). The pragmatic linkedness can also be reflected in closer syntactic integration, which is effected by the syndetic converb in -(I)p as in examples (43)–(45):

(43) Zararat bolup jilav yandurdu [234a13–14]
'I had to turn my reins.'

(44) Zararat bolub bu yurtdin köçüb Özket üstige barildi [40b13–14]
'It was a necessity that we moved from this place and marched against Özket.'

(45) Zarar bolup bu yerge oğ lagi goyuldu [300a2–3]
'It was necessary to make use of just this place.'

3.3. Wish
Comparisoned with the diversity of forms of expression of possibility and necessity, the expression of an objective wish is very uniform in the Baburnama. The bulk of expressions of this kind is formed by the item -mEKči, which either combines with the copula clitic dur (46), with the past tense copula ė(r)di (50) or with some form of the auxiliary verb bol- ‘to be, to become’ (47), or by the item -mEK, which is obligatorily followed by a word form of bol- (48)–(49) (cf. Blagova 1994: 353; Brockelmann 1954: 255). -mEKči seems to differ from -mEKči bol- in that the latter apparently adds a semantic component of development (‘to develop the wish’), especially when the auxiliary is in the unmarked aspect (boldi). There is no obvious difference between -mEKči bol- and -mEK bol- in the Baburnama. The latter appears to be a preliminary stage of what has developed into finite -mEK (without copula) in some

33 Needless to say, zarar boldi can also be used in purely arbitrary constructions like Axir zarar boldi, sarıh ayta almaduq ‘In the end it was a necessity, [but] we could not say it clearly’ [192a6]. Here, an interpretation as a parenthetical is impossible.
34 In this case, bol- is not merely a carrier auxiliary, as the past tense of -mEKči is just -mEKči ėdi. The decisive difference between -mEKči ėdi and -mEKči boldi lies in the semantics of bol-. – On the meaning of -DI, see Rentzsch 2010b.
Kipchak languages like Kirghiz and Kazakh (Balakaev & Baskakov & Kenesbaev 1962: 340–341). While *-mEKči and *-mEKč bol- abound in Modern Standard Uzbek (in the shape -moqchi, -moqchi bo’l-), *-mEK bol- is relatively scarce, although it can be found here and there (-moq bo’l-). The range of inflection forms in which -mEKči bol- actually occurs in the Baburnama is very limited (due to the type of discourse and the content of the text) and mainly comprises -DI [(+INTRA)(-POST)] and -(V)r [+INTRA–FOC]. In terms of semantics, the forms usually express a wish, but there are instances that can be interpreted as an imminent action (‘about to’, ‘going to’), although the difference is not yet very striking (cf. ex. 50). According to Balakaev et al. (1962: 340–341), the latter meaning is prominent for -MEK in Kazakh,35 while -MEKšI can range from an intention (cf. translation with ‘nameren’, 324) to an obligation (dolženstvovanie, 341).36

(46) Hindustāndin xabar kēldi kim Davlat Xān ve Gāzī Xān yēgirme ottuz miŋ čērik yējip Kalānauri aldi, Lāhaur üstige kēlmekčidur [254a7–8]
‘From India the message arrived that Davlat Khan and Ghāzī Khan had assembled twenty, thirty thousand soldiers and conquered Kalānaur, and wanted to attack Lāhaur.’

(47) Ušbu yurtta ēkende Qanbar ‘Ali ikki üč qaṭla yamanlab vilayatīga barmaqčī boldi [73a14–73b1]
‘While we were in this camp, Qanbar Ali became angry two or three times and wanted to go home.’

(48) Bu xabar kēlgeč fi’l-hāl Gvāliyār üstige atlanmaq boldük [381b11–12]
‘When this information had arrived, we immediately wanted to ride against Gwalior.’

(49) Maxfī Šerim bile sözni bir yērge qoyub Xusrav Šāh ve Ahmad Qāsimni tutmaq bolurlar [126b2–3]
‘Secretly they make an arrangement with Šerim and want to capture Xusrav Shah and Ahmad Qāsim.’

(50) Bu yağılarnıŋ üstige atlanmaqčī edük kim Humāyūn ‘aržga yētkürdi [299a14–299b1]
‘We were going to ride against these enemies when Humāyūn submitted an offer.’

35 Compare the semantic path of will in English.
36 Cf. English shall, which adumbrates the opposite development (from obligation to intention, see Bybee & Perkins & Pagliuca 1994: 178).
Apart from the items -mEKči (bol-) and -mEK bol-, there are only very few examples of AP-modifying willingness. These few examples are constructions involving the verbs iste- and tile-, which at the time of writing of the Baburnama both already had developed the meaning ‘to wish’ (on the semantic development of these verbs, see Clauson 1972: 243, 492). The sole combination of iste- with a verbal phrase is accomplished by the converb -(V)p (51). Tile- integrates a verbal phrase into its scope by means of the complementizer kim and the Optative (see MOD-2), which functions as a subjunctive (52). There are no occurrences of either iste- or tile- with a verbal noun, which is frequent in Uzbek, nor with the first or third person Voluntative, which is also frequent in several Middle and Modern Turkic varieties.37

37 On such a combination in Standard Turkish, see Rentzsch 2010a: 218.

There are also idiomatic expressions for willingness in the Baburnama, like köylü tart- ‘his heart to draw’ with a verbal noun in the dative: Çağır içmekke maylım bar eði ve bu vâldîn þey qilmaqqa köylüm tartar eði ‘I had the disposition to drink wine, and my heart was drawing me to traverse this valley’ [189a12–13].

38 The reading of this word is not completely secure. The manuscript writes <st’zmyṃ>, i.e. a dot above the <r>. There is, however, not much choice but to read istermən. Unfortunately, there is no Persian parallel to this passage that could clarify the issue.

39 Cases in which emotives are complementized without kim are to be considered grammaticalized structures building on originally asyndetic sequences of sentences.

(51) Mën ham barib istermən38 [119b6–7]

‘I want to go, too.’

(52) Tiledük kim bu qiʃ ‘arıyati bërgey tā anda olturub Samarqand vilâyatiga ēligdin kêlgençe evrüşgey biz [59a4–6]

‘We wished that he lend it us for this winter so that we would stay there and turn against Samarqand Province when we would be able to do so.’

4. MOD-2 items

While MOD-1 items influence the substance of the actional phrase they operate on, MOD-2 items express particular (modal) views toward the actional phrase, leaving its substance untouched. Those MOD-2 items that are emotive (see above, 2.) are usually unambiguously finite, which means that they cannot be integrated into a superordinate matrix clause except by some verba dicendi et sentiendi like dê- ‘to say’ or a complementizer like kim.39 Emotive MOD-2 items are interchangeable with aspect items but can generally not be moved into the scope of aspect items, not even by means of a carrier auxiliary (like bol-). Conversely, MOD-1 items may be in the scope of aspect items, either by direct suffixation (with MOD-1 items involving a
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verbal stem, e.g. -E al-) or by means of a carrier auxiliary (with MOD-1 items of nominal nature, e.g. VN-poss=kërek).

Future forms, i.e. neutral MOD-2 items with the value [–IND(–INTRA)(–POST)] (cf. Rentzsch 2010a: 214–217) are less strict in respect to finiteness and involvement in periphrastic constructions with auxiliaries, which in turn may carry aspect suffixes (e.g. Turkish -(y)EcEk ol-, Chaghatay -GÜsi kel-). The Chaghatay Future is historically a verbal noun, and hence a non-finite item, which was transferred into finite position by means of an auxiliary turur ‘stands’ which survives in reduced shape (dur). Non-finite uses of the underlying verbal noun -GÜ are common in Chaghatay, although they do not occur in the Baburnama.40

The Chaghatay MOD-2 items are as a whole very well investigated as they belong to the morphological core inventory of Chaghatay. The following account will therefore be confined to mentioning the MOD-2 items that are attested in the Baburnama and quoting a minimum of examples.41

4.1. Voluntatives and Imperatives

Voluntatives are items addressing the first or third person, while Imperatives address the second person.42 Imperatives (Brockelmann 1954: 224–226; Eckmann 1959b: 154; Blagova 1994: 347–348; Bodrogligeti 2001: 176–183) are used for direct commands. For the singular Imperative, either the bare stem (53) or the suffix -GI (54) is used in the Baburnama. In the plural, both -y and the form with an additional plural suffix, -(y)ler, are used without any obvious difference and in immediate proximity (55).43 The plural form in -(y)ler (but not in -(y)ler) is also used in honorific addresses to a single person, see ex. (56), where the context makes it clear that the utterance is directed to only one person. Occasionally, we also find the form -(y)iz, which Brockelmann classifies as peculiar to Oghuz and Kipchak (1954: 226), for the plural Imperative (57).44

40 What does occur in the Baburnama, though, are morpheme complexes entailing -GÜ such as -GÜlÜK, -GÜsiz and -GÜdëk, as well as the negated finite form -GÜ yoq. These items will not be considered in this article.

41 It goes without saying that there are numerous issues concerning individual MOD-2 items that deserve research in detail. For example, a comprehensive study of the Conditional in Chaghatay with all its possible uses could easily fill a monograph.

42 Brockelmann (1954: 227) uses the term Voluntative for first person items only and groups the third person forms together with the Imperative.

43 However, we could speculate that in ex. (55) the variants would be unlikely to appear in inverted order (këlinler ... için), and that the absence of -ler at këlin is an instance of so-called suffix dropping. Be that as it may in this particular case, there are plenty of examples of plural (i.e. not honorific singular) use of bare -(y)ler in the Baburnama.

44 But, as far as I can see, never for the honorific singular. From the meager data in the Baburnama, it is not clear whether this is coincidental or systematic.
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(53) Kele körüşeli [202a2]
‘Come, let us meet!’

(54) Agar tēngir ‘inâyi tı bile Samarqand ham musaxzar bolsa Samarqandta sën oltur-gîl [348b14]
‘If by providence Samarqand is conquered as well, then install yourself in Samarqand!’

(55) Kele mëniq qašimda içipler [236b9]
‘Come on, drink in my presence.’

(56) Siz mardâna boluŋ [161a7]
‘Be brave!’

(57) Sizler ham argta eski kësknişt tıste kim hâlî xazîndar uług ot yandurûnîz tâ biße[y]bi[z] [197a13–197b1]
‘You too ignite a big fire on top of the old pavilion in the citadel, which is now the treasury, so that we know that you know that we have come.’

The Voluntary forms are slightly inhomogeneous in their meaning, depending on person and partly number. The first person singular Voluntary expresses readiness to carry out the action, which can often (but need not) be interpreted as an intention or a wish. In the Baburnama, the form is always -(E)y (58). In the first person plural, the Voluntary either expresses the readiness of two or more people to carry out the action, or the readiness or intention of the speaker with a simultaneous proposal or order to one or more addressees to participate in the action. The form is always -(E)liŋ in the Baburname (59). This form is also used as a pluralis auctoris in substitution for -(E)y (60).

(58) Sizlere köñilleriniz tillegendin artuquraq ri’âyat-u şafqat qilay [116a1–2]
‘I will bestow you with regard and favor more than your hearts wish.’

(59) Böke mu sên? Böke bolsa kele körüşeliŋ [21a4–5]
‘You are a wrestler? If you are a wrestler, come on, let’s fight!’

(60) Čûn munça taqrîb boldi xanlarnîn aţvâlini daği iţnîl bile zîkr qilâliŋ [9b7–8]
As [the topic] has approached like this, let us mention the circumstances of the Khans in summary.’

45 Reading by Thackston (1993: 415), with which I fully agree. Writing: <bylk’nbyr>
46 This item is perfectly suitable for actions carried out reluctantly in contexts like “I don’t want to do it, but as you insist, I’ll do it”.
The third person Voluntative expresses that the speaker or another conscious subject considers it desirable or permissible that one (singular) or more (plural) persons, who are not the addressees, carry out the actional phrase (61).

\[(61) \text{Buyurdum kim ötmekke mașğāl bolsunlar [373a12–13]} \]
\[\text{‘I ordered that they should get busy crossing.’}\]

4.2. Optative

The Optative in -GEy can be inflected for person and number and forms a complete paradigm, which distinguishes it from the Voluntative and Imperative forms, which are person-bound. Brockelmann (1954: 239–240) labels this item “Future”, which is not only in accordance with (some) academic tradition (von Gabain (1941 [1974]: 115) uses this term for the corresponding Old Uyghur item), but is also not completely unjustified in terms of semantics, as the final limit of the AP marked with -GEy is usually posterior to the viewpoint. However, it is my conviction that in the Baburnama at least, the basic meaning of -GEy is essentially deontic in the literal sense of the word, i.e. it covers a spectrum ranging from obligation to permission. It is not neutral like -GÜsidur, but clearly emotive, i.e. it expresses an emotional attitude of the speaker or another conscious subject S toward the AP (‘may’, ‘should’, ‘shall’, etc.). Depending on (among other things) the personal markers attached to it, this form can evoke a large range of readings, including willingness (‘I shall’), request, order or moral obligation (‘you shall’), wish (‘may he’). More remote but frequent derived readings are Future (‘will’) and epistemic assumption (‘will’, ‘might’). A secondary derivation from the Future reading is the irrealis use. Moreover, the Optative is often used as a subjunctive in the Baburnama, i.e. an unmarked item for syntactic subordination. In this function it partly competes with the Voluntative of the first and third person as well as with the Conditional.

Given that -GEy encodes just one meaning (which covers a quite large field on the semantic map) that is open to a large range of secondary readings, the actual decoding of the pragmatic value of this item in a given context will often be highly

47 In Uzbek, the plural form can also be used as an honorific singular. I am not aware of such usages in the Baburnama, but this need not have systematic reasons.

48 In some Turkic varieties, there are derived usages of the third person Voluntative as an indirect, and hence more honorific, means of issuing a command to a direct addressee, e.g. in the Old Uyghur text “The Hungry Tigress”, where a prince uses the third person plural Voluntative word form yörüşu tarzunlar ‘they shall walk on’, addressing his two elder brothers (von Gabain [1941] 1974: 298; from the context it becomes clear that this is a direct speech utterance).

49 A comprehensive account of the semantic development of *-GEy in the Turkic languages remains to be written.
individual. In many cases, the pragmatic value of this item is intrinsically unclear and open, the interpretation arbitrary within certain limits. Hence, in some of the examples given below, the translation offers only one of several possible interpretations.

Examples (62) and (63) could be interpreted in terms of intentionality:

(62)  Mēn xud nége barmāγymēn [185b7]
       ‘Why shouldn’t I go myself?’

(63)  Ottuz miiŋ nōkerīq bīle tanām vilāyatlarīq kim élīgīııde ēdi né qildī kim bālā bēś yūz kiśīq bīle őzhek tāşarrufıdıgı vilāyatlarıга né qılğaysēn [155b6–8]
       ‘What did you do when you had 30,000 soldiers and all your provinces at your disposal that you want to achieve with only 500 peoples left against the provinces under Özbek administration?’

Both intention and future are possible interpretations of the following example; these interpretations are contributed to by muqarrar bolub ēdi:

(64)  Sulīn ‘Alī Mīrzā bīle körııkende andaŋ muqarrar bolob ēdi kim yaz alar Buxā-radın, mēn Andiǰändin kēlıb Samarqandnı muhāṣara qılğaybız [39a3–5]
       ‘When I had met with Sultan ‘Alī Mīrzā, it had been decided that in summer he (“they”) would come from Buchara and I from Andijan, and that we would besiege Samarqand.’

In the following example, -GEy will inevitably be interpreted as a wish or imploration:

(65)  Teŋri hēč musalmāŋa bu balāni salmaŋay. Yaman xōylation kaʃulq xärūn Ilāhī ālamsa qalmaŋay [169a2]
       ‘May God never strike a Muslim with such a plague! May no ill-tempered, cross woman remain on earth, my God!’

The next occurrence can either be interpreted in terms of a moral obligation (the moral institution being a royal decree), a command (the very decree per se) or even as a subjunctive depending on farrmān boldi:

(66)  Farrmān boldi kim jām’i ēlniŋ jīhātīn hēč kim saxlamay tanām yandura bērgeyler [40a5–6]
       ‘It was ordered that they should return all belongings (“sides”) of the people without exception.’

An irrealis interpretation is suitable in the following case:
Both an epistemic and a future reading, the former supported by the epistemic satellite šāyad, are possible in this example:

(Yene mēn bir navbat našīhat-āmēz xaṭī bitīp yīherey, šāyad kim ışlāḥqa kēlgey) [381b12–13]

‘I shall write him another letter mingled with advice, maybe he will be appeased.’

A whole selection of possible readings, of which only one each is mirrored in the translation, is offered by three neighboring occurrences of -GEy in this final example:


‘I said: Would this be appropriate? With which intention should we ride? Not having achieved our goal, shall we attack our own flock and then return? This is not possible.’

4.3. Conditional

As has been mentioned (section 2.), the Conditional supposedly originally meant something like ‘provided that’ and developed various derived usages. Of these, the most common is the predicate of the protasis of a real (70) or hypothetical (71) conditional clause. In hypothetical conditional clauses, both the predicate of the protasis and of the apodosis may50 be supplemented by the past tense copula ė(r)di, which then exerts its pre-temporal, dissociative function (cf. de Haan 2006: 51; Rentzsch 2010b: 274–276). For examples of other usages of the Conditional, especially the temporal one, see Bodrogligeti 2001: 190–196).

(Mēn ham va da qildım kim Tēngri rāst kēltūrse atasiniŋ orniği Rānā qilip Čitōrda oltūrğazav) [345a6–8]

‘I also promised that, God willing, I would make him Rana in his father’s place and establish him in Chittaur.’

The matter is actually quite intricate and needs further research. Example (17) above is an instance of a hypothetical conditional clause without ėdi in either the protasis or the apodosis. It exemplifies what in English grammar is called the Conditional 2, while example (71) represents the Conditional 3. It would be particularly interesting to consider more instances of (equivalents of) the Conditional 2 in prose passages and with a more straightforward apodosis.

50
4.4. Neutral modality ("Future")

There are many items in the languages of the world that are labeled "Future" (for a typological overview, see e.g. Bybee & Perkins & Pagliuca 1994: 244–251), and even in the Turcological literature there is no full agreement about the usage of this term (as we have seen, Brockelmann uses this term for the item -GEy). Turkic items that represent a particular semantic type that could be labeled Future with some justification comprise Runic Turkic -IEč, Old Ottoman -IsEr, Chaghatay -GÜsidur, Turkish -(y)EǰEK and Modern Uyghur -(E)r. Some theoretical considerations on these items (with a focus on Turkish) are presented in Rentzsch 2010a: 214–217, some of which will be summarized here but not elaborated on.51

The items under discussion are clearly not tense items in the proper sense. They do not posteriorize either "events" as a whole nor the crucial limit of an actional phrase. They share functional and semantic properties with viewpoint aspect operators: They are on the same functional layer as aspect items (which makes them MOD-2 items according to the definition given above), and they are definable in aspectual terms, as they are non-intraterminal and non-postterminal [(–INTRA)(–POST)]. What distinguishes them from the other Turkic [(–INTRA)(–POST)] item, which is -DI (cf. Rentzsch 2010b), is that -DI carries the additional feature of indicativity (i.e. presenting the content of the sentence as valid), which is absent from the MOD-2 items. These MOD-2 items may therefore be considered an extension of the aspectual domain, but they are modals as well because they are non-indicative [–IND (–INTRA)(–POST)]. This semantic profile, which makes them the negative member of several oppositions (but covers a neutral stance toward all of them as well)52, allows for a very broad spectrum of readings, which includes among other things intention, promise, command, assumption and more decided posteriority ("Future").53 The reading selected in a specific context depends among other things on the interaction with personal markers54 and on the semantic design of the verb and

51 The issue demands more comparative research.
52 As these are privative oppositions.
53 The concrete range of possible readings in a given language depends on how the semantic map is divided among various items with related usages (e.g. neutral modality vs. non-focal intraterminality ("Present-Future") vs. the Optative).
54 Interaction with first person markers has a certain affinity to intentional reading, with second person markers to interpretation as a command, with third person markers to interpretation as an assumption.
the actional phrase (e.g. whether the action is volitional or controllable by the subject/agent) on which the item operates.

The item that represents the semantic features [-IND (-INTRA)(-POST)] in the Turkic variety of the Baburnama is -GÜsidur, which consists of the modal verbal noun -GÜ55 with a possessive suffix and the copula clitic -dur (from *turur 'stands').

Of the following examples, (72), (73) and (79) are in the first person, (74) is in the second person, and (75)-(78) are in the third person. (72) and (73) will be interpreted as an intention or a promise. This interpretation is contributed to by the first person marking. (74)-(76) have the character of a prediction. In (74), an interpretation as a pure command is not feasible as conquering the Uzbeks is not under the addressee’s control exclusively. (75) will be interpreted as a very determined prediction (almost like an indicative future56), as the action is (almost) totally controllable by the writer. The prediction in (76) is founded on religious belief. (77), although formally in the third person, has the pragmatic value of an order to the second person plural; bolmagusidur could be replaced by an imperative form (gilmay 'don’t commit') without changing the intended meaning of the sentence significantly. (78) is an assumption by the speaker (epistemic reading). Assumptions formulated with -GÜsidur range rather high on the scale of epistemic probability. The operator -GÜsidur therefore combines readily with the epistemic satellite albatta ‘certainly’ (79), while balki ‘maybe’ is too vague for this operator and would rather combine with -GÆy.

(72) Agar ‘ahd qilsalar qulluqğa këlgümdur [123a10]
If they make a treaty, I will submit myself.

(73) Čūn barmaysiz har qayan barsaniz xizmatta bolğumizdur [116a4–5]
‘As you will not go there, we will be at your service wherever you go.’

(74) Sên Özbekni alqugdur [172b13–14]
‘You will conquer the Uzbeks.’

(75) Bu tärźda xañlarnı̇n ẑikri mukarraran taqrıb bile këlgüsidur, vaqāyi ve hâlülü̇r andalarda (sic!) mažkær bolışidur [11b12–14]
55 Brockelmann (1954: 246–249) groups this item with the “gerunds”, which is not felicitous, as the term Gerund is usually reserved for convertbs (i.e. adverbial verb forms) in the fields of Turcology and Mongolistics (which is obviously also Brockelmann’s intention).
56 The feature [-INDICATIVE] covers both the negative and the neutral value in the privative opposition [+INDICATIVE]; hence it is capable of suggesting unqualified indicativity if the context allows this reading.
'In this history, the Khans will be mentioned repeatedly when there is motivation to do so, and their events and circumstances will be reported there.'

(76)  *Har nė Tegriniŋ xwâsti bolsa ul bolgâsîdûr* [83a6–7]
‘Whatever God’s wish is, it will happen.’

(77)  *Talan ve târâj bolmağusîdûr* [224a14]
‘There shall be no pillage and looting!’

(78)  *Mîndin intiğâm alğularîdûr* [74b14]
‘They will take revenge on me.’

(79)  *Uşbu [a]yaz Tëŋri keltürse albatta özümîni har nau’ qilip yêtkûrğûmîzîdûr*
[345b1–2]
‘This summer, if it is God’s will, we will certainly make it there, however it may be.’

5. **MOD-3 items**

The Chaghatay variety used by Babur has several ways of expressing an epistemic stance, i.e. a subjective evaluation of the truth-value of the sentence by a conscious subject S. One class of these structures makes use of a MOD-1 or MOD-2 form of the verb *bol-* ‘to be, to become’, namely *bolgay* ‘may be’ or *bola alur* ‘can be’, which is either involved in a periphrastic construction with an aspect item or in a matrix clause with the complementizer *kim*. Modal forms of *bol-* also operate on sentences with nominal predicates.

Another class is based on the noun *iḥtimâl* ‘probability’, which is combined with verbal nouns or the Optative -*GEy* in subjunctive function.

Another frequently employed epistemic operator is the epistemic particle *ė(r)kin*, which operates directly on aspect items or the past tense marker *ėdi*. This particle seems to cover a semantic spectrum ranging from ‘maybe’ to ‘probably’, i.e. a rather (but not very) vague possibility up to a more concrete probability (which does not include certainty). The field can be narrowed down by modal satellites like *şāyad (kim)* ‘maybe, perhaps’ (83)–(85) and *gâlibâ* ‘probably’ (86)–(87). The ma-

57 The more conservative variant with <r> appears in example (85).
58 A detailed account of *ėkin* in the Baburnama is found in Schönig (1997: 351–355). The following discussion is meant to supplement and contextualize his account.
59 Example (84) collides with Schönig’s claim that only the constituent within the “şāyad-ėkin bracket” is the operandum of the epistemic markers (1997: 353). In this example the estimation (and hence the epistemic evaluation) clearly concerns the constituent
jority of occurrences of ękin in the Baburnama combine with a satellite, but it does occur on its own as well (80)–(82). A striking and interesting phenomenon is that ękin is capable not only of combining with the past tense copula ėdi, but also of taking the latter into its scope (86)–(87). From a theoretical point of view, it is both possible to evaluate the truth-value of an anteriorized sentence (tense < epistemic modality)\(^6\) and to anteriorize an epistemic evaluation (epistemic modality < tense). In the Turkic languages, the latter option is far more widespread (cf. Rentzsch 2010a: 212), but the data from Chaghatay attests the inverse scope relation as well.\(^6\)

In the Chaghatay variety of the Baburnama, ękin has a much more flexible usability than the Modern Uzbek counterpart ekīn, which is apparently only used in questions (Kleinmichel 1997).

\(80\) Bu yol qayanga barar ękin [97b4]
‘Where could this path lead?’
(cf. Schönig 1997: 352)

\(81\) Kördiŋiz tapotŋiz ękin anda ‘ışrat-u ‘aŋš birle nāz-u ni’am [330a2]
‘There you will have seen and found companionship and subsistence as well as coquetry and blessings.’

\(82\) Yene saŋdaqqa salquça ikki oq atquça furşat boldi ękin [107a6–7]
‘Until I put it into the quiver again, I would have had the opportunity to shoot two arrows.’

\(83\) Şāyad kim miŋ, miŋ bēş yūz Özbek öldi ękin [184a14]
‘Maybe a thousand or fifteen hundred Özbeks will have died.’

\(84\) Yene ić tört eliğ ham şāyad artti ękin [275b4–5]
‘And still perhaps three or four handbreadths will have been left.’

\(85\) Mundin burun ham uşbu mażmūn Mīrzālarğa hitip yibirip ėdim. Şāyad ma’lim boldi erkin [359b5–6]

\(ić\) tört eliğ ‘three or four hands’. Of course, the operator formally operates on the whole sentence.

\(60\) This fact becomes clear not only from the iconic position of ėdi and ękin (which would not be a reliable criterion) but also from the overall meaning of the sentences.

\(61\) Where the A < B means ‘A is in the scope of B’.

\(62\) Another yet unresolved question is whether the two possibilities of semantic scope are systematically distinguished by different formal representations at all, or whether the same construction can be interpreted in two ways depending on the context.
'I had written to the Mīrzās about this issue even before. Maybe it will already have been known to them.'

(86) Yene özgelerni dağı tabqiq qiliş, galiibi Saiyid Ūsayn Akbar ve Sulṭān 'Ali Čuhra yene ba'zi Xusrav Şāhī bēk-bēkū yiqiq-yelqe ham bar ēdī ēkin [152b4–6]

'Identify also the others! Probably Saiyid Ūsayn Akbar, Sultan 'Ali Čuhra and some others of Xusrav Shah's Beks and Yigits will also have been involved.'

(cf. Schönig 1997: 354)

(87) Bu yil al-hamdulillāh ul dağdağa tamām xāţārdīn raф' boldi, galiibi ṭarjumānī nazm qilməqiniğin yumm ve barakatidin ēdi ēkin [360b13–361a1]

'This year, praise God, this trouble was completely lifted from my mind, it will probably have been due to the luck and the bliss of composing the translation.'

Contiguous combinations of an aspect item with bolgay occur in the Baburnama only with the postterminal aspect item -miš, although combinations with other items are likely to have been possible at Babur’s time as well. Those combinations involving bolgay that are purely epistemic express a modal value that corresponds approximately to ‘probably’ or ‘I assume’. While in example (88) [-miš] bolgay is an epistemic operator in its purest sense, the other examples are more complex in that [-miš] bolgay belongs to subordinate clauses introduced by the complementizer kim. Example (89) is interpretable as “One should not assume that they became hostile because...”, which still preserves some of its epistemic character. In example (90), the integration into the superordinate structure “not so independently that” gives the subordinate clause an irrealis modulation. In (91), it is still possible to interpret [-miš] bolgay in terms of epistemic modality, but the Optative -GEy can also be interpreted as a subjunctive governed by ma'lūm əmes. The occurrences of [-miš] bolgay in the Baburnama therefore seem to be structurally inhomogeneous, covering both pure epistemicity and more integrated, “governed” usages—like irrealis and subjunctive—that have not yet developed into semantically completely separate items.

(88) Munča binā-iyi xayr kim ul qildi kam köşi mundaq muvaffaq bolmiş bolgay
[171a11–12]

‘Few people will have been successful in building so many buildings of charity like him.’

(89) Bu tārīxda bēş navbat mën'in bile yaqiqtilar, andaq ēmes kim mën'in bile bəmunəsabatlıq jihatidin yaqiqmiş bolgaylar, mundaq əhrakatlarını öz xənlariga mukərrar qildilar [64b11–14]

‘Until now, they have been my enemies five times; it is not the case that they will have become my enemies because of some inappropriateness [by my side], but they behaved like this against their Khans repeatedly.’
A more complex epistemic construction that occurs in the Baburnama comprises the epistemic operator [-miş] bolgay and an additional element bola alur ‘can be’, which is the exact correspondence to Turkish olabilir with partly different morphological material:

(92) Bu jihatin bola alur kim Kaşmîr dêmiş bolgaylar [272b8–9]

‘Maybe therefore they will have labeled it Kashmir.’

In a strictly formal analysis, Bu jihatin bola alur ‘It can be therefore’ is a matrix clause that integrates a subordinate clause Kaşmîr dêmiş bolgaylar ‘They will have labeled it Kashmir’ by means of the complementizer kim. In the given example, however, Kaşmîr dêmiş bolgaylar is not “governed” by bola alur kim in a sense that the matrix clause triggers the inflectional form -miş bolgay. There is rather a complete independent sentence Bu jihatin Kaşmîr dêmiş bolgaylar ‘Therefore they will have labeled it Kashmir’, into which bola alur kim is inserted as an epistemic tag (cf. de Haan 2006: 38; Traugott 2006: 125). As such, bola alur kim functions as a satellite, literally meaning ‘can be’, which closely corresponds to English maybe.

Both bola alur ‘can be’ (93) and bolgay ‘may be’ (94) can also be employed to express epistemic modality in sentences with nominal predicates. In example (94), the MOD-3 operator is combined with the past tense copula.

(93) Bu neçêçe jihatin bola alur [273b8]

‘This may have several reasons.’

63 The non-initial position of bola alur kim supports this interpretation. Cf. the English tag I think, which can also occupy shifting positions in the sentence (de Haan 2006: 38).
64 Which takes the MOD-3 operator into its grammatical scope. The question of the semantic scope is difficult to decide, as the sentence may reasonably be interpreted either as “At an anterior orientation point O2, their age was estimated to be thirteen or fourteen years” or as “I now estimate their age to have been thirteen or fourteen years at an anterior orientation point O2.”
(94)  *On üç on tört yaşta bolqaylar edî* [102b7–8]

‘They will have been thirteen, fourteen years old.’

*Bolqay* occurs in negated form as well (*bolmaqay)*:

(95)  *Keŋ Qul yoli ušbu bolqay* [116a10]

‘This can’t be the way to Keŋ Qul.’

In this case, it is not the epistemic value that is negated but the core sentence, i.e. “S considers probable [¬¬*p*]” rather than “¬[S considers probable [*p*]].” 65 (95) will therefore be interpreted as “S considers it probable that [this is not the way to Keŋ Qul]” rather than “It is not the case that [S considers it probable that [this is the way to Keŋ Qul]].” Both options seem to amount to the same thing only at first sight, because the former implies a higher degree of unlikeliness than the latter (the latter more or less meaning “S is indifferent about *p*”).

As we are dealing with epistemic marking of nominal predicates, yet another type is found in the Baburnama, which involves the verbal noun *-mEK* and the noun *kèrek* (see above, section 3.2). It expresses a stronger degree of certainty than the items just mentioned:

(96)  *Bèš lak čèrik bolmaq kèrek edî* [270a5–6]

‘He must have had 500,000 soldiers.’

When nominal phrases combine with modal forms of *bol*, there is a potential ambiguity between MOD-1 and MOD-2 on the one hand and MOD-3 on the other, as the resulting structures are interpretable either as sentences with a nominal predicate, to which an epistemic operator is added, which in turn consists of the carrier auxiliary *bol* and a modal inflectional form, or as an AP involving the initio-transformative verb *bol* ‘to become, to be’ and a MOD-1 (+Aspect/Mood) or MOD-2 inflectional form. It is, for example, not inconceivable to interpret (96) as ‘They had to become 500,000 soldiers’, which would be an AP with a MOD-1 operator. Yet, with a context at hand, this ambiguity rarely actually arises.

Contiguous constructions involving the noun *iḥtîmâl* ‘probability’ occur with the verbal noun in *-mEK*, which is either in the genitive (97) or the dative case (98), or with the participle in *-(V)r* (99). 66 All these constructions look quite inhomogeneous and arbitrary, and do not occur very frequently throughout the text.

65 Where S is a conscious subject, while *p* in modal logic conventionally represents a proposition.

66 I tend to interpret *-(V)r* as a participle here and not as a verbal noun. The construction *kömek kélir iḥtîmâlî*, with the possessive marker at the head noun, follows the normal rules of relative clause forming in Eastern Turkic.
On the other hand, there is a construction involving *ihtimāl* that consists of a matrix clause *ihtimāli bar kim* ‘it is probable that’ (lit. ‘its probability exists that’) and a subordinate clause terminating in the Optative (100–101). This type is very uniform and clearly grammaticalized, as it lacks the option of arbitrary choice of the finite verb form in the subordinate clause. It can be made irrealis by means of the past copula *edi* in its dissociative function (102).

(97) *Oğurluq*67 ve qazaqliq bile külçenmekini *ihtimāli bardur* [70b10–11]
‘It is probable that he will become strong through robbery and ambushing.’

(98) *Nē mašlahat qilmaqqa ihtimāl, nē muqavamat qilmaqqa majāl* [213a9]
‘Neither there is the probability to make peace (*sulḥ*), nor the ability to resist.’

(99) *Kēyindin hēckim kömek kēlmedi ve kömek kēlēr ihtimāli ham yoq *edi* [151a11]
‘There was no support from behind, and it was also improbable that support would come.’

(100) *Ihtimāli bar kim bizni bir tarafdin kivürgeyler* [104b3–4]
‘Probably they will let us enter somewhere.’

(101) *Ihtimāli bar kim kāfir suni alip tüşkey* [310a2]
‘Probably the infidel will take the water and camp [there].’

(102) *Ağar uşbu şanba axšami kēsi ökerilse *edi* ihtimāli bar *edi* kim aksari eligge tüşkey *edi* [337b5–6]
‘If the men had been sent across that Saturday evening, probably most of them would have fallen captive.’

Besides the item *bola alur* mentioned above, there is another, more frequent, epistemic tag in the Baburnama, and this is *bilmen* (contracted from *bilmesmēn* ‘I do not know’):

(103) *Muḥammad Ḥusayn Mīrzā bērmedī. Bilmen özüklēdīn bērmedī mu, yā yuqaridīn iṣārat boldī* [96b14–97a1]
‘Muḥammad Ḥusayn Mīrzā did not turn it over. Dunno, did he not give it because he did not want to or was there a signal from above.’

67 The manuscript writes *<wğwrwq>* which would normally be read *uğurluq* ‘luck’; but probably, *oğurluq* ‘robbery’ is intended here. In case *oğurluq* is interpreted correctly here, it would involve a metathesis and labial harmony.
Contrasted forms of the negative Aorist first (and second) person are documented for several Eastern Turkic sources, including the Baburnama, by Brockelmann (1954: 236–237). Eckmann (1959b: 156) considers these forms loans from “Southern Turkic” (i.e. Oghuz),68 where they are omnipresent, and this may well be true for many of the occurrences in Chaghatay poetry69 and in works by authors with a mixed linguistic background. In the Baburnama however, markedly Oghuz forms are virtually confined to poetic passages. The contracted form -men in place of -mesmen is restricted to the word bilmen and does not occur with any other verb stem. Additionally, bilmen never appears sentence finally, i.e. in a place where we would expect the finite predicate, but exclusively in initial parts of the sentence. In terms of usage, bilmen has lost much of its prior character of a matrix clause and is employed as a tag signaling epistemic insecurity about the content of the sentence which it is part of.70 In several respects it strongly resembles the English form dunno (<I don’t know). As there is no indication that Babur was subject to significant Oghuz influence, and as the rest of the Baburnama is quite “pure” Turki, it is highly probable that the tag bilmen is an autochthonous Eastern Turkic lexicalized item that was present in spoken Turki varieties of Transoxania and had received its reduced shape precisely because of its employment as a parenthetical. That Babur would use a colloquialism like this in his text fits well with the overall character of the Baburnama, which is not very formalized and elaborate.

68 He also states that such forms occur mainly in poetry.
69 Also Babur occasionally has Oghuz forms in his poetic passages, e.g. ol- instead of bol- (see note 22 above). Oghuz forms were always considered permitted variants of a common linguistic heritage, and could be employed quite freely in order to suit the meter, although they did not occur in the spoken language of the Chaghatay core area and would not normally be used in prose passages of non-Oghuz writers of Chaghatay.
70 Another indicator is that bilmen is not even restricted to the sentence initial position but occurs in the second position as well (105).
6. Evidentiality

Evidentiality encodes the reference to a source for a given sentence. It states that the sentence is based either on direct or indirect evidence or on mediated evidence (Plungian 2001). This implies that a conscious subject S is involved, who is either the perceiver of a (visual or non-visual) source, or who reasons about or infers something from an extra-linguistic situation, or who has obtained the information from other persons. This conscious subject may or may not be the speaker (Johanson 2000b: 61). The borderline between evidentiality and epistemic modality is often not very clear-cut at first sight, as reference to a source may imply (but not mean) that the information is regarded not fully reliable (this is dependent on the kind of source, Plungian 2001: 354). Hence, evidential markers may carry an epistemic supplement either as an optional pragmatic reading or an obligatory semantic component.

The Baburnama has both a set of genuine evidential markers as well as items with a secondary evidential component. A general typology of the most common Turkic evidentials is given in Johanson 2000b and Johanson 2003. Most of the evidentials occurring in the Baburnama have been analyzed and described by Schönig (1997).

6.1. Pure evidentials

The Baburnama has (as I will argue) three purely evidential operators, namely ămiş, ăkendur71 and oşar. Of these, oşar occurs only once (see ex. 105 above), which makes it extremely marginal in this text; however, this item seems to pave the way for a very similar evidential operator that is highly common in Modern Uzbek (<o’xshaydi>).72 Basically, however, the evidential field in this text is divided between ămiş and ăkendur. Of these, ămiş is already attested in Old Turkic (in the shape ermiş, cf. von Gabain 1941 [1974]: 126; Erdal 2004: 273–275); there is also an ărken in Old Turkic, but this does not seem to operate on independent finite sentences (Erdal 2004: 476–478; von Gabain 1941 [1974]: 181–182). Ăkendur is, so much is certain, a renewal of evidential marking in Eastern Middle Turkic. Its etymology is difficult to speculate on; Schönig (1997: 271) considers it a -GEndur (i.e. postterminal, or “Perfect”) form of the auxiliary *er- ‘to be’, which is reasonable;

71 Both items occur in the more conservative shapes ărmiş (e.g. 270b3) and ărkendur (e.g. 138b12) as well.
72 Both Chaghatay oşar and Uzbek o’xshaydī are low focal intraterminals (“general present tense forms”) of the verb oşar- ‘to resemble, to look like; to seem’ (cf. Zenker 1866–1876: 114). The origin of the item is therefore basically visual, which, however, can easily be applied metaphorically to other types of (perception of) similarity. That oşar is grammaticalized even in the Baburnama is apparent from the fact that it does not preserve its original syntactic properties, which would demand an argument in the dative.
however, it is striking that this item developed to *iken, ekan, etc. (with /k/) in modern Turkic languages (and not *igen, egan, etc.), while -GEndur developed to -GEN with a voiced consonant (except when affixed to stems ending in voiceless consonants).\footnote{The Babur name and all other Chaghatay texts in Arabic script do not provide any information about the feature [+voiced] of the velar plosive both in the suffix -gendur and in the item ekendur. For the back suffix variant of -GEndur, the (sub-)variants -qandur and -qandur are clearly distinguishable, and it is reasonable to believe that the front variant behaved similarly, but this is by no means proven. As for the evidential marker, Thackston (1993) transcribes <’yk’ndwr> as egändür, which is hardly correct given that even the modern languages have a /k/.

In Uzbek, both finite and non-finite <ekan> with their completely different semantics actually exist, while Turkish has only non-finite iken. The exact status of iken in Modern Uyghur is not very well established; from the definition in the UTIL (vol. 6: 303–304) it seems that it survives only in the finite, evidential function.

There is still another item ekan(lik), iken(lik), etc. in several modern Turkic languages (including Uzbek and Uyghur) that has neither the evidential meaning of Chaghatay. *erkendur nor the temporal meaning of OT *erken, but serves as an auxiliary to integrate constituent clauses with nominal predicates into matrix clauses. This article is not the place to speculate about the origin and development of this item.}

Deriving ekendur from the Old Turkic non-finite element erken combined with the auxiliary turur (a common strategy in Turkic) is difficult to justify in terms of semantics, but could explain the preservation of /k/ in the modern languages, as OT erken might possibly contain an element *qan/ken (von Gabain 1941 [1974]: 181–182); however, the etymology of OT erken is heavily disputed (see Erdal 2004: 288 note 479; cf. also Erdal 2004: 343–344).\footnote{In a historical perspective, the new form ėkendur (where it occurs) is gaining ground at the expense of ėmiš, pushing the latter out of its earlier domain into more marginal ones. In modern literary Uzbek, ěmiš <emish> is still comparatively vibrant, while it is extremely marginal in Kazakh (mïs) and has disappeared completely from several other modern Turkic languages.

According to Schönig (1997: 272 et passim; 344), the item ėkendur always has an anterior (i.e. [+PAST]) component in the Baburnama. Provided that his assumption of a postterminal origin of ėkendur is correct, this might very well be the case. However, I am not aware of any occurrence of ėkendur in the Baburnama that is unambiguously [+PAST]. Given that Babur’s memoirs basically refer to past events, it does not come as a surprise that ėkendur (like ěmiš) is interpretable in terms of anteriority, but this anteriority can always be inferred from either neighboring anterior items or from the narrative context (cf. Johanson 2000b: 76). On the other hand, the evidential semantics of ėkendur is always obvious, i.e. there are no purely “Perfect”}

In a historical perspective, the new form ėkendur (where it occurs) is gaining ground at the expense of ėmiš, pushing the latter out of its earlier domain into more marginal ones. In modern literary Uzbek, ěmiš <emish> is still comparatively vibrant, while it is extremely marginal in Kazakh (mïs) and has disappeared completely from several other modern Turkic languages.

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attestations of this item. Given the findings from the modern Turkic languages, where both ēmiš and ēken are [-PAST], and the absence of any clear indication from the Baburnama to the contrary, I tend to consider both ēmiš and ēkendur pure evidentials even in Babur’s times. The main function of ēkendur, so much is clear, must have been evidential. The semantic difference of these two items, as far as it can be established without consulting native informants, is not yet very sharp and clear-cut in the Baburnama. Both items seem to be capable of covering evidentiality in its broadest sense, covering direct, indirect and mediated evidence. Ėmiš appears to have already developed a certain affinity to mediated (i.e. non-personal) evidence (ex. 106–111). Some uses of ēmiš show signs of an accompanying epistemic note of disbelief or pronounced insecurity (“allegedly”; ex. 107–110). Yet, both shades still seem to be non-obligatory, ēmiš being able to signal its original meaning of pure, neutral evidentiality. Ėkendur, on the other hand, often seems to have an (optional) epistemic shade of insecurity (117), but not disbelief. There are only very few occurrences of ēkendur in combination with expressed satellites of mediated knowledge like xabar kêldi ‘the news arrived’, xabar taptuq ‘we gained the information’ or rivāyat qildilar ‘they claimed’ (cf. however ex. 120, where ēkendur is combined with an introductory phrase dërler kim ‘they say’, while ēkendur is unlikely to be part of a direct quotation), while ēmiš frequently combines with these. On the other hand, ēkendur does not exclude the notion of mediated knowledge and is often used as an unspecific, 75 The genuine [+PAST] item of the Baburnama, and of Turkic in general, is ēdi. – It would also be difficult to imagine how an anterior item (ēkendur) could push a non-anterior item (ēmiš) from its domain, and the fact that this actually has happened in all modern languages that have both items testifies to a non-recent [-PAST] quality of this item.

76 Notes on the situations for which ēmiš is employed: (106) mediated evidence which is overtly expressed, no trace of an epistemic evaluation; (107) mediated evidence which is overtly expressed, disbelief; (108) mediated evidence which is overtly expressed, pronounced insecurity; (109) mediated evidence without overt expression, pronounced insecurity but not disbelief; (110) mediated evidence which is overtly expressed, disbelief which is overtly expressed; (111) mediated evidence without overt expression; (112) non-visual direct experience; (113) non-visual direct experience; (114) completely unspecific source, “It is well-known”. – From what has already been stated, it will be clear that these are just extra-linguistic situations in which the use of ēmiš is adequate; neither direct, nor indirect or mediated evidence are actually encoded linguistic features of ēmiš. There is, on the other hand, a certain tendency to a certain pragmatic “behavior” of ēmiš which is different from that of ēkendur.

77 Cf. also the example from folio 96a–96b provided by Schönig (1997: 310), where the mediated nature of the information is not signaled by a satellite, but by an independent sentence containing (maŋ) ēnitürdiler ‘they told me’ (lit. ‘they made me hear’), while the subsequent sentence is still marked with ēkendur and not ēmiš.
neutral evidential in accounts where we may assume that the knowledge was obtained through hearsay, although this is not explicitly stated (121). In this respect, the domain of evidentiality seems to be divided into (explicitly) mediated evidence and evidentiality with an epistemic shade of disbelief, which tend to be expressed by *emiš*, and the rest, which tends to be expressed by *ekendur*, while both items are basically capable of covering the full range of usages.

(106) Yārīga yēken maḫālida xabar taptik kim Šēr ‘Alī Čuhra ve Kičik Bāqī Divāna ve yene bir nečce kišini qaçar xayallari bar ēmiš [158a7–8]
‘When we came to Yārī, we obtained news that Šēr ‘Alī Čuhra, Kičik Bāqī Dīvāna and some others had the idea of fleeing.’

(107) Andaq rivāyat qildilar kim ba’zi fażāytrda on qari fil bolur ēmiš [275a3–4]
‘There have been rumours that on some islands there are elephants that are ten yards tall.’
(cf. Schönig 1997: 339)

(108) Dērler kim kišini ve balki gāvmēşni ałur ēmiš [281b8]
‘They say that it snatches men and maybe even buffaloes.’

(109) Bisyār qaçı baştasi bar ēmiš, ottuz qirq miy bayt yādida bar ēmiš [181b7]
‘He is supposed to have a very strong memory, allegedly he remembers thirty or forty thousand verses.’

(110) Ul söz kim ul vilāyaatlerda māsḫūrdir kim karg filini şax bile köterūr ēmiš gālibā galaṭīr [275b1–2]
‘The claim, which is famous in these areas, that a rhinoceros can lift an elephant on its horn is probably wrong.’

Notes on the usages of *ekendur*: (115) direct, visual evidence with overt expression; (116) direct, visual evidence without overt expression; (117) direct, visual evidence with shade of insecurity expressed by the satellite *gālibā*; (118) indirect evidence: inference from the affliction (cf. Plungian 2001: 352); (119) indirect evidence: reasoning; (120) mediated evidence with overt expression; (121) mediated knowledge without indication of the source; (122) unspecific evidence, “It turned out”.

Notes on the usages of *erken*: (115) direct, visual evidence with overt expression; (116) direct, visual evidence without overt expression; (117) direct, visual evidence with shade of insecurity expressed by the satellite *gālibā*; (118) indirect evidence: inference from the affliction (cf. Plungian 2001: 352); (119) indirect evidence: reasoning; (120) mediated evidence with overt expression; (121) mediated knowledge without indication of the source; (122) unspecific evidence, “It turned out”.

For general observations on the difference between *erken* and *ermiš* in Turkic, see Johanson 2000b: 77.
(111) *Inim bahādūr ēmiš sīz* [108b9]
   ‘My brother, you are a hero.’

(112) *Hindustānīnīq üç iśidin mutažar-rīr ērdūk. Bir iśiğdin, yene bir rund yēlidin, yene bir gardidin. Ḥammām har üçelesiniq daf’in ēmiš* [300a8–10]
   ‘We were afflicted by three features of India: the light, the rough wind and the dust. The bathhouse is the repulse of all three.’

(113) *Ān mundaq ‘azīz nēme ēmiš munčā bīmes ēdin* [306b13]
   ‘I did not know that life is such a precious thing.’

(114) *Āmī ‘Hindustān vilāyātiniq pāytaxti Dillī ēmiš* [270b2–3]
   ‘The capital of all the provinces of India is Dilli.’

(cf. Schönig 1997: 344)

(115) *Mīrzā qopqandin son Ḥaẓrat-i Xwāja byuwraptuqlar kim Mīrzā olturğan yērini baqqaylar. Bir sōneg bar ēkendur* [18b7–8]
   ‘When the Mīrzā had risen, the Khoja ordered that they should examine the place where the Mīrzā had sat. They found a bone there.’

(cf. Schönig 1997: 300–301)

(116) *Yavuq yētkende ma’lūm boldi kim taqlan qaz ēkendur* [153a10–11]
   ‘When we approached, it turned out that it was a flock of geese.’

(cf. Schönig 1997: 308)

(117) *Usbu furṣat-ta yağini qacurup bu ariqlardin Murğān tağinīn tumuşığı sari öttük. Ariqlardin ʿoter furṣat-ta bir boz təpqıqlıq kışt taq dəmanasıda ulsari busari barmaqqa mutaraddid bolup äxiv bir sari baqqa tēpredti. Sāḥ Békke oxšattim, gālibā Sāḥ Bēk ēkendur* [211a3–6]
   ‘When we had put the enemy to flight at this occasion, we passed across the channels toward a beak in the Murghan mountain. When we crossed the channels, a person with a gray steed at the foot of the mountain was hesitating whether to go in that or this direction. Finally he moved in one direction. He reminded me of Sāḥ Bék, and probably he was.’

80 This sentence is addressed to Babur by his uncle Kicik Khan, who, as is expressly mentioned in the context, already knows Babur personally. Therefore, Thackston’s (1993: 220) translation ‘You must be my younger brother the hero’ is not adequate, as *inim* can hardly be in the scope of *ēmiš*. The evidential operator refers to mediated knowledge (with Kicik Khan as the conscious subject S) about Babur’s bravery.
He became quite afflicted. Obviously he had imagined that he would dismount somewhere, sit down and meet with me ceremoniously.'

(cf. Schönig 1997: 274)

'Probably these words were a deceit for me. Its implementation after being successful was not certain. (But) there was no choice, and willingly or not, I agreed.'

(cf. Schönig 1997: 310)

'They say that even in privacy he covered his feet from his family members and in-house persons.'

(cf. Schönig 1997: 299)

'While north thereof there were towns earlier like Almaliğ and Almatu and Yanği, which is written Utrar in the books, they are now destroyed due to the Mongols and Uzbeks.'

(cf. Schönig 1997: 309)

'Later it turned out that it was a beguilement by the neighbors.'

(cf. Schönig 1997: 309)

6.2. Other items

There are two items that do not belong to the core inventory of evidentials in the Baburnama but are capable of signaling or implying evidential ideas, and these are the postterminal verb suffixes -miš and -(V)ptur.81 Of these, -miš is well attested since Old Turkic times, while -(V)ptur is a renewed item derived from the (originally) postterminal converb -(V)p and the auxiliary turur ‘stands’ (Johanson 2000a: 124). In the Baburnama, -miš seems always to have evidential function, i.e. eviden-

Modality in the Baburnama 117

tiality has become part of the core semantics of -miş,82 while -(V)ptur can be employed in situations that favor an evidential interpretation although this value is not actually encoded. Both items preserve a clear postterminal component, i.e. they express that the relevant term of the actional phrase is transgressed at the viewpoint. -(V)ptur is relatively high focal, which means that the situation obtaining after the transgression of the relevant limit is valid at the viewpoint.

-miş is often used in situations describing mediated knowledge (123), but it can be used for direct and indirect evidence as well. Example (124), which is the description of a dream, refers to a kind of direct perception. The evidentially marked sentence in (125) refers to a situation in which the information is obtained through inference (a group of persons sees the fire on the citadel, which is a signal that had been agreed upon in advance. This is not a case of direct visual perception!). The -miş item in (126) represents an unspecific evidentiality; the statement on the position of the path is probably based on indirect evidence (inference on the basis of some criteria in the topographic setting), maybe on direct evidence (seeing the path), but certainly not mediated.

The -(V)ptur predication in (126) on the other hand can be interpreted either non-evidentially as a plain statement or evidentially in terms of a diagnostic statement based on the fact (as is mentioned immediately afterwards) the group has missed the path. The statement in (127) is based on reasoning about the difference in orientation between two prayer niches. Of the three predications in -(V)ptur in example (128), the first (olturupturmėn) is a bare statement without any evidential shade, while the second (qiliptur) and third (qilipturmėn) may or may not be interpreted in terms of mediated evidentiality (“Tell me: Who do you think has done... as I have done it!”). In (129) and (130), there is no noticeable evidential component.

(123) Xabar kėldi kim mukāliqlar Andiǰān sari barmiš [66b7–8]
‘The information arrived that the opponents had gone towards Andijan.’

(124) Tūš kērermėn kim Ḥaźrat-i Xwāja ‘Ubaydullāh kēlmišler, mēn istiqbāllarīqa čiqmišmėn [83b5–6]
‘I was dreaming that Hazrat-i Khoja Ubaydullah has come and I have gone out to receive him.’
(cf. Schönig 1997: 350)

(125) Bībī Māḥrōyga yèerdin burunraq argdin uluq ot čiqti. Ma’lām boldi kim xabardār bolmišlar [198a1–2]
‘Before we reached Bībī Mährōy, a big fire appeared from the citadel. (Thereby)

82 I.e. it is a portmanteau marker of postterminality and evidentiality. In this respect it distinguishes itself from the corresponding Turkish item, which is commonly but not obligatorily interpreted evidentially (cf. Johanson 2000b: 75).
it became obvious that they had become informed.’
(cf. Schönig 1997: 349)

(126) Ġāfīl bolupturbiz. Kēṅ Qul yoli kēyin qalmiş [116a13]
‘We have been unattentive. The way to Kēṅ Qul lies behind us.’
(cf. Schönig 1997: 349)

(127) Bu masfīdinq qiblası bile madrasanıq qıblasıng arasıda bisyär təfəvvut tür. Ġālibə bu masfīd qıblasıng sımtını83 munaǰjenis qarğı bile ‘amal qılibturılra [46b3–5]
‘There is a big difference between the prayer niche of the mosque and that of the madrasa. Obviously, they have implemented the direction of the prayer niche of the mosque with astronomical methods.’

‘Even if I am small in age, I am of a noble kind. I have captured the throne of my forefathers twice with the blow of my right hand and sat down on it. Who has battled so much against various enemies for this dynasty as I have done?’

(129) Fən tağlarıng arasıda bir uluq kilı tüüşətər [81b8]
‘In the Fən mountains, there is a big lake (lit. “a big lake has fallen”).’

(130) Rəst ḥıkayıattır kim bitıpturmən [201a3]
‘It is the true story which I have written.’

7. Survey: Types of modals in the Baburname

Table 1: MOD-1 items

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<td>-sE bol-</td>
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<tr>
<td>VN-POSS=nē inkān</td>
<td>Impossibility</td>
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83 Reading by Thackston (1993: 95). The facsimile has <swny> with dəmma above the <ș>. 
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<th>Item</th>
<th>Type of meaning</th>
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<td>NP=bolgay</td>
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<td>VN-DAT=iḥtimāl</td>
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<tr>
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### Table 4: Evidentials

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<td>106–114</td>
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<td>[+POST] plus</td>
<td>126–130</td>
</tr>
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## Abbreviations

<table>
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<th>Abbreviation</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>Ø</td>
<td>Unmarked</td>
</tr>
<tr>
<td>1</td>
<td>First person</td>
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<td>3</td>
<td>Third person</td>
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<td>ABL</td>
<td>Ablative</td>
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<tr>
<td>ACC</td>
<td>Accusative</td>
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<tr>
<td>AP</td>
<td>Actional phrase</td>
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