

**Research article**

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# Formal and functional approaches to subordination in Kazakh

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**Abstract:** This paper investigates clausal subordination in Kazakh and its functional and formal properties. Kazakh subordinate clauses manifest typical Turkic nominalization, where the dependent predicate and the first argument (if overtly expressed) differ from those of main clauses. Such differences can be seen in three grammatical aspects: syntax, semantics and prosody. Regarding the semantic-syntactic features, subordinate clauses are morphologically reduced and display various degrees of syntactic downgrading; they can display first argument co-reference and semantic integration with their superordinate clauses. Prosodically, subordinate clauses have either a separate intonation pattern or one that follows the intonation of main clauses. The aim of the paper is to describe the syntactic, semantic and prosodic features of subordinate clauses in Kazakh and to compare these peculiarities in a hierarchical order.

**Keywords:** subordination; syntactic, semantic and prosodic features; Kazakh

## 1 Introduction

In general, coordination in Turkic languages is an associative relation of two linked clauses with finite predicates capable of exhibiting full finite verb properties. Thus, the two clauses are functionally and syntactically independent and equal, and each forms a full-fledged clause. Subordinate clauses, on the other hand, exhibit embeddedness and dependency relations. A typical criterion for subordinate clauses in Turkic languages is that they are usually based on the verb form in the predicate. The subordinate predicate is namely introduced by non-finite verb forms, participles, verbal nouns, and converbs, for example. Moreover, these non-finite verb forms are inflected with nominal suffixes, possessive markers, plural markers (in headless relative clauses), and case markers, which are the proper characteristics of nouns in the Turkic grammatical system. As a result, the clause-combining strategy used in Turkic subordinate clauses is nominalization, and within such a nominalization process, subordinate clauses differ from main clauses in three different grammatical aspects: syntax, semantics and prosody. This assumption is based on the fundamental distinction proposed by Stassen (1985), Lehmann (1988), Dik (1997) and Cristofaro (2002).

Syntactically, subordinate clauses exhibit a lower syntactic level, strong nominalization, morpho-syntactic reduction, and a lack of specification on the subordinate clauses (e.g. a lack of overt relative pronouns, complementizer particles, or adverbial subordinators). An obvious structural feature of the subordinate clause is that the dependent predicate loses its verbal characteristics and begins to function as a nominal constituent of a main clause. As a result, the main and subordinate clauses form a morpho-syntactic “asymmetry” relation. Semantically, subordinate clauses manifest semantic integration, and some have first argument co-reference with their main clauses. In the process of semantic integration, the subordinate clause may lose illocutionary force and truth-value reference. Generally, the subordinate clauses do not have illocutionary force. Certain types of subordinate clauses can denote propositions containing truth-value, while others express predications referring to a state of af-

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fairs (henceforth SoA) without truth-value. The distinction between proposition and predication is made on the basis of functional grammar (Dik 1997; Siewierska 1991). Finally, subordinate clauses may or may not have an independent intonation pattern.

The present paper is devoted to describing the clause-linking strategies in Kazakh with a specific focus on the syntactic, semantic and prosodic features of subordination. Terminological conventions are addressed in Section 2. Section 3 provides a general discussion of clause linkage and linking devices in Kazakh. Section 4 investigates syntactic, semantic, and prosodic properties of subordinate clauses. Concluding remarks are given in Section 5.

Both spoken and written data are used in the present paper. The spoken data comes from the author's recordings and communications with the Kazakh varieties in China, while the written data is taken from literature, newspapers and official websites of the Kazakh broadcasters in China.

## 2 Terminological conventions

To enable a better understanding of the paper, the use of terminology should be addressed first. The term *sentence* refers to a higher-order entity consisting of one or several clauses with a specific relation between them. A *clause* is a second-order entity that has at least a predicate as its main constituent, and optionally a first argument. A *complex sentence* minimally contains a main and a subordinate clause. A *main clause* can stand alone as a self-contained sentence and is thus independent, whereas a *subordinate clause* is dependent and functions as a component of a main clause (see Hengeveld 1989; Dik 1997; Cristofaro 2005).

The term *finite* is used to refer to the predicate of an independent clause exhibiting full verbal properties, while *non-finite* forms are only used in dependent clauses lacking certain verbal properties, e.g. tense, aspect, mood and person-number agreement. A *complement clause* serves as a core argument of a complement-taking predicate (henceforth CTP), a *relative clause* refers back to a participant of a main clause, and the function of an *adverbial clause* is to identify a verbal phrase or a main clause as a whole (Givón 2001; Noonan 2007 [1985]; Thompson *et al.* 2007 [1985]). The terms *proposition* and *state of affairs* designate semantic concepts and are used in functional grammar. *Proposition* refers to a possible fact with a truth-value, whereas *state of affairs* indicates an action, process, position or state (Dik 1997; Siewierska 1991).

The terminological conventions *aspect*, *actionality*, and *modality* are based on Johanson's framework (1999, 2021, 2022). *Aspect* is a grammaticalized category that indicates perspectives on events, providing various ways of envisaging them from different points of view, e.g. their beginning, their end, etc. On the contrary, *actionality* (*Aktionsarten*) is similar to aspect, which is a grammatical category. However, actionality is lexically encoded in each lexeme, and can then interact with aspect. The term *modality* is used to indicate speakers' various attitudes towards propositions.

## 3 Clause-linking devices and ambiguity

Clause combining is a combination of two syntactic relations, in which either the two linked elements are structurally equivalent or one is dependent on the other. Thus, the two main types of relationships between linked clauses are coordination (parataxis) and subordination (hypotaxis).

In cases of coordination, the two linked clauses are structurally and functionally independent and equivalent. With subordination, on the other hand, there is a structural and functional dependency between the two linked clauses. The term *dependency* refers to syntactic, semantic and prosodic (stress and intonation) dependency relations between the linked clauses. In other words, coordination implies the absence of syntactic, semantic and prosodic dependency between the clauses. Specifically, each clause can stand on its own, they can be interpreted independently, and they each possess an

isolated intonation pattern. In subordination, on the other hand, the dependent clause lacks at least one of the properties characterizing coordinate clauses.

In addition to dependency, embedding is another parameter distinguishing coordination from subordination. Embedding implies that one of the clauses serves as a constituent of the other. In coordination, there is no embedment between the two clauses. In the subordination relation, one of the clauses functions as a constituent of the other. Depending on the type of the embedded constituent, subordinate clauses can be classified into three main types: relative clauses, complement clauses, and adverbial clauses (cf. Foley & Van Valin 1984; Van Valin 1984; Haiman & Thompson 1984; Johanson 2021; Haspelmath 2007; Gast & Diessel 2012).

Co-subordination (or clause chaining), like coordination, does not imply embedding, but it does involve dependency, like subordinate clauses. In particular, a “co-subordinate” clause cannot stand by itself, and the sentence tense operator is determined by the final verb (Van Valin 2021).

The three types of clause linkage are illustrated by the Kazakh examples below. In (1), two clauses illustrate the coordination relation; both clauses are fully independent, each clause takes tense and person markers, and neither clause functions as an argument of the other. Two clauses are linked by the conjunction *da* ‘and’. In (2), one of the clauses *onıñ kelgenin* ‘his coming’ is dependent on the other *bilemin* ‘I know’, and the predicate of the dependent clause is based on the non-finite verb form, the perfect participle suffix in -GAn. Furthermore, the dependent clause is a core argument of the matrix predicate *bil-* ‘to know’. Thus, subordination involves dependency and embeddedness. In (3), only the final verb in the sequence is fully inflected for tense, mood and person-number agreement, while the medial verbs carry converb markers in -(I)p that functionally correspond to the English conjunction *and*. These represent semantically independent events all of which are syntactically dependent on the final verb. None of the clauses functions as a constituent of the other. Thus, ‘co-subordination’ involves structural dependency, but is not semantically modifying.

- (1) *Asan dūnye-si-n al-dī da šiy-ıp ket-ti.*  
 Asan stuff-POSS3-ACC take-PST3 and go out-CONV AUX-PST3  
 ‘Asan took his stuff and went out.’

- (2) *Men onıñ kel-gen-i-n bil-e-min.*  
 I s/he.GEN come-PTCP-POSS3-ACC know-PRES-1SG  
 ‘I know that s/he has come.’

- (3) *Ol üy-ge qaytıp kel-ıp, ot žay-ıp sabaq-qa dayında-l-dī.*  
 s/he house-DAT return-CONV fire light-CONV lesson-DAT prepare-REF-PST3  
 ‘S/he returned home, lit the fire, and prepared the lesson.’

Regarding the typology of clause combining, coordinate and subordinate clauses use different clause-linking devices. Coordinate clauses are linked by conjunctions, while subordinate clauses are joined by subordinators. The use of linking devices is related to the explicitness of the clause linking. Specifically, if the clauses are fully nominalized, non-finite verb forms are used as subordinating devices instead of connective adverbials or conjunctions. Therefore, clauses belonging to a higher sentential level use explicit conjunctions. Nominalized clauses, on the other hand, employ non-finite verb forms as linking devices<sup>1</sup>. The formation of dependent predicates of subordinate clauses will not

<sup>1</sup> Kazakh complement clauses can be expressed by verbal nouns and participles such as -(U)w, -(I)s, -GAn, -A// -ytIn, -(A)r, etc. Relative clauses are based on the participles and verbal nouns: -GAn, -A// -ytIn, -MAK, -A// -ytIn -dAy/-(A)rIKDAy, etc. Adverbial clauses are expressed by morpho-phonologically simple primary converbs, e.g. -(I)p, -A// -y, -MAy, and complex secondary converbs that consist of participles, verbal nouns, case markers and/or postpositions, e.g. -GAndA, -GAndIKtAn, -GAnnAn *keyin* ‘after’, -(A)rdA, etc. Kazakh has more than 20 converbs.

be discussed in the present paper. Coordinate clauses in Kazakh use conjunctions to express various semantic aspects of the main clauses. For example, clauses linked by the conjunctions *DA* ‘and’, *äri* ‘and’ (additive), *ya/yäki/ne/nemese* ‘or’ (disjunctive), *sebebi* ‘reason’, *sondıqtan* ‘so’, *üytkeni* ‘because’ (causative or resultative), *bıraq* ‘but’, *degenmen* ‘but’, *alayda* ‘but’ (contrastive), etc. have full independent clause structure, so the two linked clauses exhibit syntactic independence. Furthermore, the coordinate clauses expressed by these conjunctions reflect explicit additive, disjunctive, causal or contrastive relationships. Subordinate clauses expressed by participles (e.g. -GAn, -A// -ytIn, -(A)r), verbal nouns (e.g. -MAK, -(U)w, -(I)s, etc.), and converbs (e.g. primary converbs -(I)p, -A// -y, -MAy, and secondary converbs -GAndA, -GAndIKtAn, -GAnnAn *keyin* ‘after’, etc.), on the other hand, are not very explicit, and in certain environments they may even be ambiguous in meaning. Specifically, due to the multi-functionality of the converb marker in -(I)p, which is used in both subordination and co-subordination, it is sometimes difficult to distinguish subordination from co-subordination. In (4a), two dependent predicates are joined by -(I)p, and both of them can be interpreted as the predicate of either a subordinate clause or a co-subordinate clause. Nonetheless, co-subordinate clauses usually narrate more than two semantically equivalent events that are performed in sequence, as (4b) shows. Regarding the subtle differences between subordination and co-subordination, see Ótött-Kovács (2015: 92–97).

- (4a) *Asan šäpki-si-n al-ip äke-si-ne sälem ber-di.*  
 Asan hat-POSS3-ACC take-CONV father-POSS3-DAT greet-PST3  
 ‘Having taken off his hat, Asan greeted his father.’  
 ‘Asan took off his hat and greeted his father.’
- (4b) *Asan üy-ge kir-ip, aynala-ya köz žiber-ip, šäpki-si-n*  
 Asan house-DAT enter-CONV surroundings-DAT look-CONV hat-POSS3-ACC  
*al-ıp, äke-si-ne sälem ber-di.*  
 take-CONV father-POSS3-DAT greet-PST3  
 ‘Asan entered the house, looked around, took of his hat, and greeted his father.’

Another example illustrates the phenomenon that clauses joined by non-finite verb forms contain implicitness. The ambiguity of the subordinate clause has been discussed in the literature (see Johanson 2021; Csató & Muzappar 2010; Rentzsch 2005; Comrie 1998). Kazakh uses the same morphology to introduce both relative and complement clauses, making it difficult to distinguish between them. The subordinate clause *žosparya alıp otıryanın* in (5), without the previous part, can be interpreted as either a relative clause ‘what they are planning’ or a complement clause ‘that they are planning to do’. A few practical methods for distinguishing complement clauses from relative clauses are discussed by Muhamedowa (2016) and Jumabay (2022).

- (5) *Žospar-ya al-ıp otır-yan-ı-n quwanış-pen žetkiz-di.*  
 plan-DAT take-CONV AUX-PTCP-POSS3-ACC happiness-POSTP deliver-PST3  
 i. ‘They delivered with joy what they were planning.’  
 ii. ‘They delivered with joy that which they are planning to do.’

Similarly, adverbial clauses and complement clauses sometimes have identical clause structures. The predicates of the causal clause *šiqqannan* in (6) and the complement clause *qoriqqannan* in (7) are suffixed by the same form -GAn and the ablative case marker. It is clear from the English interpretation that in (6), the subordinate clause fills the complement slot, functioning as an indirect object of the main clause, while in (7), two linked clauses stand in a causal relationship. The state of affairs in the main clause is not fulfilled, because the SoA described in the subordinate clause is not realized.

The easiest way to distinguish between them is that *kel-* ‘to come’ cannot function as a complement-taking predicate governing a core argument in the object position. The verb *qoriq-* ‘to be afraid’, on the other hand, is a complement-taking predicate that takes a complement clause as its core argument. See:

- (6) *Tün-de dala-ya šiq-qan-nan qorq-a-min.*  
 night-LOC outside-DAT go out-PTCP-ABL be afraid-PRES-1SG  
 ‘I am afraid of going outside at night.’
- (7) *Ol qoriq-qannan kel-me-di.*  
 s/he be afraid-CONV come-NEG-PST3  
 ‘S/he did not show up because he was afraid.’

## 4 Semantic, syntactic and prosodic parameters of subordination

### 4.1 Syntactic features

In Turkic languages, subordinate clauses manifest dependency and embeddedness, and therefore the linking of main and subordinate clauses yields syntactic “asymmetry”. Such syntactic process of subordination can be viewed in terms of three aspects: reduction of verbal morphology, a change of the category status of dependent predicates (from verb to noun), and downgrading of syntactic level.

During the process of morpho-syntactic reduction, the subordinate clause loses some clausal and verbal properties depending on what type of subordinate clause it is. Due to the use of non-finite verbal nouns and participles (in complement clauses), participles (in relative clauses), and converbs (in adverbial clauses), the verbs of the subordinate clauses reduce their verbal properties of denoting tense, aspect, and mood, and cannot be conjugated for person and number, and therefore they begin to function as nouns inflected with plural markers, case markers, or other nominal suffixes. Moreover, the first argument of a subordinate clause may take genitive case and act as the possessor of a non-finite verb, or it may even be obligatorily omitted if the subordinate clause shares its participant with the superordinate clause.

Reduction of verbal morphology and changes in status may cause downgrading of the syntactic level of subordination. Depending on the morpho-syntactic function of a subordinate clause, a full clause may be downgraded into a verbal phrase or even a word. However, such syntactic downgrading can vary within the types of subordinate clauses, with different types of subordinate clauses exhibiting various syntactic levels.

#### 4.1.1 Morpho-syntactic reduction

In general, subordinate clauses in Kazakh exhibit the highest degrees of morpho-syntactic reduction. For example, mood, tense operators, and word order freedom are excluded from them. They can only be marked by a limited set of aspect and modality operators. Although most types of subordinate clauses can imply some verbal properties such as voice, negation, and actionality, these are excluded from certain types of subordinate clauses. The goal of this section is to test the mood, modality, aspect, actionality, negation and voice marking of subordinate clauses, to compare the reduction degrees of subordinate clauses, and to organize the results in a hierarchical schema.

**Mood and modality:** The degree of morpho-syntactic reduction of subordinate clauses is relevant for the mood marking of their predicates. As far as mood marking in subordination is concerned, there are normally no mood markers on subordinate predicates. As for the so-called conditional mood markers used in conditional and concessive clauses, their use is determined by internal

semantic features of these clauses, which express hypotheses within any time slot. In fact, conditional mood markers in such clauses behave like converbs, lacking any specific time reference. The time reference of such clauses is determined only by the tense of the main predicate. Moreover, like other types of subordinate clauses, conditional and concessive clauses<sup>2</sup> have no illocutionary force, and they also carry fewer modal operators after their dependent predicates. In contrast, causal, anteriority, and posteriority clauses can have epistemic modal marking, expressing likelihood and assumption. In Kazakh, causal clauses marked by the form -GAndIKtAn, which consist of the perfect participle -GAn, the derivational suffix -LIK, and the ablative case marker -DAn, can be followed by modal adverbs, modal periphrastic constructions, or interrogative participles to express probability or likelihood. See (8) and (9).

- (8) *Demalis bol-yandıqtan bol-ar oquwşı bala-lar da kel-ip-ti.*  
 holiday BE.COP-CONV BE.COP-PTCP student child-PL also come-INDIR-3  
 ‘Probably because it was a holiday, schoolchildren came, too.’ (Ayažay Altay: 24.10.2017)
- (9) *Kiškentay-ım-nan žalyzdıq-qa üyren-gendig-im-nen be, sırt-ta tek*  
 little-POSS1SG-ABL loneliness-DAT be used to-CONV-POSS1SG-ABL Q outside-LOC just  
*öz-im-e yana süyen-er-im-di žaqsi bil-etin-min.*  
 self-POSS1SG-DAT only rely-PTCP-POSS1SG-ACC good know-PTCP-1SG  
 ‘I well knew that I would rely only on myself outside; maybe it is because I was used to being alone in my childhood.’ (CNR KZ: 09.06.2020)

In examples (8) and (9), the predicates of -GAndIKtAn-based causal clauses are postposed by the modal adverb *bolar* [BE.COP-PTCP] and the interrogative particle *MA* to convey the speaker’s expectation about the performance of the dependent clauses. It is noteworthy that none of these modal elements has a lexical meaning.

Like causal clauses, anteriority and posteriority clauses may be followed by the modal adverbs *bolar* [BE.COP-PTCP] and *šiyar* [COME OUT-PTCP], the interrogative particle *MA*, and the modal periphrastic construction *bolsa kerek* [BE.COP-COND necessary], signaling epistemic modality content. See (10) and (11).

- (10) *Men uyqta-p qal-yannan keyin be äytew kel-di.*  
 I sleep-CONV AUX-CONV after Q anyway come-PST3  
 ‘Anyway, s/he probably came after I fell asleep.’
- (11) *Mektep bitir-üwden burın bol-sa kerek onı bir ret kör-ge-m.*  
 school finish-CONV before BE.COP-COND.3 necessary s/he.ACC once see-PTCP-1SG  
 ‘Maybe it was before I graduated; I met him once.’

However, causal, anteriority, posteriority and simultaneity clauses cannot always have modal operators after their dependent predicates. In most cases, such clauses cannot be marked by modal particles. The dependent predicate of the simultaneity clause in (12a) cannot be followed by any modal elements. As soon as they are added to the construction, it becomes unacceptable, as (12b) shows.

2 In this paper adverbial clauses are divided into 9 sub-types following Kortmann (1997): Temporal (‘when’, ‘since’, ‘after/before’, etc.), Concessive (‘although’, ‘even if’), Conditional (‘if’), Causal (‘because’, ‘since’), Purpose (‘in order to’), Manner/Instrumental (‘by’, ‘as’), Additive (‘besides’, ‘in addition to’), Substitutive (‘instead of’, ‘rather than’) and Concomitance (German ‘*wobei*’, ‘*without*’). Of these, Temporal clauses are further divided into secondary sub-types: Simultaneity (‘when’, ‘while’), Anteriority (‘after’), Posteriority (‘before’), Immediate Anteriority (‘as soon as’), *Terminus ad quem* (‘until’), *Terminus a quo* (‘since’). In this paper all these types will be analyzed together.

(12a) *Uşaq-qa otir-yanda, saqtıq belbew-i-n tay-uw-ya mintetti-siz.*  
 plane-DAT sit-CONV seat belt-POSS.3-ACC fasten-VN-DAT obligatory-2SG  
 ‘When you take a plane, it is obligatory to fasten your seat belt.’

(12b) \**Uşaq-qa otir-yanda ma saqtıq belbew-i-n tay-uw-ya mintetti-siz.*  
 plane-DAT sit-CONV Q seat belt-POSS.3-ACC fasten-VN-DAT obligatory-2SG

As for the modality marking in other subordinate clauses, complement clauses governed by knowledge and perception, propositional attitude, and utterance predicates<sup>3</sup>, and relative clauses can take the periphrastic construction -GI+ possessive *kel-* or -GI+possessive *bar/zoq* to signal intentions. (On the usage of the periphrastic construction in Kazakh, see Abish 2016.) In the following examples, the dependent predicates of the complement clause governed by a perception predicate clause *bayqa-* ‘to notice’ in (13), has taken the construction -GI + possessive *kel-*, which expresses inclination or willingness.

(13) *Kino-ya bar-yi-si kel-gen-i-n bayqa-di-m.*  
 movie-DAT go-NEC-POSS3 come-PTCP-POSS3-ACC notice-PST-1SG  
 ‘I noticed that s/he wanted to go to the movie.’

Complement clauses governed by CTPs of modal, manipulative, desiderative, achievement, commentative and phasal types, adverbial clauses of manner, and additive, substitutive and concomitance clauses are not able to take such constructions; therefore, modality values are not overtly expressed in them. This illustrates that the degree of reduction of knowledge and perception, propositional attitude, and utterance subordinate clauses, and of relative clauses is lower than that in the adverbial clauses of manner, additive, substitutive and concomitance clauses.

Relative clauses expressed by the forms -MAK, -MAKŞI, -(A)r, and -A//-ytİndAy, -(A)rİIKDAy can denote the modal notions of intention, possibility or probability. Furthermore, in certain contexts, -(A)r-based complement clauses can express the epistemic modality of possibility. In (14), the relative clause predicate is of the form -(A)rİIKDAy, expressing likelihood. In (15), the predicate of a complement clause governed by a knowledge predicate *bil-* ‘to know’ governs -(A)r to express epistemic possibility.

(14) *Üy-de bir apta-ya žet-erliktey nan qal-di.*  
 house-LOC one week-DAT suffice-PTCP bread stay-PST3  
 ‘There was bread remaining in the house, which was probably enough for a week.’

(15) *Erteñ ne bol-ar-i-n eškim de bil-me-y-di.*  
 tomorrow what BE.COP-PTCP-POSS3-ACC nobody too know-NEG-PRES-3  
 ‘Nobody knows what might happen tomorrow.’

The complement clauses governed by certain types of CTPs can denote modality notions (See Abish & Jumabay 2019; Jumabay 2022). In (15), the complement clause *qaldırp ketüwdi* ‘leaving behind’ governed by an utterance CTP *ayt-* ‘to tell’ conveys a deontic modality of obligation.

3 The present study adopts the classification of CTPs proposed by Noonan (2007 [1985]) with slight revision, and we thus distinguish nine types of CTPs: utterance predicates (‘say’, ‘tell’, ‘promise’); propositional attitude predicates (‘believe’, ‘think’, ‘deny’); predicates of knowledge and perception (‘know’, ‘realize’, ‘forget’, ‘see’, ‘hear’); desiderative predicates (‘want’, ‘wish’, ‘hope’); manipulative predicates (‘force’, ‘persuade’); achievement predicates (‘manage’, ‘try’, ‘fail’); modal predicates (‘necessary’, ‘doubtful’); phasal predicates (‘start’, ‘finish’, ‘continue’); commentative predicates (‘like’, ‘be happy’, ‘surprise’).

- (15) *Kitap-ti osi ara-ya qal-dir-p ket-uw-di ayt-ti.*  
 book-ACC this place-DAT stay-CAUS-CONV AUX-VN-ACC tell-PST3  
 ‘S/he asked us to leave the book here.’

**Tense, aspect and actionality:** As is well known (e.g. Cristofaro 2005), tense markers are entirely excluded from subordinate clauses. The non-finite forms -A//-ytIn and -GAN inherently distinguish perspective and anterior aspect values (Györfi 2021), so that subordinate clauses built with these two forms can express aspect contents. Other verbal nouns and converbs such as -(U)w, -(I)s, -(I)p, -A//y, -GAndA, -GAndIKDAn, etc. are not capable of distinguishing aspect values. The time reference of subordinate clauses expressed by all non-finite forms needs to be inferred from the main predicates. As for the aspect notions, they are excluded from all subordinate clauses, except for relative clauses and complement clauses governed by knowledge and perception, propositional attitude, and utterance predicates, where subordinate predicates are predominantly expressed by the forms -A//-ytIn and -GAN. In (16), the complement clause *quwip žiberetinin*, which is governed by the propositional attitude predicate *oyla-* ‘to think’, expresses a relative future time reference (i.e. its action will happen after the time reference point expressed by the main predicate), while the relative clause *žiber-gen Sibe ultinij bir tobı* ‘a group of Sibe nationality who have been sent’ in (17) indicates that the propositions referred to in the subordinate clauses took place in the relative past (i.e. prior to the temporal reference point expressed by the main predicate).

- (16) *Kepki-si men boqša-si-n tart-ip al-ip*  
 hat-POSS3 and bag-POSS3-ACC draw-CONV AUX-CONV  
*quw-ip žiber-etin-i-n kim oyla-yan?*  
 drive away-CONV AUX-PTCP-POSS3-ACC who think-PTCP3  
 ‘Who would have thought that s/he took over her/his hat and bag and would drive her/him away?’

- (17) *Šegara-ni qorya-w üšin žiber-gen Sibe ult-i-nij*  
 border-ACC protect-VN for send-PTCP Sibe ethnic-POSS3-GEN  
*bir tob-i öz til-i-n umit-pa-yan eken.*  
 one group-POSS3 self language-POSS3-ACC forget-NEG-PTCP INDIR.COP  
 ‘Apparently, a group of ethnic Sibe people who have been sent to protect the border have not forgotten their native language.’

However, in the substitutive clause expressed with -MAy in (18) and in the concomitance clause expressed by -(I)p in (19), aspect notions are not overtly expressed. In both cases, the time reference is only construed through the independent predicates, in which the SoA happened in the past.

- (18) *Televizor kör-mey üy tazala-dı-m.*  
 TV see-NEG.CONV house clean-PST-1SG  
 ‘I cleaned the house without watching TV.’
- (19) *Meni kör-ip üy-den žügir-ip šiq-ti.*  
 I.ACC see-CONV house-ABL run-CONV go out-PST3  
 ‘Seeing me, s/he came running out of the house.’

Nonetheless, as far as analytical constructions expressing present or past progressive and actionality are concerned, almost all non-finite forms of subordinate clauses can take them, and they distinguish actionality and progressive as a result. This is shown by the following examples, where a manipulative CTP *buyir-* ‘to order’ governs the complement clause *kitap oqip turuwya* in (20), signaling non-transformative actionality, while the modal CTP *qažetsiz* ‘needless’ in (21) selects the comple-



ment clause *tüsindirip otıruwım*, which is built with an analytical construction to indicate present progressive.

(20) *Biz-di kitap oqi-p tur-uw-ya buyir-di.*  
 we-ACC book read-CONV AUX-VN-DAT order-PST3  
 ‘The teacher asked us to keep reading the book.’

(21) *Sayan tüsindir-ip otir-uw-im qazetsiz.*  
 you.DAT explain-CONV AUX-VN-POSS1SG needless  
 ‘I do not need to explain it to you right now.’

Almost all subordinate clauses can express notions of actionality, but not all of them can indicate aspect values. Relative clauses and complement clauses governed by knowledge and perception, propositional attitude, and utterance predicates, in which the subordinate predicates are predominantly expressed by the forms *-A//ytIn* and *-GAN*, can denote aspects. As a result, they have a lower degree of morpho-syntactic reduction than other types that cannot distinguish aspect content. In other words, as long as the aspect marking in subordination is taken into account, relative clauses and complement clauses governed by knowledge and perception, propositional attitude, and utterance predicates are less nominalized than the remaining subordinate clauses.

**Negation and voice:** Complement clauses marked by the verbal noun marker *-(I)s* do not convey most verbal features; they cannot distinguish modal, aspect, or actionality notions, and they cannot even be negated. Moreover, the complement clause based on verbal noun *-(I)s* must carry the possessive suffix, and thus its first argument is always explicit, and it can be inferred from the possessive suffix on the dependent predicate. Such constructions have either co-referential or non-coreferential first arguments (see Jumabay & Nevskaya 2021). This can be seen in example (22a), where the complement clause is equipped with *-(I)s*, a possessive and an accusative case marker, and has an explicit argument *ol*. This clause cannot be reflected by verbal operators; adding the negator *-MA* makes the construction unacceptable, as in (22b).

(22a) *Ol žür-is-i-n üde-t-e tüs-ti.*  
 s/he move-VN-POSS3-ACC speed-CAUS-CONV AUX-PST3  
 ‘S/he slightly speeded up her/his walking.’

(22b) \**Ol žür-me-s-i-n üde-t-e tüs-ti.*  
 s/he move-NEG-VN-POSS3-ACC speed-CAUS-CONV AUX-PST3

Similarly, purpose clauses expressed by the converb markers *-GAlI* and *-MAK* are not able to take verbal morphologies such as aspect, modality, and negation markers. Furthermore, these non-finite forms cannot be marked by plural and possessive suffixes. The form *-MAK* is often followed by dative case.

(23) *Tilewbay äke-šeše-si-niñ aqwal-i-n uq-qalı,*  
 Tilewbay parents-POSS3-GEN condition-POSS3-ACC know-CONV  
*mal-dar-ï-n bil-mek-ke Körsay-ya tike tart-ïp*  
 livestock-PL-POSS3-ACC know-VN-DAT Korsay-DAT directly pull-CONV  
*at-pen ayanđa-p kel-di.*  
 horse-POSTP walk-CONV come-PST3  
 ‘In order to learn the condition of his parents and know his livestock, Tilewbay was coming directly towards Korsay and walking slowly with the horse.’ (CNR KZ: 27.02.2020)

The dependent predicates *uqqali* ‘in order to know’ and *bilmekke* ‘in order to know’ of the purpose clauses in (23) cannot take aspect operators or be negated. Their first arguments are co-referential with the main clauses.

The morpho-syntactic reduction can vary across subordinate clauses and outcomes, as summarized in Schema 1:

**Schema 1:** *Morpho-Syntactic Reduction Hierarchy of Subordinate Clauses:*

**Mood and modality** ← **Tense, aspect, actionality** → **Negation and Voice**

Purpose clauses, complement clauses governed by -(I)s > complement clauses governed by Phasal/Modal/Manipulative/Desiderative/Achievement/Commentative complement-taking predicates, Manner/Instrumental, Additive, Substitutive, Concomitance > Conditional, Concessive, Immediate Anteriority, *Terminus a quo*, *Terminus ad quem* > Relative clauses, complement clauses governed by Knowledge/Propositional attitude/Utterance/Commentative CTPs, Causal, Anteriority, posteriority, simultaneity clauses

The symbol “>” indicates a greater degree of morpho-syntactic reduction.

The clause types located before the sign “>” distinguish fewer verbal characteristics of mood, modality, tense, aspect, actionality than those located after “>”. For example, Purpose clauses display fewer clausal features than causal clauses.

#### 4.1.2 Downgrading of syntactic level

In this paper, downgrading of syntactic level is comparable with the layers (periphery, core and nucleus) in the role and reference grammar of Foley and Van Valin (1984), the levels of predicate, predication, proposition and speech act (utterance) in the functional grammar of Dik (1997), and syntactic level as proposed by Lehmann (1988). In functional grammar approaches, illocutionary force operators belong to the utterance layer, mood operators to the proposition layer, and tense operators to the predication layer, while aspect has the narrowest scope, belonging only to the predicate layer. A similar hierarchy of verbal categories as in Schema 1 has been proposed by Bybee (1985: 34). A similar hierarchical structure of verbal categories has been provided in many linguistic theories, e.g. Noonan 2007 [1985], Johanson 2002, Malchukov 2004.

**Schema 2:** *Hierarchy of Verbal Categories*

[[[[[[[V] Valency] Voice] Aspect] Tense] Mood] Agreement].

This layer reads as follows. The further to the right that a category is on the layer, the less likely it is to be encoded on a subordinate predicate. As far as the subordinate clauses are concerned, the subordinate predicates are most likely to be encoded by the innermost layer, e.g. aspect, as opposed to the outermost layer, e.g. mood. As shown above, almost all types of subordinate clauses can be inflected by actionality operators, but only certain types of them can take aspect markers, and therefore subordinate predicates are most easily encoded by the innermost layer, e.g. actionality, rather than by the outermost layer, e.g. aspect.

Regarding the downgrading of syntactic levels, Kazakh subordinate clauses display the syntactic levels of an S-like clause, a clause, a phrase (verbal phrase or noun phrase), or a word (a verb or a noun). In general, all the types of subordinate clauses are located within the main clauses, but at different syntactic levels. Specifically, causal clauses, anteriority clauses, posteriority clauses and simultaneous overlap clauses<sup>4</sup> display the highest syntactic level. However, they are still part of the main clauses. Although the dependent predicates of complement clauses and relative clauses can be marked by modality operators, most modal operators are generally lacking in these two types of predicates. The main reason why complement and relative clauses involve modality interpretation is

4 The dependent predicate formation of these adverbial clauses has been investigated in Jumabay 2022.

that the non-finite forms such as *-(A)r*, *-A//-ytIndAy*, *-(A)rLIKDAy* and *-MAK* are inherently capable of distinguishing modality notions, as examples (14) and (15) show. On the contrary, causal clauses, anteriority clauses, posteriority clauses and simultaneous clauses are structurally more flexible and accept more modality operators than complement and relative clauses do, and thus they exhibit higher syntactic levels of S-like clauses, as examples (8)–(11) show.

Relative clauses, conditional, concessive, immediate anteriority (as soon as), *Terminus a quo* (since), *Terminus ad quem* (until), and the complement clauses governed by the CTPs of knowledge and perception, utterance, propositional attitude manifest second highest syntactic level: clause level. These clauses possess the full structural properties of a clause. Specifically, their dependent predicates can be negated, be inflected by voice markers, and take aspect operators. Moreover, they tend to have independent first actants. See example (24):

- (24) *Oquw bastal-γannan keyin γoy de-y-min, men onı bir ret kör-ge-m.*  
 study start-CONV after PART say-PRES-1SG I s/he.ACC one time see-PTCP-1SG  
 ‘I think, after the beginning of the school year, I probably saw him/her once.’

In (24), the dependent predicate of the anteriority clause is followed by the particles *γoy* and *deymin* to convey the probability that the event in the main clause probably happened after the event in the temporal clause. It should be emphasized that *deymin* has no lexical meaning, and usually it follows the particle *γoy* to express probability. Anteriority clauses possess a full internal clause structure, as well as independent intonation (this will be tested in section 5.3), although their dependent predicates are reduced to a certain degree and are not capable of expressing time reference or modal value.

Complement clauses governed by manipulative, desiderative, modal, phasal, and commentative predicates, and additive, substitutive, manner, instrumental, and concomitance adverbial clauses are at the phrasal, i.e. VP level. The dependent predicates of such clauses are non-finite forms, which are able to take negation, voice and aspect markers (not all of these clauses). However, most of them lack overtly expressed first arguments, and share their first arguments with the main clauses. The dependent predicates of these clauses directly precede the main predicate, superficially forming a complex verb or a verbal phrase. This can be seen in the following examples:

- (25) *Žügir-e žet-ip kel-di.*  
 run-CONV reach-CONV come-PST3  
 ‘S/he came running.’

- (26) *Men bar-uw-dı qala-y-mın.*  
 I go-VN-ACC like-PRES-1SG  
 ‘I want to go.’

In these examples, the dependent predicate of the manner clause *žügire* ‘running’ in (25) and the complement clause *baruwdı* ‘to go’ (26), which is governed by the desiderative CTP *qala-* ‘to like’, are part of verbal phrases whose matrix predicates are the predicates of the main clauses. Both subordinate clauses have no explicit first argument; they take their argument reference from the main clauses. Hence, they can be analyzed as being syntactically on the level of a VP.

Finally, complement clauses based on *-(I)s* and purpose clauses are at the word level, consisting of a single predicate that loses most verbal properties. Their dependent predicates cannot be negated (except in some purpose clauses), or inflected with voice suffixes, and they cannot be marked with aspect, or mood operators. Purpose clauses share their first arguments with the main clauses, while the non-finite form *-(I)s* requires a possessive suffix. Correspondingly, such subordinate clauses have lost

internal clausal features and are beginning to display more nominal than verbal features. These phenomena are shown in examples (22) and (23).

Subordinate clauses that are on the syntactic level of a nuclear verb operator or of a verbal phrase should not be combined with analytical constructions in Kazakh. Analytical constructions, in which two verbs are connected with the converb markers *-A//y* or *-(I)p*, cannot be analyzed as clauses, because such verbal sequences express the various grammatical meanings of only one lexical verb, not two. For instance, they can convey an actionality meaning, e.g. *žila-p žiber-di* [cry-CONV AUX-PST3] ‘burst into tears’, or a viewpoint notion, e.g. *žaz-ıp žatır* [write-CONV AUX-AOR3] ‘s/he is writing (at the moment of reference)’. However, thanks to the multi-functionality of converbs, two-verb sequences can also be pluri-predicate formations, in which both verbs retain their lexical meanings, e.g. *kel-ıp tur-dı* [come-CONV stand-PST3] ‘s/he came and stood’. In this case, the first verb is formally dependent on the last verb, but it is neither embedded in the last verb, nor does it modify it, so their relation cannot be analyzed as subordination. On the contrary, verb sequences joined by the converb *-(I)p*, in which the first verb modifies the circumstances of the second one, are considered manner adverbial clauses, *žila-p qayt-tı* [cry-CONV return-PST3] ‘s/he returned crying’.

The syntactic downgrading hierarchy of subordinate clauses can be summarized as in Schema 3:

**Schema 3:** *The syntactic downgrading hierarchy of subordinate clauses*

**S-like clause ← Clause – Phrase → Word**

Purpose clauses, *-(I)s*-based complement clauses > Additive, Substitute, Manner, Instrumental, Concomitance, Manipulative, Desiderative, Modal, Commentative clauses, and Phasal > Conditional, Concessive, Immediate Anteriority, *Terminus a quo*, *Terminus as quem*, Knowledge and Perception, Utterance, Propositional attitude, Relative clauses > Causal, Anteriority, Posteriority, Simultaneity clauses (The sign “>” means “higher syntactic downgrading than”)

The schema can be read as stating that the purpose and *-(I)s*-based complement clauses display higher syntactic downgrading than causal, anteriority, posteriority, simultaneity clauses.

## 4.2 Semantic features

A subordinate clause may have a co-referential first argument with its main clause, and there is semantic integration between two SoAs, as described for main and subordinate clauses. However, such semantic features can vary within the types of subordinate clauses; i.e. different subordinate clauses of the same type can manifest different semantic features. It should be noted that first argument coreference and semantic integration, which influence the semantics of subordinate clauses, are not purely the result of semantic interaction. In other words, first argument coreference and semantic integration are not exclusively determined by the semantic features of subordinate clauses or main clauses. On the contrary, they are determined by both semantic and syntactic factors, and are therefore mixed or hybrid phenomena. Nonetheless, they are treated as semantic properties of clausal subordination.

### 4.2.1 First argument coreference

Subordinate clauses can have an overt first argument or a first argument that is co-referential with the main clause. Such characteristics are determined by several factors such as inherent structural features, the semantic function of the dependent clauses, and the internal semantics of the matrix predicates. As shown in the previous section, subordinate clauses encoded by non-finite forms such as *-GAn* and *-(I)s*, which require a possessive suffix, can have an overt first argument, and this first argument is not necessarily coreferential with that of the main clauses. This shows that the inherent properties of non-finite forms can affect the argument indexation of main and subordinate clauses. Furthermore, in complement clauses, the semantics of the CTPs can control whether the same or a

different first argument is manifested. As a result, the presence or absence of a coreferential first argument can vary within the types of subordinate clauses. This section examines the first argument of the subordinate clauses.

Some subordinate clauses have no overtly expressed first arguments, and they take their first argument reference from the matrix clauses. A first argument encoded in the nominative or genitive case normally signals that the subordinate clause does not share its first argument with the matrix clause. If the first argument of a subordinate clause is expressed as an oblique object, this shows that the subordinate clause takes its first argument reference from the direct or oblique object of the matrix clause. This will be explained below. The absence of an overt first argument implies that the subordinate clause is structurally more reduced, and is more tightly connected to the main clause than those subordinations which have independent first arguments.

All types of temporal clauses, as well as causal, conditional, and concessive clauses, tend to have independent first arguments which are encoded in the nominative case. The immediate anteriority clause in (27) and the simultaneity clause in (28) have overtly expressed first arguments: *men* ‘I’ in both clauses.

- (27) *Men osi ireniš-im-di blog-im-a šiy-ar-a*  
 I this resentment-POSS1SG-ACC blog-POSS1SG-DAT come out-CAUS-CONV  
*sal-is-i-men, köptegen adam-dar munday äreket-ke*  
 AUX-VN-POSS3-POSTP many person-PL like this action-DAT  
*ölderdey öš eken-i-n bildir-gen.*  
 extremely hate NF.COP-POSS3-ACC express-PTCP3  
 ‘As soon as I posted this resentment on my blog, many people expressed that they hated it abysmally.’ (Ili News: 23.06.2017)

- (28) *Men дәл awla-ya kir-e ber-er tus-ta, ol kezig-e ket-ti.*  
 I just yard-DAT enter-CONV AUX-PTCP moment-LOC s/he meet-CONV AUX-PST3  
 ‘He bumped into me when I was just about to enter the yard.’ (Kharatal: 21.03.2020)

The complement clauses with predicates expressed by the non-finite forms -GAN, -A//-ytIn, -(I)s have either co-referential or non-coreferential first arguments. However, the first arguments of such constructions can be inferred from the possessive suffixes that attach to these non-finite forms.

- (29a) *Men mindet-ti orında-y al-atın-ım-a sen-e-min.*  
 I mission-ACC perform-CONV AUX-PTCP-POSS1SG-DAT believe-PRES-1SG  
 ‘I believe that I can complete the assignment.’

- (29b) *Men seniñ mindet-ti orında-y al-atın-ıñ-a sen-e-min.*  
 I you.GEN mission-ACC perform-CONV AUX-PTCP-POSS2SG-DAT believe-PRES-1SG  
 ‘I believe that you can complete the assignment.’

As (29a) shows, *orınday al-* ‘be able to complete’ does not have an overt first argument. It takes its reference from the subject of the matrix clauses *men* ‘I’, whereas in (29b), the complement clause and matrix clause have different arguments, *men* ‘I’ and *seniñ* ‘you’.

There is a general tendency for overt encoding of the first argument to be missing in complement clauses governed by manipulative, desiderative, achievement, modal and phasal predicates. These types of complement clauses have obligatory control of the first arguments of subordinate clauses by the subjects or objects of the main clauses. In other words, the first arguments of such complement clauses take their first argument reference from either the subject or the object of the matrix clause.

The term “oblique first argument” indicates that the object of the main clauses is the implicit first argument of the subordinate clause. Complement clauses governed by the manipulative predicate *tapsir-* ‘to order’ in (30) and the desiderative predicate *ötin-* ‘to ask for’ in (31) do not have overt first arguments, and thus the direct object of the matrix clause *žumisti* ‘the job’ in (30) and the oblique object of the matrix clause *olardan* ‘from them’ in (31) are the implicit first actants of the CCs. In (32), the first argument of the complement clause *qaytpawımız* ‘our not turning back’, which is assigned by the modal CTP *mümkın* ‘possible’ and its main clause, has a co-referential semantic subject *biz* ‘we’.

(30) *Žumis-ti erteŋ-ge deyin iste-p bol-uw-dı tapsir-dı.*  
 job-ACC tomorrow-DAT until do-CONV BE.COP-VN-ACC order-PST3  
 ‘S/he ordered [someone] to finish the job by tomorrow (should finish).’

(31) *Biz olar-dan tawar baya-si-n säl arzanda-t-uw-dı ötin-di-k.*  
 we they-ABL goods price-POSS3-ACC a bit of reduced-CAUS-VN-ACC ask-PST-1PL  
 ‘We asked them to reduce the price of the goods a little.’

(32) *Biz üy-ge qayt-pa-w-imiz mümkın.*  
 we house-DAT return-NEG-VN-POSS1PL possible  
 ‘It is possible (for us) that we won’t go back home.’

However, insofar as we consider the occurrence of possessive suffixes on the dependent predicates of complement clauses, constructions equipped with the possessive suffix tend to have separate explicit first arguments, and those without the possessive suffix tend not to have explicit first arguments. The “obligatory control” relation in complement clauses is outside the scope of the discussion here. For instance, the complement clauses *meniŋ ketüwimdi* ‘my returning’ in (33a), whose dependent predicate has the possessive suffix, has its own actant *meniŋ* ‘mine’, while the complement clause *ketüwdi* ‘returning’ in (33b) lacks such a feature.

(33a) *Meniŋ ket-üw-im-di qala-ma-dı.*  
 I.GEN go away-VN-POSS1SG-ACC want-NEG-PST3  
 ‘S/he did not want me to leave.’

(33b) *Men ket-üw-di qala-ma-dı-m.*  
 I go away-VN-ACC dream-NEG-PST-1SG  
 ‘I did not want to leave.’

The additive, substitutive, concomitance, manner/instrumental and purpose adverbial clauses share their first arguments with the main clauses, even if the dependent predicates of these clauses are formed with the converbs *-(I)p*, *-A//y* and *-MAy*. In (34), the concomitance clause *salıstıra kele* ‘having compared’, expressed by the primary converb in *-A//y*, has same first argument as its main clause, *men* ‘I’. The manner/instrumental clause *nan satıp* ‘by selling bread’, encoded by the converb *-(I)p* in (35), and the substitutive clause *žürmey* ‘instead of walking’, based on the negative converb *-MAy* in (36), share their first actants with the main clauses.

(34) *Barlıy-i-n salıstır-a kel-e osi-niŋ eŋ zaqsı eken-i-n turaqtandır-di-m.*  
 all-POSS3-ACC compare-CONV AUX-CONV this-GEN most good NF.COP-POSS3-ACC fix-PST-1SG  
 ‘Having compared all the things, I decided this one is the best.’

- (35) *Olar nan sat-ip kün kör-e-di.*  
 they bread sell-CONV live-PRES-3  
 ‘They make a living by selling bread.’
- (36) *Tüzüw žol-men töte žür-mey, qalašiq-tiñ sirt-in-da-yi*  
 straight road-POSTP straight walk-NEG.CONV town-GEN outside-POSS3-LOC-REL  
*aynalma žol-men žür-üw daydili ädet-i e-di.*  
 detour-POSTP walk-VN habitual habit-POSS3 E.COP-PST3  
 ‘It was his custom to take a detour outside the town, instead of walking on a straight road.’ (Ili News: 30.04.2015)

Nonetheless, the purpose clauses based on the secondary converb form *-(U)w üšin* ‘for’ have either shared or non-shared first arguments. The purpose clause *oqi-w üšin* in (37a) has a coreferential first argument *ol* ‘he/she’ together with its main clause, so that the action in the main and subordinate clauses is performed by the same entity. In (37b), however, the purpose clause and its main clause have different first arguments, *meniñ* ‘mine’ and *ol* ‘he/she’.

- (37a) *Ol kitap-ti oqi-w üšin al-di.*  
 s/he book-ACC read-VN for buy-PST3  
 ‘S/he bought the book in order to read it.’
- (37b) *Ol kitap-ti meniñ oqi-w-im üšin al-di.*  
 s/he book-ACC I.GEN read-VN-POSS1SG for buy-PST3  
 ‘S/he bought the book in order for me to read it.’

#### 4.2.2 Semantic integration

Complement clauses function as core arguments of the matrix predicate, are governed by the matrix predicate, and are required to fulfill or satisfy it. Moreover, they are essential entities of the complement of the SoAs described in the main clauses. Within a complex sentence, they occupy the focus position, immediately preceding the matrix predicate. Relative clauses modify a participant of the main clauses. They are neither required nor governed by the matrix predicate, so they are not a very essential part of the complement of the SoAs in main clauses, except in headless relative clauses. They precede the noun constituent they modify, and their position in the main clause is determined by the syntactic function of that nominal constituent. Specifically, if the modified noun is the first argument of the matrix predicate, the relative clause and its head noun occupy the sentence-initial position. If the modified head noun is the core argument of the matrix predicate, they immediately precede the matrix predicate. Adverbial clauses function as circumstantial modifiers of a verbal phrase or main predicate. They are not required by the matrix predicate, except in purpose clauses; instead, they provide further information about the SoAs expressed in the main clauses: the location of the SoAs, and the speaker’s attitude toward, or evaluation of the speech act. Almost all the types of adverbial clauses occupy the sentence-initial position, which specifies the topic of the sentence.

In fact, there is a strong connection between the degree of semantic and syntactic integration. As Givón (2001: 40) suggests, semantic integration between events is reflected in morphosyntactic integration between clauses; i.e., the stronger the semantic connection between the SoAs in two linked clauses, the higher the syntactic integration of the two clauses. Semantic integration between two SoAs is related to the morpho-syntactic encoding of subordinate clauses, such as dependent predicate marking and first argument sharing. If most verbal properties (e.g. aspect, modality, negation) are reduced from a dependent predicate of a subordinate clause, and this subordinate clause shares its main actant with the main clause, it manifests higher semantic integration, and vice versa.

The previous discussion has shown that when complement clauses are governed by phasal, modal desiderative, manipulative, and perception predicates, as well as by purpose clauses, they lose most of their verbal and clausal characteristics, and in most cases, their actants are controlled by the main clauses. Thus we can assume that these types of complement clauses are tightly integrated into their main clauses. Complement clauses that are governed by knowledge, propositional attitude, and utterance predicates retain most of their verbal properties, and they tend to have independent first arguments. Therefore, the SoAs denoted by such clauses are not semantically related to those in the main clauses. Finally, all types of adverbial clauses, except purpose clauses and relative clauses, are not semantically related to main clauses.

**Illocutionary force:** Normally, the main clause of a complex sentence has illocutionary force, which means that all subordinate clauses lack it. Once subordinate clauses acquire independent illocutionary force, they are no longer subordinate; instead, they should be analyzed as independent clauses. As Cristofaro (2005: 32) argues, sentential questions or tag-questions are needed to test whether a clause has its own illocutionary force. If a clause lacks illocutionary force, then it cannot assert information. In Kazakh, the interrogative marker MA normally follows the main predicate to interrogate the whole sentence. It cannot be used after the dependent predicates of subordinate clauses (which usually precede the main clauses). There is an exception, though, namely that the interrogative marker MA can be used after the predicates of causal, anteriority and posteriority subordinate clauses. In such cases, however, the morphological status of the main predicate is transformed. Specifically, if the original main predicates are in the finite form, i.e. in the present or past tense, these finite present or past tense markers -A//y or -DI are changed to non-finite forms -A//ytIn or -GAn when MA is added after the dependent predicates. As a result, both clauses are converted into dependent clauses. Nevertheless, even then, the question marker still interrogates the whole complex sentence, and cannot solely interrogate the subordinate clause. Again, this shows that the complex sentence has only one clause with illocutionary force, and only this main clause contains the asserted information. The subordinate clauses have no such properties. See the following examples:

(38a) *Oquw basta-l-yanda onı kör-di-ŋ be?*  
 study start-PASS-CONV s/he.ACC see-PST-2SG Q  
 ‘Did you see him/her when school started?’

(39a) *Erteŋ düken aš-il-yanda, zat al-uw-ya bar-a-siŋ ba?*  
 tomorrow store open-PASS-CONV thing buy-VN-DAT go-PRES-2SG Q  
 ‘Will you go shopping tomorrow when the store opens?’

In (38a) and (39a) the interrogative marker MA comes after the independent predicates *kördiŋ* ‘you saw’ and *barasıŋ* ‘you will go’, and interrogates the complex sentences in their entirety. MA can be moved to a position after the dependent predicates of simultaneous clauses, as (38b) and (39b) show. However, there is an accompanying structural change in the form of the independent predicates *kördiŋ* ‘you saw’ and *barasıŋ* ‘you will go’, with -DI being replaced by -GAn, and -A//y by -A//ytIn through nominalization. However, moving the interrogative marker in this way does not affect the assertion of the complex sentence. MA still interrogates the sentences as a whole, and not just parts of them. Thus, even the subordinate clauses that display the highest clausal level lack illocutionary force.

(38b) *Oquw basta-l-yanda ma onı kör-gen-iŋ?*  
 study start-PASS-CONV Q s/he.ACC see-PTCP-POSS.2SG  
 ‘Is it (true) that when you saw him/her it was in the beginning of the school year?’



- (39b) *Erteŋ dükēn aš-il-yanda ma zat al-uw-ya bar-atin-iŋ?*  
 tomorrow store open-PASS-CONV Q thing buy-VN-DAT go-PTCP-POSS.2SG  
 'Is it (true) that when the store opens tomorrow you will go shopping?'

The predicates of other types of subordinate clauses that display lower clausal level do not allow the interrogative marker MA to follow them at all. Moving MA to a position after their predicates makes the constructions ungrammatical, as in (40), where the predicate of the conditional clause cannot be followed by an interrogative particle. The particle should be at the end of the main clause.

- (40) \**Men bar-sa-m ba sen üy-de bol-a-siŋ?*  
 I go-COND-1SG Q you home-LOC BE.COP-PRES-2SG  
 Intended meaning: 'Will you be at home if I go away?'

Johanson (1995: 322) argues that adverbial clauses cannot involve assertion; instead, they provide "background information" for the development of the central event in the main clause. The example sentences above show that adverbial clauses do not assert. This is also the case for restrictive relative clauses and complement clauses.

As discussed in the literature (Lehmann 1988; Dik 1997; Crisotofaro 2005; Ishizuka 2008), a non-restrictive relative clause can have an illocutionary force value. In terms of functional grammar, non-restrictive relative clauses do not count as instances of subordination, since they contain an autonomous assertion which differs from that of the main clause. In formal approaches, the relation between the main clause and the non-restrictive relative clause is one of association, not dependency. Since the distinction between restrictive and non-restrictive relative clauses in Turkic languages presupposes no syntactic differences, non-restrictive relative clauses that have their own illocutionary force are irrelevant for our description (for more on restrictive and non-restrictive relative clauses, see Johanson 2021).

**Proposition and predication:** In functional grammar (Dik 1997; Hengeveld 1989; Siewierska 1991), the structure of the clause is seen as consisting of four levels or layers which represent four different structural units specifically predicate, predication, proposition and clause. Each structural unit designates a certain type of entity: a property or relation, SoAs, a possible fact, and a speech act, respectively. An SoA is defined as a state or event, or more precisely, as "the conception of something that can be said (to occur, take place or obtain) in some world". A predication refers to a particular type of SoA, i.e. an action, process, position or state. However, it cannot express a specific SoA itself, unless it is inflected with "spacio-temporal" reference points in the utterance. "In its interpersonal function the predication takes the form of a proposition. It becomes something that can be affirmed or denied, doubted, contradicted, agreed to, disagreed with, insisted on, accepted, rejected, qualified, regretted, remembered and so forth." (Siewierska 1991: 37). Thus, a proposition expresses a belief, knowledge or thought, and refers to a possible fact. The distinction between SoAs and possible facts can be seen by comparing the following examples:

- (41a) *Oniŋ kel-üw-i-n qala-ma-dï-m.*  
 s/he.GEN come-VN-POSS3-ACC want-NEG-PST-1SG  
 'I don't like his/her coming.'
- (41b) *Oniŋ kel-gen-i-n qala-ma-dï-m.*  
 s/he.GEN come-PTCP-POSS3-ACC want-NEG-PST-1SG  
 'I don't like his/her having come.'

(42a) *Oniñ öl-gen-i šindiq.*  
 s/he.GEN die-PTCP-POSS3 truth  
 ‘It was true that s/he died.’

(42b) \**Oniñ öl-üw-i šindiq.*  
 s/he.GEN die-VN-POSS3 truth  
 Intended meaning: ‘It was true that s/he died.’

A SoA *oniñ kelüwin* ‘his coming’ (41a) and a possible fact *oniñ kelgenin* ‘his having come’ in (41b) can be expressed by both -(U)w and -GAN-based CCs. However, the expression *oniñ kelgeni* ‘his having come’ in (42a) is only appropriate in a possible fact construction. As a result, a proposition refers to a possible fact, and it can be evaluated in terms of its truth value; a SoA is a conception of something that can be the case in some world, and it can be evaluated in terms of its existence. The test here is to categorize the subordinate clauses in Kazakh in terms of their inherent semantics for expressing proposition or predication, and the notions of proposition and predication in this paper are slightly different from those in functional grammar. Similar approaches have been applied by Csátó (2010) to Turkish complement clauses.

Relative clauses can be analyzed as propositions, since they are predominantly expressed by the perfect participle -GAN and the imperfect participle -A// -ytIn, which distinguish aspect notions. For example, the expression e.g. *men kör-gen flim* [I see-PTCP movie] ‘the movie which I watched/have watched’ has a truth-value property, since it did indeed happen in the past. Moreover, the relative clause *men bar-atın žer* [I go-PTCP place] ‘the place where I will go’ also has truth-value, since the speaker assumes that the proposition in the relative clause will be the case in the future.

Complement clauses can either have truth-value or not, depending on the morphological status of the dependent predicate and the semantics of the matrix predicate. Roughly speaking, complement clauses expressed by -GAN can denote propositions containing possible facts, whereas -(U)w-based complement clauses are on the level of predication lacking a notion of truth-value, as examples (41a, b) and (42a, b) illustrate. Nevertheless, in some cases, -GAN-based complement clauses cannot involve possible factual value; instead, the actions described in such complement clauses only convey SoAs, and thus they presuppose an identical interpretation with -(U)w-based complement clauses. Such scenarios can be observed in constructions where both -GAN and -(U)w-based complement clauses are governed by the same CTPs. See:

(43a) *Esik-ti žab-uw-dı umit-pa!*  
 door-ACC close-VN-ACC forget-NEG-IMP2SG  
 ‘Do not forget to close the door!’

(43b) *Esik-ti žap-qan-dı umit-pa!*  
 door-ACC close-PTCP-ACC forget-NEG-IMP2SG  
 ‘Do not forget to close the door!’

The two expressions in (43a) and (43b), where the non-finite verbs are formed with -GAN and -(U)w, are acceptable and imply the same interpretation, i.e. state of affairs. Although we expect -(U)w-based complement clauses (and these are considered the most natural expressions), -GAN-based complement clauses still fit the construction.

The various kinds of adverbial clauses denote either propositions or predications, depending on their relation to the main clauses and the circumstances in which they appear. Generally, temporal clauses of simultaneity, anteriority, and posteriority, as well as manner/instrumental, additive, concomitance, concessive and causal clauses, can involve possible facts, in that the actions have truth-

value. Conditional, negative concomitance, substitutive and purpose clauses, on the other hand, do not have truth value, and the SoAs in the adverbial clauses are not realized when the state of affairs in the main clauses happens. In example (44), a concessive clause that combines the conditional marker *-sA* and the modal particle *DA* is presented as factual, because the event of the dependent clause is realized at the point in time when the event of the main clause is realized; i.e. it true that s/he was not qualified.

- (44) *Tolimdi bol-ma-sa da qizimet-ke ornalas-ti.*  
 qualified BE.COP-NEG-COND3 PART job-DAT settle-PST3  
 ‘S/he got the job, although s/he was not qualified.’

Analogously, the additive and concomitance clauses in (45) and (46) have truth value, because in (45) the addressee already has a ticket and in (46) Aray actually saw the speaker.

- (45) *Belet-ij bol-uwdan tis, küwälig-ij de bol-uw-i qazet.*  
 ticket-POSS2SG BE.COP-CONV besides ID-POSS2SG also BE.COP-VN-POSS3 necessary  
 ‘In addition to having your ticket, you must have an ID.’

- (46) *Aray meni kör-ip apa-si-niñ köyleg-i-niñ eteg-in-e tiyil-di.*  
 Aray I.ACC watch-CONV grandmother-POSS3-GEN skirt-POSS3-GEN hem-POSS3-DAT hide-PST3  
 ‘Having seen me, Aray hid behind her grandmother’s skirt.’

Conditional, purpose, negative concomitance and substitutive clauses, on the other hand, have non-factual reference. Dependent SoAs described in the purpose clauses convey intention, desire, wish, willingness, decision or presumption, so they are future-oriented; i.e. they can be presented as future realization. The dependent SoAs *tösekten tüspekši bolsa* ‘if s/he wants to get out of bed’ and *betin žuwmaqši bolsa* ‘if s/he wants to wash his/her face’ in (47) have no truth-value; instead they just refer to an intention to perform such an action.

- (47) *Töse-ten tüs-pekši bol-sa, šaqay-i-n al-ip žet-e-di;*  
 bed-ABL fall-PTCP BE.COP-COND3 shoe-POSS3-ACC take-CONV reach-PRES-3  
*bet-i-n žuw-maqši bol-sa, žili suw dayar*  
 face-POSS3-ACC wash-PTCP BE.COP-COND3 warm water ready  
*bol-a qal-a-di.*  
 BE.COP-CONV AUX-PRES-3  
 ‘If he wants to get out of bed, she brings his shoes; If he wants to wash his face, warm water will be ready (immediately).’ (Tarbagatay News: 20.03.2017)

Likewise, the basic implication of the SoA in negative concomitance is that it does not actually take place, while the main SoA has taken place. It is only an expectation or assumption of the addresser. This can be seen in (48), in which s/he responded to the speaker’s question, but did not look at the speaker. Looking at “me” is only an expectation on the part of the speaker, and thus the event has non-factual reference.

- (48) *Ol mayan qara-may žawap ber-di.*  
 s/he I.DAT look-NEG.CONV answer-PST3  
 ‘S/he answered without looking at me.’

### 4.3 Prosodic features

As stated in the literature (Haiman & Thompson 1984; Givón 2001; Van Valin 1984), when it comes to prosody, the subordinate and main clauses have linked intonation without a break between them. In Kazakh, the intonation of relative clauses and complement clauses is combined with the sentence intonation of their super-ordinate clauses.

The intonation of adverbial clauses can vary depending on their type. In general, most temporal, conditional, concessive, and causal clauses tend to have separate intonations. Manner, instrumental, purpose, substitutive, additive and concomitance clauses fall under the intonation of their main clauses. The conditional clause in (49) has its own intonation, whereas the purpose clause in (50) does not.

- (49) *Eger qus-tar bol-ma-sa, ziyandı qurt-tar köbey-e-di.*  
 if bird-PL BE.COP-NEG-COND.3 harmful worm-PL multiply-PRES-3  
 ‘If there are no birds, harmful worms will multiply.’ (KZ CNR: 05.06.2020)

- (50) *Biz Qazaq til-i-n oqi-yalı kel-di-k.*  
 we Kazakh language-POSS.3-ACC study-CONV come-PST-1PL  
 ‘We came to learn the Kazakh language.’

Nonetheless, depending on the morphological status of specific adverbial clauses, they may have isolated or combined intonations even within the same type. In examples (51) and (52), the simultaneity clause marked with the converb marker -(I)p lacks independent intonation, while the simultaneity clause marked with the converb -GAndA has independent intonation.

- (51) *Kel-e zat-ıp Aray-ya žoliq-ti-m.*  
 come-CONV AUX-CONV Aray-DAT meet-PST-1SG  
 ‘I ran into Aray while I was coming.’

- (52) *Biz stansiya-ya žet-kende, poyez de kel-ip žet-ti.*  
 we station-DAT reach-CONV train too come-CONV reach-PST3  
 ‘When we arrived at the train station, the train arrived too.’

We have observed that adverbial clauses expressed with the primary converbs, i.e. morphologically simple forms such as -(I)p and -A//y, tend to lack dependent intonation, whereas adverbial clauses marked with the secondary converbs, elaborate converbs consisting of participles or verbal nouns, case markers, and/or postpositions or nouns (e.g. -GAnnAn *keyin* ‘after’) tend to have separate sentence intonation.

The absence of isolated intonation patterns in relative, complement and some adverbial clauses in Kazakh absolutely satisfies the cross-linguistic feature of subordinate clauses. However, the feature of having separate intonation construes the adverbial clauses as “less subordinated” in a certain sense, or loosely integrated into the main clauses, and weakly reduces their structural properties than other types, so that they display higher syntactic level than others. These features of adverbial clauses, namely possessing isolated intonation and showing different degrees of downgrading, are also observed cross-linguistically and within individual languages, for example in English (Verstraete 2007) and in 45 languages of Hetterle’s (2016) language sample. It is not necessary to treat adverbial clauses differently from relative clauses and complement clauses, as in traditional Kazakh grammar (clause or constituent). Therefore, we argue that they should be viewed as clauses and studied together with other subordinate constructions, despite the fact that they manifest slightly different clausal structures.

## 5 Concluding remarks

This paper has compared the syntactic, semantic and prosodic features of subordinate clauses to show their semantic and prosodic integration with the main clauses, and their morpho-syntactic reductions within subordinate clauses. In general, due to the properties of left-branching sentences, all types of subordinate clauses are strongly nominalized. Their dependent predicates lose certain verbal features and begin to function as nouns. Nonetheless, various kinds of subordinate clauses exhibit different syntactic properties that can be captured by exploring morpho-syntactic reduction and syntactic downgrading.

The degrees of morpho-syntactic reduction of subordinate clauses are examined in terms of the ability to express clausal characteristics such as tense, aspect, mood, modality and actionality. In general, no subordinations in Kazakh can have independent tense and mood indicators; such properties can only be expressed by independent predicates. The manifestation of degrees of morpho-syntactic reduction in subordinate clauses shows diversity, and the results show that causal, anteriority, posteriority and simultaneity clauses contain more verbal properties, so that their dependent predicates carry aspect, modality, actionality and negation markers. On the one hand, the relative clauses, and the complement clauses governed by knowledge, propositional attitude, and utterance CTPs are capable of expressing aspect and actionality notions, and they can be negated. Only when these CTPs select -(A)r-based complement clauses can they convey modality value. On the other hand, the adverbial types of additive, substitutive, manner/instrumental, and concomitance clauses, and the complement clauses governed by modal, manipulative, desiderative, achievement, and phasal CTPs, lose some verbal properties of distinguishing between aspect and modality notions. Finally, purpose clauses based on -GAI and complement clauses based on -(I)s cannot express all verbal properties, and also they cannot be negated.

Such morpho-syntactic reduction affects the degree of syntactic downgrading of the subordinate clauses, and thus there are considerable differences in the syntactic downgrading within the types of subordination. They vary at the level of clauses, phrases and even words. It was found that the causal, anteriority, posteriority and simultaneity clauses occupy the highest clausal level, as they have the most clausal properties, such as an independent first argument and a verbal predicate inflected for most verbal categories. The conditional, concessive and other types of adverbial clauses, the complement clauses governed by knowledge and perception, propositional attitude, and utterance predicates, and relative clauses, are all at the clause level. Most of these clauses have independent first arguments and verbal predicates that carry relatively more verbal categories. Compared with the previous types, however, they lack some verbal categories, especially modality operators. The manner/instrumental, substitutive, additive, and complement clauses, which are governed by manipulative, desiderative, phasal and modal predicates, are at the verb phrase level, since these types lack an overt first argument. However, their dependent predicates can be inflected by certain verbal operators. Finally, the purpose and complement clauses based on the verbal noun marker in -(I)s are at the word level. In most cases, they do not have overtly expressed first arguments, and their predicates are restricted as far as most verbal features are concerned, so that within a complex sentence they appear as a single word.

As for the semantic properties of subordinate clauses, it can be assumed that the complement clauses are generally tightly integrated with the main clauses, while the relative clauses and adverbial clauses display lower semantic integration. Complement clauses are governed by the matrix predicates, and they normally function as core arguments of the superordinate clauses, occupying the focus positions within complex sentences. The propositions expressed in the complement clauses are semantically relevant to those in the main clauses. Relative and adverbial clauses, however, are not governed by the matrix predicates. They only modify participants of the main clause or verbal phrases or matrix predicates as a whole, respectively. Moreover, they are not semantically related to

the main clause. Within semantic features, first argument sharing and the semantic integration, with or without illocutionary force and truth-value reference, have been studied.

Regarding the first-argument dependency, temporal, conditional, concessive, and causal clauses, and complement clauses governed by knowledge and perception, propositional attitude, and utterance CTPs tend to have an independent first actant, whereas manner/instrumental, substitutive, additive, concomitant, and purpose clauses, and complement clauses governed by manipulative, desiderative, phasal and modal predicates tend to share their first argument with the main clauses. However, this is not a definitive result, and depending on the morphological status of the dependent predicates, other types of clauses may have an independent first argument.

Regarding semantic integration, the ability of subordinate clauses to express illocutionary force, propositions (possible facts) or predications (states of affairs) is considered in terms of functional grammar. Roughly speaking, subordinate clauses cannot have illocutionary force value; this only can be expressed by their main clause. Relative clauses and -GAn-based complement clauses denote propositions with truth-value content, while -(U)w-based complement clauses convey predicates that simply state SoAs. As for adverbial clauses, generally speaking, temporal clauses of simultaneity, anteriority, and posteriority, as well as manner/instrumental, additive, concomitant, concessive and causal clauses can involve possible facts, because the actions have truth-value. Conditional, negative concomitant, substitutive and purpose clauses, on the other hand, have no such value.

In terms of prosody, subordinate clauses may or may not have independent sentence intonation. Complement clauses, relative clauses and certain types of adverbial clauses follow the intonation of main clauses, whereas causal, conditional, concessive and some types of temporal clauses may have separate intonation patterns. Again, these capacities can vary between different types of clauses, or even within the same type of adverbial clauses.

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## Abbreviations

1	first person	LIK	the suffix -LIK
2	second person	LOC	locative
3	third person	NEG	negation
ABL	ablative	NF.COP	non-finite copular <i>eken</i>
ACC	accusative	PASS	passive
AOR	AORIST	PL	plural
AUX	auxiliary verb	POSS	possessive
BE.COP	copular <i>bol-</i> 'to be/become'	POSTP	postposition
CAUS	causative	PRES	present tense
CONV	converb	PST	past tense
COP	copular	PTCL	particle
DAT	dative	PTCP	participle
E.COP	copular <i>e-</i> 'to be'	Q	interrogative
EQUA	equative	REF	reflexive
GEN	genitive	REL	relational suffix in -GI
IMP	imperative mood	SG	singular
INDIR	indirective	VN	verbal noun

### Abbreviations used in the notation of morphophonemic suffix alternations

A	<i>a, e</i>
A//y	<i>a, e, y</i>
D	<i>d, t</i>
G	<i>g, γ, k, q</i>
I	<i>i, i</i>
K	<i>k, q</i>
L	<i>l, d, t</i>
M	<i>m, b, p</i>
U	<i>u, ü</i>
X	<i>i, i, u, ü</i>

### Further abbreviations

CNR KZ	China National Radio of Kazakh
KG	Kazakh Grammar
KZ	Kazakh
MKL	Modern Kazakh Language

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