Clause Linkage In Ket

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Chapter 5. Complement relations

The present chapter is concerned with the coding of complement relations in the Ket language.

The chapter is organized in the following way. In section 5.1, we outline the general typology of complement relations. Section 5.2 considers the morphosyntactic properties of complement relations in Ket. In Section 5.3, we survey complement taking predicates and their semantics in the language. Section 5.4 provides a summary and conclusions to the chapter.

5.1 Typology of complement relations

In the linguistic literature, complementation is traditionally referred to as the syntactic situation in which a subordinate clause functions as an argument of the predicate in the main clause (cf. Noonan 2007: 52, Horie and Comrie 2000: 1). Consider, for example, the Russian sentences in (5.1) and (5.2).

(5.1) Russian

Ja xoču <moroženogo>

'I want an ice-cream.'

(5.2) Russian

Ja xoču <tebe verit'>

'I want to believe you.'

Both the noun <*moroženogo*> 'ice-cream' and the infinitive clause <*tebe verit'*> 'to believe you' serve as an object argument of the transitive predicate *xoču* 'want'. In such cases, the infinitive clause in (5.2) is said to be syntactically embedded within its main (or matrix) predicate.

The traditional view on complementation has been often criticized for being strictly tied to the notion of syntactic embedding (for example, Dixon 1995, Thompson 2002, Cristofaro 2003). As typological studies have shown, embedded clauses, which are typical instances of complementation in modern Indo-European languages, are not found in many of world's other languages. Instead, in identical conceptual situations,

many of these languages tend to employ various non-embedded structures (cf. Cristofaro 2003: 95ff). Dixon (1995) explicitly draws a distinction between complement clauses and the so-called 'complementation strategies'. According to him, a 'true' complement clause is a clause that fulfills the following two grammatical criteria: a) it has the internal constituent structure of an independent clause with regard to core argument marking, and b) it functions as an argument of the main clause. Other grammatical mechanisms that can serve to express the range of semantic concepts coded by complements belong to 'complementation strategies'. Here belong nominalization, serial verb constructions, paratactic clauses, participial constructions, etc.

Unlike Dixon, Noonan in his work on complementation subsumes both complement clauses and complementation strategies under one umbrella term 'complement type'. He identifies a complement type by the following main criteria (1) the morphology of the predicate, (2) the expression of syntactic relations between the predicate and its arguments, and (3) the syntactic relation of the complement construction as a whole with the rest of the sentence (Noonan 2007: 54-55).

The first criterion is concerned with whether the predicate of a complement type is reduced or non-reduced, i.e. whether it is morphologically the same as the one in the main clause or in some way different with respect to argument and/or tense marking. See, for example, sentences from Lango, a Nilotic language, in (5.3) and (5.4).

(5.3) Lango

àtîn òpòyò <nî àcégò dɔ́ggɔ́lâ>

àtîn	òpòyò	nî	àcégò	dɔ́ggɔ́lâ
child	remembered.3SG	COMP	closed.1SG	door

'The child remembered that I closed the door.' (Noonan 2007: 54)

(5.4) Lango

àtîn òpòyò <cèggò dɔ́ggɔ́lâ>

àtîn	òpòyò	cèggò	dɔ́ggɔ́lâ
child	remembered.3SG	close.INF	door

'The child remembered to close the door.' (Noonan 2007: 54)

In (5.3), the predicate *àcégò* '(I) closed' in the complement clause is marked for tense and person in the same way as the main predicate *òpòyò* '(he) remembered', i.e. it is morphologically non-reduced. In Noonan's terms such a complement type is called a sentence-like (or S-like) complement. The other non-reduced complement types include paratactic[72] and verb-serialization complements. A morphologically reduced complement type is illustrated in (5.4) in which the predicate *cèggò* 'to close' is marked as an infinitive and stripped of all relevant tense/person distinction. The other reduced complement types distinguished by Noonan are nominalized and participial complements (Noonan 2007: 70-74).

In his work, Noonan also discusses a special type of reduced complements called clause union (CU). In a clause union the main and complement predicates share one set of grammatical relations, as exemplified in (5.5).

(5.5) French

Roger laissera manger les pommes à Marie

Roger	laissera	manger	les	pommes	à	Marie
Roger	let.3SG.FUT	eat.INF	the	apples	to	Marie

'Roger will let Marie eat the apples.' (Noonan 2007: 84)

In this sentence both the main predicate *laissera* and the complement predicate *manger* are merged together, so that they share one set of arguments: *Roger* functions as subject, *les pommes* as direct object and *à Marie* as indirect object of the whole construction. There is also a more extreme variation of CU called lexical union (LU). In LU both predicates are merged to the extent of becoming a single lexical unit, in which the complement taking predicate (i.e. the main predicate) is reduced to an affix on the complement predicate. An example of LU is represented in (5.6) below.

(5.6) Georgian

Me mas movatanine

me	mas	movatanine
I	him	come.CAUS

'I made him come.' (Noonan 2007: 86)

[72] The difference between a paratactic complement type and an S-like type is the presence of a complementizer in the latter case. Complementizers are discussed below.

The affix representing the complement-taking predicate in LU cannot be viewed as another predicate because it cannot stand alone and take any argument/tense marking. Therefore LU cannot be considered as a complement type. Nevertheless, it will be discussed in our work, because it is a rather widespread means in Ket to express some semantic types of complement-taking predicates.

The second criterion used by Noonan to identify a complement type deals with whether the subject of a complement predicate is the same as or different from the one in the main clause. Consider the examples from Russian:

(5.7) Russian

Ja xoču <ego ubit'>

'I want to kill him.'

(5.8) Russian

Ja xoču, <čtoby ty ego ubil>

'I want you to kill him'

In (5.7), the subject of the predicate in the main clause and the subject of the predicate in the complement clause are the same (*ja* 'I'), while in (5.8) the subject of the main predicate is different from that of the complement predicate (*ja* 'I' vs. *ty* 'you.SG'). These examples also illustrate a general tendency to reduce the subject of the predicate in complement clauses, if it coincides with the one in the main clause. If the subjects are different, they both are retained in the sentence.

The last criterion concerns the grammatical role of the complement type in the main clause. The complement type can function as either a subject or an object of the main predicate. The latter has been already mentioned in (5.2) above, in which the infinitival complement functions as an object of the predicate *xoču* 'want'. The subject function of the complement type is illustrated in the example below, in which the complement clause *<čto on byl xolodnyj>* is the subject of the predicate *napugalo* 'frightened'.

(5.9) Russian

Menja napugalo, <čto on byl xolodnyj>

'His being cold frightened me.'

In many languages complement types often have a special element (it can be a word, particle, affix, etc.) whose function (or one of the functions) is to identify the given entity as a complement (Noonan 2007, Givón 2001). Such elements are usually known as complementizers, for example, the Russian *čtoby* and *čto* in (5.8) and (5.9), respectively, or the particle *to* in front of the infinitive complement in '*I want <to kill him>*' from example (5.7). Some complement types may have more than one complementizer associated with them, others may have no complementizer at all (Noonan 2007: 55). The latter can be seen in the Lango example (5.4) above, as well as in the Russian sentence in (5.7) and in the English translation in (5.9). Example (5.10) from Yaqui, an Uto-Aztecan language, illustrate a complement type with two complementizers:

(5.10) Yaqui

Tuisi tuʔi ke hu hamut bwika-kai

tuisi	tuʔi	ke	hu	hamut	bwika-kai
very	good	COMP	the	woman	sing-COMP

'It's very good that the woman sings.' (Noonan 2007: 57)

In some cases, the occurrence of complementizers may also be optional or determined by the context, as in (5.11).

(5.11) Russian

Ja znaju, (čto) on prišël

'I know (that) he came.'

The use of the complementizer *čto* 'that' is optional in the Russian sentence, as well as in its English counterpart.

From a diachronic point of view, complementizers usually originate from various sources like pronouns, adpositions, case markers, conjunctions, or even verbs (Noonan 2007: 57). Therefore they may often coexist in a language with their sources, like, for example, the complementizer *čto* and its source, the interrogative

pronoun *čto*, in Russian, or the complementizer *that* and the demonstrative pronoun *that* in English.

It is important to mention that there is a restricted set of verbs that are capable of taking complements. Such verbs are called complement-taking predicates (CTP). There are various kinds of classification of these predicates, with various degrees of elaboration, depending on the general semantics they express. For example, Givón (1990) distinguishes between three major classes of CTPs: modality, manipulative and cognition-utterance. Noonan (2007), on the other hand, provides a more detailed classification distinguishing the following semantic classes: (1) modal predicates (like *must, can, may, be able,* etc.), (2) phasal predicates (like *start, begin, stop, continue,* etc.), (3) manipulative predicates (like *order, make, persuade,* etc.), (4) desiderative predicates (like *want,* etc.), (5) immediate perception predicates (like *see, hear,* etc.), (6) predicates of knowledge and acquisition of knowledge (like *know, understand, realize,* etc.), (7) propositional attitude predicates (like *think, understand, believe,* etc.), (8) utterance predicates (like *say, tell,* etc.), (9) commentative predicates (factives) (like *regret, be sorry, be sad,* etc.), (10) predicates of fearing (like *fear*, *be afraid,* etc.), (11) achievement predicates (like *manage, chance, try,* etc.), (12) pretence predicates (like *imagine*, *pretend*, etc.), (13) negative predicates, and (14) conjunctive predicates. It is often noted that the degree of reduction found in complements used with a CTP correlates with the semantics class this CTP belongs to (Noonan 2007; Givón 2001; see also Figure 5.1 below).

5.2 Morphosyntactic properties of complement constructions in Ket

In this section we will examine complement constructions in Ket with respect to their morphosyntactic properties such as the morphology of the predicate, the syntactic relations of the predicate with its arguments and the syntactic relations of complement types with the main predicate. But before turning to the complement types, we will consider the native complementizers *esaŋ* and *bila*.

5.2.1 The complementizer *esaŋ*

The complementizer *esaŋ* originates from the relational morpheme *esaŋ* with translative meaning. When used with nouns it usually indicates the "goal" of a verbal action (with verbs of becoming, transforming, producing, and the like). It may also encode the "role" of a human being (Georg 2007: 115). Examples (5.12)-(5.14) illustrate the use of this relational morpheme with nouns.

(5.12) *bū ér^{j}ɛs^{j}aŋ átɔnɔq*

bū	ed-esaŋ	a^{6}-t^{5}-o^{4}-n^{2}-oq^{0}
3SG	sable-TRANSL	3SG^{6}-TH^{5}-PST^{4}-PST^{2}-become.PST^{0}

'He turned into a sable.'

(5.13) *āt bɔ́ɣɔn úl^{j}ɛs^{j}aŋ*

ād	bo^{6}-k^{5}-o^{4}-{n^{2}}-{de}n^{0}	ul-esaŋ
1SG	1SG^{6}-TH^{5}-PST^{4}-PST^{2}-go^{0}	water-TRANSL

'I went for water.'

(5.14) *bū pɛršipɛs^{j}aŋ dal^{j}ɔvɛrɔl^{j}bɛt*

bū	peršip-esaŋ	da^{7}-lobed^{7}-o^{4}-l^{2}-bed^{0}
3SG	doctor.RUS-TRANSL	3F^{8}-work.RUS.ANOM^{7}-PST^{4}-PST^{2}-ITER^{0}

'She worked as a doctor.'

The most common functional extension of this relational morpheme in Ket is that of a purposive marker used in adverbial clauses, as in (5.15).

(5.15) *nanbarilgɛtin tavɨŋaj ɛijŋ-ɛsaŋ*

nanbed^{7}-il^{2}-ked^{0}-in^{-1}		tabaŋaj	eijŋ-esaŋ
bread.make.ANOM^{7}-IMP^{2}-ITER^{0}-AN.PL^{-1}		hunt.ANOM	go.ANOM-TRANSL

'Make bread in order to go for a hunt.' (Belimov 1973: 135)

As a complementizer, *esaŋ* is used mostly with complements of desiderative predicates, like in (5.16).

(5.16) *bū usqat-ɛs^{j}aŋ dujɔtɔs^{j}*

bū	usqat-esaŋ	du^{8}-o^{1}-tus^{0}
3SG	warm.ANOM-TRANSL	3^{8}-3SG.SS^{1}-intend^{0}

'He wants to get warm.' (Belimov 1973: 23)

The use of *esaŋ* in the complementizing function is not obligatory and it can, in principle, be omitted, compare, for example, (5.16) and (5.17).

(5.17) *āt kɛrʲa taʁaj dittusʲ*

ād	ked-da	taqaj	di^{8}-d{i}^{1}-tus^{0}
1SG	person-M.POSS	hit.ANOM	1^{8}-1SG.SS^{1}-$intend^{0}$

'I want to hit the man.'

5.2.2 The complementizer *bila*

The complementizer *bila* is the functional extension of the interrogative adverb *bila* 'how'. Example (5.18) illustrates the interrogative function of this adverb.

(5.18) *bílʲa ū kúɣadaq?*

bila	ū	ku^{8}-k^{5}-a^{4}-daq^{0}
how	2SG	2^{8}-TH^{5}-NPST^{4}-$live^{0}$

'How do you live?'

The use of *bila* in the complementizing function is illustrated in (5.19).

(5.19) *ássanɔsʲ tɔ́lʲuŋ bílʲa ássɛlʲ ɔɣɔ́n*

assano-s	{du^{8}}-t^{5}-l^{2}-$oŋ^{0}$	bila	assel	o^{6}-k^{5}-o^{4}-{n^{2}-de}n^{0}
hunt.ANOM-NMLZ	3^{8}-TH^{5}-PST^{2}-see^{0}	how	animal	3M^{6}-TH^{5}-PST^{4}-PST^{2}-go^{0}

'The hunter saw how the animal went away.'

It seems fair to assume that the complementizing use of the interrogative adverb *bila* is the calque from the Russian language, where interrogative adverbs are a common source of subordinators. It is the case, for example, with the Russian interrogative adverb *kak* 'how' that can be used as a complementizer with various complement taking predicates (5.20).

(5.20) Russian

Ja videl ***kak on uxodil***

'I saw him leaving (lit. **how he was leaving**).'

As we can see in (5.20), *kak* introduces the complement of the verb *videl* 'saw'.

The fact of calquing in the case of *bila* is also corroborated by the existence of more obvious calques in the domain of subordinators, see, for example, *aska* (Section 6.2.2.2.1).

5.2.3 Complement types in Ket

There are two main complement types in Ket, one involving S-like clauses, the other – action nominal clauses. Both general types can be further divided into several subtypes. They will be considered in order.

5.2.3.1 S-like complement type

A sentence-like or S-like complement clause has the same syntactic form as a main clause and can in principle stand on its own as an independent sentence. This complement type can be used paratactically or in combination with the complementizers.

5.2.3.1.1 Paratactic S-like complement

The most frequent complement type in Ket is a paratactic S-like clause. In the paratactic complement construction both main clause and complement clause are juxtaposed to each other without any connecting element. Such complement clauses are rather frequent in polysynthetic languages (cf. Mithun 1984, 1988). Examples (5.18) and (5.19) illustrate this complement type in Ket.

(5.21) *āt itpɛrɛm kɛˀt duːnɔ*

ād	it^{7}-ba^{6}-d{i}^{1}-am^{0}	keˀd	du^{8}-o^{4}-n^{2}-{q}o^{0}
1SG	know^{7}-1SG^{6}-1SG^{1}-R^{0}	person	3SG^{8}-PST^{4}-PST^{2}-die^{0}

‘I know (that) the man died.’

(5.22) *ad daɣudɔ ab kit qutkə dɔɻətən*

ād	d{i}^{8}-a^{6}-k^{5}-a^{4}-do^{0}	āb	keˀd	qotka	d{u}^{8}-o^{4}-l^{2}-a^{1}-tan^{0}
1SG	1^{8}-3M^{6}-TH^{5}-NPST^{4}-watch^{0}	my	person	ahead	3^{8}-PST^{4}-PST^{2}-3SS^{1}-stop^{0}

‘I watched my friend stop ahead of me (lit. I watched him, my friend stopped ahead of me)’.

(Ivanov et al. 1969: 217)

5.2.3.1.2 S-like complement with *esaŋ*

S-like complements can be also marked with the complementizer *esaŋ* which occurs postposed to the complement clause. Other than that, the clause remains the same as a main one. In many cases, the use of *esaŋ* is optional. Example (5.23) illustrates this complement type.

(5.23) *dīlʲ āt dʌ́lʲabɔ̀ɣɔʁɔs-ɛsaŋ díttus*

dīl	ād	d{i}^{8}-əla^{7}-bo^{6}-k^{5}-o^{4}-qos^{0}-esaŋ		di^{8}-d{i}^{1}-tus^{0}
child	1SG	1^{8}-outside^{7}-1SS^{6}-TH^{5}-3SG.M^{4}-take^{0}-TRANSL		1^{8}-1SG.SS^{1}-intend^{0}

'I want to take the child out' (Kotorova and Nefedov, forthcoming)

5.2.3.1.3 S-like complement with *bila*

This subtype is a calque from the Russian language (cf. 5.2.2). The use of *bila* with S-like complement clauses is optional. Example (5.24) provides an illustration of this complement type.

(5.24) *qímarʲa tɔ́luŋ bíla āb ōp saʾq díʁɛj*

qima	da^{8}-t^{5}-o^{4}-l^{2}-oŋ^{0}	bila	āb	ōb	saʾq	d{u}^{8}-i^{6}-q^{2}-ej^{0}
grandma	3F^{8}-TH^{5}-PST^{4}-PST^{2}-see^{0}	how	my	father	squirrel	3M^{8}-3F^{6}-PST^{2}-kill^{0}

'Grandmother saw my father killing a squirrel.'

5.2.3.2 Action nominal complement type

Action nominals represent the second general complement type in Ket. As we already mentioned in Chapter 2, action nominals are a word class in Ket that subsumes functions typical of infinitives, participles and gerunds in other languages (see Section 2.2.7 for more discussion). It is thus not surprising that they often occur as complements of various CPTs. Contrary to S-like clauses, the morphology of this complement type is heavily reduced, since these forms show no tense/aspect marking. As complements, action nominals can be used both without any special marking, and with the complementizers *esaŋ* and *bila*.

5.2.3.2.1 Bare action nominal complement

This type of complements involve an action nominal without any additional marking. The following example illustrates this complement type:

(5.25) *dɛ́ŋna ássanɔ bínut*

deŋ-na	assano	b{in}^{7}-{b^{3}}-in^{2}-{q}ut^{0}
people-AN.PL.POSS	hunt.ANOM	self^{7}-3N^{3}-PST^{2}-finish^{0}

'People finished hunting (lit. People's hunting finished).'

As can be seen from the example, the subject of the complement clause in this type is marked as a possessor and the complement clause itself is cross-referenced on the main predicate *bínut* '(it) finished'.

5.2.3.2.2 Action nominal complement with *esaŋ*

Action nominals in complement clause can also in principle be marked with *esaŋ*. As with S-like complements, the use of the marker *esaŋ* is optional in many cases. This type of complements is illustrated in (5.26).

(5.26) *hiˀp daōp suːlʲbɛrʲɛsʲaŋ datpilʲa*

hiˀb	da-ōb	suːlbed-esaŋ	d{u}^{8}-a^{6}-t^{5}-b^{3}-l^{2}-a^{0}
son	M.POSS-father	sled.make.ANOM-TRANSL	3^{8}-3M^{8}-TH^{6}-3N^{3}-PST^{2}-ask^{0}

'The son asked his father to make sleds.' (Zinn 2006)

5.2.3.2.3 Action nominal complement with *bila*

The complementizer *bila* can also be combined with an action nominal, as shown in (5.27).

(5.27) *sīnʲ báàm ɛnʲdirʲunʲsʲɔŋ bilʲa kʌˀj*

sīn	báàm	en^{7}-did^{4}-n^{2}-soŋ^{0}	bila	kəˀj
decrepit	old.woman	R^{7}-3F^{4}-PST^{2}-forget^{0}	how	walk.ANOM

'The decrepit old woman forgot how to walk.'

(Kotorova and Nefedov, forthcoming)

Note that, like in the case of the above mentioned *bila* construction (cf. 5.2.3.1.3), this complement type is a calque from Russian, where the verb *zabyvat'* 'forget' takes a functionally similar complement, i.e. '*kak* + infinitive' (5.28).

(5.28) Russian

Ja zabyl ***kak xodit'***

'I forgot **how to walk**.'

5.3 The semantics of complement taking predicates

In this section we will discuss semantic classes of complement-taking predicates in Ket. We were able to identify the following complement-taking predicates in Ket (based on Noonan 2007):

- modal
- phasal
- manipulative
- desiderative
- perception
- knowledge
- propositional attitude
- utterance
- commentative
- achievement

5.3.1 Modal predicates

Modal predicates are restricted to verbs expressing ability, obligation, permission and necessity (such as English *must, can, may, be able,* etc.) (Noonan 2007: 137-138). Unlike English, Russian and many other languages, Ket lacks verbs which are exclusively modal in meaning. Instead, it makes use of verbs meaning 'to know' and 'to understand' as well as some other means to express these modal concepts. Let us consider them in order.

The most common way of expressing the concept of ability in Ket is the use of the irregular verb *it*^{7}*-[l*^{2}*]-am*^{0} 'to know'. The verb has two slots filled by agreement markers, but nonetheless is morphologically intransitive, because both slots cross-reference the subject, as can be seen in (5.29).

(5.29) *ēn āt túrɛ ítpɛrɛm*

ēn	ād	tu-de	it^{7}-ba^{6}-d{i}^{1}-am^{0}
now	1SG	this-N	know^{7}-1SG^{6}-1SG.SS^{1}-R^{0}

'Now I know it.'

In (5.29), both *-ba-* in P6 and *-di-* in P1 refer to the 1st person singular pronoun *ād*, while the pronoun *tude* 'this' does not get cross-referenced on the verb at all. If *it*^{7}*-[l*^{2}*]-am*^{0} is used with an animate object, it obligatorily requires the presence of a special relational marker *qoŋ* < *qoˀŋ* 'image, appearance'.

(5.30) *āt tūr kétda qɔ́ŋ ítpɛrɛm*

ād	tū-d	ked-da	qoŋ	it^{7}-ba^{6}-d{i}^{1}-am^{0}
1SG	this-M	person-M.POSS	image	know^{7}-1SG^{6}-1SG.SS^{1}-R^{0}

'I know this man (lit. I recognize this man's appearance).'

When used as a modal predicate, the verb *it*^{7}*-[l*^{2}*]-am*^{0} generally takes complements in the form of action nominals, as exemplified in (5.26)

(5.31) *bū dèrʲ itɛlɛm*

bū	dèd	it^{7}-a^{6}-l^{2}-am^{0}
3SG	read.ANOM	know^{7}-3M^{6}-PST^{2}-R^{0}

'He can (=knows how to) read.' (Belimov 1973: 25)

It can also take a finite clause complement marked with *esaŋ* as in (5.32), although such constructions are much less frequent.

(5.32) *bū ɛtalʲam duːbdɛt-ɛsʲaŋ*

bū	it^{7}-a^{6}-l^{2}-am^{0}	du^{8}-b^{3}-ded^{0}-esaŋ
3SG	know^{7}-3M^{6}-PST^{2}-R^{0}	3^{8}-3N^{3}-read^{0}-TRANSL

'He can read.' (Ščipunova 1975: 77)

Apart from expressing abilities which can be referred to as purely mental (like reading, speaking, etc.), the use of *it*^{7}*-[l*^{2}*]-am*^{0} has been extended to cases where a mental ability is accompanied by a physical one, as in (5.33)-(5.35).

(5.33) *bū sùj ítɛlɛm*

bū	sùj	it^{7}-a^{6}-l^{2}-am^{0}
3SG	swim.ANOM	know^{7}-3SG.M^{6}-PST^{2}-R^{0}

'He can swim.'

(5.34) *dum itɛlɛm kɨɣ*

dūm	it^{7}-a^{6}-l^{2}-am^{0}	kīk
bird	know^{7}-3SG.M^{6}-PST^{2}-R^{0}	fly.

'The bird can fly.' (Belimov 1973: 25)

(5.35) *at su:l itpɛdɛm bɛ:da*

ād	súùl	it^{7}-ba^{6}-d{i}^{1}-am^{0}	bèd
1SG	sled	know^{7}-1SG^{6}-1SG.SS^{1}-R^{0}	make.ANOM

'I can make a sled.' (Belimov 1973: 25)

The example (5.34) also shows that the action nominal complement can be placed after the matrix clause, whereas in (5.35) the matrix verb separates the parts of the complement clause.

While a verb meaning 'to know' is the most commonly documented lexical source for ability predicates among the world's languages (Bybee, Perkins, and Pagliuca 1994: 190), the grammaticalization of a verb with the meaning 'to understand' seems to be rather infrequent, albeit quite acceptable logically. The sentences in (5.36)-(5.37) illustrate this case in Ket.

(5.36) *āt askatij dabátɛvɛt*

ād	askatij	da^{8}-ba^{6}-t^{5}-a^{4}-bet^{0}
1SG	speak.ANOM	IC^{8}-1SG^{6}-TH^{5}-NPST^{4}-understand^{0}

'I can speak.'

(5.37) *āt dabátɛvɛt túdɛ bèd*

ād	da^{8}-ba^{6}-t^{5}-a^{4}-bet^{0}	tu-de	bèd
1SG	IC^{8}-1SG^{6}-TH^{5}-NPST^{4}-understand^{0}	this-N	make.ANOM

'I can make it.' (Georg 2007: 305)

The verb *da^{8}-t^{5}-[n^{2}]-bet^{0}* belongs to '*da*-intransitives' which have a petrified marker *da-* in position 8 (cf. 2.2.8.1.3.1). Interestingly, there is no way to translate sentences

like ‘I understand X’ into Ket other than as ‘I understand X’s words, speech, etc.’, see (5.38).[73]

(5.38) *āt ūk qáàn dabátɛvɛt*

ād	ūk	qáàn	da^{8}-ba^{6}-t^{5}-a^{4}-bet^{0}
1SG	2POSS	word.PL	IC^{8}-1SG^{6}-TH^{5}-NPST^{4}-understand^{0}

‘I understand you (lit. your words).’

Compared to *it^{7}-[l^{2}]-am^{0}*, the verb *da^{8}-t^{5}-[n^{2}]-bet^{0}* seems to be less grammaticalized in the modal function, since it is used much more seldom and is in principle restricted to conveying the notion of mental ability, as in (5.36) above. Although Werner (2002, II: 225) provides an example similar to that in (5.39), our language consultants felt rather uncertain about it.

(5.39) *āt sʲùj dabátɛvɛt*

ād	sùj	da^{8}-ba^{6}-t^{5}-a^{4}-bet^{0}
1SG	swim.ANOM	IC^{8}-1SG^{6}-TH^{5}-NPST^{4}-understand^{0}

‘I can swim.’ (Werner 2002, II: 225)

Another possible way to express the notion of ability (or disability) in Ket is by using special non-verbal modal predicates. These predicates include *itej* (and its variant *hɨtej*) ‘can, may’ and *qoŋan* ‘not be able’. Unfortunately, our language consultants could not recognize these words; neither could we find them in the existing Ket texts. Therefore our description is based only on the examples found in the literature, mostly in Werner’s (2002) dictionary.

According to Werner (2002, I: 384) the original meaning of *itej* is ‘to know’ (cf. the verb *it^{7}-[l^{2}]-am^{0}* ‘know’ above). The word form itself resembles an action nominal due to the presence of the morpheme *-ej*. As Belimov (1973: 65ff.) states, the action nominals formed with the help of the morpheme *-aj* (and its variants *-ej*, *-ij*, *-oj*) are one of the most common in Ket. The origin and meaning of the morpheme seems to

[73] It should be noted that in the past tense forms the initial *b* of the root morpheme *-bet* is metathesized with the past marker *-n-* in position 2 creating an impression of the presence of the inanimate marker *-b-* in slot 3 (Edward Vajda, p.c.). For example, *dabátomnet* [da^{8}-ba^{6}-t^{5}-o^{4}-b^{3}-n^{2}-et^{0} IC^{8}-1SG^{6}-TH^{5}-PST^{4}-PST^{2}-understand$^{3/0}$]. Vajda and Zinn (2004: 94) explicitly analyze this verb as having two lexicalized markers, namely, involutinary causative markers, since they cannot change to reflect an animate class source argument. Georg (2007: 304ff.) likewise parses this verb as having *-b^{3}-*.

be obscure. Despite this striking resemblance, the existing examples show that the word *itej* can function like a real modal predicate taking an action nominal (5.40) and a paratactic clause (5.41) as its complements.

(5.40) *āt turʲɛ bānʲ bè:rʲi ítɛj*

ād	tu-de	bān	bèd	itej
1SG	this-N	NEG	make.ANOM	can

'I cannot make it.' (Werner 2002, I: 384)

(5.41) *ād bān dáddij ítɛj*

ād	bān	d{i}^{8}-a^{4}-d{i}^{1}-dij^{0}	itej
1SG	NEG	1^{8}-NPST^{4}-1SG.SS^{1}-come^{0}	can

'I cannot come.' (Werner 2002, I: 384)

In (5.40), the complement of *itej* is the action nominal *bèd* 'make, do'. Note also the presence of the 1st person singular pronoun *ād* which, quite unexpectedly, does not trigger any relevant cross-reference in the sentence.[74] Another interesting and a very unusual property is that according to the existing examples *itej* seems to derive time reference from its complement. Compare the examples (5.41) and (5.42).

(5.42) *ād dɔ́ndidij bānʲ itɛj*

ad	d{i}^{8}-o^{4}-n^{2}-di^{1}-dij^{0}		bān	itej
1SG	1SG^{8}-PST^{4}-PST^{2}-1SG.SS^{1}-come^{0}		NEG	can

'I could not come.' (Werner 2002, I: 384)

In both (5.41) and (5.42), *itej* remains unmarked, it is the verb *-dij*^{0} 'come' in the complement clause that bears the tense distinction transferred to the whole sentence: non-past in (5.41) and past in (5.42).

Although, in the above examples, *itej* does not take any additional markers, Werner (2002) lists a few examples in which *itej* is used with the inanimate predicative marker *-am*, as shown in (5.43) and (5.44).

[74] In principle, it is possible to assume that the form *itej* is a special suppletive 1st person singular form of a finite verb. Unfortunately, this hypothesis cannot be tested, since apart from *itejam*, which is an inanimate predicate form, all the examples with *itej* in Werner (2002) are given with the 1st person singular pronoun.

(5.43) *qɔ̀sʲ itɛjam*

qɔ̀s	itej-am
take.ANOM	can-N.PRED

'One can take (lit. Taking is possible).' (Werner 2002, I: 384)

(5.44) *diliŋ itɛjam*

d-iliŋ	itej-am
N.POSS-eat.ANOM	can-N.PRED

'One can eat it (lit. Its eating is possible).' (Werner 2002, I: 384)

The next modal predicate *ḣitej* (or *hitej*) originates from the particle *ḣi* 'yet, already' + *itej* (Werner (2002, I: 346). It was recorded only with the predicative markers in contexts similar to (5.43) and (5.44). No examples with contexts similar to (5.40)-(5.42) above are available.

(5.45) *kirʲ ɔksʲ ʌːŋ ḣitlɛm da aspuntɛt ḣitajam*

kī-d	ōks	ə́ə̀n	ḣitl-am	da	asbunted	ḣitej-am
this-M	tree	branches	low-3N.PRED	M.POSS	climb.ANOM	already.can-N.PRED

'This tree has branches close to the ground, it's possible to climb it (lit. its climbing is possible).'

(Belimov 1973: 25)

This predicate can also be used to express permission:

(5.46) *tudɛ ɛ́ɛ̀lʲd iliŋ ḣitɛjam*

tu-de	ɛ́ɛ̀l-d	iliŋ	ḣitej-am
this-N	berry-N.POSS	eat.ANOM	already.can-3N.PRED

'One can already eat the berries (lit. These berries' eating is already possible).'

(Werner 2002, I: 346)

As we can see, *ḣitej* is used only with action nominal complements; no examples with paratactic complements are recorded.

Finally, there is a special predicate in Ket, *qoŋan* 'not to be able', that is specifically used to express the modal meaning of inability. Its origin is likewise quite obscure. Werner (2002, II: 108) proposes the following analysis: *qoˀŋ* 'image' ('soul'?) + *-an* (Caritive relational marker). As the recorded examples show, *qoŋan* requires the presence of the inanimate predicative marker. This modal predicate can be used

with both action nominal complements and paratactic clause complements, as exemplified below.

(5.47) *ukuŋa ūŋ qɔŋanam*

uk-uŋa	ūŋ	qoŋan-am
2SG-DAT	sit.ANOM	not.be.able-N.PRED

'You cannot sit (lit. Sitting is not possible to you). (Werner 2002, II: 108)

(5.48) *bū tām-aksʲ-aːna bānʲ dubbɛt qɔŋanam*

bū	tām-aks-aːna	bān	du^{8}-b^{3}-bed^{0}	qoŋan-am
3SG	nothing	NEG	3^{8}-3N^{3}-make^{0}	not.be.able-3N.PRED

'He cannot do anything (lit. It is not possible for him to do anything).'

(Werner 2002, II: 108)

In (5.47), the complement of *qoŋan* is the action nominal *ūŋ* 'sit', while in (5.48), it is the full-fledged clause *bū tām áksʲ aːna bānʲ dubbɛt* 'he doesn't do anything'.

It is important to mention that Werner (2002, II: 108) also lists a finite verb that has *qoŋan* in the incorporant position (P7), see the examples below.[75]

(5.49) *bū ūŋ daqɔŋandaʁan*

bū	ūŋ	da^{8}-qoŋan^{7}-d^{5}-a^{4}-qan^{0}
3SG	sit.ANOM	3F^{8}-not.be.able^{7}-TH^{5}-NPST^{4}-become^{0}

'She cannot sit (lit. She becomes being not able to sit.)'

(Werner 2002, II: 108)

(5.50) *daèːjɛ tqɔŋandɔksʲɛtn*

da-èːje	d{u}^{8}-qoŋan^{7}-d^{5}-o^{4}-kset^{0}-n^{-1}
M.POSS-kill.ANOM	3^{8}-not.be.able^{7}-TH^{5}-PST^{4}-become^{0}-AN.PL^{-1}

'They could not kill him (lit. It became impossible for them to kill him)'

(Werner 2002, II: 108)[76]

[75] The morphemes *qan^{0}* and *(k)set^{0}* are suppletive roots with a translative meaning 'become, turn into'. The former is used with inanimate or singular animate subjects (5.45), while the latter appears when the subject is plural animate (5.46) (Vajda and Zinn 2004: 172).

[76] Werner's (2002, II: 108) translation of this sentence as being in the non-past tense (ihn töten können sie nicht 'they cannot kill him') does not seem to be correct, because the verb form *tqoŋandoksetn* is clearly in the past tense. This is indicated by the labialized form of the tense marker *-a-* in position 4, cf. also *daqtasetin* 'they get better' [du^{8}-aqt^{7}-a^{4}-set^{0}-in^{-1} 3^{8}-good^{7}-NPST^{4}-become^{0}-AN.PL^{-1}] vs. *daqtoksetin* 'they got better' [du^{8}-aqt{a}^{7}-o^{4}-kset^{0}-in^{-1} 3^{8}-good^{7}-PST^{4}-become^{0}-AN.PL^{-1}].

In both recorded examples the verb takes its complement in the form of an action nominal. Unfortunately, as in the case with the modal predicates above, these verbs were not recognized by our language consultants and only one example similar to (5.49) was found in the texts.

The next modal concept to be discussed is obligation and necessity. Ket does not have a native lexeme that would express this concept. Therefore in order to express obligation and necessity the modal predicate *náda*, a direct loan of the Russian predicate *nado* 'need', is used. Unlike other verbal loans from Russian that obligatorily get incorporated into the native verbal paradigms, the predicate *nada* remains unchanged and uninflected for any person / tense distinction. This modal predicate is used mostly with action nominal complements. Examples (5.51)-(5.52) illustrate *náda* with bare action nominals.

(5.51) *nanʲ kɛtbɛt nara*

naˀn	kedbed	nada
bread	price.make.ANOM	need

'It's necessary to buy bread.' (Belimov 1973: 18)

(5.52) *avɛŋa lɛsdiŋa ɛiŋ nara*

ab-aŋa	les-di-ŋa	ejiŋ	nada
1-DAT	forest-N-DAT	go.ANOM	need

'I need to go to the forest.' (Belimov 1973: 17)

The examples also show that as in Russian, if there is no overt subject argument, as in (5.51), the sentence with *náda* receives an impersonal reading. If the subject of *náda* is expressed overtly, it takes the Dative relational morpheme, as in (5.52).

In addition to bare action nominal complements, *náda* can be used with the *esaŋ* complementizer on an action nominal as illustrated in (5.53), although such examples are rather rare in our corpus.

(5.53) *abaŋa assano-ɛsaŋ nara*

ab-aŋa	assano-esaŋ	nada
1POSS-DAT	hunt.ANOM-TRANSL	need

'I have to hunt.' (Vajda 2004: 77)

Another type of complement registered with the predicate *náda* is finite clauses. Example (5.54) illustrates the complement clause with the finite verb form *tkájbuqos* 'I take it', while in example (5.55) *náda* is used with the corresponding action nominal *kases* 'take.ANOM'.

(5.54) *ɛn nadə aɣə tkajbuʁɔs*

ēn	nada	aka	d{i}^{8}-kaj^{7}-b^{3}-qos^{0}
now	need	away	1^{8}-limb^{7}-3N-take^{0}

'Now it's necessary to take it away (lit. Now it's necessary, I will take it away).'

(Belimov 1973: 19)

(5.55) *sújat kásɛsʲ náda*

sujad	kases	nada
dress	take.ANOM	need

'It's necessary to buy (lit. take) the dress.'

Table 5.1 summarizes the information on the modal CTPs and the complement types they take.

PREDICATE	COMPLEMENT TYPE						
	lexical union[77]	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
it^{7}-[l^{2}]-am^{0} 'can, know'		+					
da^{5}-t^{5}-[n^{2}]-bet^{0} 'can, understand'		+					
itej 'can'		+				+	
hitej 'be possible'		+					
qoŋan 'not to be able'		+				+	
nada 'be necessary'		+	+			+	

Table 5.1. Modal predicates

[77] Note that, as we have already stated above, LU is not a complement type. It is included in the table for the sake of the further analysis.

5.3.2 Phasal predicates

Phasal predicates (such as *begin, start, continue, finish,* etc.) refer to the phase of an act or state: its inception, continuation, or termination (Noonan 2007: 139). In Ket there are no predicates expressing continuation, only those of inception and termination are attested.

The concept of inception is expressed in Ket by means of causatives (mostly for transitive actions) or by inchoative "roots" (*-qan~qon*^{0}*, -saŋ*^{0}) (mostly for intransitive actions):

(5.56) *dalɔŋalqimna*

da^{8}-loŋal^{7}-q^{5}-b^{3}-n^{2}-a^{0}

3SG.F^{8}-examine.ANOM^{7}-CAUS^{5}-3N^{3}-PST^{2}-MOM.TR^{0}

'She began examining it.'

(5.57) *ilkuɣaʁan*

il^{7}-ku^{6}-k^{5}-a^{4}-qan^{0}

sing^{7}-2SG^{6}-TH^{5}-NPST^{4}-INCH.NPST^{0}

'You start singing.' (Vajda and Zinn 2004: 176)

(5.58) *qɔ:vinsaŋ*

qo^{7}-b^{3}-in^{2}-saŋ^{0}

die^{7}-3N^{3}-PST^{2}-INCH^{0}

'It started to die.' (Vajda and Zinn 2004: 190)

Example (5.56) illustrates a transitive verb with the marker *q*^{5} which is traditionally regarded as a causative marker (cf. Section 2.2.8.3.1). The verb conveys the inchoative meaning of 'begin Ving X'. The other two examples illustrate inchoatives of intransitive verbs formed with the help of the special roots *-qan~qon*^{0} in (5.57) and *-saŋ*^{0} in (5.58).

As we can see, these examples represent the case of lexical union, since in each of the examples the meaning of the complement taking predicate is conveyed by a morpheme on the verb.

Unlike inception, the concept of termination of an event is expressed in Ket by means of a separate CTP – the verb *bin*^{7}*-[n*^{2}*]-qut*^{0} 'finish, stop'. This verb is used only with

action nominals and conveys the meaning ‘X stops Ving (Y)’. The only noun that can be used with *bin^{7}-[n^{2}]-qut^{0}* is *ū* ‘strength’, the whole construction conveying the meaning ‘X is tired’:

(5.59) *bur^{j}a ū binut*

bu-da	ū	b{in^{7}-b^{3}}-in^{2}-{q}ut^{0}
3SG-M.POSS	strength	self^{7}-3N^{3}-PST^{2}-finish^{0}

‘He is tired (lit. His strength finished).’

Examples (5.60) and (5.61) illustrate complement constructions with the predicate *bin^{7}-[n^{2}]-qut^{0}*.

(5.60) *bur^{j}a kʌ^{ʔ}j binut*

bu-da	kə^{ʔ}j	b{in^{7}-b^{3}}-in^{2}-{q}ut^{0}
3SG-M.POSS	walk.ANOM	self^{7}-3N^{3}-PST^{2}-finish^{0}

‘He stopped walking (lit. His walking finished).’

(5.61) *dɛŋna tāp tàr^{j} binut*

deŋ-na	tāb	tàd	b{in^{7}-b^{3}}-in^{2}-{q}ut^{0}
people-AN.PL.POSS	dog.PL	hit.ANOM	self^{7}-3N^{3}-PST^{2}-finish^{0}

‘People stopped beating their dogs’ or ‘The beating of the people’s dogs finished.’

As we can see, both the noun phrase in (5.59) and the action nominal complements in (5.60) and (5.61) trigger the verb internal agreement (the inanimate marker *-b-* in P3) on the main predicate. Therefore the complement clauses can be considered as the subjects of the given CTP. Other complement types are not possible with this predicate.

Table 5.2 summarizes the information about phasal predicates in Ket.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
q^{5}/qan~qon^{0}/ saŋ^{0} ‘start, begin’	+						
bin^{7}-[n^{2}]-qut^{0} ‘finish, stop’		+					

Table 5.2. Phasal predicates

5.3.3 Manipulative predicates

Manipulative predicates express a relation between an agent or a situation which functions as a cause, an affectee, and a resulting situation. There are two kind of manipulatives: a) expressing causation (such as *make, force*, etc.) and b) expressing request (such as *order, ask,* etc.) (Noonan 2007: 136).

The first type, causation, as we already stated in Section 2.2.8.3.1 above, can be expressed in Ket either morphologically (5.62) or analytically (5.63).

(5.62) *danánbɛtqirit*

da^{8}-nanbed^{7}-q^{5}-(i)-di^{1}-t^{0}

3F^{8}-bread.make.ANOM^{7}-CAUS^{5}-1SG^{1}-MOM.TR^{0}

'She makes me bake bread.'

(5.63) *būŋ kɛˀt élʲtij dɛraʁajdan*

bū-ŋ	keˀt	eltij	d{u}^{8}-eda^{7}-q^{5}-a^{4}-t^{0}-in^{-1}
3-PL	person	berries.pick.ANOM	3^{8}-send^{7}-CAUS^{5}-3M^{4}-MOM.TR^{0}-AN.PL^{-1}

'They make the man pick berries.'

In (5.63), the noun *keˀd* is semantically both the object of the main predicate *eda^{7}-q^{5}-a^{4}-[l^{2}]-da^{0}* 'send, cause' (note, it is marked verb-internally) and the subject of the complement clause *eltij* 'pick berries'. Example (5.64) shows that such a noun phrase can in principle be omitted from the complement construction without causing any change, i.e. the object of the CTP will be interpreted as the subject of the complement clause.

(5.64) *bísʲɛp ísqɔ dɛ́raqadda*

biseb	isqo	d{u}^{8}-eda^{7}-q^{5}-a^{4}-d{i}^{1}-da^{0}
sibling	fish.ANOM	3^{8}-send^{7}-CAUS^{5}-NPST^{4}-1SG^{1}-ITER.TR^{0}

'Brother makes me fish.'

As we can see in (5.63)-(5.64), the predicate *eda^{7}-q^{5}-a^{4}-[l^{2}]-da^{0}*[78] takes its complement as a bare action nominal. It is also possible to find examples in which the

[78] Please note that this is the iterative form of this causative verb. There is also the momentaneous counterpart *eda^{7}-q^{5}-[n^{2}]-t~a^{0}* (*deraqajit* 'I send him'). In what follows, only the iterative form will be cited as CTP, since these two forms are identical, both lexically and syntactically.

action nominal is marked with *esaŋ* as in (5.65). Finite complements are not attested with this CTP.

(5.65) *bísʲɛp ílʲ-ɛsʲaŋ árʲa éraqadda*

biseb	iˀl-esaŋ	ād	da^{8}-eda^{7}-q^{5}-a^{4}-d{i}^{1}-da^{0}
sibling	sing.ANOM-TRANSL	1SG	3F^{8}-send^{7}-CAUS^{5}-NPST^{4}-1SG^{1}-ITER.TR^{0}

‘Sister makes me sing.’

The concept of request in Ket is conveyed by means of verbs of speaking. They are *t^{5}-a^{4}-[n^{2}]-kij^{0}* ‘tell’ (5.66), *t^{5}-b^{3}-[l^{2}]-a^{0}* ‘ask’ (5.67) and *t^{5}-b^{3}-[l^{2}]-ij^{0}* ‘ask’ (5.68).

(5.66) *at tɔvingij iːsʲ ʌːnisʲaŋ*

ād	{di}^{8}-t^{5}-o^{4}-b^{3}-n^{2}-kij^{0}	īs	ən-esaŋ
1SG	1^{8}-TH^{5}-PST^{4}-3N^{3}-PST^{2}-tell^{0}	fish	boil.ANOM-TRANSL

‘I told (someone) to cook fish.’ (Belimov 1973: 54)

(5.67) *hɨp daōp suːlʲbɛrʲɛsaŋ datpilʲa*

hɨˀb	da-ōb	suːlbed-esaŋ	d{u}^{8}-a^{6}-t^{5}-b^{3}-l^{2}-a^{0}
son	M.POSS-father	sled.make.ANOM-TRANSL	3^{8}-3M^{8}-TH^{6}-TH^{3}-PST^{2}-ask^{0}

‘The son asked his father to make sleds.’ (Zinn 2006)

(5.68) *dɨlʲ anʲaŋ huˀnʲ bɛrʲɛsaŋ dativij*

dɨˀl	aniŋ	huˀn	bèd-esaŋ	da^{8}-t^{5}-(i)-b^{3}-ij^{0}
child	play.ANOM	daughter	make.ANOM-TRANSL	3F^{8}-TH^{5}-3N^{3}-ask^{0}

‘The girl$_{j}$ asks (for permission) that she$_{j}$ make a doll.’ (Zinn 2006)

As can be seen from the examples, these CTPs take complements in the form of an action nominal with *esaŋ*. However, in the case of the predicate *t^{5}-b^{3}-[l^{2}]-ij^{0}* ‘ask’, it is also possible to find examples with an *esaŋ*-marked finite clause as a complement (5.69).

(5.69) *dɨlʲ dativij anʲaŋ huˀnʲ duːbbɛtinɛsaŋ*

dīl	da^{8}-t^{5}-(i)-b^{3}-ij^{0}	aniŋ	huˀn	du^{8}-b^{3}-bed^{0}-in^{-1}-esaŋ
child	3F^{8}-TH^{5}-3N^{3}-ask^{0}	play.ANOM	daughter	3^{8}-3N^{3}-make^{0}-AN.PL^{-1}-TRANSL

‘The girl asks so that they make a doll.’ (Zinn 2006)

The manipulative predicates in Ket are summarized in Table 5.3.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
q^{5} 'cause'	+						
eda^{7}-*q*^{5}-*a*^{4}-*[l*^{2}*]*-*da*^{0} 'send, cause'		+					
t^{5}-*kij*^{0} 'tell'			+				
t^{5}-*a*^{0} 'ask'			+				
t^{5}-*ij*^{0} 'ask'			+			+	

Table 5.3. Manipulative predicates

5.3.4 Desiderative predicates

Desiderative predicates (such as *want, wish, desire,* etc.) are characterized by having experiencer subjects expressing a desire that the complement proposition be realized (Noonan 2007: 132). Noonan divides them into three semantic classes – the *hope*-class, the *wish*-class and the *want*-class. All the desiderative predicates found in Ket correspond to the last class – Ket has no (known) predicates corresponding to the first two classes – which consists of verbs expressing a desire that a state or event may be realized (Noonan 1985: 133). In Ket these are the following predicates: *[n*^{2}*]*-*tus*^{0} 'intend, want', *t*^{5}-*a*^{4}-*[l*^{2}*]*-*baq*^{0} 'intend, want', *qoˀj* 'wish' and its negative counterpart *bən*^{7}-*qoj*^{0} 'not wish'.

The verbs *[n*^{2}*]*-*tus*^{0} and *t*^{5}-*a*^{4}-*[l*^{2}*]*-*baq*^{0} seem to be dialect specific, since the first is found only in Southern Ket examples in texts, while the second – mostly in Central Ket examples (cf. Belimov 1973: 23). Our language consultants from Kellog (i.e. Southern Ket speakers) could not recognize the verb *t*^{5}-*a*^{4}-*[l*^{2}*]*-*baq*^{0} too. The use of the predicate *qoˀj* and its negative variant can be found in all the Ket dialects.

The verb *[n*^{2}*]*-*tus*^{0} is used to express intention rather than desire. As CTP, it usually takes complements in the form of action nominal with *esaŋ*, as in (5.70).

(5.70) *bu usqat-ɛsʲaŋ dujɔtɔsʲ*

bū	usqat-esaŋ	du^{8}-o^{1}-tus^{0}
3SG	get.warm.ANOM-TRANSL	3^{8}-3SG.SS^{1}-intend^{0}

‘He wants to get warm.’ (Belimov 1973: 23)

Another type of complements that can be found with this predicate is a finite verb marked with *esaŋ*.

(5.71) *at dijɣɛt-ɛsʲaŋ dittɔsʲ*

ād	di^{8}-it^{0}-esaŋ	di^{8}-d{i}^{1}-tus^{0}
1SG	1^{8}-sneeze^{0}-TRANSL	1^{8}-1SG.SS^{1}-intend^{0}

‘I want to sneeze.’ (Belimov 1973: 24)

(5.72) *bu at labɔtɔkŋ-ɛsʲaŋ dujɔtɔsʲ*

bū	ād	{du^{8}}-lab^{7}-bo^{6}-t^{5}-oqŋ^{0}-esaŋ	du^{8}-(j)-o^{1}-tus^{0}	
3SG	1SG	3^{8}-piece^{7}-1SG^{6}-TH^{5}-bite^{0}-TRANSL	3^{8}-3SG.SS^{1}-intend^{0}	

‘He wants to bite me.’ (Belimov 1973: 24)

As we can see, the complement clauses in (5.71)-(5.72) contain fully finite verbs. This type of complements is less frequent with this verb than action nominals with *esaŋ*.

Examples (5.73)-(5.74) illustrate that this CTP allows its complements to have a non-coreferential subject.

(5.73) *āt dɛ́ŋna úsqat-ɛsʲaŋ díttusʲ*

ād	deˀŋ-na	usqat-esaŋ	di^{8}-d{i}^{1}-tus^{0}
1SG	people-AN.PL.POSS	get.warm.ANOM-TRANSL	1^{8}-1SG.SS^{1}-intend^{0}

‘I want people to get warm.’

(5.74) *bū étn dáŋsɛj-ɛsaŋ āt díttusʲ*

bū	ed-n	d{u}^{8}-aŋ^{6}-s^{4}-ej^{0}-esaŋ	ād	di^{8}-d{i}^{1}-tus^{0}
3SG	polar.fox-PL	3^{8}-3AN.PL^{6}-NPST^{4}-kill^{0}-TRANSL	1SG	1^{8}-1SG.SS^{1}-intend^{0}

‘I want him to kill polar foxes.’

As we can see, if the subject of the action nominal complement is not identical to the subject of the main clause, it is marked as a possessor (5.73). In the case of the S-like complement, the non-equi subject is signaled by the corresponding marking

on the verb in the complement clause as well as by the overt presence of the corresponding personal pronoun, as in (5.74).

The Central Ket verb *t^{5}-a^{4}-[l^{2}]-baq^{0}* 'intend, want' behaves in many ways similar to its Southern Ket synonym. As CTP, it most frequently takes action nominal with *esaŋ* complements (5.75), while finite clauses with *esaŋ*, although possible, are quite rare, exemplified in (5.76).

(5.75) *at iš^{j} tʌlqit-ešaŋ ditɛbʌq*

ād	īs	təlqat-esaŋ	di^{8}-t^{5}-a^{4}-baq^{0}
1SG	fish	freeze.ANOM-TRANSL	1^{8}-TH^{5}-NPST^{4}-intend^{0}

'I want to freeze fish.' (Belimov 1973: 23)

(5.76) *at š^{j}ɛl^{j} qɔptɔkš^{j}ɛbɛt-ɛš^{j}aŋ ditɛbʌq*

ād	sèl	{di^{8}}-qopt^{7}-o^{6}-k^{5}-s^{4}-bed^{0}-esaŋ	di^{8}-t^{5}-a^{4}-baq^{0}
1SG	reindeer	1^{8}-geld^{7}-3SG.M^{6}-TH^{5}-NPST^{4}-make^{0}-TRANSL	1^{8}-TH^{5}-NPST^{4}-intend^{0}

'I want to geld a reindeer.' (Belimov 1973: 39)

We could not find any examples of these two CTPs using bare action nominal complements or paratactic S-like complements (i.e without the marker *esaŋ*).

The most frequent way to express desire in Ket is by using the predicate *qoˀj* 'wish'. As CTP, *qoˀj* can be found with different types of complements illustrated in (5.75)-(5.78) below.

(5.75) *dɨl^{j} kʌj-ɛs^{j}aŋ da-qɔj*

dīl	kəj-esaŋ	da-qoˀj
child	walk.ANOM-TRANSL	M.POSS-wish

'The child wants to walk.' (Belimov 1973: 23)

(5.76) *at u uspɛraŋ-ɛs^{j}aŋ vqoj*

ād	ū	usbedaŋ-esaŋ	b-qoˀj
1SG	2SG	kiss.ANOM-TRANSL	1SG.POSS-wish

'I want to kiss you.' (Belimov 1973: 23)

(5.77) *āt ɔ̀nʲ ulʲdɔ pqɔʔj*

ād	ɔ̀n	uldo	b-qoʔj
1SG	many	water.drink.ANOM	1SG.POSS-wish

'I want to drink water a lot.'

(5.78) *āt arʲɛndiŋa bɔɣɔtn-ɛsaŋ pqɔʔj*

ād	aden-di-ŋa	bo^{6}-k^{5}-a^{4}-den^{0}-esaŋ		b-qoʔj
1SG	forest-N-DAT	1SG^{6}-TH^{5}-NPST^{4}-go^{0}-TRANSL		1SG.POSS-wish

'I want to go to the forest.'

Examples (5.75) and (5.76) show that *qoʔj* can be used with complements in the form of the action nominal with *esaŋ*. This type of complement is the most frequent with this CTP. We were also able to elicit examples with bare action nominal complements as in (5.77), although no such examples were found in the Ket texts. The predicate *qoʔj* can also take complements in the form of S-like clauses marked with *esaŋ*, as shown in (5.78). Paratactic S-like complements with this CTP were rejected by our language consultants.

Interestingly, the subject of *qoʔj* can be expressed twice, first as a personal pronoun (it can be a noun as well) at the beginning of the sentence, then as a corresponding possessive marker on the predicate. The personal pronoun can in principle be omitted, whereas the possessive marking of *qoʔj* is obligatory. Note that this is only possible if the predicate *qoʔj* is placed after its complement, if the predicate precedes its complement only the possessive marking is retained, cf. (5.79) in which only the second variant is acceptable.

(5.79a) **āt pqɔʔj ássanɔ-ɛsʲaŋ*

ād	b-qoʔj	assano-esaŋ
1SG	1SG.POSS-wish	hunt.ANOM-TRANSL

'I want to go to hunt'

(5.79b) *āb qɔʔj ássanɔ-ɛsʲaŋ*

āb	qoʔj	assano-esaŋ
1SG.POSS	wish	hunt.ANOM-TRANSL

'I want to go to hunt'

Non-equi subjects in the complement clause are also possible with this CTP.

(5.80) *āt búŋna lɔ́vɛr-ɛsaŋ bqɔʔj*

āt	bu-ŋ-na	lobed-esaŋ	b-qoʔj
1sg	3-PL-AN.PL.POSS	work.RUS.ANOM-TRANSL	1SG.POSS-wish

'I want them to work.'

(5.81) *ú klɔ́vɛravɛt-ɛsaŋ Mašad qɔʔj*

ū	{ku}[8]-lobed[7]-a[4]-bed[0]-esaŋ	masa-d	qoʔj
2SG	2SG[8]-work.RUS.ANOM[7]-NPST[4]-ITER[0]-TRANSL	M.-3F	wish

'Masha wants you to work.' (Edward Vajda, p.c.)

The predicate *bən[7]-qoj[0]* is the negative counterpart of *qoʔj*. Historically, it seems to represents a verbalized contraction of the phrase *bān* POSS-*qoʔj* 'not someone's wish' (cf. Werner 1997: 181). Although, only the 3rd person singular forms still contain markers reminiscent of nominal possessive forms, cf. the full paradigm given below.

bən[7]-qoj[0] 'smn does not want'

*bən**ba**ʁoj*	'I do not want'	*bən**daŋ**ʁoj*	'we do not want'
*bəŋ**gu**ʁoj*	'you do not want'	*bəŋ**gaŋ**ʁoj*	'you.PL do not want'
*bən**da**ʁoj*	'he does not want'	*bən**aŋ**ʁoj*	'they do not want'
*bən**di**ʁoj*	'she does not want'		

As we can see, other than the markers *-da-* and *-di-* for the 3rd person masculine singular and the 3rd person feminine singular, respectively, no person agreement morphemes in the paradigm resemble the possessive nominal markers (cf. Section 2.2.1). Rather they follow a mix of two intransitive paradigms typical for *habeo*-verbs (see Section 2.2.8.2.2.5 for details). Another verbal feature is that the subject of this predicate remains in its sentential form (cf. (5.79) and (5.80) below). At the same time, unlike finite verbs, these forms do not contain any temporal marker. It should also be noted that this verb cannot be used without the negative morpheme *bən*, i.e. forms like *aŋqoj* 'they want' are ungrammatical.[79] Examples (5.82)-(5.84) illustrate the use of this predicate.

[79] Werner (2002, I: 137) provides the Yeniseian word *bogoj* 'neccessary' taken from the materials recorded by Castrén. According to Werner it might originate from *baqoj* 'my wish'.

(5.82) *úsɛn dɨlʲlʲat tásʲaŋ-ɛsʲaŋ bʌ́naŋɢɔj*

usen	dɨlkad	tasaŋ-esaŋ	bən^{7}-aŋ^{6}-qoj^{0}
sleep.ANOM	children	get.up.ANOM-TRANSL	NEG^{7}-3AN.PL^{6}-wish^{0}

‘Sleeping kids do not want to get up.’

(5.83) *āt búŋna pɔ́sɔbat bʌ́nbɔʁɔj*

ād	bu-ŋ-na	posobad	bən^{7}-bo^{6}-qoj^{0}
1SG	3-PL-AN.PL.POSS	help.RUS.ANOM	NEG^{7}-1SG^{6}-wish^{0}

‘I do not want to help them.’ Or ‘I do not want them to help.’

(5.84) *at bʌn bɔʁɔj itpɛdɛm ɛšʲaŋ*

ād	bən^{7}-bo^{6}-qoj^{0}	it^{7}-ba^{6}-d{i}^{1}-am^{0}-esaŋ
1SG	NEG^{7}-1SG^{6}-wish^{0}	know^{7}-1SG^{6}-1SG^{1}-R^{0}-TRANSL

‘I don’t want to know.’ (Belimov 1973: 39)

As in the case of *qoˀj*, this CTP prefers *esaŋ*-marked action nominals (5.82), but action nominal complements without *esaŋ* are possible as well (5.80). Note that the complement in (5.83) can also have a non-equi-subject reading. Finally, this predicate is capable of taking finite clauses with *esaŋ* as complements (5.84).

Table 5.4 summarizes the desiderative predicates in Ket.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
[n^{2}]-tus^{0} ‘intend, want’			+			+	
t^{5}-a^{4}-[l^{2}]-baq^{0} ‘intend, want’			+				
qoˀj ‘wish, want’		+	+			+	
bən^{7}-qoj^{0} ‘not wish, not want’		+	+			+	

Table 5.4. Desiderative predicates

5.3.5 Perception predicates

Perception predicates include verbs naming the sensory mode by which the subject directly perceives the event coded in the complement. Here belong predicates like *see*, *hear*, *watch*, and *feel* (Noonan 2007: 142).

There are the following perception predicates in Ket: *k⁵-a⁴-[l²]-do⁰* 'watch' (5.85), *t⁵-a⁴-[l²]-oŋ~ok⁰* 'see (*intr.*)' (5.86), *t⁵-a⁴-[l²]-oŋ~ok⁰* 'see (*tr.*)' (5.87) and *k⁵-a⁴-[l²]-da⁰* 'hear' (5.88). All of them favor paratactic finite clause complements, as can be seen in the examples.

(5.85) *ad daɣudɔ ab kit qutkə dɔɻətən*[80]

ād	d{i}^{8}-a^{6}-k^{5}-o^{4}-do^{0}	āb	ke^{ʔ}d	qotka	d{u}^{8}-o^{4}-l^{2}-a^{1}-tan^{0}
1SG	1^{8}-3M^{6}-TH^{5}-PST^{4}-watch^{0}	my	person	ahead	3M^{8}-PST^{4}-PST^{2}-3SS^{1}-stop^{0}

'I watched my friend stop ahead of me (lit. I watched him, my friend stopped ahead of me).'

(Ivanov et al. 1969: 217)

(5.86) *qímarʲa tɔ́luŋ āb ōp saʔq díʁɛj*

qima	da^{8}-t^{5}-o^{4}-l^{2}-oŋ^{0}	āb	ōb	saʔq	d{u}^{8}-i^{6}-q^{2}-ej^{0}
grandma	3F^{8}-TH^{5}-PST^{4}-PST^{2}-see^{0}	my	father	squirrel	3^{8}-3F^{6}-PST^{2}-kill^{0}

'Grandmother saw my father killing a squirrel.'

(5.87) *āt dátuŋ bū tsújabɛt*

ād	d{i}^{8}-a^{6}-t^{5}-oŋ^{0}	bū	d{u}^{8}-suj^{7}-a^{4}-bed^{0}
1SG	1^{8}-3M^{6}-TH^{5}-see^{0}	3SG	3^{8}-swim.ANOM^{7}-NPST^{4}-make^{0}

'I see him swimming (lit. I see him, he is swimming).'

(5.88) *Usap baːt ɔːabilʲda bɔgdɔm dɛ́ɛ́sɔlʲɛj*

usab	báàd	a^{6}-{k^{5}}-b^{3}-il^{2}-da^{0}		bokdom	da^{8}-es^{7}-o^{4}-l^{2}-ij^{0}
U.	old.man	3M^{6}-TH^{5}-3N^{3}-PST^{2}-hear^{0}		rifle	3N^{8}-cry^{7}-PST^{4}-PST^{2}-R^{0}

'The old man Usjap heard a rifle fire (lit. The old man Usjap heard it, a rifle cried).'

(Kotorova and Porotova 2001: 48)

[80] Repeated from example (5.22) above.

The intransitive predicate *t^{5}-a^{4}-[l^{2}]-oŋ~ok^{0}* can also be used with the complementizer *bila* 'how' (5.89), which, as we have already mentioned in Section 5.2.3.1.3, is a calque from Russian. Note that there is no difference with (5.86) above other than the presence of the complementizer.

(5.89) *āt tɔluŋ bila bur^{j}a til^{j}tɛrɔl^{j}bɛt*

ād	{di^{8}}-t^{5}-o^{4}-l^{2}-oŋ^{0}	bila	bū	da^{8}-tilted^{7}-o^{4}-l^{2}-bed^{0}
1SG	1^{8}-TH^{5}-PST^{4}-PST^{2}-see^{0}	how	3SG	3F^{8}-bathe.ANOM^{7}-PST^{4}-PST^{2}-ITER^{0}

'I saw her bathing.'

The summary for the perception predicates in Ket is presented in Table 5.5.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
k^{5}-a^{4}-[l^{2}]-do^{0} 'watch'					+		
k^{5}-a^{4}-[l^{2}]-do^{0} 'watch'					+		+
t^{5}-oŋ^{0} 'see (tr.)'					+		
k^{5}-da^{0} 'hear'					+		

Table 5.5. Perception predicates

5.3.6 Knowledge predicates

Knowledge predicates (such as *know, realize, forget, see, hear,* etc.) take experiencer subjects and describe the state or the manner of acquisition of knowledge (Noonan 2007: 129).

The predicate *it^{7}-[l^{2}]-am^{0}* 'know' has already been discussed in Section 5.3.1 above, since it can also be used as a modal predicate with the meaning 'can' taking complements in the form of bare action nominals. As a knowledge CTP, *it^{7}-[l^{2}]-am^{0}* is capable of taking only finite clause complements. This is illustrated in (5.90).

(5.90) *āt ítpɛrɛm tūr^{j} kɛ^{ʔ}t dú:nɔ*

ād	it^{7}-ba^{6}-d{i}^{1}-am^{0}	tū-d	ke^{ʔ}t	du^{8}-o^{4}-n^{2}-{q}o^{0}
1SG	know^{7}-1SG^{6}-1SG^{1}-R^{0}	that-M	person	3^{8}-PST^{4}-PST^{2}-die^{0}

'I know/knew that the man died (lit. I know, the man died).'

The predicates *sit*^{7}*-a*^{4}*-[n*^{2}*]-a*^{0} (5.91) and *in*^{7}*-k*^{5}*-a*^{4}*-b*^{3}*-[l*^{2}*]-da*^{0} (5.92), both having the meaning of 'guess', take only finite clauses as well:

(5.91) *qima sitditna ōp saˀq diʁɛj*

qima	sit^{7}-dit^{4}-n^{2}-a^{0}	ōb	saˀq	d{u}^{8}-i^{6}-q^{2}-ej^{0}
grandma	guess^{7}-3F^{4}-PST^{2}-R^{0}	father	squirrel	3M^{8}-3F^{6}-PST^{2}-kill^{0}

'Grandmother guessed that father had killed a squirrel.'

(5.92) *Ulgɛrɛŋda bisʲap ɨnkavra qɨmdilʲ tam bilʲa sɛlʲda aniŋilʲvit*

ulgereŋ-da	biseb	ɨn^{7}-k^{5}-a^{4}-b^{3}-da^{0}	qim-dil
whirlwind-3M	sibling	guess^{7}-TH^{5}-NPST^{4}-3N^{3}-R^{0}	female-child
tām-bila	sèl	da^{8}-aneŋ^{7}-l^{2}-bed^{0}	
somehow	bad	3F^{8}-thought^{7}-PST^{2}-make^{0}	

'Whirlwind's sister guesses that the girl has planned something bad.'

(Kostjakov 1981: 74)

Unlike the above mentioned perception predicates, the predicate *en*^{7}*-[n*^{2}*]-suk~soŋ*^{0} 'forget' can take action nominal complements with *bila* (5.93), although finite clauses marked with the same complemtizer are possible as well (5.94).

(5.93) *sīnʲ báàm ɛnʲdirʲunʲsʲɔŋ bilʲa kʌˀjˀ*[81]

sīn	báàm	en^{7}-did^{4}-n^{2}-soŋ^{0}	bila	kəˀj
decrepit	old.woman	R^{7}-3F^{4}-PST^{2}-forget^{0}	how	walk.ANOM

'The decrepit old woman forgot how to walk.'

(Kotorova and Nefedov, forthcoming)

(5.94) *báàm ɛnʲdirʲunʲsʲɔŋ bilʲa āt dijavɛt*

báàm	en^{7}-did^{4}-n^{2}-soŋ^{0}	bila	ād	di^{8}-a^{1}-bed^{0}
old.woman	R^{7}-3F^{4}-PST^{2}-forget^{0}	how	1SG	1^{8}-RES^{1}-make^{0}

'The old woman forgot what I look like (lit. how I am made).'

Indirect questions with these predicates are formed either with the help of the question particle *(bənd) ū* (5.95) or an interrogative adverb (5.96) or pronoun (5.97).

[81] Repeated from example (5.27) above.

(5.95) *ū ítʲum ōb ū díksivɛsʲ?*

ū	it^{7}-ku^{6}-am^{0}	ōb	ū	d{u}^{8}-ik^{7}-s^{4}-bes^{0}
2SG	know^{7}-2SG^{6}-R^{0}	father	QUEST	3^{8}-here^{7}-NPST^{4}-move^{0}

'Do you know whether the father is coming?'

(5.96) *ād ítparʲam bisʲéŋ bū dúɣɔraq*

ād	it^{7}-ba^{6}-d{i}^{1}-am^{0}	biséŋ	bū	du^{8}-a^{4}-daq^{0}
1SG	know^{7}-1SG^{6}-1SG.SS^{1}-R^{0}	where	3SG	3^{8}-NPST^{4}-live^{0}

'I know where he lives.'

(5.97) *ād ítparʲam bítsʲɛ túrʲɛ dbílʲbɛt*

ād	it^{7}-ba^{6}-d{i}^{1}-am^{0}	bitse	tu-de	d{u}^{8}-b^{3}-l^{2}-bed^{0}
1SG	know^{7}-1SG^{6}-1SG.SS^{1}-R^{0}	who.M	this-N	3^{8}-3N^{3}-PST^{4}-make^{0}

'I know who did it.'

The Ket knowledge predicates are summarized in Table 5.6.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
it^{7}-[l^{2}]-am^{0} 'know'					+		
sit^{7}-a^{4}-[n^{2}]-a^{0} 'guess'					+		
ɨn^{7}-k^{5}-a^{4}-b^{3}-[l^{2}]-da^{0} 'guess'					+		
en^{7}-[n^{2}]-suk~soŋ^{0} 'forget'				+			+

Table 5.6. Knowledge predicates

5.3.7 Propositional attitude predicates

Propositional attitude predicates express the speaker's attitude or evalution towards the propositional content of the complement clause. It can be either positive (for example, *believe, think, suppose, assume,* etc.), or negative (like *not believe, doubt, deny,* etc.) (Noonan 2007: 124). In Ket there is only one propositional attitude

predicate attested, *an(eŋ)*^{7}*-[s*^{4}*]-[l*^{2}*]-bed~ked*^{0} ‘think (*intr.*)’[82] (5.98), which belongs to the positive type.

(5.98) *qimar*^{i}*a anlibɛt āb ōp ar*^{i}*ɛndiŋa ɔɣɔt*

qima	da^{8}-an^{7}-l^{2}-bed^{0}	āb	ōb	aden-di-ŋa	o^{6}-k^{5}-o^{4}-d{en}^{0}
grandma	3F^{8}-think.ANOM^{7}-PST^{2}-ITER^{0}	1SG.POSS	father	forest-N-DAT	3M^{6}-TH^{5}-NPST^{4}-go^{0}

‘Grandmother thought that my father would go to the forest.’

As can be seen from the example, this CTP takes a finite clause complement. No other complement types are attested.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
an(eŋ)^{7}*-[s*^{4}*]-[l*^{2}*]-bed~ket*^{0} ‘think (*intr.*)				+	+		

Table 5.7. Propositional attitude predicate

5.3.8 Utterance predicates

Utterance predicates (such as *say, tell, ask,* etc.) describe a transfer of information initiated by an agentive subject towards an addressee. The addressee may be implicit or overtly expressed (Noonan 2007: 121). Utterance predicates may be used both in indirect and direct speech, although it is not relevant for Ket, since there is no special marking (apart from intonation) to differentiate between direct and indirect speech in the language (cf. Werner 1997: 369; see (5.95) below).

The following utterance predicates can be found in Ket: *t*^{5}*-a*^{4}*-[n*^{2}*]-kij*^{0} ‘say, tell’ in (5.99), *t*^{5}*-b*^{3}*-[l*^{2}*]-ij*^{0} ‘ask’ in (5.100), and *b/a*^{3}*-[n*^{2}*]-d/a*^{0} ‘say’[83] in (5.101) and (5.102). These predicates take only paratactic finite clause complements as can be seen below.

[82] Werner (2002, I: 38) lists a few other verbs formed with the help of the same action nominal *an(eŋ)*: *anbedeŋ*^{7}*-a*^{4}*-[l*^{2}*]-bed~ked*^{0} ‘think (intr.)’ *aneŋbed*^{7}*-a*^{4}*-[l*^{2}*]-bed~ked*^{0} ‘think (intr.)’, but our language consultants did not recognize them. Also note that the transitive verb *aneŋ*^{7}*-k*^{5}*-[s*^{4}*]-[l*^{2}*]-bed~ked*^{0} ‘think about’ has not been not attested with any complement type.

[83] This is one of the irregular verbs we mentioned in Section 2.2.8.2.2.6 that is hard to analyze at the synchronic level, therefore we do not parse it into positions in our glossing.

(5.99) *dɛŋnaŋa tɔ́vingij ʌtta keˀt qɔ̀j duldɔq*

deŋ-na-ŋa	{du^{8}}-t^{5}-o^{4}-b^{3}-n^{2}-ki^{0}	ətta	keˀd	qòj	d{u}^{8}-o^{6}-l^{2}-doq^{0}	
people-AN.PL-DAT	{3^{8}}-TH^{5}-PST^{4}-3N^{3}-PST^{2}-say^{0}	1PL.POSS	person	bear	3^{8}-3M^{6}-PST^{2}-eat^{0}	

'He said to the people: A bear ate our man.'

(5.100) *bū tɔ́vingi aváŋa keˀt dímɛsʲ*

bū	{du^{8}}-t^{5}-o^{4}-b^{3}-n^{2}-kij^{0}	ab-aŋa	keˀd	d{u}^{8}-i{k}^{7}-n^{2}-bes^{0}
3SG	{3^{8}}-TH^{5}-PST^{4}-3N^{3}-PST^{2}-say^{0}	1SG.POSS-DAT	person	3^{8}-here^{7}-PST^{2}-move^{0}

'He said to me (that) the man came.' or 'He said to me: The man came.'

(5.101) *bu diŋa bada utɛsʲ kisʲaŋ ab deˀŋ duɣin*

bū	di-ŋa	bada	utes	kiséŋ	āb	deˀŋ	du^{8}-k^{5}-{daq}^{0}-in^{-1}
3SG	F-DAT	he.says/said	near	here	1SG.POSS	people	3^{8}-TH^{5}-live^{0}-AN.PL^{-1}

'He said to her: My people live near here.' (Belimov 81:67, 23)

(5.102) *bu manʲa bu daiksʲivɛsʲ*

bū	mana	bū	da^{8}-ik^{7}-s^{4}-bes^{0}
3SG	she.says/said	3SG	3F^{8}-here^{7}-NPST^{4}-move^{0}

'She$_{j}$ said/says she$_{j}$ would/will come.' / 'She$_{j}$ said/says: She$_{i}$ will come.'

(Werner 1997: 369)

The Ket utterance predicates are summarized in Table 5.8.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
t^{5}-a^{4}-[n^{2}]-kij^{0} 'say, tell'					+		
t^{5}-b^{3}-[l^{2}]-ij^{0} 'ask'					+		
b/a^{3}-[n^{2}]-d/a^{0} 'say'					+		

Table 5.8. Utterance predicates

5.3.9 Commentative predicates

Commentative predicates (or 'factives' in more traditional terms) provide a comment on the complement proposition in the form of an emotional reaction or evaluation (*regret*, *be sorry*, *be sad*, etc.) or a judgement (*be odd*, *be significant*, *be important*, etc.) (Noonan 2007: 127).

In Ket, this class of CTPs is filled only with adjectives, which is common cross-linguistically (cf. Noonan 2007: 129). The adjectives used as commentative predicates are marked with the inanimate predicative marker *-am*. They take complements in the form of bare action nominals.

(5.103) *abɨŋa ísʲqɔ áqtam*

ab-iŋa	isqo	aqta-{a}m
1SG.POSS-DAT	fish.ANOM	good-N.PRED

'I like fishing (lit. Fishing is good to me).'

(5.104) *búrʲa sʲálʲdɔ sélʲam*

bu-da	saldo	sel-am
3-M.POSS	smoke.ANOM	bad-N.PRED

'His smoking is bad.'

(5.105) *tūrʲ kérʲaŋa sʰúːlʲd tāŋ sʲʌ́ɣam*

tū-d	keˀd-da-ŋa	súùl-d	tāŋ	səː-am
this-M	person-M.POSS-DAT	sled-N.POSS	carry.ANOM	heavy-N.PRED

'It is difficult for this man to carry the sled.'

When the subject of the action nominal is present, it is expressed as a possessor, cf. (5.103) and (5.104). The overt subject of the main clause is expressed as an experiencer marked by the Dative relational morpheme, as in (5.103) and (5.105).

Table 5.9 presents a summary of the commentative predicates in Ket.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
aqtam 'it is good'		+					
selam 'it is bad'		+					
səkam 'it is difficult'		+					

Table 5.9. Commentative predicates

5.3.10 Achievement predicates

Achievement predicates can be divided into two general classes: positive and negative achievements. Positive achievement predicates (for example, *manage*, *chance*, *remember to*, *happen to*, etc.) refer to the manner or realization of achievement, whereas negative achievement predicates (*try*, *forget to*, *fail*, etc.) refer to the manner or reason for the lack of achievement in the complement predication (Noonan 2007: 139).

The only achievement predicate attested in Ket belongs to the negative class. It is the predicate *en^{7}-[n^{2}]-suk~soŋ^{0}* 'forget'. This predicate can take action nominal complements, as exemplified in (5.106).

(5.106) *āt ɛnbansuk nʲaˀnʲ dɛstij*

ād	en^{7}-ba^{6}-n^{2}-suk^{0}	naˀn	d-estij
1SG	R^{7}-1SG^{6}-PST^{2}-forget^{0}	bread	N.POSS-stir.ANOM

'I forgot to stir the dough (lit. I forgot the dough's stirring).'

No other complement types have been attested with this CTP in Ket.

PREDICATE	COMPLEMENT TYPE						
	lexical union	action nominal			S-like clause		
		bare ANOM	*esaŋ*	*bila*	paratactic	*esaŋ*	*bila*
en^{7}-[n^{2}]-suk~soŋ^{0} 'forget'		+					

Table 5.10. Achievement predicates

5.4 Summary of Chapter 5

In the present chapter we provided an overview of complement constructions in Ket. We surveyed them from the structural and semantic point of view. From the structural point of view, we distinguished several complement types in Ket. They are the S-like clause type and action nominal type. Each of them can be further subdivided into three subtypes: unmarked and marked with the subordinators *esaŋ* and *bila*. The morphosyntactic properties of these types are summarized in Table 5.11 below.

	COMPLEMENT TYPES IN KET					
	action nominal complement			**S-like complement**		
	bare ANOM	***esaŋ***	***bila***	**paratactic**	***esaŋ***	***bila***
verb form	non-finite	non-finite	non-finite	finite	finite	finite
TAM distinction	–	–	–	+	+	+
Person agreement distinction: SBJ	– verb-internal	– verb-internal	– verb-internal	+ verb internal	+ verb internal	+ verb internal
Person agreement distinction: OBJ	– verb-internal	– verb-internal	– verb-internal	+ verb internal	+ verb internal	+ verb internal
Case marking / adpositions	–	+	–	–	+	–
Argument coding: SBJ	not expr-d / POSS / NOM	not expr-d / POSS / NOM	not expr-d	not expr-d / NOM	not expr-d / NOM	not expr-d / NOM
Argument coding: OBJ	NOM / POSS	NOM / POSS	NOM / POSS	NOM	NOM	NOM

Table 5.11. Properties of complement types in Ket

As we can see, action nominal types show almost no inflectional completeness ("deranked" in Cristofaro's (2003) terms), while the types with finite verbs remain fully inflected ("balanced" in Cristofaro's (2003) terms).

From the semantic point of view, we distinguished ten semantic classes of complement taking predicates in Ket based on Noonan (2007).

As typological studies show, there is a certain correlation between the semantics of a complement taking predicate and the types of complements: the more semantically integrated the predicate is, the more syntactically integrated (i.e. deranked) complement it takes (Givón 1990: ch. 13). A similar idea is expressed in Cristofaro (2003). Based on correlations between the semantics of CTPs and the structural properties of complement types used with these predicates, Cristofaro (2003: 131) postulates the following hierarchy called the Complement Deranking-Argument Hierarchy:

MODALS, PHASALS > MANIPULATIVES ('MAKE', 'ORDER'), DESIDERATIVES > PERCEPTION > KNOWLEDGE, PROPOSITIONAL ATTITUDE, UTTERANCE

The hierarchy reads as follows: the most semantically integrated (and hence taking the most deranked complements) classes of CTPs are to the left, while the further to the right, the less semantically integrated the predicates become.

Table 5.10 provides an account of this correlation in Ket.

Complement type	CTP semantic class	Ket CTP predicates
Lexical union	Phasal	*-q*^{5}*- / -qan~qon*^{0}*/ -saŋ*^{0} 'start, begin'
	Manipulative	*-q*^{5}*-* 'cause'
Action nominal	Phasal	*bin*^{7}*-[n*^{2}*]-qut*^{0} 'finish, stop'
	Modal	*it*^{7}*-[l*^{2}*]-am*^{0} 'can, know how' *da*^{8}*-t*^{5}*-[n*^{2}*]-bet*^{0} 'can, understand' *itej* 'can' *hitej* 'be possible' *qoŋan* 'not to be able' *nada* 'be necessary'
	Manipulative	*eda*^{7}*-q*^{5}*-a*^{4}*-[l*^{2}*]-da*^{0} 'send, cause' *t*^{5}*-a*^{4}*-[n*^{2}*]-kij*^{0} 'say, tell' *t*^{5}*-b*^{3}*-[l*^{2}*]-a*^{0} 'ask' *t*^{5}*-b*^{3}*-[l*^{2}*]-ij*^{0} 'ask'
	Desiderative	*qoʔj* 'wish, want' *bən*^{7}*-qoj*^{0} 'not wish, not want'
	Commentative	*aqtam* 'it is good' *selam* 'it is bad' *səkam* 'it is difficult'
	Achievement	*en*^{7}*-[n*^{2}*]-suk~soŋ*^{0} 'forget'
Action nominal +*bila*	Knowledge	*en*^{7}*-[n*^{2}*]- suk~soŋ*^{0} 'forget'
Action nominal +*esaŋ*	Modal	*nada* 'be necessary'
	Manipulative	*t*^{5}*-a*^{4}*-[n*^{2}*]-kij*^{0} 'say, tell' *t*^{5}*-b*^{3}*-[l*^{2}*]-a*^{0} 'ask' *t*^{5}*-b*^{3}*-[l*^{2}*]-ij*^{0} 'ask'
	Desiderative	*tus*^{0} 'intend, want' *t*^{5}*-baq*^{0} 'intend, want' *qoʔj* 'wish, want' *bən*^{7}*-qoj*^{0} 'not wish, not want'

Finite clause + *esaŋ*	Manipulative	*t*^{5}-*ij*^{0} ‘ask’
	Desiderative	*tus*^{0} ‘want, intend’ *qo*^{2}*j* ‘wish, want’ *bən*^{7}-*qoj*^{0} ‘not wish, not want’
Finite clause + *bila*	Perception	*t*^{5}-*oŋ*^{0} ‘see (intr.)’
	Knowledge	*en*^{7}-*[n*^{2}*]-suk~soŋ*^{0} ‘forget’
Finite clause	Modal	*itej* ‘can’ *qoŋan* ‘not to be able’ *nada* ‘be necessary’
	Perception	*k*^{5}-*do*^{0} ‘watch’ *t*^{5}-*oŋ*^{0} ‘see (intr.)’ *t*^{5}-*oŋ*^{0} ‘see (tr.)’ *k*^{5}-*da*^{0} ‘hear’
	Knowledge	*it*^{7}-*[l*^{2}*]-am*^{0} ‘know’ *sit*^{7}-*a*^{4}-*[n*^{2}*]-a*^{0} ‘guess’ *in*^{7}-*k*^{5}-*a*^{4}-*b*^{3}-*[l*^{2}*]-da*^{0} ‘guess’
	Propositional attitude	*an(eŋ)*^{7}-*[s*^{4}*]-[l*^{2}*]-bed~ket*^{0} ‘think (intr.)’
	Utterance	*t*^{5}-*a*^{4}-*[n*^{2}*]-kij*^{0} ‘tell’ *b/a*^{3}-*[n*^{2}*]-d/a*^{0} ‘say’

Table 5.12. Complement types and semantic classes of CTP in Ket

The table shows that Ket in general conforms to the hierarchy proposed by Cristofaro. We can see that the most semantically integrated CTPs, phasals and modals, take the most deranked complement types, while the predicates not involving semantic integration (knowledge, propositional attitude, and utterance predicates) take the balanced complement types. At the same time the table shows there are two unexpected deviations from the hierarchy. First of all, it concerns the modal predicates *itej* ‘can’, *qoŋan* ‘not to be able’, *nada* ‘be necessary’ which are capable of taking finite clauses as their complements (in addition to the deranked type), which also places them with the predicates without semantic integration. The second deviation is the knowledge predicate *en*^{7}-*[n*^{2}*]-suk~soŋ*^{0} ‘forget’ which takes an action nominal complement marked with the complementizer *bila*.