

Semantics of complementation in Adyghe

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Introduction

This paper investigates the semantic distribution of complement constructions in the Adyghe language (North-West Caucasian). The complementation system of Adyghe presents many interesting issues that are not widely attested typologically. An interesting point is the possibility of unsubcategory case marking in complementation: clausal arguments show variation in case marking with one and the same complement-taking verb, a phenomenon which is not attested with nominal arguments. Another issue is the use of the same complement construction to encode events with emotive verbs (like *I like dancing*) and false propositions (like *he had been to China* in *He said he had been to China, but I know he was lying*). Meanwhile there is a special “factive form” used to encode facts and manner complements.

Complementation in Adyghe has previously been described in both reference grammars and the specialized literature on subordination (see Zekokh 1976, Kerasheva 1984 and others). However, these works do not focus on the semantic types of complement clauses. I consider the main complementation strategies in Adyghe in terms of semantic notions including fact vs. event vs. proposition, presupposition vs. assertion, and epistemic meaning. In particular, competition between the various complementation strategies is dealt with in detail. An overview of the relevant parameters, and the tests that help to differentiate between the semantic types of complement clauses, are given in (Serdobolskaya, this volume), which is focused on Ossetic. A list of the complement-taking predicates considered here is given in the Appendix.

Most of the Adyghe data presented here were collected by elicitation and from texts recorded during fieldwork in 2004, 2005, 2006 and 2008 in the village of Khakurinokhabl, in the course of field trips carried out by the Russian State University for the Humanities (led by Jakov Testelec, Nina Sumbatova, and Svetlana Toldova). The elicited examples are given without reference, while examples taken from recorded oral texts are labelled TEXT.

I will use the following terms: “complement-taking predicate”, or CTP – a predicate that can take clausal (and potentially also nominal) arguments; “matrix clause” – the clause headed by the complement-taking predicate (CTP); “complement clause” – a clausal argument (marked with square brackets); “dependent/embedded clause” – any type of subordinate clause; “complementation strategy” – the morphosyntactic construction used for the complement clause.

The paper is structured as follows. The first section presents a list of complementation strategies in Adyghe. The second section is dedicated to the morphosyntactic properties of the main complementation strategies. In the third section, I analyze the semantics of the different complementation strategies and explain the choice of construction in those cases where competition exists.

1. Adyghe: typological features and main complementation strategies

1.1. Typological features of Adyghe

Adyghe (West Circassian) belongs to the Abkhazo-Adygh branch of the North-Caucasian language family; it is spoken in the Republic of Adygea and in Krasnodarskij district in Russia, and also in Turkey, Syria, Israel and several other countries. The total number of speakers does not exceed 500,000. Standard Adyghe is based on the Kemirgoy dialect spoken in Adygea. The idiom of the village of Khakurinokhabl, described in this

paper, is largely Kemirgoy, with a very small number of features (mostly phonetic) belonging instead to the Abadzeh dialect.

The Adyghe language is characterized by a large consonant system, whereas only three vowels are distinguished. The main typological features of Adyghe are ergative alignment, polysynthesis in the verb morphology, a small number of nominal cases, free word order, and somewhat blurred morphological distinctions between the parts of speech (cf. [Rogava and Kerasheva 1966]; a grammatical sketch is provided by [Arkadiev et al. 2009]).

Adyghe has four morphological cases: oblique (ergative), absolutive (which marks patient-like arguments of transitive verbs (1) and the single argument of intransitive verbs (2)), instrumental and adverbial. The oblique case is used to mark agent-like arguments of transitive verbs (1), indirect objects with various semantic roles, and adjuncts (cf. *šə-m* and *zawe-m* in (2)). This case is termed “oblique” here on the basis of its functional range (for further arguments against the term “ergative” cf. Letuchiy 2012).

(1) *hač'e-m č'ale-r ə-λeβ^wə-β.*
 guest-OBL boy-ABS 3SG.A-see-PST
 ‘The guest has seen the boy.’ (Rogava and Kerasheva 1966: 65)

(2) *č'ale-r šə-m tje-s-ew zawe-m k^wa-βe.*
 boy-ABS horse-OBL LOC-sit-ADV war-OBL go-PST
 ‘The boy went to war on horseback.’ (Rogava and Kerasheva 1966: 65)

The instrumental case encodes a large number of meanings, such as instrument, means, measure, and motion through an area (prolative) (Serdobolskaya 2011). The adverbial case is mostly used to mark adverbs, secondary predication, and converbs, as well as in some other functions, see 2.5 for details. The absolutive and the oblique case mark core arguments of the verb, as opposed to the remaining two cases, which are most often used to introduce adjuncts. Henceforth I will thus use the term “core cases” for the oblique and the absolutive, and “non-core cases” for the instrumental and the adverbial.

In Adyghe, most semantic roles are encoded by verbal prefixes. For example, the beneficiary is introduced by a special prefix on the verb:

(3) *se txələ-xe-r sə-š'efə-βe-x.*
 I book-PL-ABS 1SG.A-buy-PST-PL
 ‘I bought the books’. (Letuchiy 2009: 331)

(4) *se č'ale-xe-m txələ-xe-r a-fe-s-š'efə-βe-x.*
 I boy-PL-OBL book-PL-ABS 3PL.IO-BEN-1SG.A-buy-PST-PL
 ‘I bought the books for the boys’. (Letuchiy 2009: 331)

In (4) the NP denoting the beneficiary is marked with the oblique case, the same case marker that is used to encode agent-like arguments of transitive verbs. The valency-increasing prefix *fe-* on the verb specifies its role in the sentence as a beneficiary (in reference grammars of Adyghe this prefix is termed “version” (Rogava and Kerasheva 1966)).

The Adyghe sentence can host several noun phrases marked with the oblique case, whose semantic roles are specified by prefixes on the verb. These prefixes are marked for the person and number of the corresponding participants. Meanwhile, a clause may contain only one absolutive NP. The overwhelming majority of verbs require an absolutive argument.

The tense system of Adyghe includes present tense (no special morphological marker; however, a “dynamicity” morpheme attaches to verbs, except for stative predicates), future tense (the marker *-š't*), past tense (the marker *-β*), the remote past in *-βaβ* (PST-PST) and the imperfect in *-š'tə-βe* (the past tense of the auxiliary, which is homonymous with the future tense; for the arguments against the uniform analysis cf. Footnote 5).

1.2. Complementation strategies in Adyghe

Adyghe represents an interesting case for the typology of complementation, since in this language the case markers develop a complementizing function when used with verbal stems. The possibility of choosing more than one case marker in a given context multiplies the number of complementation strategies available, as will be shown in the following sections.

The main complementation strategies in Adyghe (first described in Gerassimov 2006) are the following: verbal stem without tense suffixes or subordination markers (5), potentialis without case markers (6), factive form in *zere*¹ (7), verbal stem with case markers (8) and potentialis with case markers (9).

- (5) *ʔʷənçʰəbze-xe-r z-be-kʷed s-jə-xabz.*
 key-PL-ABS 1SG.A-CAUS-lose 1SG.PR-POSS-law

‘I sometimes lose the keys (lit. It’s my law to lose the keys).’

- (6) *labə-xe-r s-thačʰə-n faje.*
 plate-PL-ABS 1SG.A-wash-POT must

‘I must wash the dishes.’

- factive form with the prefix *zere-* (the factive form takes the case marker required by the CTP):

- (7) *[aχšʰe deβʷ qə-zer-jə-βaxə-re-r] s-əgʷ r-j-e-hə.*
 money good DIR-FCT-3SG.A-earn-DYN-ABS 1SG.PR-heart LOC-3SG.A-DYN-carry

‘I’m pleased that he earns a lot.’

- verbal stem with tense markers (the zero marker of the present tense in (8)) and with the case markers of adverbial or instrumental case:

- (8) *[azemat qa-kʷ-ew] qə-s-šʰ-e-χʷə.*
 Azamat DIR-go-ADV DIR-1SG.IO-LOC-DYN-become

‘It seems to me that Azamat will come.’

- potentialis with case markers:

- (9) *[sə-tje-fe-n-čʰe] s-e-šʰəne.*
 1SG.ABS-LOC-fall-POT-INS 1SG.ABS-DYN-fear

‘I’m afraid of falling down.’

I consider this a distinct construction from the potentialis without case markers, because the two differ in their morphosyntactic properties and syntactic distribution. The potentialis without case markers is used with modal, phasal, and aspectual predicates, i.e. predicates that do not denote an independent situation, but modify another situation (in terms of phase, modality, or aspect respectively). Typologically it is known that such verbs often head clause union structures with their dependent verbs (cf. Aissen 1974; Noonan 1985: 138–142). According to Kimmelman (2010), in Standard Adyghe most of these verbs form monoclausal constructions with their “complements”.

In contrast, the potentialis with case markers is used with verbs that denote an independent situation, such as mental/emotive verbs and verbs of speech and perception. This

¹ Reference grammars use different terms for these forms. The verbal stem without suffixes is labelled “bare stem” in (Kerasheva 1984: 121–134), “non-finite form without suffixes” in (Rogava and Kerasheva 1966: 329), and “infinitive” in (Kumakhov 1989: 277–278). The potentialis is often called “masdar” (Rogava and Kerasheva 1966; Kumakhov 1989; Zekokh 2002), but the term “action nominal” is used in (Paris and Batouka 2005). (Kumakhov 1989) uses the term “infinitive” for the potentialis without case markers, and “masdar” for the potentialis with case markers. The masdar (i.e. potentialis) with the adverbial case marker in particular is described as the “supine” in (Rogava and Kerasheva 1966) and (Kerasheva 1984), while other researchers retain the term “masdar” here. The factive form is referred to as the “participle” (Rogava and Kerasheva 1966: 111), and the verbal stem with the adverbial case as the “converb”; there is no special term for the verbal stem with the instrumental case. The rationale for adopting the terms used in this paper are discussed in detail in Serdobolskaya 2009a and 2009b.

construction will be of major concern in this paper, as will the factive form (7) and the verbal stem (8). The first two strategies, exemplified in (5)² and (6), will not be considered.

- indirect question strategies

Complement clauses with general questions take the conditional marker *-me* with the additive particle *-jə* (10). The particle is optional in such contexts. In conditional clauses in Adyghe, the marker *-me* introduces a real/unreal/counterfactual condition, and the combination of the markers *-me* and *-jə* denotes concession.

- (10) *č'ale-m ə-še-r-ep [pšaše-r me-čaje-m-jə].*
 boy-OBL 3SG.A-know-DYN-NEG girl-ABS DYN-sleep-COND-ADD
 'The boy does not know if the girl is sleeping.' (Arkadiev et al. 2009: 96)

Indirect wh-questions are introduced by relative clause constructions, where the question focus is the head, e.g. (11) lit. "I do not know the one where Aslan has gone".

- (11) *se [aslan zə-de-k^wa-be-r] s-še-r-ep.*
 I Aslan REL.IO-LOC-go-PST-ABS 1SG.A-know-DYN-NEG
 'I do not know where Aslan has gone.' (Arkadiev et al. 2009: 93)

I do not consider these constructions in detail, since they have a very special distribution, i.e. they only appear in the context of indirect questions.

A number of other complementation strategies exist which are used more rarely than those enumerated in (5)–(9). Since their use is limited to a small number of constructions/CTPs, I describe them very briefly here.

- verbal noun in *-č'e*:

The verbal noun has the meaning of manner, e.g. *k^wač'e* 'gait, step' from *k^we-* 'go', *š'ə?ač'e* 'way of life' from *š'ə?e-* 'live' (Kumakhov 1964: 121), and it heads sentential complements with manner meaning:

- (12) *[a-xe-m ja-qe-š^wa-č'e] s-λeβ^wa-be.*
 DEM-PL-OBL 3PL.PR+POSS-DIR-dance-NMLZ 1SG.A-see-PST
 'I saw how they were dancing.'

Unlike the verbal stem with the instrumental, the verbal noun in *-č'e* shows nominal morphosyntactic properties, e.g. it takes the possessive marker and cannot host all the arguments of the initial verb. It also differs from this form morphologically: unlike the instrumental case marker, it triggers the *e* → *a* alternation in the preceding morpheme.

- the grammaticalized form of the verb of speech *ʔ^we-* 'say' with the additive particle *-jə*:

- (13) *["se prosto sə-b-de-semerqewə-β nah-č'e" ə-ʔ^w-jə] qə-s-jə-ʔ^wa-β.*
 I just 1SG.ABS-2SG.IO-COM-joke-PST than-INS 3SG.A-say-ADD DIR-1SG.IO-3SG.A-say-PST
 '“I have only played a practical joke on you, nothing else”, he said to me.’ (TEXT)

This form is grammaticalized and has somewhat “bleached” semantics, since it can also mark citations with predicates that do not necessarily presuppose speech (14) and can be used to mark complements of the same CTP *ʔ^we-* 'say' (13) without giving rise to tautology. However, it preserves agreement with the agent of the matrix clause, cf. the 1st person marker in (14), contrasting with the 3rd person in (13).

- (14) *jetane direktorə-m thape-m fə-tje-stx-jə [“k^we če-š' je obed g^were j-e-be-še je nemač' g^were fe-š' s-ʔ^w-jə].*
 then school.head-OBL paper-OBL BEN-LOC-1SG.A-write-ADD go.IMP LOC-take.away.IMP
 or lunch some OBL-DYN-CAUS-do.IMP or other some BEN-do.IMP 1SG.A-say-ADD
 '...then I wrote a note to the school head (lit. saying): “Come and take her [the inspector] to lunch or whatever, or do something else with her”.’ (TEXT)

² The construction in (8) should not be confused with that seen in (5): in (5), the “bare” verbal stem is used, i.e. without any tense suffixes or subordination markers, while in (8) the verbal stem takes both tense suffixes and case markers, which serve as subordinators.

- parataxis

This strategy is distinct from that using the verbal stem (8) in terms of its morphology. Firstly, it does not take case markers; secondly, there is a clear indicator of the non-subordinate status of the semantically dependent clause, namely the “non-subordinate” negation *-ep* (see section 2.1 for the negation in Adyghe):

- (15) *se [azemat qe-kʷe-šʹt-ep] s-šʷešə.*
 I Azamat DIR-go-FUT-NEG 1SG.A-think
 ‘I think that Azamat is not coming.’

This type of construction has only been observed with non-factive mental verbs of opinion. However, the distribution of this strategy has not been investigated in detail.

- temporal and conditional markers:

- (16) a. *saše me-šʹane [šʷənčə zə-χʷə-čʹe].*
 Sasha DYN-fear dark REL.TEMP-become-INS
 b. *saše me-šʹane [šʷənčə χʷə-me].*
 Sasha DYN-fear dark become-COND
 ‘Sasha is afraid of the dark.’

These markers are used in complements denoting generic events, as in (16), with emotive and evaluation predicates and the verb *ježe-* ‘wait’.

The problem with these constructions is whether they should be classified as argument or adverbial clauses. Semantically the conditional/temporal clauses in (16) are filling the valency slot of the matrix predicate, since the stimulus of emotion belongs to the set of arguments of an emotive verb. However, they are encoded with means that are otherwise found to head conditional/temporal adverbial clauses.

One test for the argument status of an NP (suggested in Apresyan 1974) concerns the possibility of omitting the NP in question³. On the basis of this criterion, the clauses in (16) are to be classified as adjuncts. They can be omitted without leading to ungrammaticality, e.g. it is possible to say *s-e-šʹane!* (1SG.ABS-DYN-fear) ‘I am afraid’ without expressing the stimulus. By contrast, the stimulus cannot be omitted with the verb *šʹešʹane-* ‘fear’, which contains the preverb *šʹe-* (note that with this verb the function of the preverb *šʹe-* is to introduce a new valency slot). The same is true for other CTPs that take conditional/temporal clauses. Thus, these constructions do not meet the syntactic criterion defining complementation, and are not considered in this paper.

It is significant that in Adyghe coreferentiality between the arguments of the matrix and the dependent clause does not play a role in the choice of complementation strategy. Although there is a form traditionally termed the “infinitive” (potentialis without a case marker; in other reference works, this is taken as the verbal stem without suffixal markers), it is reserved for phasal, aspectual and modal CTPs only. Other classes of verbs do not show a preference for any of the analyzed strategies on the basis of the coreferentiality pattern (cf. (20) and (27b) with the CTP ‘fear’, or (52) and (103abcd) with ‘hope’).

In the next section I address the morphosyntactic features of the main complementation strategies in Adyghe.

2. Morphosyntactic properties of complement clauses

In this section, I consider the morphosyntax of complement clauses headed by the potentialis, the verbal stem, and the factive form. All three forms take case markers (and postpositions) that mark their subordinate status.

³ It has been pointed out in the literature that this criterion does not always give plausible results and must be used with caution as regards labile verbs (cf. the possibility of *She loves* in English without the NP referring to the stimulus). In Adyghe, arguments of two-place verbs can also be omitted under certain semantic conditions; however, this does not apply in the case of many verbs with valency-increasing prefixes, including *šʹe-šʹane-*.

Adyghe predominantly uses non-finite clauses in complementation, as in other types of subordinate constructions. The question arises as to the “degree” of finiteness of subordinate clauses. A number of parameters have been suggested in works on (non-)finiteness, such as tense/aspect/mood marking and the presence of nominal cases (Lehmann 1988, Givón 1990, Malchukov 2004, Kalinina 2002). The following morphosyntactic parameters are relevant for Adyghe:

Morphological properties of verbal forms

Verbal: mood and modality, tense, aspect, valency-changing markers, negation, agreement markers, dynamicity marker⁴;

Nominal: presence of an overt nominalizer, possibility of taking case markers (and/or articles), nominal number and possessive markers.

Syntactic properties of verbal forms

Marking of the core arguments (if this reflects the pattern used in independent clauses or in noun phrases), (in)compatibility with postpositions, (in)compatibility with adverbs/adjectives, (in)ability to head an independent clause.

2.1. Morphosyntax of complement clauses headed by the potentialis

The potentialis can take nearly all the verbal grammatical markers: see example (17) with the 2nd person marker *-p-*, (19) with the number agreement suffix, (17) with the valency-increasing prefix *fe-* and (17)–(18) with the aspectual markers (the preverb *qə-* (17) and the refactive suffix *-ž’ə* (18)).

(17) [*tawrəχə-r qə-p-fe-s-ʔ^wete-nə-m əpe] wə-z-βe-šxe-š’t.*
 tale-ABS DIR-2SG.IO-BEN-1SG.A-tell-POT-OBL before 2SG.ABS-1SG.A-CAUS-feed(ANTIP)-FUT
 ‘I’m going to feed you before I tell you a fairy tale.’

(18) *maše ja-dež’ k^we-ž’ə-n-ew z-je-βe-hazərə.*
 Masha 3SG.PP-towards go-RE-POT-ADV REFL.ABS-DYN-CAUS-ready
 ‘Masha plans to return home (lit. to her).’

There are two negation markers in Adyghe: the prefix *mə-* is used in subordinate clauses, while the suffix *-ep* marks the head of an independent clause (e.g. *k^we-r-ep* (go-DYN-NEG) ‘he doesn’t go’ vs. *ə-mə-λeβ^wə-βe jə-šawe-m* (3SG.A-NEG-see-PST POSS-boy-OBL) ‘his son that he has never seen’ (Arkadiev 2009 et al.: 45)). The potentialis in complement clauses takes only the “non-finite” negation, as in all subordinate clauses:

(19) [*we laβe-xe-r wə-mə-thač’ə-n-x-ew] sə-faj.*
 you plate-PL-ABS 2SG.A-NEG-wash-POT-PL-ADV 1SG.ABS-want
 ‘I don’t want you to wash the plates (lit. I want that you not wash the plates).’

Note that in independent clauses the potentialis takes the “finite” negation, as shown in (23).

Past tense markers are not in complementary distribution with the potentialis; they can co-occur in one and the same verbal form:

(20) [*vaze q^wətə-βe-n-č’e] s-e-š’əne.*
 vase break-PST-POT-INS 1SG.ABS-DYN-fear
 ‘I fear that the vase has broken’ (during transportation).

The future tense marker *-š’t* cannot occur in the potentialis form. However, it is unclear whether this prohibition is due to the “non-finite” properties of the potentialis or whether it can be explained by the semantics of the two forms. The future tense and the potentialis are semantically similar, both signalling the future time reference of the situation (whereas the potentialis has peculiar semantic nuances, which are discussed below in this section). Hence,

⁴ In Adyghe, dynamic verbs in the present indicative take one of the dynamicity markers *ma-/me-*, *-e-*, or *-re-* (for the exact distribution see [Rogava and Kerasheva 1966]).

it can be assumed that the two markers are incompatible in a single verbal form because of the tautology effect. The two markers cannot co-occur in verbal forms that head independent sentences either.⁵

The mood and dynamicity markers are incompatible with the potentialis, not only in complement clauses, but also in the head of independent sentences. The markers of the conditional in *-me*, concessional in *-mjə* and desiderative in *-B^wet* can co-occur with the future tense marker *-š't*, but they are incompatible with the potentialis (Rogava and Kerasheva 1966: 192–201). This may serve as an argument for the non-finiteness of the complement clauses with the potentialis, as well as in independent clauses.

Hence, from the point of view of verbal morphological categories, the potentialis demonstrates nearly all the properties that are characteristic for verb forms that head independent sentences, except for the ability to take markers of non-indicative mood and dynamicity.

The potentialis also demonstrates a number of nominal features. The marker itself can be analyzed as the nominalizer; note that most reference grammars label this form the “masdar” (Zekokh 2002; Kerasheva 1984; Kumakhov 1989; Rogava and Kerasheva 1966) or “action nominal” (Paris and Batouka 2005). It is not easy to say whether this marker should be viewed as a subordinate clause marker or a modal marker. The potentialis is most often found in subordinate clauses that have future temporal reference or gnomic meaning. However, it can also head independent sentences:

(21) *se tort s-šə-š't/-n.*
 I cake 1SG.A-do-FUT/POT
 ‘I’ll bake a cake.’

(22) *sə-qə-b-de-?epə?a-n-a?*
 1SG.ABS-DIR-2SG.IO-COM-help-POT-Q
 ‘Should I help you?’

(23) *lavə-r s-?epəzə-n-ep.*
 dish-ABS 1SG.A-drop-POT-NEG
 ‘{I’ll be very careful and} I won’t drop the dishes, {don’t worry}.’

The acceptability of this form in independent clauses cannot, however, be taken as a good argument against analyzing it as a subordinate clause marker. The potentialis in independent clauses cannot take indirect mood and dynamicity markers. It has been demonstrated in (Kalinina 2002), (Evans 2007) and other works that subordinate verbal forms can occur as the head of independent sentences as a result of so-called ‘insubordination’. Analysis of the contexts where the potentialis can head an independent sentence shows the following (cf. Serdobolskaya 2009a for details): the potentialis is used if the independent clause has reference to the future and does not constitute the main assertion of the sentence. Let us clarify this point. In (21) the potentialis introduces the semantic nuance of spontaneous decision; in (22) it encodes deontic necessity; and (23) it suggests an attempt at persuasion. Native speakers comment that the potentialis is possible if the speaker is *assuring* the hearer that he will not drop the dishes, rather than simply stating it as a fact. Such “fuzzy” explanations have one point in common: native speakers always try to find some semantic matrix predicate (and a matrix clause) that is not expressed in the sentence headed by the

⁵ There are verbal forms that seem to violate this restriction, e.g. *ma-k^we-š'tə-n* (DYN-go-AUX-POT) ‘he probably goes’ (Arkadiev et al. 2009: 48). However, these forms are interpreted by (Arkadiev et al. 2009) as the potentialis forms of the auxiliary verb *š'tə-*, which encodes epistemic modality. This auxiliary also has other tense forms, such as *ə-?^we-š'tə-ka-ve* (3SG.A-say-AUX-PST-PST) ‘he would say’. The argument for differentiating this auxiliary from the future tense marker is the position of the negation marker *-ep*: with the future marker it is postposed to all other suffixes (including the future tense marker *-š't*), while in the construction with the auxiliary it precedes the auxiliary marker *-š't*: for example, *š'tə-sə-B-ep-š'tə-n* (LOC-sit-PST-NEG-AUX-POT) ‘he probably didn’t sit’.

potentialis: in (21) it is “I have just decided”, in (22) it is a marker of deontic modality, in (23) it is “I assure you”. Such a semantic predicate, which is absent in the syntactic structure, is present in the insubordinated use of infinitives, participles and other verbal forms that head non-finite clauses (Evans 2007). Hence, the marker of the potentialis can be analyzed as a marker of subordination with a semantic matrix predicate, and the examples with the potentialis in independent clauses can be interpreted as a result of insubordination. Thus, the potentialis can be described semantically as a form mostly referring to the future, and having an “insubordinated” use in main clauses, i.e. when found in main clauses it does not itself make a semantic assertion but requires a semantic matrix predicate, cf. (Evans 2007) for the types of semantic matrix predicates found in insubordination.

The nominal morphological features of the potentialis are the following. First, the potentialis can take all four nominal cases, cf. (24)–(26) and (27a). (The nominal number affix *-xe* also functions as a verbal plural agreement marker (24), and thus cannot be used as an argument regarding the finiteness of a construction.)

- (24) [*zeč'e çaf-xe-r nasəpə řə-n-x-ew*] *tə-faj*.
 all person-PL-ABS happy do-POT-PL-ABS 1PL.ABS-want
 ‘We want everybody to be happy.’

Second, the person and number agreement prefixes can be omitted on the potentialis (25), while this is unacceptable in verbal forms that head independent sentences.

- (25) [*mařine (s)-fə-nə-r*] *qə-s-fe-qjan*.
 car (1SG.A)-drive-POT-ABS DIR-1SG.IO-BEN-hard
 ‘It is hard for me to drive a car.’

The omission of agreement markers is only possible with the potentialis in core cases; it is not possible in non-core cases, cf.:

- (26) a. [*mařine-r s-fə-n-č'e/ew*] *qə-s-fe-qjan*.
 car-ABS 1SG.A-drive-POT-INS/ADV DIR-1SG.IO-BEN-hard
 b. **[mařine-r fə-n-č'e/ew]* *qə-s-fe-qjan*.
 car-ABS drive-POT-INS/-ADV DIR-1SG.IO-BEN-hard
 ‘It is hard for me to drive the car.’

It can be concluded that the potentialis forms with and without agreement markers head different constructions in Adyghe. The construction without the markers shows a higher degree of nominalization than the construction with the agreement markers.

Third, the potentialis can take the nominal marker of possession *jə-*. This prefix occurs postposed to the person and number prefix and marks alienable possession on nouns, as in (27). It can occur on the potentialis (28).

- (27) a. *s-řə*
 1SG.PR-brother
 ‘my brother’
 b. *s-jə-ř*
 1SG.PR-POSS-horse
 ‘my horse’ (Arkadiev et al. 2009: 56)

- (28) *s-jə-k'e-n deβ'ə s-jə-č'e-n nah*.
 1SG.PR-POSS-go-POT good 1SG.PR-POSS-run-POT than
 ‘I walk well, but I can hardly run (lit. My walking is good, compared to my running).’

Such examples are possible if the potentialis denotes an activity with gnomic meaning or a cultural event, i.e. in more “nominalized” contexts. Complement clauses that have concrete temporal reference do not allow such a construction. Even with a gnomic interpretation the possessive markers are not always possible:

- (29) a. * [*č'ale-m* *jə-qe-š^we-n*]⁶ *jə-č'as*.
 boy-OBL POSS-DIR-dance-POT POSS-favourite
- b. [*č'ale-m* *qe-š^we-nə-r*] *jə-č'as*.
 boy-OBL DIR-dance-POT-ABS POSS-favourite
- ‘The boy likes dancing.’

I suggest that (28) shows a higher degree of nominalization than the form in (29b).

Different syntactic structures must therefore be postulated for (28) and (29b), as well as for (27a) and (27b). Hence, the potentialis in Adyghe can head a number of constructions that exhibit different degrees of nominalization (and desententialization, cf. Lehmann 1988);⁷ see [Ershova forthc.] for a similar analysis of Kabardian constructions. The least nominalized constructions are those that include the potentialis with adverbial/instrumental markers. The highest degree of nominalization is observed with forms demonstrating a clear semantic shift towards the denotation of activities or cultural events (or even objects, such as *šxən* ‘food’ from the verb *šxə-* ‘eat’) rather than propositions or events. This semantic distinction is common for many languages that possess various syntactic types of nominalization.

In terms of its syntactic behaviour, the potentialis mostly demonstrates verbal properties: its core arguments are marked according to the pattern used in independent finite clauses (e.g. absolutive in (24)), and adjuncts are most often marked as adverbs (30). In Adyghe, adverbs derived from adjectives are marked with the adverbial marker *-ew*, e.g. *ž'ə* ‘early’ (adjective), *ž'ew* ‘early’ (adverb).

- (30) [*ž'-ew* *sə-tež'ə-n-əm*] *s-jezeš'ə-κ*.
 early-ADV 1SG.ABS-get.up-POT-OBL 1SG.ABS-fed.up-PST
- ‘I’m fed up with getting up early.’
- (31) *sə-g^w* *r-jə-hə-κ* *təκ^wese-re* *qe.š^we-nə-r*.
 1SG.PR-heart LOC-3SG.A-carry-PST yesterday-ADJ dance-POT-ABS
- ‘I liked yesterday’s dances.’

Adjectival adjuncts (31) are allowed with the potentialis in core cases (recall that these forms show more nominalized properties than those with non-core cases), and in the absence of person and number agreement prefixes. That is, these constructions show a high degree of nominalization.

The potentialis is compatible with postpositions, even when agreement prefixes are present, cf:

- (32) *se* *s-e-k^we* [*gəzet* *qe-s-š'efə-nə-m* *paje*].
 I 1SG.ABS-DYN-go newspaper DIR-1SG.A-buy-POT-OBL for
- ‘I am going [to a shop] to buy a newspaper.’

In conclusion, the Adyghe potentialis occupies a high position in all finiteness hierarchies, since it demonstrates nearly all the properties, including distributional properties, shown by a verb in the language. However, it can also head nominalized constructions – in these cases it shows nominal morphological features, e.g. it may take adjectives and the possessive marker, and may appear without agreement markers. In this paper, I do not analyze such constructions, since they are employed only marginally in complementation and have peculiar semantic nuances, as is characteristic of deverbal nouns with a high degree of lexicalization.

⁶ I do not give an asterisked example with the possessive on the absolutive form of the potentialis, since the possessive marker is incompatible with nouns in the absolutive (Rogava and Kerasheva 1966: 62–64).

⁷ It is well known that in many languages one and the same nominalized form can head constructions with different degree of nominalization, see the analysis of the constructions headed by the English gerund *Mary’s singing of the song* (nominal pattern), *Mary singing the song* (verbal pattern), *Mary’s singing the song* (mixed pattern) in (Abney 1987).

The ability to take core cases and postpositions does not signal a high degree of nominalization. However, as shown in (25)–(29), the potentialis with the core cases is more “nominalized” than the potentialis with non-core cases.

2.2. Morphosyntax of complement clauses headed by the verbal stem

The verbal stem in complement clauses preserves the full range of verbal morphology, with the exception of the mood and dynamicity markers: see examples (33)–(35) with the agreement prefixes, (33) with the reflexive aspectual suffix, (34) with the negation marker. As for tense markers, the verbal stem takes all tense markers that are used in independent clauses, cf. (33) with the past tense marker and (35) with the future marker.

(33) *se [w-jə-dese-xe-r p-ʂə-ž'ə-be-xe-č'e] s-je-neg^wəje.*
 I 2SG.PR-POSS-lesson-PL-ABS 2SG-do-RE-PST-PL-INS 1SG.ABS-OBL-think
 ‘I hope that you have already done your homework.’

(34) *g^wəš'ə?e pəte qə-w-e-s-e-tə [pçə sə-mə-wəsə-č'e].*
 word hard DIR-2SG-OBL-1SG.A-DYN-give lie 1SG.A-NEG-invent-INS
 ‘I give you my word of honour that I’m not lying.’

(35) *[a ž'anə-r pšəše-m ə-š'efə-š't-ew] qə-s-š'e-χ^we.*
 DEM dress-ABS girl-OBL 3SG.A-buy-FUT-ADV <think>DIR-1SG.IO-LOC-DYN-become
 ‘I think that the girl will buy that dress.’

The unacceptability of mood markers and the absence of the dynamicity marker (34) are among the properties that differentiate these constructions from the independent clause construction. Another property of this kind is the use of subordinate negation (34).

As for nominal features, the verbal stem can take the markers of adverbial (35) and instrumental cases (34); core cases are impossible in the construction under discussion. The possessive marker is also unacceptable.

All the syntactic properties of the complement constructions with the verbal stem follow the clausal and not the nominal pattern: the verbal stem assigns to its core arguments the same cases as those required in independent clauses (cf. absolutive and oblique in (35)), and the adjuncts are encoded as adverbs, not as adjectives. The verbal stem can occur with postpositions.

As shown in 2.1, core cases signal a higher degree of nominalization than the adverbial and the instrumental cases (and postpositions). Hence, it can be concluded that the verbal stem in complement clauses does not demonstrate nominal morphological properties.

2.3. Morphosyntax of complement clauses headed by the factive form

The factive form (traditionally termed the participle, cf. [Rogava and Kerasheva 1966: 111]) is formed with the prefix *zere-* and takes the case marker required by the CTP:

(36) *č'elejekaž'e-m je-ʂe [azemat šhan^wəpče-r zere-x-jə-wətə-be-r].*
 teacher-OBL OBL+DYN-know Azamat window-ABS FCT-LOC-3SG.A-break-PST-ABS
 ‘The teacher knows that Azamat has broken the window.’

The factive form preserves verbal morphological features, including polypersonal agreement, aspect, dynamicity marking, valency-changing affixes, and verbal tenses; cf. examples with the agreement markers (36)–(37), with the reflexive aspectual suffix (38), with negation (37), with the dynamicity marker *-re-* (37) and with the markers of the past (36) and future (38) tense. Mood markers are unacceptable on the factive form. Another property differentiating the factive form from verbal forms that head independent clauses is the use of subordinate negation *mə-* (37).

(37) [*ə-ne-me* *deβ^wə* *zer-a-mə-λeβ^wə-re-m* *paje*]
 3SG.PR-eye-OBL.PL good FCT-3PL.A-NEG-see-DYN-OBL for
a-š' *mašine* *ə-fə-r-ep.*
 DEM-OBL car 3SG.A-drive-DYN-NEG

‘He doesn’t drive the car, because he has poor eyesight.’

(38) [*zere-k^we-ž’ə-š’tē-m-č’e*] *q-a-r-jə-ɽ^wa-β.*
 FCT-go-RE-FUT-OBL-INS DIR-3PL-AUG-3SG-say-PST

‘He told them he would leave. (lit. As for his departure, he told them about it).’

(Gerassimov and Lander 2008: 293)

The main nominal feature of the factive form is the presence of the nominalizer *zere-*. Like the potentialis form, this can take all four nominal case markers. However, it cannot take the possessive marker or the nominal plurality marker; adjectival modifiers are also unattested with the factive form.

The syntax of the complement clause headed by the factive form follows the clausal pattern. Both core arguments and adjuncts are encoded in the same way as in independent finite clauses. However, the factive form can take all four cases and may occur with postpositions, cf.:

(39) *a-r* *me-g^wəš^we* [*xə-m* *zere-k^we-š’tə-m* *paje*].
 DEM-ABS DYN-hope sea-OBL FCT-go-FUT-OBL for

‘He is glad because he’s going to travel to the sea.’

Hence, the factive form shows mostly verbal properties, except for the possibility of taking core case markers and appearing in the context of postpositions.

2.4. Morphosyntax of the complement clauses: summary

The properties of the three forms discussed in 2.1–2.3 are summarized in table 1 below.

Nominal / verbal properties	Potentialis	Factive form	Verbal stem with case markers
<i>Verbal properties</i>			
mood	–	–	–
tense markers	+/-	+	+
aspect- and valency-changing markers	+	+	+
agreement	+/-	+	+
negation	“non-finite” ⁸ negation	“non-finite” negation	“non-finite” negation
dynamicity	–	+	–
core arguments encoded in the same way as in independent clauses	+	+	+
adjuncts marked as adverbs	+	+	+
<i>Nominal properties</i>			
nominalizer	+	+	–
case markers	+	+	+/-
nominal plurality markers	n/a	n/a	n/a
adnominal marking of the arguments	–	–	–

⁸ This only concerns the potentialis in complement clauses; in independent sentences the “finite” negation marker is used (23).

possessive markers	+/-	-	-
compatibility with postpositions	+	+	+

Table 1. Morphosyntactic properties of the potentialis, the factive forms and the verbal stem with case markers in complement clauses in Adyghe

It can be concluded that the most frequently used complementation strategies in Adyghe do not demonstrate a high degree of nominalization and/or desententialization (cf. Lehmann 1988, Givón 1990). The constructions with the most nominalized properties involve the potentialis without agreement markers; however, even in these constructions the argument structure and the aspectual properties of the nominalized verb are mostly preserved.

In the next section I consider the three complementation strategies discussed here with regard to their ability to take case markers, and argue for the necessity of distinguishing more than three complementation strategies in Adyghe.

2.5 Case markers as complementizers

2.5.1. The distribution of case markers with the main complement constructions

As has been shown above, all three of the strategies under discussion take nominal case markers. Traditional works on Adyghe identify four case markers: ergative with the marker *-m*, absolutive with the marker *-r*, instrumental with the marker *-č'e* and adverbial with the marker *-ew*. The ergative in Adyghe, besides its function of marking agent-like arguments of transitive verbs, is also used to mark indirect objects, including arguments introduced by the version prefixes (as shown in (4)), and adjuncts of time, location, etc. As shown in 1.1, the ergative introduces a large number of argument and adjunct roles, and there can be many NPs marked with the ergative in one and the same clause in Adyghe. Thus, Letuchiy (2012) argues for another term for this case marker, namely the *oblique*. As stated in 1.1, the absolutive and the oblique case mark core arguments of the verb, as opposed to the remaining two cases, which are most often used to introduce adjuncts.

The instrumental case, as well as marking instrumental meaning proper, is used to mark the meaning of motion through an area (prolative), as well as cause, temporal interval, means of transport, stimulus of emotion etc. (cf. Serdobolskaya 2011). The adverbial case suffix is attached not only to nouns (in contexts of manner, as in *to jump like a kangaroo*), but is also used to mark adverbs (40), nouns in adverbial position, heads of relative clauses, secondary predicates (41) and adverbial clauses (42) etc. (cf. [Arkadiev et al. 2009] for details).

(40) *psənč'e – psənč'-ew; daxe – dax-ew*
 easy easy-ADV beautiful beautiful-ADV
 'easy' – 'easily'; 'beautiful' – 'beautifully' (Rogava and Kerasheva 1966: 334)

(41) *se ap-ew sə-k'a-B.*
 I first-ADV 1SG.ABS-go-PST
 'I went first.'

(42) [*janəwe jə-B'əneB'ə-m a-dež' k'a-B-ew] ?e šhalə-m*
 POSS+old.woman POSS-neighbour-OBL 3PL.PP-to go-PST-ADV hand mill-OBL

pestapχe qə-š'-jə-haž'ə-š'tə-B.
 ...porridge DIR-LOC-3SG.A-grind-AUX-PST

'Having gone to the neighbours, the old woman ground the flour to make porridge.'
 (Kerasheva 1995: 167)

Thus, the interpretation of this marker as a "case" in the reference grammars is rather misleading. However, in this article I retain the term "case" for lack of any other well-established term.

In complementation, all four cases can be attached to the head of the complement clause. However, the factive form in *zere-* and the potentialis can take all four case markers, while the verbal stem can only take⁹ the instrumental and adverbial case markers (see Table 2):

- (43) **[azemat qa-kʷe-r] qə-s-šʹ-e-χʷə.*
 Azamat DIR-go-ABS DIR-1SG.IO-LOC-DYN-become
 Intended meaning: ‘It seems to me that Azamat is coming.’

Such examples are judged ungrammatical, although nominal arguments of this verb with the same role of “theme” do take absolutive case marking:

- (44) *se a-r qə-s-šʹ-e-χʷə.*
 I DEM-ABS DIR-1SG.IO-LOC-DYN-become
 ‘I think so.’

The same distribution is observed for all CTPs that take a complement clause headed by the verbal stem or a nominal argument with the absolutive/oblique case. It can be concluded that nominal and clausal arguments in Adyghe require different case marking. This phenomenon has been attested in some Mongolic (see Knjazev 2009 for Kalmyk) and Finno-Ugric languages (see Miteva 2009 for Komi-Zyryan).

Table 2. Case marking of the dependent predicate in different complementation strategies

Complementation strategy	Absolutive in <i>-r</i>	Oblique in <i>-m</i>	Instrumentalis in <i>-čʹe</i>	Adverbial case in <i>-ew</i>
Factive form in <i>zere-</i>	+	+	+	+
Verbal stem	–	–	+	+
Potentialis in <i>-n</i>	+	+	+	+

The table shows that complements take non-core cases, that is, cases that are predominantly used to mark nominal non-arguments. However, in complementation non-core cases are used not as adverbial clause markers, but as complementizers. Dependent clauses with instrumental/adverbial case markers remain arguments of CTPs (see the discussion after example (16)).

2.5.2. Terminological remarks on the verbal stem with case markers

As shown in 2.2, the verbal stem in this construction preserves most of the morphosyntactic properties of verbal forms that head independent finite clauses. The only marker of subordination in these constructions is the case marker. In Adyghe reference grammars (Zekokh 1976; Kerasheva 1984 and others), the verbal stem with the adverbial case marker *-ew* is termed the “converb” (as opposed to the potentialis with the adverbial case, which is known as the supine), while the verbal stem with the instrumental case marker, as far as I know, receives no special designation (it is called a “non-finite formation in *-nčʹe*” in [Kerasheva 1984]). This form can be related to the frustrative (antiresultative) mood in Adyghe. The frustrative is formed with the marker *-čʹe*, which attaches to the verbal stem after the suffixes of tense, plural agreement and dynamicity; it is used in antiresultative contexts (i.e. with the meaning of “cancelled” result):

- (45) *a-r šxe-čʹe xe-χʷe-šʹt-ep.*
 DEM-ABS eat-INS grow-FUT-NEG
 ‘Even if he eats, he’ll never gain weight.’ (Kuznetsova 2009: 311)

⁹ It should be specified that in relative clauses, verbs in Adyghe can take all the case markers in reference to the participant in a situation: *kʷa-be-r* “go-PST-ABS” ‘the one that has gone’, *kʷa-be-m/-mčʹe/-ew* “go-PST-OBL/INS/ADV” ‘the one that has gone/with the one that has gone/as the one that has gone’, *kʷe-šʹtə-r* “go-FUT-ABS” ‘the one that will go’ etc. (Rogava and Kerasheva 1966: 314–315). I do not consider these constructions here, since they function as relative clauses and not sentential complements.

It is unclear whether the marker seen in (45) and that seen in sentential complements should be considered to represent the same unit. From the point of view of morphosyntax, they do not show different properties: they occupy the same position in the verb form (position 5 after the verbal stem, as defined in [Arkadiev et al. 2009]), and they do not trigger the *e~a* alternation¹⁰ in the previous syllable (this alternation differentiates the manner nominalization marker *-č'e* from all three of the other markers with this shape: the case marker *-č'e*, the frustrative marker *-č'e*, and the sentential argument marker *-č'e*). However, the semantics of (45) and of complement clauses with the instrumental do not seem to be related. The frustrative denotes a situation with cancelled result, while the complement clause marker *-č'e* marks eventive and irrealis complements. The second type of context can be linked functionally with the frustrative; see (Plungian 2001) for the combination of irrealis and antiresultative meaning in markers of the pluperfect. However, the link between the meanings of event and irrealis/antiresultative is not so obvious. It could be speculated that the event and irrealis readings arise from different sources. The event reading may have developed from the instrumental case in *-č'e* via the “manner” meaning of the instrumental (although in fact this meaning is rather marginal in Adyghe). A shift from manner towards event in the meaning of complementizers is attested in a number of languages, e.g. Slavic. However, the exact grammaticalization path of complements in *-č'e* is unclear and needs further research. I label these forms “frustrative” in independent clauses, and “verbal stem with the instrumental case” in complement clauses (even in irrealis clauses); the gloss, however, is the same in all these contexts (INS).

I am not using the term “converb” for the verbal stem with the adverbial case, nor do I use “supine” for the potentialis with the adverbial case as in Kerasheva (1984). The rationale for this solution is that, as I show below, the potentialis with the adverbial case is more appropriately analyzed as a combination of two markers (the potentialis and the adverbial marker), which is fully compositional semantically.

2.5.3. Variation of case marking in complementation

The case marker found on the verb heading the complement clause can be determined by the CTP, cf. the same marking for nominal and clausal arguments with the CTP ‘like’:

(46) *č'ale-m pšaše-r ə-g^w r-j-e-hə.*
 boy-OBL girl-ABS 3SG.PR-heart LOC-3SG.A-DYN-carry
 ‘The boy likes the girl.’

(47) [*c^wəmpe-r qe-sə-wəB^wejə-nə-r*] *sə-g^w r-j-e-hə-r-ep.*
 strawberry-ABS DIR-1SG.A-collect-POT-ABS 1SG.PR-heart LOC-3SG.A-carry-DYN-NEG
 ‘I don’t like to collect strawberries.’

Both nominal and clausal arguments take the absolutive case in (46) and (47), just as the same preposition is used in the English sentences *I’m afraid of him* and *I’m afraid of his doing nothing about the work*. For the sake of brevity, I will henceforth use the term “subcategorized case marking” for case marking that follows the pattern shown by nominal arguments.

However, complement clauses in Adyghe may instead take other case markers which are not determined by the CTP (non-subcategorized case marking): for example, the verb *əg^w rjəhə-* ‘like’ in (48) takes the potentialis in the instrumental or adverbial case:

(48) a. [*c^wəmpe-r qe-sə-wəB^wejə-n-č'e* / *qe-sə-wəB^wejə-n-ew*]
 strawberry-ABS DIR-1SG.A-collect-POT-INS DIR-1SG.A-collect-POT-ADV
sə-g^w r-j-e-hə.
 1SG.PR-heart LOC-3SG.A-DYN-carry
 ‘I like collecting / to collect strawberries.’

¹⁰ See Smeets 1984; Arkadiev et al. 2009.

Such variation is prohibited with nominal arguments:

b. * *č'ale-m pšâse-č'e / pšâs-ew ə-g^w r-j-e-hə.*
 boy-OBL girl-INS girl-ADV 3SG.PR-heart LOC-3SG.A-DYN-carry

Intended meaning: 'The boy likes the girl.'

Let us consider another example of this variation. The verb *š'eš'ane-* 'fear' has the argument structure <ABS(experiencer) OBL(stimulus)>. Thus if the stimulus is an object, it is encoded by the oblique case:

(49) a. *se təB^wəžə-m sə-š'-e-š'ane.*
 I wolf-OBL 1SG.ABS-LOC-DYN-fear

'I'm afraid of the wolf.'

Other case markers in this context are ungrammatical:

b. **se təB^wəžə-ew / -č'e / -ər sə-š'-e-š'ane.*
 I wolf-ADV / -INS / -ABS 1SG.ABS-LOC-DYN-fear

Intended meaning: 'I'm afraid of the wolf.'

The sentential complement, however, can be marked either with the oblique case, or with the instrumental or adverbial case:

(50) *se [č'eš'ə-m s-jə-zaq^w-ew*
 I night-OBL 1SG-POSS-alone-ADV
qe-s-k^wə.ha-nə-m / n-ew / n-č'e] sə-š'-e-š'ane.
 DIR-1SG.A-go-POT-OBL POT-ADV / POT-INS 1SG.ABS-LOC-DYN-fear

'I'm afraid of walking around alone at night.'

(With this verb the instrumental and adverbial cases are regarded by native speakers as stylistically marked, but acceptable.)

The variation in complement case marking is limited by the following rules.

First, unsubcategoryed case marking only concerns non-core cases. The core cases are used in accordance with the same rules as nominal arguments: if the verb requires the oblique case, as here with the verb "fear", it cannot assign absolutive case to its argument, whether this is nominal or sentential. The unsubcategoryed non-core cases are acceptable with the sentential complement, as in (50). The same goes for those verbs requiring the absolutive: e.g. the verb "like" requires absolutive case on the stimulus, and it cannot assign oblique case to this argument, whether nominal or sentential; however, non-core cases are acceptable with the sentential complement.

CTPs are found that cannot assign core cases to the stimulus, and require the instrumental or adverbial case, e.g.:

(51) *maše ja-dež' [k^we-ž'ə-n-ew] z-j-e-ve-hazəra.*
 Masha 3PL.PP-to go-RE-POT-ADV REFL.ABS-3SG.A-DYN-CAUS-ready
 'Masha is going to return home (lit. go back to hers).'

These predicates can only take complements with non-core cases. Some take only one, e.g. instrumental or adverbial case (such as *zəvehazəra-* 'intend, be about to'), but there are also CTPs that may take either case (such as *g^wəve-* 'hope').

(52) *se [univjersitjetə-m sə-če.fe-n-ew / -č'e] s-e-g^wəB^we.*
 I University-OBL 1SG.ABS-enter-POT-ADV / INS 1SG-DYN-hope
 'I hope to enter the University.'

The restrictions formulated above can be summarized as follows. The use of the core cases with sentential complements conforms to the subcategoryed of the matrix predicates; non-core cases can have non-subcategoryed uses with sentential complements; nominal arguments do not allow this variation.

Variation in the case marking of complements is also restricted by complementation type: it is only observed with the potentialis and the verbal stem. As for the factive form, there is variation of oblique and instrumental with some emotive CTPs (for example, *jezeš'ə-*

‘be fed up’ and *əg^w rjehə-* ‘like’, see the Appendix). This variation is more limited than that seen with the verbal stem and the potentialis, and I do not consider it in this paper.

Hence, the number of complementation strategies in Adyghe interacts with the possibility of case variation to give the following:

- 1a. Factive form in *zere-* with subcategorized case (oblique/absolutive/instrumental/adverbial)
- 1b. Factive form with non-subcategorized case: instrumental
- 2a. Verbal stem with the instrumental case
- 2b. Verbal stem with the adverbial case
- 3a. Potentialis in *-n* with one of the core cases (subcategorized marking)
- 3b. Potentialis in *-n* with the (un)subcategorized instrumental
- 3c. Potentialis in *-n* with the (un)subcategorized adverbial case

The question arises of how to characterize the semantic distinction between verbal forms which differ only in case marking: namely, between types 1a and 1b; 2a and 2b; 3a, 3b and 3c. This difference is rather subtle, and is not easily explained by native speakers. For Kabardian, where similar variation is attested, Kumakhov and Vamling (1998: 126) characterize the distribution of case markers in terms of interchangeability and vagueness of semantic difference. I will address this question in 3.2–3.3.

3. Semantics of complementation strategies

In this section I consider the functions of the factive form in *zere-*, the potentialis and the verbal stem with case markers.

3.1. Semantics of the factive form

3.1.1. *Fact vs. proposition*

The factive form is used in classical factive contexts, as described in theoretical works (Kiparsky and Kiparsky 1971; Arutjunova 1988, Zalizniak 1990); cf. (Serdobolskaya, this volume) for the overview of tests that identify facts in complementation. This complementation strategy is used with the factive verb *ʃe-* ‘know’ (53) and the emotive factive verbs *jeχ^wepse-* ‘envy’ (54), (*fe*)*g^wabžə-* ‘be angry’ and others (see Gerassimov and Lander 2008 for details).

- (53) [*čəg^wə-r zere-χ^wəraje-r]* *zeč’e-m-jə ja-ʃe.*
 Earth-ABS FCT-round-ABS all-OBL-ADD 3PL.A+DYN-know
 ‘Everybody knows that the Earth is round.’

- (54) *pšaše-r jeχ^wepse [ə-šəpχ^w č’ale-m nah ə-g^w zere-r-jə-hə-re-r*
 girl-ABS envy 3SG.PR-sister boy-OBL than 3SG.PR-heart FCT-LOC-3SG.A-carry-DYN-ABS
jež’ nah-rjə].
 INTF/REFL than-PTCL
 ‘The girl envies her sister because the boy likes her sister more than her.’

Non-factive mental verbs of opinion meaning ‘think, believe’ (*ləte-*, *š’əχ^wə-* etc.) do not allow the factive form (55b).

- (55) a. [*čəg^wə-r χ^wəraj-ew]* *s-e-ləte.*
 Earth-ABS round-ADV 1SG.ABS-DYN-count
 b. * [*čəg^wə-r zere-χ^wəraje-r]* *s-e-ləte.*
 Earth-ABS FCT-round-ABS 1SG.ABS-DYN-count
 ‘I think that the Earth is round.’

On the contrary, complements in the adverbial case, which do not have a factive reading, are preferred with these verbs (55a), and in most contexts are judged as unacceptable with *ʃe-* ‘know’ (56b).

- (56) a. [azemat qə-zere-ḱ^we-š'tə-r] s-e-ṣe.
Azamat DIR-FCT-go-FUT-ABS 1SG.A-DYN-know
b. *[azemat qe-ḱ^we-n-ew] s-e-ṣe.
Azamat DIR-go-POT-ADV 1SG.A-DYN-know
'I know that Azamat will come.'

When the verb 'know' is used in the non-factive meaning 'be certain, be sure' (57) or in presupposition-opaque contexts (58) (cf. Serdobolskaya, this volume for details), it can take the potentialis with non-core cases, cf.:

- (57) [azemat qe-ḱ^we-n-ew] w-e-ṣ-a?
Azamat DIR-go-POT-ADV 2SG.A-DYN-know-Q
'Are you sure that Azamat will come?'

- (58) [psewənaḱe w-jə-ʔe-n-č'e] s-ṣe-me
health 2SG.A-LOC-be-POT-INS 1SG.ABS-know-COND
qə-p-fe-sə-mə-ṣe-n š'a-ʔ-ep.
DIR-2SG.IO-BEN-1SG.A-NEG-do-POT LOC-be-NEG
'I wouldn't spare anything for your health (lit. There is nothing I wouldn't give, if I knew that you were healthy).'

Here the truth of the complement clause is not presupposed – in (57) it is questioned, and in (58) it is merely hypothesized by the speaker. In such contexts the factive form is not used. In (57) the dependent clause is propositional, and the adverbial case is used. The context of (58) suggests that the complement clause is in fact false, and the instrumental case is chosen. For the use of the adverbial case to encode propositions, and the instrumental to encode false propositions, see 3.2–3.3.

As well as encoding facts, the factive form can also be used with non-factive CTPs, e.g. 'love, like' and the verb of speech 'say':

- (59) [njepe weš'x q-je.š'xə-n-ew] a-ʔ^wa-ḱ.
today rain DIR-rain-POT-ADV 3PL.A-say-PST
'They said it would be raining today.' (The sentence describes a radio forecast. The speaker does not know if the forecast will turn out true or false.)

- (60) s-jane je-s-ʔ^wa-ḱ-ep [ocenke dej qə-zere-s-hə-ḱe-r].
1SG.PR-POSS+mother OBL-1SG.A-say-PST-NEG mark bad DIR-FCT-1SG.A-carry-PST-ABS
'I haven't told mother that I got a bad mark.' (The speaker did receive a bad mark.)

Both examples contain complement clauses with the verb of speech, but in (59) it takes the potentialis with the adverbial case, while in (60) the factive form is used. The difference between the two examples corresponds to the difference between presupposition and assertion. In (59) the complement clause belongs to the assertion being made, while in (60) the matrix clause is asserted, and the complement is presupposed.

Complements with the factive form pass the diagnostic tests for facts. First, the negation test: for example, in (60) the negation of the CTP does not affect the truth of the complement. In the judgment of native speakers, the truth of the complement clause is preserved in such cases, unlike in complement clauses with the verbal stem.

Second, the truth of the complement clause cannot be denied in the further context by the same speaker. If the speaker does not intend to present as true the situation described in the complement clause, the factive form cannot be employed, and other complementation strategies must be used instead, cf.:

- (61) [a-r qə-s-e-wa-ḱ-ew] zeč'e-m-jə a-r-jə-ʔ^wa-ḱ.
DEM-ABS DIR-1SG.IO-OBL-hit-PST-ADV all-OBL-ADD 3PL.IO-OBL-3SG.A-say-PST
'He told everyone that he had hit me. {But this is not true.}'

Let us consider quasi-performative contexts. The factive form cannot be used in such cases: these contexts require the verbal stem with the adverbial case.

- (62) a. *se azemat jane-jate-xe-m ja-s-ʔ^wa-β [azemat mə-š'*
 I Azamat mother-father-PL-OBL 3PL.IO+OBL-1SG.A-say-PST Azamat DEM.PROX-OBL
zere-š'-je-mə-ž'e-ž'ə-š'tə-r].
 FCT-LOC-OBL-NEG-read-RE-FUT-ABS
- b. ...*[azemat mə-š' š'-je-mə-ž'e-ž'ə-š't-ew] ja-s-ʔ^wa-β.*
 Azamat DEM.PROX-OBL LOC-OBL-leave-RE-FUT-ABS 3PL.IO+OBL-1SG.A-say-PST
 a=b. 'I told Azamat's parents that he would not study here.'

In (62a) the sentence is interpreted by native speakers as follows: the decision that Azamat will not study at this school has been taken before the moment described in the matrix clause, and the speaker (and perhaps the hearer) is aware of this. However, (62b) can be interpreted in such a way that the speaker is the director of the school, and the decision was taken at the moment of the speech event described in the matrix clause, and was in fact implemented in the statement "He will not study here" itself. This quasi-performative context takes a proposition in the complement clause, and hence the adverbial case complement is used.

Therefore, the conclusion can be drawn that the factive form introduces facts, while forms using the adverbial case introduce propositions.

3.1.2. Fact vs. event

Let us consider minimal pairs with factive and eventive complements. In (63) what is being evaluated by the speaker is the fact that Aslan has come, while in (64) s/he is evaluating the emotions and physical sensations arising from the activity of walking.

- (63) *[aslan qə-zere-ḱ^wa-βe-r] deβ^wə.*
 Aslan DIR-FCT-go-PST-ABS good
 'It is good that Aslan has come.' (Gerassimov and Lander 2008: 292)
- (64) *[pč'əha.re qe-p-ḱ^wə.ha-n-č'e] deβ^wə.*
 in.the.evening DIR-2SG.A-go-POT-INS good
 'It's nice walking in the evening.'

The factive form can be used in (63), and not in (64), because (64) introduces the eventive context (cf. the tests for distinguishing between propositions, facts, and events in [Serdobolskaya, this volume]). The same semantic opposition is observed in (65) and (66): in (65) the speaker describes as positive his feelings arising from the situation, while in (66) s/he is evaluating the fact of it being warm as positive. Hence, in (66) the factive form is used, in contrast to (65).

- (65) *[c^wəmpɛ-r qe-sə-wəβ^wejə-n-č'e] sə-g^w r-j-e-hə.*
 strawberry-ABS DIR-1SG.ABS-collect-POT-INS 1SG.PR-heart LOC-3SG.A-DYN-carry
 'I like collecting strawberries. (I enjoy this activity.)'
- (66) *[njepə zere-fabe-r] sə-g^w r-j-e-hə.*
 today FCT-warm-ABS 1SG.PR-heart LOC-3SG.A-DYN-carry
 'I like the fact that it is warm today.'

Therefore, the factive form denotes facts, while forms with the instrumental case denote events.

3.1.3. Other functions of the factive form

Other functions of the factive form are peripheral (cf. Gerassimov and Lander 2008). First, it is found in the context of topical irrealis complements, cf:

- (67) *[marine bzaλfəβe daḱ^wə zere-χ^wə-š'tə-r] a-rə-βe-š'tə-n.*
 Marina woman seamstress FCT-become-FUT-ABS DEM-PRED-PST-AUX-POT
 'It is likely that Marina will become a seamstress.' (Gerassimov and Lander 2008: 299)

According to Gerassimov and Lander (2008), the factive form is chosen in (81) because the complement clause constitutes the topic of the sentence, cf. 3.2.3 for the role of information structure in the choice of complementizer.

Second, the factive form can mark complement clauses with manner semantics, and the eventive complements of verbs of immediate perception:

(68) *se sə-g^w r-j-e-hə [a-š' wered qə-zer-jə-ʔ^we-re-r].*
 I 1SG.PR-heart LOC-3SG.A-DYN-carry DEM-OBL song DIR-FCT-3SG.A-say-DYN-ABS
 'I like the way he sings.'

(69) [*fatime qə-zere-š^we-re-r*] *hasanə zə-λeβ^wə-m š^wə ə-λeβ^wə-β.*
 Fatima DIR-FCT-dance-DYN-ABS Khasan REL.TEMP-see-OBL good 3SG.A-see-PST
 'When Khasan saw Fatima dancing, he fell in love with her.'

These uses are explained by the diachronic origin of the factive form. Gerassimov and Lander (2008: 307–310) argue that it stems historically from the relative construction, where the instrumental argument is relativized. This analysis is supported by the fact that the prefix *ze-* functions as a relativizer in Adyghe ("participle" in reference grammars), while *re-/rə-* is a valency-increasing prefix which introduces an instrumental argument. See the contrast between (70), without the instrumental argument, and (71), where the instrumental argument is introduced by *rə-*.

(70) *mašine-r psənč'-ew ma-k^we.*
 car-ABS fast-ADV DYN-go
 'The car goes fast.' (Rogava and Kerasheva 1966: 334)

(71) *k^wə-xe-r β^wəg^wə-m r-e-k^we-x.*
 cart-PL-ABS road-OBL INSTR-DYN-go-PL
 'The carts are going down the road.' (Jakovlev and Ashxamaf 1941: 66, cit. after Gerassimov and Lander 2008: 308)

Gerassimov and Lander (2008) suggest that the manner interpretation (68) of the factive form arises from this diachronic source. I suggest that the manner interpretation, in its turn, gives rise to the use of the factive form in eventive contexts with immediate perception verbs (69)¹¹.

3.1.4. Some conclusions

Thus, the main function of the factive form in Adyghe is to denote facts; it can also introduce topical irrealis propositions, manner complements and events with immediate perception verbs. It is therefore used with the factive verbs *še-* 'know', *š'əβ^wəpše-* 'forget', *jeχ^wepse-* 'envy', *feg^wəbžə-* 'be angry', *g^wəš^we-* 'rejoice', and with non-factives that allow factive complements: emotive verbs (as predicates with the semantics 'love, like' and *jezeš'ə-* 'fed up'), the verbs of perception *λeβ^wə-* 'see' and *zexexə-* 'hear', mental verbs, and the verb *ʔ^we-* 'say'. It is noteworthy that facts are only encoded by means of the factive form.

As I show below, the distribution of the potentialis and the verbal stem in complementation cannot be explained on the basis of the opposition of semantic parameters discussed in (Serdobolskaya, this volume): propositions vs. events, irrealis complement clauses vs. propositions etc. The difference between the potentialis and the verbal stem in complement clauses belongs to the domain of temporal reference of the dependent clause. Meanwhile, events and propositions are differentiated by means of the case markers occurring on the complement.

In the following sections I consider only non-factive contexts, since facts are encoded by the factive form only.

¹¹ The shift from manner to event in the meaning of complementizers is observed in Slavic languages, cf. (Arutjunova 1988) for Russian.

3.2. Opposition of adverbial and instrumental case in complement clauses

The verbal stem and the potentialis in *-n* can take both adverbial and instrumental markers with one and the same CTP. The distribution of the case markers seems arbitrary at first sight, since there are many matrix predicates that allow both case markers without any apparent difference in meaning. Analyzing the same phenomenon in Kabardian, a language belonging to the same Circassian subgroup of the Northwest Caucasian language family, Kumakhov and Vamling (1998: 126) claim that the instrumental and adverbial case markers are very close in meaning and interchangeable in complement clauses. Native speakers of Adyghe often see no difference in meaning between the two cases. However, there are contexts where one variant is preferred by all speakers. Moreover, not all matrix predicates allow variation in case marking. I suggest that the distribution of the cases in complement constructions is based on the opposition between events and propositions.

3.2.1. Potentialis / verbal stem with the adverbial case

As shown in 3.1.1, in many contexts the factive form is semantically opposed to the forms with the adverbial case (the verbal stem and the potentialis with the adverbial case), see examples (55)–(56), (59)–(60) and (62). In (61) the complement clause with the adverbial case is used to denote a proposition that is negated in the following context (unlike with factive complements, which cannot be negated in the following context). In (62b) it introduces a proposition in a quasi-performative context. Hence, forms with the adverbial case meet the criteria for propositions discussed in (Serdobolskaya, this volume).

There is additional evidence for the claim that forms with the adverbial case (both the verbal stem and the potentialis) denote propositions. The potentialis with the adverbial case introduces purpose clauses (72) and complements of speech causation verbs (73), see [Asher 1993] for the analysis of complements of such CTPs as propositions.

(72) *se dak^we-m šeč' qə-fe-s-hə-β [š'ane qə-s-f-jə-də-n-ew].*
 I tailor-OBL cloth DIR-BEN-1SG.A-carry-PST dress DIR-1SG.IO-BEN-3SG.A-sew-POT-ADV
 'I brought the cloth to the tailor in order for him to sew a dress.'

(73) *se je-s-ɬ^wa-β azemat [urokə-m č'e-č'ə-ž'ə-n-ew].*
 I OBL-1SG.A-say-PST Azamat lesson-OBL LOC-leave-RE-POT-ADV
 'I told Azamat to leave the class.'

Note that the forms with the instrumental and with the adverbial case are differentiated prosodically. Complements with the adverbial case usually host the main accent – a property that characterizes propositions in a number of languages (Yanko, p.c.; cf. Yanko 2001: 242–245 for Russian). Meanwhile, cross-linguistically events may or may not take the main accent, and Adyghe complements with the instrumental case show the same variation.

Unlike eventive complements, complements with the adverbial case can host negation:

(74) *a-r me-š'əne [jə-č'elejež'ak^we-xe-r*
 DEM-ABS DYN-fear POSS-pupil-PL-ABS
univjersitjetə-m č'e-mə-has^wə-n-x-ew / ?-n-xe-č'e].
 University-OBL LOC-NEG-enter-POT-PL-ADV POT-PL-INS
 'He fears that his pupils will not enter the University.'

The complement contains the negation prefix *mə-*, and native speakers prefer the variant with the adverbial marker in this context.

On the basis of these arguments, I claim that complements with the adverbial case in Adyghe denote propositions.

However, there are contexts where the function of forms with the adverbial case is less clear. The adverbial case marker is found with evaluative CTPs and with CTPs with the meaning 'love, like':

(75) [*we čašhe.mašhe-xe-r p-šxə-n-ew] deb^wə.*
 you fruit-PL-ABS 2SG.A-eat-POT-ADV good
 ‘It is good for you (for your health) to eat fruit.’

(76) [*pč’edəž’ə-m ž’-ew sə-qe-tež’ə-n-ew]*
 morning-OBL early-ADV 1SG.ABS-DIR-get.up-POT-ADV
sə-g^w r-j-e-hə
 1SG.PR-heart LOC-3SG.A-DYN-carry
 ‘I like getting up / to get up early in the morning.’

With these CTPs both the adverbial and the instrumental are possible. It has been claimed for many languages that these CTPs take factive (e.g. *I like that he protects me*; *It is good that he protects you*) or eventive complements (e.g. *I like dancing*; *Dancing is good for your health*). However, I assume that they can also take propositions. The evaluative predicates can be used when the complement denotes a situation imagined by the speaker, cf. Russian:

(77) *Xorošo, čto, mož-et by-t’, et-o by-l l’edan-oj meteorit.*
 good COMP can-PRS.3SG be-INF this-N.SG.NOM be-PST(M.SG) ice-M.SG.NOM meteorite
 ‘It is good that it was possibly an ice meteorite.’
 (radiovesti.ru/article/show/article_id/79018)

(78) *A vam po-nravi-l-o-s’ by, jesli by vaš muž po-šel*
 and you.DAT PV-like-PST-N.SG-REFL SBJV if SBJV your husband PV-go.PST(M.SG)
v sportzal s ženščin-oj?
 in gymnasium with woman-INS

‘Would you like it if your husband went to a gymnasium with a woman?’ (Russian National Corpus www.ruscorpora.ru)

The imagined situation in the complements with *čto* ‘that’ and *esli* ‘if’ is evaluated as positive. In both examples the complement is not eventive, since what is being evaluated is the pure fact (and not the feelings of the speaker). Moreover, the complements in both examples can host negation:

RUSSIAN

(77’) *Xorošo, čto et-o ne l’edan-oj meteorit.*
 good COMP this-N.SG.NOM NEG ice-M.SG.NOM meteorite
 ‘It is good that it is not an ice meteorite.’

(78’) *A vam po-nravi-l-o-s’ by, jesli by vaš muž ne po-šel*
 and you.DAT PV-like-PST-N.SG-REFL SBJV if SBJV your husband NEG PV-go.PST(M.SG)
v sportzal s ženščin-oj?
 in gymnasium with woman-INS

‘Would you like it if your husband did not go to a gymnasium with a woman?’

These are not factive, since the complement can be negated in the following context by the same speaker:

(77’’) *Xorošo, čto, mož-et by-t’, et-o by-l ledan-oj meteorit, xot’a ja v et-o ne ver’-u.*
 good COMP can-PRS.3SG be-INF this-N.SG.NOM be-PST(M.SG) ice-M.SG.NOM meteorite although I in this-N.SG.NOM NEG believe-PRS.1SG

‘It is good that it was possibly an ice meteorite, although I do not believe it.’

(78’’) *Mne ne po-nrav-it-s’a, jesli, (mož-et by-t’,) moj muž po-jd-et v sportzal s ženščin-oj. Vr’ad li on tak s-delaj-et.*
 I.DAT NEG PV-like-PRS.3SG-REFL if can-PRS.3SG be-INF SBJV my husband PV-go-PRS.3SG in gymnasium with woman-INS hardly he so PV-do-PRS.3SG

‘I will not like it if my husband goes to a gymnasium with a woman. He would hardly do such a thing.’

They can both contain an epistemic expression, which is a diagnostic for propositions (Boye 2012), see (77’’) and (78’’).

Therefore, these complements are to be analyzed as propositional. See (Letuchiy 2014) on the analysis of Russian *if*-complements with emotive CTPs as non-factives. It seems that similar contexts are observed in English constructions where the complement of the evaluative predicate is introduced by the conjunction *if*:

(79) *John might hate it if he won.* (Quer 1999: 242)

In Spanish and Catalan, similar constructions are observed with the emotive verbs ‘please’, ‘annoy’, ‘hate’ and others:

CATALAN

(80) *M'agrada molt pro [si fas pastissos].* (Catalan)
 me-please.3SG a-lot if make.2SG cakes
 ‘I like it a lot if you make cakes.’ (Quer 1999: 242)

Quer shows that these constructions are often non-factive, even if they are attested with factive emotive verbs (Quer 1999: 252).

As the conjunction in question is believed to introduce conditional, i.e. adjunct clauses, examples similar to (79) and (80) are not often involved in studies of complementation (see [Quer 1999] and [2008] for argumentation against the adjunct analysis), which is why it is believed that the CTPs under discussion do not take propositional complements. However, I claim that evaluative predicates in Adyghe do take propositional complements, as exemplified in (75), and that Adyghe verbs with the meaning ‘love, like’ count positive evaluation among their meanings, which is why they may take propositional complements too (76).

3.2.2. *Potentialis / verbal stem with the instrumental case*

The instrumental case can be used in the following contexts. Firstly, it is found in the irrealis (81) or in false complements¹² with mental verbs (82).

(81) [*a ž'anə-r ə-š'efə-n-č'e*] *w-je-neg^waj-a?*
 DEM dress-ABS 3SG.A-buy-POT-INS 2SG.ABS-OBL+DYN-suppose-Q
 ‘Do you think she’ll buy this dress? (I doubt it.)’

(82) [*a-š' j-e-tə-č'e*] *j-e-λəte.*
 DEM-OBL 3SG.A-DYN-dig-INS 3SG.A-DYN-think
 a. ‘He thinks he’s digging. (He doesn’t understand how poorly he is working.)’
 b. ‘He pretends to dig. (He ‘potters’: he pretends he’s working, but he doesn’t dig effectively.)’

In (81), the situation in the complement clause is interpreted as irrealis (as defined in [Serdobolskaya, this volume]): the speaker strongly doubts its validity. As for (82), native speakers suggest two interpretations of this example, cf. the translations; in both cases the complement clause has the truth value “false”.

The “false” interpretation of the instrumental contrasts with the neutral truth value interpretation of the verbal stem with the adverbial case, cf.:

(83) a. [*s-šə-nahə.č'e čəja-ke-č'e*] *me-g^wəbe.*
 1SG.PR-brother-younger sleep-PST-INS DYN-hope
 ‘She thinks that my younger brother has fallen asleep. {In fact, he’s still watching TV}.’

b. [*s-šə-nahə.č'e čəja-k-ew*] *s-e-g^wəbe.*
 1SG.PR-brother-younger sleep-PST-ADV 1SG.ABS-DYN-hope
 ‘I think that my younger brother has fallen asleep. (In reality, he may or may not have.)’

The irrealis reading is largely found with mental verbs of opinion (see also (58) with the verb ‘know’) and with singular verbs of causation and potential situation. For example, the verb *g^wəš'ə?e jetə-* ‘promise, lit. give a word’ most often takes the potentialis with the

¹²This meaning was originally identified by Julia Kuznetsova.

adverbial case; the instrumental is used if the speaker presumes or suspects that the promised situation will not be accomplished. Note that the irrealis reading is possible with both the potentialis (81) and the verbal stem (82).

Another type of context is that of events (see Serdobolskaya, Motlokhov 2009 for details), as demonstrated in (63)–(66) above, where the forms with instrumental marking contrast with the factive form. Consider some more examples with emotive verbs:

- (84) a. *a-r* *[doske-m dež' qə-de-č'ə-n-č'e]* *š'əne-zepətə-š'tə-ɤ.*
 DEM-ABS blackboard-OBL to DIR-LOC-go-POT-INS fear-always-AUX-PST
 ‘{Teachers often called him up, but} He was always afraid to go to the blackboard.’
- b. *a-r* *me-š'əne* *[jə-č'elejež'ak^we-xe-r*
 DEM-ABS DYN-fear POSS-pupil-PL-ABS
univjersitjetə-m *č'e-mə-haš^wə-n-x-ew].*
 University-OBL LOC-NEG-enter-POT-PL-ADV
 ‘He is worried about his pupils not getting into university.’ (If this happens it will harm his pedagogical reputation.)

- (85) a. *[we čəšhe.məšhe-xe-r p-šxə-n-ew]* *deɤ^wə.*
 you fruit-PL-ABS 2SG.A-eat-POT-ADV good
 ‘It is good for you (for your health) to eat fruit.’
- b. *[sə-qə-b-de-g^wəš'ə?e-n-č'e]* *deɤ^wə.*
 1SG.ABS-DIR-2SG.IO-COM-talk-POT-INS good
 ‘It is pleasant to talk to you.’

- (86) a. *[c^wəmpe-r qe-sə-wəɤ^wejə-n-ew]* *sə-g^w* *r-j-ə-hə-r-ep*
 strawberry-ABS DIR-1SG.A-collect-POT-ABS 1SG.PR-heart LOC-3SG.A-DYN-carry-DYN-NEG
aw varenje s-šə-n-ew *sə-faj.*
 but jam 1SG.A-do-POT-ADV 1SG.A-want
 ‘{The girl has been collecting strawberries for hours. – Do you like collecting berries that much?} – Oh no, I don’t like collecting strawberries, but I want to make jam.’
- b. *[c^wəmpe-r qe-sə-wəɤ^wejə-n-č'e]* *sə-g^w* *r-j-e-hə.*
 strawberry-ABS DIR-1SG.ABS-collect-POT-INS 1SG.PR-heart LOC-3SG.A-DYN-carry
 ‘I like collecting strawberries. (I enjoy this activity.)’

The examples with the instrumental case are used in contexts where the CTPs in question denote ungrounded emotion without any mental processing: the experiencer in (84a) fears the situation of going to the blackboard at school independently of the possible harm that s/he may undergo as a result. In (84b), however, the experiencer fears the situation because of its possible consequences. This sentence can be paraphrased as “the experiencer fears the consequences of the dependent situation, considering them as unwanted” (similar characterization is given in [Zalizniak 1992] for the meaning of the Russian verb *bojat'sa* ‘fear’; the same difference is observed in the English examples *I'm afraid to go to the forest* vs. *He's afraid of receiving negative feedback*).

The predicate *deɤ^wə* ‘good’ and the verb *əg^w rjəhə* ‘like’ can take complements with both the adverbial and the instrumental case. With *deɤ^wə* the instrumental is used if the predicate denotes emotion or physical pleasure; the adverbial case is compatible with the meaning of positive evaluation (from the point of view of morality, health, rationality or the like). The same distinction is observed with *əg^w rjəhə*: the adverbial case is used in contexts where the CTP denotes positive emotion based on evaluation (86a), the instrumental case being judged unnatural in these contexts, whereas the instrumental is preferred if the emotion is a positive feeling ‘proper’, as in (86b).

A similar semantic distinction is observed with most evaluative predicates: when denoting evaluation as such they take the adverbial case, whereas the instrumental case is

used if the matrix predicate denotes a physical or emotional feeling. The difference observed for the verb $\text{əg}^w \text{rjəhə}$ ‘like’ is also attested with its close synonyms $\text{jəč}^w \text{as}$ and $\text{š}^w \text{ə} \text{ləb}^w \text{ə}$.

Serdobolskaya, Motlokhov (2009) explain the observed difference in meaning on the basis of the distinction between events and propositions. Complements with the instrumental case introduce events, and those with the adverbial case introduce propositions. This explanation captures the semantic opposition observed in (84)–(86). In (85b) the aspects of the situation, i.e. the event itself, are evaluated as “good”, or giving pleasure acquired by the experiencer. By contrast, in (85a) the situation is mentally processed, and evaluated as “good”. The role played by mental processing makes this situation a proposition. On propositions with evaluative predicates and verbs of emotion see the discussion in 3.2.1.

This claim provides an explanation for the distribution of the instrumental and adverbial cases in the context of other matrix predicates. The instrumental case is generally unacceptable with matrix predicates that do not take eventive complements, i.e. verbs of causation, speech causation and potential situation ($\text{pə} \text{lə}$ - ‘try’, $(f)\text{jə} \text{ke} \text{še}$ - ‘teach’, $\text{zə} \text{ke} \text{hə} \text{zə} \text{rə}$ - ‘intend’ etc.). On the other hand, with the predicate $\text{tχ} \text{əb}^w \text{e}$ ‘pleasant, delightful’, which cannot denote evaluation proper, the instrumental case is the only possible non-core case:

- (86) $[\text{we} \text{š}^w \text{x} \text{ q-jə.} \text{š}^w \text{x-ew} \quad \text{qə-p-} \text{k}^w \text{ə.} \text{hə-n-} \text{č}^w \text{e} / * \text{-ew}] \quad \text{tχ} \text{əb}^w \text{e.}$
 rain DIR-rain-ADV DIR-2SG.A-go-POT-INS/*-ADV pleasant
 ‘It is pleasant to walk in the rain.’

Most emotive and mental verbs can take either the instrumental or the adverbial case, depending on the semantic type of the dependent clause. The emotive verbs that allow for such variation are $\text{š}^w \text{əne}$ - ‘fear’, faj ‘want’, $\text{χ}^w \text{əpse}$ - ‘dream’, $\text{jə} \text{ze} \text{š}^w \text{ə}$ - ‘pester’ and $\text{š}^w \text{eg}^w \text{əbe}$ ‘hope’. The verb $\text{g}^w \text{ə} \text{š}^w \text{e}$ - ‘rejoice’ can take facts or propositions, and does not allow the instrumental case. The other emotive verbs that we have examined are factive ($\text{jə} \text{χ}^w \text{əpse}$ - ‘envy’, $(\text{fe})\text{g}^w \text{əb} \text{žə}$ - ‘be angry’ and others), and only allow the factive form (54).

Mental verbs show the same semantic effect that has been observed with emotive verbs. Adyghe possesses a number of verbs meaning ‘think, believe, suppose’ ($\text{š}^w \text{e} \text{š}^w \text{ə}$ -, $\text{lə} \text{te}$ -, $\text{jə} \text{ne} \text{g} \text{wə} \text{jə}$ -, $\text{š}^w \text{ə} \text{χ} \text{wə}$ -). All these verbs take both instrumental case and adverbial case complements, cf.:

- (89) a. $\text{s-j-e-neg}^w \text{əje} \quad [\text{t}^w \text{ə} \text{ qə-s-hə-n-ew}].$
 1SG.ABS-OBL-DYN-think two DIR-1SG.A-get-POT-ADV
 ‘I **think** I’ll get a bad mark (a “two”).’
 b. $[\text{č}^w \text{əle-r} \quad \text{š}^w \text{e-k}^w \text{edə-n-} \text{č}^w \text{e}] \quad \text{j-e-neg}^w \text{əje.}$
 boy-ABS MAL-loose-POT-INS OBL-DYN-think
 ‘She **fears** that she will lose this boy.’
 c. $[\text{mə} \text{jə} \text{q}^w \text{əpe} \quad \text{š}^w \text{ə-psewə-} \text{č}^w \text{e}] \quad \text{s-j-e-neg}^w \text{əje.}$
 Majkop LOC-live-INS 1SG.ABS-OBL-DYN-think
 ‘I **hope** that he lives in Majkop.’

The adverbial case is used with the principal meaning of these verbs, i.e. the meaning that does not presuppose any emotional commitment on the part of the experiencer (89a). In these sentences, the dependent clause denotes a proposition. The instrumental case gives the dependent clause an eventive reading (or the falsity reading, as in (82) and (83a)). Mental verbs of opinion do not combine with eventive complements, cf. Russian **Ja polagaj-u, kak on ne prid’-ot* (lit. I think-PRS.1SG how he NEG come-FUT.3SG) ‘I think that he will not come’ and English **I think John’s being late* in [Rosenbaum 1967: 29]). In Adyghe many mental verbs allow this type of complement, but with a particular semantic shift whereby the CTP takes on a semantic component of emotional commitment, as in (89b) and (89c). The actual type of emotion – positive or negative – is not specified by the mental verb itself, and is inferred from the pragmatic context. This explains the translations given for (89b) and (89c): native speakers translate these examples with emotive verbs. Such a semantic shift is not

observed in Russian or English mental verbs, which explains their inability to take eventive complements.

Note that the event reading (as well as the irrealis reading) is possible with both the potentialis (89b) and the verbal stem (89c). Meanwhile, generic events are encoded by the same means as events proper (86), or by conditional and temporal subordinators, cf. 1.2. The generic event meaning is only attested with the potentialis.

Therefore, I conclude that the distribution of the instrumental and the adverbial in complement constructions can be accounted for in terms of the distinction between event and proposition. Complements with the instrumental case can also have the “false” or “irrealis” interpretation. The instrumental and adverbial case markers have thus become grammaticalized in Adyghe in the function of complementizers.

It should be specified that the use of the adverbial and the instrumental cannot be straightforwardly explained as the use of the factive form can. First, the observed semantic difference is very subtle with some CTPs and can barely be clarified even in the wider context. Second, some deviations are found from the pattern observed above. Some CTPs do not encode events by means of the instrumental: these are verbs of immediate perception, the verb ‘forget’ and phasal verbs.

CTPs of immediate perception take the factive form (cf. 3.1.3) or the verbal noun in *-č'e* (12) in eventive contexts. To encode propositions, the adverbial case is employed¹³:

- (90) [*ə-š* *je-š^w-ew*] *s-e-λeβ^wə*.
 3SG.PR-brother 3SG.IO-drink.ANTIP-ADV 1SG.A-DYN-see
 ‘I see that his brother drinks [alcohol] / is a drinker.’

Forms with the instrumental case are not allowed with CTPs of perception. Likewise, phasal verbs (91) do not allow the potentialis with the instrumental case:

- (91) *se [sə-če-n-ew]* (**sə-če-n-č'e*) *s-je-ž'a-β*.
 I 1SG.ABS-run-POT-ADV 1SG.ABS-run-POT-INS 1SG.ABS-OBL-begin-PST
 ‘I started running.’

In these contexts we see deviation from the semantic distribution observed above. Thus, in general, the distribution of the markers is explained in terms of the opposition of propositions vs. events, but it appears that their grammaticalization in this function is still in progress, or has stopped at this point.

The question remains as to the function of the core cases with the potentialis. This question is addressed in 3.3. Another issue is the distribution of the verbal stem vs. the potentialis in complementation, which is addressed in 3.4.

3.2.3. Influence of information structure on the choice of complementation strategy

Example (67) shows that the choice of complementation strategy in Adyghe is also influenced by the information structure of the sentence. In (67), the complement clause is the topic of the sentence, and it belongs to the “irrealis complement” type. Irrealis complements are usually encoded by the verbal form with the instrumental case. However, in (67) the factive form is used. Hence, the topical position of the complement clause in the information structure is more important than its semantic type.

The information structure is also relevant for the choice of complementation strategy in the context of focused non-factive complements. If the complement is focused, or an element inside the complement is focused, the form with the adverbial case is preferable:

¹³ The meaning of the perception verb shifts towards “cognitive perception” (conclusion made from perceived events: e.g. the speaker has noticed a large number of empty bottles and general disorder in his brother’s apartment, and has drawn the conclusion that his brother drinks heavily).

- (92) *we nah w-jə-č'ase-r [təve-m z-je-b-ɣewə-n-ew (*-č'e)]*
 you more 2SG.PR-POSS-favourite-ABS sun-OBL REFL.ABS-OBL-2SG.A-tan-POT-ADV (INS)
ar-a? – hawəmja [zə-b-ɣe-pskə-n-ew] ar-a?
 DEM:PRED-Q or REFL.ABS-2SG.A-CAUS-bathe-POT-ADV DEM:PRED-Q
 'Do you prefer tanning? Or bathing?'

The instrumental case is unacceptable here. By contrast, the instrumental case can be used if the CTP constitutes the question focus:

- (93) *w-e-š'əne [w-jə-zaq^w-ew wə-ḱ^we-n-č'e] ar-a?*
 2SG.ABS-DYN-fear 2SG.PR-POSS-alone-ADV 2SG.ABS-go-POT-INS DEM:PRED-Q
 'You're afraid of going alone, aren't you?' (Children are teasing a little girl.)

The position of the copula with the question marker is the same in (92) and (93): it is placed after the dependent verb. However, in (93) it semantically modifies the CTP, which is why the instrumental is possible.

Examples (92) and (93) contain a special focus construction described in (Sumbatova 2009); however, in Adyghe the focus can also be marked by intonation only, as in (94). Although the special focus construction is not used, the adverbial case is also preferable, because the complement is focused:

- (94) *č'eš'naq^we-m we š'e-r te q-jə-p-xə-š't-a? – [t-jə-ɣ'əneɣ^w*
 midnight-OBL you milk-ABS where DIR-LOC-2SG.A-take-FUT-Q 1PL.PR-POSS-neighbour
š'əzə-m jə-ʔe-n-ew] s-e-g^wəɣe.
 wife-OBL LOC-be-POT-ADV 1SG.ABS-DYN-hope
 'Where will you find milk at night? – I hope that the neighbour has some.'

Hence, the adverbial case is preferred in contexts where the complement constitutes the focus of the whole sentence or contains a focused element. Complements with the instrumental case are preferably not focused. This is in agreement with the fact that complements with the instrumental are used in topical constructions with reduplication:

- (95) *je-ž'e-n-č'e / -š't-č'e j-e-ž'e aw par-jə qə-g^wəra^we-r-ep.*
 OBL-read-POT-INS / FUT-INS 3SG.ABS-DYN-read but NPI-ADD DIR-understand-DYN-NEG
 'He does read (lit. as for reading, he reads), but he doesn't understand anything.'

The adverbial case is unacceptable in this context.

Note that topicality in complement clauses can also be marked with the instrumental attached to the oblique (Serdobolskaya 2011).

Thus, non-core cases in complementation can have the function of signalling certain types of information structure: the instrumental can mark topical complements, while the adverbial marks focused complements.

3.3. Distribution of core and non-core cases with the potentialis

As argued in 2.2, the core cases are not available with the verbal stem in complement clauses. Meanwhile, variation of cases with the factive form is attested with four CTPs only, and is not considered in this paper. Thus competition between the core and non-core cases occurs mostly with the potentialis. Syntactically, the two types of construction differ as follows. Complement clauses with the potentialis in the core cases are nominalized to a higher degree: they allow the omission of the prefixal agreement markers, and can take possessive prefixes and adjectival modifiers. Moreover, these constructions apparently form syntactic islands in terms of (Ross 1967): unlike the constructions with non-core cases, they do not allow relativization of the arguments of the embedded verb, cf.:

- (96) a. *[mašin-ew p-fə-n-č'e/-ew]* *qə-p-fe-qjanə-r* *qe-t-š'efə-ɤ-ep.*
 car-ADV 2SG.A-drive-POT-INS/ADV DIR-2SG.IO-BEN-hard-ABS DIR-1PL.A-buy-PST-NEG
- b. **[mašin-ew p-fə-n-ər]* *qə-p-fe-qjanə-r* *qe-t-š'efə-ɤ-ep.*
 car-ADV 2SG.A-drive-POT-ABS DIR-2SG.IO-BEN-hard-ABS DIR-1PL.A-buy-PST-NEG

‘We haven’t bought the car that is difficult to drive.’ (lit. ‘...bought the car that it is difficult to drive’)

In (96) the single argument of the embedded verb is the target of relativization. If the embedded verb is encoded by the potentialis with the instrumental/adverbial, relativization is allowed; however, if it occurs in the absolutive case, relativization is not allowed (96b).

I claim that this empirical difference is due to the nominalized properties of the potentialis with core cases.

The use of the potentialis with the core cases is similar to the use of (de)verbal nominals cross-linguistically. For example, the verb *pəλə-* ‘try’ can have two meanings, ‘be engaged in an activity’ and ‘try, attempt’. The first meaning is observed with nominal and clausal arguments:

- (97) a. *sportə-m* *pəλə-n*
 sports-OBL be.engaged.in-POT
 ‘to be engaged in sports’ (Txarkaxo 1991: 198)
- b. *[adəga-bze-č'e s-je-ž'e-nə-m]* *sə-pəλ.*
 Adyghe-language-INS 1SG.ABS-OBL-read-POT-OBL 1SG.ABS-be.engaged.in
 ‘I’m engaged in reading in Adyghe.’

Nominal arguments are marked with the oblique case (other cases are unacceptable). Clausal arguments with this meaning are also marked with the oblique. However, the complement with the adverbial case is acceptable if the CTP is used in the second meaning:

- (98) *[adəga-bze-č'e s-je-ž'e-n-ew]* *sə-pəλ.*
 Adyghe-language-INS 1SG.ABS-OBL-read-POT-ADV 1SG.ABS-try
 ‘I try to read in Adyghe.’

In this meaning, the verb in question does not take nominal arguments.

The same distinction is present in the pair of verbs *zəfəvəhazərə-* ‘prepare, pack one’s things’ and *zəvəhazərə-* ‘1. intend, be going to, 2. prepare, pack one’s things’. The first verb takes arguments in oblique, both clausal and nominal (the prefix *fe-* in Adyghe is a version prefix that introduces an argument in the oblique case). The second verb only takes clausal arguments, and only in the adverbial case (99c).

- (99) a. *lekcije-m* *zə-fe-ɤe-hazərə-n*
 lecture-OBL REFL.ABS-BEN-CAUS-ready-POT
 ‘to prepare oneself for the lecture’ (Txarkaxo 1960: 160)
- b. *azemat* *[wered q-ə-ʔ^we-nə-m]* *zə-f-j-e-ɤe-hazərə.*
 Azamat song DIR-3SG.A-say-POT-OBL REFL.ABS-BEN-3SG.A-DYN-CAUS-ready
 ‘Azamat is preparing to sing.’ (He may not yet have gone onstage, but he is getting out the microphone, guitar etc.)
- c. *azemat* *[wered q-ə-ʔ^we-n-ew]* *zə-ɤ-e-hazərə.*
 Azamat song DIR-3SG.A-say-POT-ADV REFL.ABS-CAUS-DYN-ready
 ‘Azamat intends to sing.’ (He may already be on the stage and will be singing in a few seconds.)

The examples show that *zəfəvəhazərə-* with oblique-marked complements has the same meaning as with nominal arguments, namely ‘prepare’. The verb *zəvəhazərə-*, which takes only clausal arguments, can also have the meaning ‘intend, be going to’, and it only takes complements with the adverbial case.

The potentialis with core cases is often used in the characteristic contexts for (de)verbal nouns in many languages, e.g. contexts of cultural events and activities rather than concrete situations:

- (100) *sə-g^w* *r-jə-hə-ɤ* [*təɤ^wese-re* *qe.ʃ^we-nə-r*]. (=31)
 1SG.PR-heart LOC-3SG.A-carry-PST yesterday-ADJ dance-POT-ABS
 ‘I liked yesterday’s dances.’

Hence, the potentialis with core cases is used with the same meaning that CTPs have with nominal arguments. The use of this form is characteristic for (de)verbal nouns, and can be described as “cultural event or activity described by the nominalized verb”. The semantic difference is sometimes very subtle, and cannot always be discerned even with the help of the broader context.

3.4. Opposition between the potentialis and the verbal stem with case markers

In sections 3.2–3.3 it has been demonstrated that the opposition between events and propositions in Adyghe is encoded by the case markers on the complement verb. Another issue to be explained is the distribution of the potentialis and the verbal stem in complementation. The choice between these forms is based on the temporal and modal meaning of the complement clause and the semantics of the CTP.

In general, neither the verbal stem nor the potentialis show any restrictions on their temporal reference (with respect to the temporal reference of the matrix clause). Cf. examples (101) with the verbal stem and (102)–(105) with the potentialis. I distinguish four types of temporal reference:

(A) anteriority: the situation in the dependent clause precedes the situation in the matrix clause:

- (101) a. [*s-šə-nahə.č'e* *čəja-ɤe-č'e*] *me-g^wəɤe*. (=83a)
 1SG.PR-brother-younger sleep-PST-INS DYN-hope
 ‘She thinks he has fallen asleep {but he has not}.’

(B) simultaneity: the situation in the dependent clause is simultaneous with the situation in the matrix clause:

- b. *se s-e-g^wəɤ^we* [*we pçə wə-wəsə-č'e*].
 I 1SG.ABS-DYN-hope you lie 2SG.ABS-invent-INS
 ‘I think that you might be telling me lies.’

(C) posteriority: the situation in the dependent clause follows the situation in the matrix clause:

- c. [*ə-š'efə-š'tə-č'e*] *w-e-g^wəɤ-a?*
 3SG.A-buy-FUT-INS 2SG.ABS-DYN-hope-Q
 ‘Do you think he’s going to buy it? {I doubt it}.’

(D) gnomic interpretation of the situation in the dependent clause:

- d. *se s-e-g^wəɤ^we* [*we kaše-r ə-g^w r-jə-h-ew*].
 I 1SG.ABS-DYN-hope you porridge 3SG.PR-heart LOC-3SG.A-carry-ADV
 ‘I hope that you like porridge.’

The verbal stem may include tense markers that encode the temporal reference of the dependent clause. Here (101a) and (101c) illustrate the markers of past and future respectively, while present tense in (101b) and the gnomic reading in (101d) are signalled by the absence of any special marking¹⁴.

Generally, the potentialis can encode all four types of temporal reference enumerated in (A)–(D), cf.:

(A) anteriority:

¹⁴ In independent sentences, dynamicity markers occur in the present tense; they are absent in complement clauses with the verbal stem and the potentialis.

- (102) [*vaze qʷətə-~~ve~~-n-č'e]* *s-e-š'əne.* (=20)
 vase break-PST-POT-INS 1SG.ABS-DYN-fear
 'I fear that the vase has broken' (during transportation).

(B) simultaneity:

- (103) *gʷəš'əʔe pəte qə-w-e-s-e-tə* [*pçə sə-mə-wəsə-n-ew*].
 word solid DIR-2SG.IO-OBL-1SG.A-DYN-give lie 1SG.A-NEG-invent-POT-ADV
 'I give you my firm promise that I'm not lying.'

(C) posteriority:

- (104) *se* [*sə-če-n-ew*] *s-je-ž'a-~~κ~~*. (=91)
 I 1SG.ABS-run-POT-ADV 1SG.ABS-OBL-begin-PST
 'I started running.'

(D) gnomic meaning:

- (105) *č'ale-m* [*qe-šʷe-nə-r*] *jə-č'as.* (=29b)
 boy-OBL DIR-dance-POT-ABS POSS-favourite
 'The boy likes dancing.'

In the case of anteriority (of the situation in the complement), the potentialis takes the past tense marker (102). The remaining three types of temporal reference are not encoded with special markers (103)–(105) and the exact interpretation is inferred from the context and from the semantics of the CTP. There is a group of CTPs that require a future temporal interpretation of their complement, for example the verb 'begin' and verbs of potential situation ('try', 'intend' etc.) and causation and speech causation ('promise', 'permit' etc.). With these verbs the potentialis is always interpreted as referring to the situation that follows the situation in the matrix clause (104).

A number of CTPs exist that most often take complements with gnomic interpretation: for example, verbs with the semantics 'like' (105), 'love' and their antonyms, and evaluative predicates. However, these CTPs also allow for the posterior interpretation:

- (106) [*pçə wə-wəsə-nə-r*] *de~~κ~~ʷ-ep.*
 lie 2SG.A-invent-POT-ABS good-NEG
 a. 'It is not good to lie.'
 b. 'If you lie now, it won't be good.'¹⁵

In (106) the complement clause with the potentialis can be interpreted both as posterior and gnomic meaning, and the exact interpretation is inferred from the context.

As has been demonstrated in 2.1, the potentialis can head not only subordinate, but also independent clauses, where it shows a peculiar distribution with the future marker. In independent clauses, the potentialis can only have future temporal reference; all other types of temporal reference arise in subordinate clauses only.

It should be noted that in Adyghe the temporal reference of the matrix clause does not impose strong restrictions on the choice of the tense form in the subordinate clause; most often it is not differentiated whether the tense of the subordinate clause encodes its temporal reference depending on the temporal reference of the matrix clause vs. on that of the speech act time (there is a pluperfect, however, it is not obligatory; there is no future-in-the-past).

Although all four types of temporal reference are attested with the potentialis, the last two types of temporal reference, posteriority and gnomic meaning, are by far the most frequent. In contexts of anteriority and simultaneity the potentialis occurs only marginally. Therefore, competition between the two forms mostly arises in contexts of posterior and gnomic interpretation. The use of the verbal stem in these two types of contexts is also restricted by the groups of CTPs. Hence, although both forms are acceptable in all four types

¹⁵ In Adyghe, the 2nd person singular is used to introduce generic person (as in *One has to be patient*): this is why the generic-subject interpretation is possible in (106).

of temporal reference, there is not a lot of variation in the choice between the potentialis and the verbal stem, because most CTPs impose restrictions on this choice.

Below I describe the distribution of the verbal stem and the potentialis among those CTPs that can take one or both of these. Factive CTPs are not considered in this section. Most of the examples of the constructions discussed below have already been given in sections 3.1–3.2; here I only give examples that show deviation from the major pattern and have not been exemplified in the previous sections.

(A) Verbs of immediate perception only take the verbal stem and the factive form; the potentialis is not attested with these verbs¹⁶.

(B) Predicates of evaluation can only take the potentialis and the factive form; the verbal stem is not attested.

(C) CTPs of causation and potential situation, as well as the verb ‘dream’, require posterior temporal reference in their complement. These CTPs most often take the potentialis. The verbal stem with the future tense marker is marginal, although acceptable:

(107) [sə-qə-b-de-g^wəš’ə?e-š’tə-č’e] *tha* *s-e-?^we*.
 1SG.ABS-DIR-2SG.IO-COM-talk-FUT-INS God 1SG.A-DYN-say
 ‘I swear by the name of God that I’ll talk to you.’

(D) Emotive verbs behave differently with respect to the temporal reference of their complement. Verbs meaning ‘love’, ‘like’ and the verb ‘bother’ often require a gnomic interpretation in their complement. To encode this meaning, the potentialis is used. In other cases (e.g. *I liked how he danced yesterday*) only the factive form and the verbal noun have been attested. The construction using the verbal stem has not been attested with these CTPs.

The verbs ‘want’ and ‘fear’ and their synonyms most often take the potentialis where the complement has a posterior or gnomic interpretation. If the complement refers to a simultaneous or anterior situation, the verbal stem is preferable. However, the potentialis can also occur in these contexts (102).

(E) Mental verbs and verbs of speech most often take the verbal stem if their complement refers to an anterior or simultaneous situation. However, the potentialis can also be used:

(108) [kl’ejə-m oboj-xe-r ə-wəbatə-~~be~~-n-č’e] *s-e-g^wəbe*.
 glue-OBL wallpaper-PL-ABS 3SG.A-catch-PST-POT-INS 1SG.ABS-DYN-hope/think
 ‘I think that the glue has stuck to the wallpaper.’

If the complement refers to a posterior or gnomic situation, both the potentialis and the verbal stem are possible. The choice between the potentialis and the future in that case depends on the presence of modal meanings, which are characteristic for the potentialis, see 2.1.

The distribution of the potentialis and the verbal stem in the context of the different groups of CTPs is represented in Table 3¹⁷. I use round brackets for marginal constructions and the slash for where the two constructions are equally possible.

Table 3. Distribution of the potentialis and the verbal stem in complement clauses.

Groups of CTPs	Temporal reference of the complement clause (with respect to the temporal reference of the matrix clause)			
	anterior	simultaneous	posterior	gnomic
Perception verbs	–	verbal stem	–	–
Predicates of	–	–	potentialis	potentialis

¹⁶ It could be expected that the potentialis is acceptable in cases of the meaning of “cognitive perception” (*I see that you will not believe me*). However, such examples are absent in my sample.

¹⁷ I do not give the distribution of the factive form and the verbal noun in this table; only non-factive contexts are taken into account. For this reason the table does not include factive CTPs, such as ‘be angry’ and others.

evaluation				
CTPs of causation and potential situation and the verb ‘dream’	–	–	potentialis (verbal stem)	–
Emotive verbs ‘love’, ‘like’, ‘bother’ etc.	–	–	–	potentialis
Emotive verbs ‘fear’, ‘want’ etc.	verbal stem (potentialis)	verbal stem (potentialis)	potentialis (verbal stem)	potentialis (verbal stem)
Mental verbs, verbs of speech	verbal stem (potentialis)	verbal stem (potentialis)	potentialis / verbal stem	potentialis / verbal stem

Thus, the distribution of the potentialis and the verbal stem can be explained on the basis of temporal and modal (and ‘indirect speech act’) meanings. The potentialis most often denotes a gnomic or posterior situation (with respect to the temporal reference of the matrix clause) that does not constitute the main assertion of the sentence. In other cases, the verbal stem is used.

4. Conclusions

The main complementation strategies in Adyghe are the factive form, the verbal stem with case markers, and the potentialis. There are also several further devices used in complementation: a paratactic construction, special forms used with phasal and modal predicates, a verbal noun of manner, a complementizer derived from the verb of speech, and the relativization construction which is used to mark indirect questions.

Many CTPs in Adyghe allow non-subcategorized marking in complementation, which is attested with non-core cases on the verbal stem and the potentialis. These constructions meet the criteria for complement clauses and not adverbial clauses. I explain this peculiarity of the Adyghe complementation system in terms of the grammaticalization of the non-core cases as complementizers.

Thus, the number of complementation strategies in Adyghe is increased due to the grammaticalization of case markers in the function of complementizers. Non-core cases, the instrumental and the adverbial, are used in complementation to differentiate between the semantic types of complements. Events and irrealis propositions are marked with the instrumental case, while propositions are marked with the adverbial case. The polysemy of the instrumental case marker is unusual for complementizers in the languages of the world. However, it is only anomalous if we limit our research purely to the synchronic data. I suppose that this polysemy has a diachronic rationale. The two constructions have probably emerged from different sources and coincided in complement clauses. As discussed in 2.5.2, the “irrealis proposition” construction could originate in the antiresultative in *-č’e*. The polysemy of irrealis and antiresultative is typologically widespread: as Plungian (2001: 13) shows, both meanings are often observed in markers of the pluperfect. I suggest that the “event” complement construction has developed from the instrumental case in *-č’e*. It might have developed through the “manner” meaning of the instrumental (however, this meaning is rather marginal in Adyghe). The shift from manner towards event in the meaning of complementizers is attested in a number of languages, e.g. Slavic. Another diachronic scenario is the development of the event meaning from the verbal noun in *-č’e* (which denotes manner and event with immediate perception verbs). However, this scenario is less probable since the two forms are differentiated morphophonologically. In sum, the exact path of grammaticalization of complements in *-č’e* is unclear and requires further investigation.

Semantically, the encoding of clausal arguments in Adyghe is organized in the following way. The coreference pattern does not play a role in the choice of construction encoding the complement. The main relevant parameter is the semantic type of the embedded clause: factive, propositional, or eventive. However, unusual polysemy patterns occur: events are encoded by the same device as irrealis complements (instrumental case); manner complements are encoded in the same way as facts (factive form); the temporal reference of the complement clause is encoded by the tense markers on the verbal stem or potentialis. Topical proposition complements are encoded with the factive form. Generic events are encoded by the same means as events proper.

The following table represents the distribution of the complementation strategies according to the semantics and temporal reference of the dependent clause (the distribution of the potentialis vs. future tense is presented in detail in Table 3).

Table 4. The choice of complementation strategy depending on the semantics and temporal reference of the complement clause.

Semantics of the complement clause	The dependent situation is simultaneous with or precedes the situation in the matrix clause	The dependent situation follows the situation in the main clause or has gnomic interpretation
Fact	factive form (with tense markers)	
Manner complements	factive form (with tense markers) / verbal noun in <i>-č'e</i>	
Proposition	verbal stem (marginally: potentialis) with the adverbial case	potentialis / verbal stem with the adverbial case
Irreal or false proposition	verbal stem (marginally: potentialis) with the instrumental case	potentialis / verbal stem with the instrumental case
Event		
Generic event	n/a	potentialis with the instrumental case

It should be emphasized that the opposition between events and propositions is not encoded consistently; a number of eventive contexts are encoded by the factive form or by the verbal stem with the adverbial case (in the context of immediate perception verbs or phasal verbs). Thus, Adyghe makes a clearcut distinction between the context of fact and all other contexts; the event vs. proposition distinction is significant, but it is not always encoded consistently. It appears that the grammaticalization of non-core case markers in the function of complementizers is still in progress, or has stopped at this point.

Let us compare the Adyghe complementation system with that of Ossetic, which is considered in detail in (Serdobolskaya, this volume). The Ossetic system is sensitive to the opposition of coreferentiality patterns with CTPs of causation, speech causation and potential situation, emotive CTPs and others, thus demonstrating the same control pattern as is observed in SAE languages. By contrast, Adyghe does not show any distinctions based on this parameter.

The same semantic parameters are relevant for the choice of complementation strategy in both languages. However, the exact “weight” laid on these parameters, and the polysemy patterns shown by the two languages, differ greatly. For Adyghe, the basic opposition is that of fact vs. non-fact (proposition/event). The event vs. proposition distinction is not encoded uniformly with all CTPs, as there are exceptions to the common pattern. Generic events are encoded by the same means as events proper. Irrealis complements take the same complementizer as eventives. Meanwhile, in Ossetic it is the event vs. non-event distinction that is most relevant; the fact vs. proposition distinction is not always encoded (which brings this system close to that found in Russian, where this differentiation is often reflected in the intonation pattern or deduced from context). There is a special device for marking irrealis

complements and generic events. An unexpected polysemy pattern is observed with the conjunction *k^wəd*, which can encode event and potential / caused action in the future. A special device is used with the verb ‘wait’.

However, some common features can be identified. In both languages facts are encoded by means of relativization: the relativization of the instrumental argument in Adyghe (i.e. the factive form), and the correlative construction in Ossetic. Belyaev, Serdobolskaya (forthc.) explain this feature of Ossetic in terms of the areal influence of the North-West Caucasian languages. For both Adyghe and Ossetic the information structure of the sentence is important for the choice of complementation strategy: the topicality of the complement triggers the choice of a special device reserved for the encoding of presupposed complements, which is the factive form in Adyghe and the correlative construction in Ossetic.

Appendix¹⁸. Distribution of complementation strategies

Complementation strategy	Factive form in <i>zere-</i>		Verbal stem		Potentialis in <i>-n</i>		
	acceptability	case marking/postpositions	instrumental	adverbial	core cases	instrumental	adverbial
<i>faj-</i> ‘want’	–		–	–	–	+	+
<i>ježe-</i> ‘wait’	–		–	–	?	+	+
<i>Mental verbs</i>							
<i>še-</i> ‘know’	+	ABS	–	+	–	+	+
<i>š’əb^wəpše-</i> ‘forget’	+	ABS	–	–	–	–	+
<i>š^wešə-</i> ‘seem’	–		+/-	+	+/-	+/-	+
<i>ləte-</i> ‘think, believe’	–		+	+	–	+	+
<i>jeneg^wəje-</i> ‘suppose’	?		+	+	–	+	+
<i>š’eχ^wə-</i> ‘think’	+	ADV	–	+	–	–	+
<i>Predicates of emotion</i>							
<i>g^wəb^(w)e⁻¹⁹</i> ‘hope, think’	–		+	+	–	+	+
<i>š’əg^wəb^(w)ə⁻¹⁹</i> ‘hope, think’	–		+	+	+	+	+
<i>š’əne-</i> ‘fear’	–		+	–	–	+	+
<i>š’əš’əne-</i> ‘fear’	–		+	–	+	+	+
<i>jač’as</i> ‘like’	+	ABS	–	–	+	+	+
<i>əg^w rjehə-</i> ‘like’	+	ABS, INS	–	–	+	+	+
<i>š^wə ləb^wə-</i> ‘love’	+	ABS	–	–	+	+	+
<i>χ^wepse-</i> ‘dream’	+	OBL	–	–	+	+	+
<i>jezeš’ə-</i> ‘annoy’	+	OBL, INS	–	–	+	+	+
<i>g^wəš^we-</i> ‘rejoice’	+	OBL	–	–	–	–	–
<i>feg^wəbžə-</i> ‘be angry’	+	INS, <i>paje</i> ‘for’	–	–	–	–	–
<i>Verbs of perception</i>							
<i>ləb^wə-</i> ‘see’	+	ABS, ADV	–	+	–	–	–
<i>zexexə-</i> ‘hear’	+	ABS	–	+	–	–	–
<i>Speech verbs</i>							

¹⁸ Notation in the Appendix: «+» means that a construction is acceptable, «–» that it is unacceptable; «+/-» that variation exists among native speakers; «?» marks insufficient information.

¹⁹ Both verbs can occur in two variants, *g^wəb^we-*, *š’əg^wəb^wə-*, and *g^wəbe-*, *š’əg^wəbə-*, with no apparent semantic difference, cf. (Txarkaxo 1991).

ʔ ^w e- ‘say’	+	ABS	–	+	–	–	+
g ^w əʂ ^w əʔe (je)tə- ‘promise’, lit. ‘give a word’	–		+/–	–	–	+/–	+
βeg ^w əβe- ‘promise, reassure’	+	INS	?	–	+	+	+
<i>Predicates of potential situation or causation</i>							
(f)jəβeʂe- ‘teach’	–		–	–	+	–	+
pəʔə- ‘try’	+	OBL	–	–	+	–	+
zəβehazəʔə- ‘intend’	+	(POT)ADV	–	–	–	–	+
zəfəβehazəʔə- ‘intend’	+	(POT)ADV	–	–	+	–	+
hazəʔ- ‘ready’	+	(POT)ADV	–	–	+	–	+
(de)ʔepəʔe- ‘help’	–		–	–	+	–	+
fjəda- ‘permit’	–		–	–	+	–	+
<i>Evaluative predicates</i>							
deβ ^w ə ‘good’	+	ABS	–	–	+	+	+
(fe)qjan ‘difficult’	–		–	–	+	+	+
psənç ^w e ‘easy’	–		–	–	+	+	+
tχəβ ^w e ‘pleasant’	?		–	–	+	+	–

Abbreviations

- A – person agreement with agent-like arguments of transitive verbs
 ABS – absolutive case/person agreement with absolutive argument
 ADD – additive morpheme
 ADJ – adjectivizing suffix
 ADV – adverbial case
 ANTIP – antipassive
 AUG – (morphonological) augment
 AUX – auxiliary verb
 BEN – benefactive
 CAUS – causative
 COM – comitative
 COMP – complementizer
 COND – conditional mood
 DAT – dative
 DEM – demonstrative pronoun
 DIR – directive preverb
 DYN – dynamicity
 FCT – factivity
 FUT – future tense
 IMP – imperative
 INF – infinitive
 INS – instrumental case
 INSTR – instrumental preverb
 INTF – intensifier
 IO – person agreement with indirect object
 LOC – locative preverb
 M – masculine
 MAL – malefactive
 N – neuter
 NEG – negation
 NMLZ – verbal noun

NOM – nominative
NPI – negative polarity item
OBL – oblique case; valency-changing prefix that promotes an oblique to argument position
PL – plural
POSS – alienable possession
POT – potentialis
PP – person agreement with an argument introduced by a prefix on the verb
PR – person agreement with the possessor
PRED – predicative
PROX – proximal demonstrative
PRS – present
PST – past tense
PTCL – particle
PV – perfective preverb
Q – question particle
RE – reflexive/reversive
REL – relativizer
REL.TEMP – temporal adverbial clauses
REFL – reflexive
SBJV – subjunctive mood
SG – singular

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