

Diana Forker

Microtypology and the Tsezic Languages: A Case Study of Syntactic Properties of Converbial Clauses

Abstract

This paper analyzes the syntactic properties of adverbial clauses in the Tsezic languages, a group of five to six languages from the Nakh-Daghestanian language family (Caucasus, Russia). These languages make heavily use of converbs and other non-finite verb forms in order to form complex sentences. The syntactic analysis presented builds on Bickel's (2010) variables for the investigation of clause-linkage patterns and is based on data from natural texts. I mainly focus on coreference, scope properties, word order and extraction. Despite being closely related and syntactically rather similar, the Tsezic languages show some variation with respect to coreference and zeros in converbial clauses. This paper thus confirms the validity of microtypological studies and positions Tsezic converb constructions within a cross-linguistic typology of complex sentences.

1. Introduction

The Tsezic languages are a group of closely related languages that form one branch of the Nakh-Daghestanian language family (Russia). They can be divided into East Tsezic, comprising Hunzib and Bezhta, and West Tsezic, comprising Khwarshi, Tsez and Hinuq. The languages are dependent-marking and have absolutive, ergative, genitive and a few other grammatical cases, depending on the language in question, as well as a large number of spatial cases. Their word order is predominantly head-final, but other orders are also admissible. Especially in main clauses the verb often occurs in positions other than the final position. The word order in subordinate clauses is more restrictive, e.g. in Hinuq and Tsez relative clauses only verb-final order is allowed. Most simple main clauses are headed by one of three predicate types: (i) intransitive predicates with at least an S argument, (ii) transitive predicates with at least an A and a P

argument, and (iii) affective predicates with at least an experiencer argument and a stimulus argument. The case marking of S, A, and P arguments is the same for all five languages and as expected for languages with ergative morphology, i.e. S and P must be in the absolutive case, and A must be in the ergative case. The stimuli arguments of affective verbs are also identically marked in all Tsezic languages; they must bear the absolutive case. The marking for the experiencer, however, differs from language to language. It can be dative (Hinuq), lative (Tsez, Khwarshi, Bezhta) or IN-essive (Hunzib).

Gender is a central grammatical category. In all Tsezic languages, nouns can be divided into four or five genders, which are usually not marked on the noun. But many if not most of the vowel-initial verbs have prefixes that express agreement with their nominal (and clausal) absolutive arguments in gender and number.

Tsezic languages have a comparatively rich inventory of verb forms employed in subordinate clauses such as participles, converbs, and verbal nouns. The participles are mainly employed for relative-clause formation, but also in a few complement clauses and occasionally in adverbial clauses. In the latter use they often bear case suffixes. Verbal nouns, i.e. the infinitive and the masdar, occur in complement clauses. Converbs are almost exclusively used in adverbial clauses. They express temporal (e.g. *before, while, after*) or non-temporal (e.g. *because, although, in order to*) meanings. In addition, clauses with ‘contextual’ (i.e. semantically vague) converbs are the main translation equivalents of clauses linked by coordination in most European languages. All Tsezic languages have more than a dozen of these converb forms.

Although the converbs cannot function as the heads of independent main clauses, they share some properties with predicates of main clauses. First of all, agreement is fully preserved, i.e. converbs and main clause predicates always agree with the argument bearing the absolutive case. Second, converbs preserve their valency frame. Furthermore, a few converbs are also used for the formation of periphrastic verb forms, e.g. the Hunzib perfective converb also occurs in the perfect, the pluperfect and the evidential perfect (van den Berg 1995: 101–105), and the Tsez imperfective converb is employed for various progressive verb forms. At least in some Tsezic languages the imperfective and the perfective converbs are homophonous with and most probably diachronically related to verb forms heading independent main clauses. Thus, the Hinuq and the Tsez imperfective converb suffixes have the same phonological shape as the

simple present tenses in both languages. Imperfective converbs and simple present tenses can be distinguished on functional grounds; however, the distinction is rather weak. Therefore, it has been argued that the finite/non-finite dichotomy familiar from European languages, is not suitable for the analysis of Nakh-Daghestanian languages (cf. Kalinina & Sumbatova 2007; Creissels 2009; Forker 2011; Forker 2013).

In this paper, only the syntactic properties of adverbial clauses containing various sorts of converbs will be analyzed, namely coreference, scope properties, word order and extraction. I will adopt Bickel's (2010) variables for the investigation of clause-linkage patterns and place Tsezic converbs within a cross-linguistic typology of complex sentences. For detailed information on the morphology and the semantics of Tsezic converbs see Comrie, Forker and Khalilova (2012).

The paper is based on data coming mainly from the analyses of corpora. Since at the current moment I have only corpora of four Tsezic languages at my disposal, I will largely restrict myself to Hinuq, Tsez, Bezhta and Hunzib with merely a few occasional remarks on Khwarshi. The Hinuq corpus is currently unpublished. It has been gathered by the author and contains around 43,000 words. The Tsez corpus has been published in Abdulaev and Abdullaev (2010). Around 42,500 words of this corpus have been glossed by André Müller, and have been employed for this paper. The Bezhta corpus (around 38,000 words) consists of the memories of Šeyx Ramazan, written down by himself at the end of the last century, translated and edited by Madžid Xalilov and glossed by myself. Finally, the Hunzib corpus has been published as van den Berg (1995) and contains around 9,000 words.

The paper is organized in the following way: In Section 2 I start with a short introduction to a recently proposed typology of clause linkage on which the body of this paper is based. In Section 3 coreference and disjoint reference are treated. Section 4 treats scope properties and Section 5 word order and the possibility of extraction. Section 6 contains the conclusion.

2. Tsezic adverbial clauses within a broader typology of clause-linkage

Instead of making the traditional coarse-grained distinction between subordination and coordination, or even the slightly more comprehensive distinction of subordination, cosubordination and coordination (cf. Foley & Van Valin 1984), Bickel (2010) proposes a fine-grained typology of clause-

linkage patterns. Due to the lack of sufficient data for the other Tsezic languages, I discuss this typology only with regard to converbs in Hinuq, more precisely with regard to the narrative, the anterior and the posterior converb. Bickel's typology consists of eleven variables, which are displayed in the first column of Table 1. A short description is given in the second column of the same table. More detailed information can be found in Bickel (2010).

Table 1. Clause-linkage patterns of three Hinuq converbs

Variable	Description	Narrative / Anterior, posterior converbs
Illocutionary scope	Which clauses fall within the scope of illocutionary force operators?	local / extensible
Illocutionary marking	Can the dependent clause contain illocutionary force operators?	banned
Tense scope	Which clauses fall within the scope of tense operators?	conjunct
Tense marking	Can the dependent clause contain tense markers?	banned
Finiteness	Does the dependent clause express fewer (non-finite) or the same number (finite) of categories?	non-finite
Symmetry	Can the range of expressed categories in the dependent and in the main clause be different or not?	asymmetrical
WH	Are question words and the focus enclitic inside dependent clauses allowed or not?	ok
Extraction	Is extraction of elements of dependent clauses allowed?	banned
Focus	Can the focus marking appear on the dependent clause?	ok
Position	Can the dependent clause appear before and after the main clause? Can it be separated by other clauses?	flexible-relational
Layer	Can the dependent clause be center-embedded?	AD-V (adjoins to the predicate)

The first two variables concern illocutionary scope and marking. The scope of the illocutionary force markers, i.e. imperative and interrogative suffixes, depends on the type of illocutionary force, and on the converbs (see Section 4 below), but they are either 'local' (i.e. restricted to the main clause) or 'extensible' to both the main clause and the adverbial clause. The marking appears exclusively in the main clause (i.e. 'banned' from the

converbial clause). For example, (1a) consists of a narrative converb clause and a main clause with the verb bearing an interrogative marker. This example has two interpretations: one in which the interrogative suffix has only the main clause in its scope and one in which it has both the adverbial clause and the main clause in its scope. In contrast, the interrogative suffix in (1b) does not have scope over the adverbial clause headed by the posterior converb. Furthermore, interrogative enclitics are not allowed in adverbial clauses.

(1) Hinuq

- a. [xok'o-be=n r-u:-n] Madina maduhal-de-do y-ił'i-ye?
 khinkal-PL=and NHPL-do-CVB Madina(II) neighbor-ALOC-DIR II-go-Q
 'Did Madina make khinkal and go to the neighbor?' or 'Having prepared khinkal did Madina go to the neighbor?'
- b. ked-i [idur(=*e) y-aq'e-ył'or] jašik' y-ayi-me?
 girl(II)-ERG home(=Q) II-come-POST box(IV) IV-open-Q.NEG
 'Did the girl open the box before she came home?'

Tense marking is (almost exclusively) 'banned' from the adverbial clause, and the tense scope is 'conjunct', that is, the tense marking in the main clause extends to the adverbial clause. For instance, the interrogative suffixes in (1a, b) express also past time reference which extends to the whole sentence including the adverbial clauses. The only exceptions are conditional converbs (see example (15) in Section 4 below).

From this it is clear that adverbial clauses express fewer categories than main clauses and are therefore in Bickel's terminology 'non-finite' and 'asymmetrical'. Question words and focus markers can occur in adverbial clauses (2a). Extraction of elements out of the adverbial clauses is not allowed (2b).

(2) Hinuq

- a. Šamil [se qałe-n idudo] Ø-ił'i-yo?
 Šamil(I) what sing-CVB home I-go-PRS
 'Šamil is going home singing what?'
- b. *[hału sumka-ma _ gor-no] λax-a gom xemu
 this.OBL bag-IN ABS put-CVB tear.up-INF be.NEG stone
 (Intended meaning: 'When you put a stone into this bag, it will not tear up.')

The position of the adverbial clauses is variable (‘flexible-relational’), e.g. in (1a) appears before the main clause, and in (3) after the main clause. As examples (1b) and (2a) show, adverbial clauses can also be center-embedded (‘adjoined to the predicate’).

(3) Hinuq

hadbe bat'i-bat'iyaw raq-ma-do b-iλ'i-š=eλ buλe
 3PL different direction-IN-DIR HPL-go-PST=NARR house

yoλu.koka-qo-r=no kur-no
 cindarello-AT-LAT=and throw-CVB

‘They went away into different directions, leaving the house to cindarello.’

Hinuq converbs show thus only minor differences in their behavior. When comparing them with the construction analyzed by Bickel, the result is that there are no constructions in that sample that are completely identical to the Hinuq converbs. This fact justifies this fine-grained, bottom-up typology and enriches it with further data. The constructions that most closely resemble Hinuq adverbial clauses are chaining constructions and temporal converb constructions in the distantly related Chechen language (cf. Molochieva 2008), but also converb and purposive constructions in Belhare, constructions with adverbial participles in Russian and German purposive constructions with *um zu* and *ohne zu*.

However, there is one interesting variable missing in Bickel’s typology, namely coreference (and zero arguments), which will be analyzed in the following section. This is a feature where Tsezic converbs show some variability and behave clearly differently from European languages such as English and German.

3. Coreference

Tsezic languages can be described as pro drop. Whenever speakers assume that hearers can retrieve the referents of the arguments from the contexts of utterances, they leave them out. Therefore, looking into corpora one can easily find sentences lacking either the subject-like argument (4a) or all arguments (4b).

(4) a. Hunzib

[*r-oxče-n=no*] *kayár quwo-n li*
 V-take-CVB=and letter(V) read-CVB be.V
 ‘Having taken the letter, (the woman) read it.’ (van den Berg 1995: 227)

b. Hunzib

“*r-uw-á*”=*λe nisə-n*
 V-do-INF=QUOT say-CVB
 ‘“(I) will do (that),” (the woman) said.’ (van den Berg 1995: 226)

In general, it is much more common to leave out overt arguments than to use pronouns. For example, a count of 661 S, A and P arguments in Hinuq texts brought the following results: 290 (i.e. 44%) of the arguments were zeros, 240 (i.e. 36%) lexical NPs, and only 131 (i.e. 20%) pronouns.

Zeros are mostly interpreted as definite, e.g. in (4a) and (4b) the hearer is assumed to know the unique referent of the omitted arguments. However, occasionally zeros can be indefinite. Thus, in (5) the hearer is not assumed to know who has murdered the saint crow. It is clear that someone must have killed it, but since the identity of the murderer is unknown, it is not important. Such sentences are similar to impersonal passives.

(5) Hinuq

hoboži Malla Rasadan kutakalda Ø-a:-n “di šayix
 then Mullah Nasredin(I) strongly I-cry-UWPST 1SG.GEN saint(III)
b-uher-no=λen”
 III-kill-UWPST=QUOT
 ‘Then Mullah Nasredin strongly cried, “My saint was killed.”’

3.1 Zero and overt arguments in converbal clauses

By far the most typical way to express coreference between arguments of a converbal clause and arguments of the corresponding main clause is zero, i.e. one (i.e. either converb clause or main clause) or even both clauses do not have overt coreferential arguments (zero anaphora and zero cataphora). This corresponds to the typical way of reference tracking in Tsezic; speakers tend to drop overt arguments if they can be understood from context (6).

(6) Bezhta

[*huliʔ-is ataa=na m-eλ'e-na*] *hiɬbaxo-yo xabar-li-λ'a*
 there-ABL far=and HPL-go-CVB stay.PL-WPST story-OBL-SPR
 'Going away from there (we) stayed for a talk.'

If there are overt pronouns, then they occur (almost) exclusively in the main clause, preceded by the coreferential NP in the converb clause (7).

(7) Tsez

[*esiw_i y-ay-run*] *neɬa_i mi Ø-exur-a yot*
 sister(II) II-come-IMANT 3SG.FEM.ERG 2SG I-kill-INF be
 'As soon as my sister comes back, she will kill you.' (Abdulaev & Abdullaev 2010: 150)

If a preceding converb clause contains a pronoun, this cannot be coreferent with a subsequent full NP, thus pronominal cataphora is generally excluded. This constraint is fairly robust in elicitation (8). Note that in familiar European languages pronominal cataphora in adverbial clauses is grammatical.

(8) Khwarshi

*[*žu_i Ø-ot'q'-aλa*] *Nazir_i q^waq^waλ-še Ø-eč-i*
 3SG I-come-ANT Nazir(I) laugh-IPFVCVB I-be-WPST
 'When he*_{i/j} came Nazir_i was laughing.'

However, under certain circumstances it seems that this constraint can be overridden. Example (9) from Tsez consists of an adverbial clause headed by the anterior converb (and containing two relative clauses), followed by a quote and a main clause framing the quote. The pronoun *yisir* '3SG.MASC.LAT' and the proper name *Bac'ali* refer to the same person, and the pronoun in the adverbial clause precedes the main clause. I assume that it is the long distance between the pronoun and the proper name which makes the coreference in (9) possible.

(9) Tsez

[*suλli* *yisir* [*boc'-zo* *k'icaza-t* *šiš-äsi*]
suddenly 3SG.MASC.LAT wolf-GEN tooth.OBL.PL-CONT get.stuck-PTCP

y^hit'a=n [*hut'za-q=gon* *tut-äsi*] *iyo=n*
goat.wool=and jaw.OBL.PL-AT=CNTR be.stained-PTCP blood=and

b-ukay-nosi] “*hay malʁun, mi=wa dey čanyabi*
III-see-ANT hey villain 2SG=Q 1SG.GEN she.goat.PL

r-ac'-no”=*λin*, *Bac'ali* *boc'-λ'o-r* *Ø-oq-no*
NHPL-eat-UWPST=QUOT Batsali(I) wolf.OBL-SPR-LAT I-be-UWPST

‘Suddenly, when he_i saw the goat wool stuck between the wolf’s teeth and the blood staining on its jaws, Batsali_i began on the wolf: “So then, you villain, have you eaten my goats?”’ (Abdulaev & Abdullaev 2010: 192)

If the order of converb clause and main clause is reversed, then Bezhta and Tsez allow for pronominal cataphora (10a) whereas Khwarshi and Hinuq still ban it (10b). But note that these examples have been elicited. I was not able to find any corpus examples similar to (10a) or (10b).

(10) a. Bezhta

hogo_{i/j} *y-uɣo-s* [*Žamilati_i* *äč'enayig=na* *iłna* *λi*
3SG.FEM II-die-PRS Zhamilat.ERG ninety=and six year

ömrö=nä *b-oh-na*]
life(III)=and III-do-CVB

‘After Zhamilat_i had lived for 96 years, she_{i/j} died.’

b. Khwarshi

*žuj_i*_i* *q^waq^waλ-še* *Ø-eč-I* [*Nazir_i* *Ø-ot'q'-aλa*]
3SG.MASC laugh-IPFVCVB I-be-WPST Nazir(I) I-come-ANT

‘He_j*_i was laughing when Nazir_i came.’

If the pronoun is left out in examples such as (10a–b), then coreference is impossible. If the order of main and converb clause is changed such that the adverbial clause lacking the overt argument precedes the main clause containing the overt NP then coreference is normally the first available interpretation (11a). But again, disjoint reference would also be possible if the context allows for such an interpretation. For instance, in example (11b) two adverbial clauses with no overt A precede the main clause, which contains an overt S. As clear from the context of the story, A and S arguments are not coreferential.

(11) a. Hunzib

[_i *homhōli-lα-α* *ogu=n* *bādaa raḥátalda* *gil-en*] *botu*
 ERG coolness-OBL-IN 3SG.FEM=and so to.rest put-CVB this

ilbis_i *b-ut'-un* *lo* *q'ere*
 demon(IV) IV-sleep-CVB be.IV down

‘Having put her down to rest in the fresh air, the demon lay down there too.’
 (van den Berg 1995: 159)

b. Hinuq

[*ižey* *r-aqi-n*] [*r-ayī-λ'or*] *haw* *šayt'an-za-s* *aqili*,
 eye(V) v-close-CVB v-open-POST that devil-OBL.PL-GEN woman(II)

pička *y-ili*, *aldoyo-s* *t'ašazi* *y-iq-o*
 match(IV) IV-similar in.front-ABL disappear II-be-PRS

‘(He) closes his eyes and until (he) opens (them) again, the devil woman disappears from there like a match.’

To sum up, pro drop is common in main as well as in adverbial and other types of subordinate clauses. Coreference is normally established by dropping one or more arguments, but pronouns may be used as well. There are almost no syntactic constraints on the establishment of coreference. In elicitation, pronouns in adverbial clauses cannot be coreferent with full NPs in subsequent main clauses (8), though this restriction may be overridden in actual texts (9). The only hard constraint concerns pronouns and zeros (for the relevant example with a zero argument see Comrie, Forker & Khalilova 2012: 178). They may never occur in a preceding main clause and at the same time express coreference with a full NP in a subsequent adverbial clause (10b). This constraint is known as the ‘precede-and-command’ rule, i.e. pronouns and zeros cannot precede and command NPs (e.g. Lasnik 1976; Reinhart 1981).

3.2 Coreference (and disjoint reference)

Tsezic converb constructions lack coreference or disjoint reference constraints for arguments of converbal clauses, as it is typical of Nakh-Daghestanian languages (see Haspelmath 1995 on Lezgian or Creissels 2010, 2012 on Akhvakh). Disjoint reference is (almost) always possible. The only apparent counterexamples are out-of-context elicited sentences consisting of a perfective/narrative converb clause and a main clause (12). In elicitation, such sentences are judged as odd because the use of the

perfective/narrative converb pragmatically implies that the situation described has some connection with the situation described in the main clause. Such a connection is naturally given if both clauses share one or more arguments.

(12) Hunzib

*[*abu-l baba=n m-ug-un*] *kid* *y- λ'e-r*
 father-ERG bread(IV)=and IV-eat-CVB girl(II) II-go-PRET
 'After father had eaten the bread, the girl went away.' (van den Berg 1995: 96)

However, even the perfective/narrative converb allows for certain arguments with disjoint reference, if the clauses share other arguments or adjuncts instead (13a), or if other adjacent clauses contain shared arguments or adjuncts, or if it is clear from the context that the situations described are connected and coherent (13b). Such examples are not very typical for the perfective/narrative converb, but nevertheless well attested in all Tsezic languages (see Table 2 below).

(13) a. Tsez

[*nesiqo-si_i šeλ'u li-y-ä=n*] *r-iž-in*, *žai_i*
 3SG.POSS-PRT clothes(IV) water-OBL-ERG=and IV-take-CVB 3SG

howlo=tow adoru λex-asi, dow-däyor nex-a
 there=PRT naked remain-PTCP 2SG.OBL-APUD.VERS come-INF

Ø-oqin-č'ey

I-enter-UWPST.NEG

'The water carried his clothes away; he remained naked there and could not come to you.' (Abdulaev & Abdullaev 2010: 32)

b. Tsez

[*λe=n b-^oλ'u-n*] *dahaw šebin λexu-s* [*Goqi*
 bridge(III)=and III-fall-CVB little thing remain-WPST Goqi(I)

li-y-ä Ø-iž-ani-r]

water-OBL-ERG I-carry-MSD-LAT

'The bridge fell down and Goqi was almost carried away by the water.'
 (Abdulaev & Abdullaev 2010: 32)

In general, tendencies for sharing or not sharing arguments and/or adjuncts across adverbial and main clause depend on the lexical meaning of the converb. As just illustrated, the perfective/narrative converb, which is

mainly used in clauses with a meaning that is very similar to coordination in European languages, has a strong tendency toward shared referents. The same holds true for purposive converbs with the meaning ‘in order to’, in which the covert subject is controlled by either the subject-like or the object-like argument of the main clause. In contrast, most other converbs tend to have arguments with disjoint reference. For some converbs, the tendency for arguments and/or adjuncts with disjoint reference can be so strong that it is hardly possible to find shared ones. The Hunzib anterior converb *-(V)-nsə* has even been named “SWITCH” (i.e. “switch reference”) by van den Berg (1995: 95–96) since in all its occurrences in the Hunzib corpora it does not share the subject with the main clause. However, in elicitation shared subjects or other shared arguments could be approved (van den Berg 1995: 96).

In order to get a better picture of coreference as attested in natural texts, I counted coreferential subjects and subjects with disjoint reference, (i.e. S, A, and experiencer arguments) of three different converbs in the Hinuq, Tsez, Bezhta and Hunzib corpora. I restricted myself to subject-like arguments because they are far more frequent than any other argument types, and I chose the most frequent converbs with clearly distinguishable semantics:

- the perfective/narrative converb (‘after, and’): Hinuq *-n(o)*, Tsez: *-n(o)*, Bezhta *-na*, Hunzib *-(V)-n*
- the anterior converb (‘after’): Hinuq *-nos*, Tsez *-nosi*, Bezhta *-nas*, Hunzib *-(V)-nsə*
- the posterior converb (‘before’): Hinuq *-ʁ’or*, Tsez *-zaʁ’or*, Bezhta *-cal*, Hunzib *-čor*

The perfective/narrative converbs and the anterior converbs are clearly cognate across all four languages. The posterior converbs in all four languages diachronically contain the lative suffixes (*-r* and *-l*). The Hinuq and Tsez suffixes are cognates, and probably the Bezhta and Hunzib suffixes as well.

I counted 100 clauses with the perfective/narrative converbs in each of the languages, and up to 50 anterior and posterior converbs, depending on the available examples from the corpora. The results are displayed in Table 2. As can be seen in this table, the perfective/narrative converbs behave in a strikingly similar way across all four languages, with Bezhta having somewhat more subjects with disjoint reference. With regard to the anterior converb, there is a clear split between the East Tsezic languages Bezhta and Hunzib and the West Tsezic languages Hinuq and Khwarshi. The East

Tsezic languages do not extensively employ these converbs; especially the Hunzib corpus in particular provides only three examples of the anterior converb, and these examples show an overwhelming tendency for subjects with disjoint reference (remember that this converb was even termed “SWITCH” in the Hunzib grammar). In contrast, the West Tsezic languages make extensive use of the anterior converb (e.g. the Hinuq corpus contains around 150 occurrences) and they show only a slight tendency for subjects with disjoint reference. As for the posterior converb, all languages have more examples of subjects with disjoint reference than of subjects with shared reference, though to different degrees. Again the Hunzib corpus contains the fewest examples, which can be explained by its size, since it is around four to five times smaller than the other corpora.

Table 2. Coreferential subjects and subjects with disjoint reference

	Perfective / narrative converb		Anterior converb		Posterior converb	
	same subject	disjoint reference	same subject	disjoint reference	same subject	disjoint reference
Hinuq	81	19	22	28	11	31
Tsez	81	19	21	29	7	35
Bezhta	66	34	4	24	14	36
Hunzib	80	20	0	3	0	6

If arguments in the converb clause and arguments in the main clause are coreferent, then it is mostly S, A, or the experiencer of the main clause that functions as a cataphor for some argument of the converb clause. However, it may also be a possessor, a local adjunct or some other non-argument type.

Occasionally, one finds partial coreference between arguments and/or adjuncts of main and adverbial clause. Thus, in (14) the referent of the S argument of the main clause, *ziru* ‘fox’, is partially identical with the referent of the pronoun *yeda* ‘3PL’ and of the zero in the preceding perfective converb clauses.

(14) Tsez

[*howlo lilyo-x=tow yeda=n xeci-n*] [*xan-der=n*
 there bank-AD=PRT 3PL=and leave-CVB khan-APUD.LAT=and

b-ik'i-n] *ziru c'ok'inay-n*
 HPL-go-CVB fox scold-UWPST

‘When they left the river bank there and went to the king, the fox scolded.’
 (Abdulaev & Abdullaev 2010: 32)

4. Scope properties: Tense, evidentiality, illocutionary force, and focus

Converbs do not specify absolute temporal reference by themselves, but only relative (i.e. after, before or simultaneous) temporal reference. Similarly, they are usually not specified for aspect, evidentiality, or illocutionary force. With respect to these features, converbs rely heavily on the predicate in the main clause, which alone can have tense, evidentiality, and illocutionary force marking. For instance, in example (14) above the main clause predicate bears past tense marking and the evidentiality value ‘unwitnessed by the speaker’. This marking bears scope over the whole sentence, such that the two adverbial clauses also get past time reference and the evidentiality value ‘unwitnessed’ although they do not contain any marking.

The only exceptions to this rule are conditional converbs (at least in Bezhta and Hinuq). In a realis conditional construction, the protasis normally has future or present time reference. If one wants to express past time reference in the protasis, the lexical verb must be non-finite (e.g. a narrative/perfective converb or a resultative participle), and has to be followed by an auxiliary verb with the meaning ‘exist’ or ‘be probable’ marked by the conditional converb suffix (15).

(15) Hinuq

[*iyo-y huł konfetbe r-ux-iš r-ese-yo*]
 mother-ERG yesterday chocolates NHPL-buy-PTCP NHPL-be.probable-COND

de hagbe čay-mo-de r-ac'-a goł
 1SG.ERG those tea-OBL-ALOC NHPL-eat-INF be
 ‘If the mother bought chocolates yesterday, I will eat them with tea.’

In complex sentences the scope of illocutionary force operators (interrogative and imperative suffixes) often depends on the meaning of the

converbs involved and on the loci of the operators. In most naturally occurring examples in *wh*-questions, the scope is the whole sentence, including the main and the converbal clauses, but it can also be the main clause only. In Hinuq, it is possible to have an interrogative enclitic in adverbial clauses, in which case again the whole sentence is in its scope, but only the adverbial clause or a constituent of that clause is in focus.

Imperative illocutionary force can either be restricted to the main clause or else, with the appropriate converb both adverbial and main clauses can fall within imperative illocutionary force. In the following example, the imperative suffix in the main clause does not have scope over the conditional converb, which is typical for converbs with conditional semantics. In contrast, the narrative converb can be interpreted as either being inside the scope of the imperative suffix (first translation) or as being outside (second translation).

(16) Hinuq

[*nagaħ* *debez* *de* *q'waraŕezi* *b-iq-o*] [b-ux-no] *hes*
 if 2SG.DAT 1SG need III-become-COND III-take-CVB one

mus *b-ek'wer-o!*
 hair(III) III-burn-IMP

'If you need me, take one hair and burn it!' or 'If you need me, having taken one hair, burn it!'

Hinuq, Bezhta and Tsez, the only Tsezic languages with identifiable focus enclitics, allow the focus enclitics to occur in converbal clauses, where they normally take scope over the whole clause (17).

(17) Bezhta

[Ø-äyiŕ-calaŕ=zu] *yak'i-ŕ* *xäŕe-ll-iyo*
 I-stand.up-SIM=FOC heart.OBL-IN stick.into-CAUS-WPST

'When (I) got up, my heart beat.'

5. Word order and extraction

Normally, adverbial clauses precede main clauses. The only significant exceptions from this rule are the purposive converbs, which almost exclusively follow main clauses. But all types of converbal clauses may be center-embedded in the main clause or follow the main clause without any change in meaning. The frequency of the three different clause orders

depends on the language, the converb and also on individual characteristics such as the text and/or the speaker. However, in quite a substantial number of sentences it is impossible to decide whether an adverbial clause precedes the main clause or whether it is center-embedded into the main clause. This is always the case when both clauses share at least one argument that bears the same grammatical role (and case-marking) in the two clauses. Thus, the sentence in (18a) starts with a noun phrase in the ergative case, which can either be interpreted as belonging to the first adverbial clause, which is headed by a perfective converb, or as belonging to the main clause.

(18) a. Hunzib

qač'ayaw-li-l žo=n r-ahu-n [diye lač'i
 bandit-OBL-ERG thing(V)=and V-take-CVB 1SG.GEN clothes(V)
r-ahu-n] Ø-oc'-or
 V-take-CVB I-chase-PRET
 'A bandit took my things, took my clothes and chased me (masc.)' (van den Berg 1995: 206)

b. Bezhta

ömrö wahla: [sidi.hōso b-i<ya>λ'e-yaλ'a] m-eλ'e-š
 life(III) so REC.ERG HPL-kill<PL>-SIM III-go-PRS
 'So life, while killing each other, passes by.'

Since from other independent, unambiguous examples (cf. 18b) it is clear that center-embedding is allowed in all Tsezic languages, I divided the sentences into only two groups: (i) adverbial clauses that precede the main clause or are center-embedded, and (ii) adverbial clauses that follow the main clause. I counted again the perfective/narrative converbs, the anterior converbs and the posterior converbs (Table 3).

Table 3. Ordering of adverbial and main clause

	First adverbial clause or center-embedding	First main clause	Total
	Perfective/narrative converb		
Hinuq	93	7	100
Tsez	99	1	100
Bezhta	86	14	100
Hunzib	92	8	100
Anterior converb			
Hinuq	49	1	50
Tsez	50	0	50
Bezhta	24	4	28
Hunzib	3	0	3
Posterior converb			
Hinuq	36	6	42
Tsez	41	1	42
Bezhta	38	11	39
Hunzib	3	3	6

The differences between the individual languages are relatively small. Bezhta seems to be the language that has a little bit more variation in its word order, allowing the main clause to precede the adverbial clause more often than the other languages. In contrast, Tsez seems to be relatively strict with regard to the constituent order, having no examples of main clauses preceding the adverbial clause. However, this may well be due to the corpora of the languages. Both the Tsez corpus and the Bezhta corpus are relatively homogenous and contain only texts from one author (Bezhta) or texts that have been prepared by one and the same editors (Tsez). Furthermore, it is possible to observe a minor difference between the anterior converb and the posterior converb because the latter shows a somewhat greater tendency to follow the main clause than the former. This may be explained by iconicity - anterior converb clauses refer to situations that happened before the situation in the main clause. Therefore, if they also precede the main clause, then their linear ordering reflects the temporal ordering of the situations, and the opposite ordering would be rather unnatural. Similarly, situations expressed by the posterior converb are understood to have happened after the situation narrated in the main clause. So if posterior converb clauses follow the main clause, the linear ordering also reflects the temporal ordering of the events.

The word order inside a converb clause is typically SOV, but it is easily possible to find other word orders (19a). However, extraction of constituents out of the converb clause is impossible (19b).

(19) a. Hinuq

[*r-ik'-r-ik'-no* *xuržan-mo-za-λ'o* *og-be*] *sadaq nuce-s*
 NHPL-beat-NHPL-beat-CVB bag-OBL-OBL.PL-SPR ax-PL all honey-GEN
banka-be *r-uher-no* *haytuy*
 jar-PL NHPL-break-UWPST 3SG.FEM.ERG
 'Beating with axes on the bags, she broke all the jars of honey.'

b. Bezhta

**oždi* [_i *y-ĩqo-t*] *sayyat* *b-ox-iy* *okko_i*
 boy.ERG LAT IV-get-ANT present(III) III-buy-WPST money(IV)
 'When the boy got the money, he bought a present.' (Lit. 'When the boy got it, he bought a present, the money.')

6. Summary

In this paper, I have analyzed the syntactic properties of adverbial clauses in the Tsezic languages. I have shown that they exhibit some variability with respect to coreference and zeros. Furthermore, the narrative/perfective has been shown to behave in a relative homogenous manner with regard to shared subjects and its position in the clause. In contrast, the anterior converb displays an east–west split with regard to the tendency for shared subjects. More differences between the adverbial constructions of the different Tsezic languages as well as between various constructions of one and the same language can possibly be detected by using Bickel's (2010) typology for clause-linkage patterns. But due to the current lack of data this remains a topic for future research.

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Abbreviations

I – V	gender classes	CONT	location ‘contact’
ABL	ablative	CVB	perfective/narrative converb
ABS	absolutive	DAT	dative
AD	location ‘at’	DIR	directional
ALOC	‘animate’ location	ERG	ergative
ANT	anterior converb	FEM	feminine
APUD	location ‘at’, ‘in close contact with’	FOC	focus
AT	location ‘at’	GEN	genitive
CAUS	causative	HPL	human plural
CNTR	contrastive	IMANT	immediate anterior converb
COND	conditional converb		

IN	location ‘in(side)’	PRT	particle
INF	infinitive	PRS	present
IMP	imperative	PST	past
IPFVCVB	imperfective converb	PTCP	participle
LAT	lative	Q	question
MASC	masculine	QUOT	quotative
MSD	masdar	REC	reciprocal
NARR	narrative	SG	singular
NEG	negation	SIM	simultaneous converb
NHPL	non-human plural	SPR	location ‘on’
OBL	oblique	UWPST	unwitnessed past
PL	plural	VERS	direction ‘towards’
POST	posterior converb	WPST	witnessed past
PRET	preterite		

Contact information:

Diana Forker
 Otto-Friedrich-Universität Bamberg
 Lehrstuhl Allgemeine Sprachwissenschaft / General Linguistics
 Obere Karolinenstraße 8
 96049 Bamberg
 Germany
 e-mail: [diana\(dot\)forker\(at\)uni-bamberg\(dot\)de](mailto:diana(dot)forker(at)uni-bamberg(dot)de)