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SYNTAX OF GENERAL CONVERB IN RUTUL

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SYNTAX OF GENERAL CONVERB IN RUTUL²

This paper discusses the syntactic properties of the general perfective converb in Rutul. It can head either an independent predication or a subordinate clause. Clausal relations tests applied to the converb suggest that, when combined with another clause, it may be either coordinate or subordinate. Furthermore, the general covnerb may either fall or not to fall within the scope of main clause illocutionary force and tense operators. I suggest that the converb may have different syntactic size in different constructions: it is a CP when used independently, but, when combined with another clause, it is either a CP or an AspP.

JEL Classification: Z.

Keywords: converb; subordination; insubordination; finiteness; Rutul; East Caucasian

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1. Introduction

This paper is dedicated to the syntax of the Rutul perfective general converb in -r (the general converb below).

Rutul is an East Caucasian language of the Lezgic branch. It has a number of dialects: in this paper, I have considered the data from the dialect spoken in the village of Kina (Rutulsky District, Dagestan, Russia). All data have been collected during field trips in 2017-2019.

Rutul is an SOV language with ergative alignment both in agreement and in case marking. It has a rather small inventory of converbs. Each of them conveys some kind of temporal semantics (anteriority, simultaneity, etc.). Alekseev 1994 provides a short description of Rutul converbs. The dialect described by Alekseev is another dialect of Rutul (the dialect of Luchek), with a slightly different inventory of converbs. In the literature on Rutul, there is no discussion of the syntactic properties of converbs.

The general converb form is derived by combining the perfective verbal stem and the suffix -r. The main function of the -r converb is to encode the sequence of events (1).

(1)	rak	hi?i-r,	ačix	hi?i-r	a-2	q-i <r>q'i-r</r>
	door	4.do.pfv-cvb	open	4.do.pfv-cvb	inside-LAT	RE-<1>come.PFV-CVB
	salam	hiwi-r		x i dil-nowu-s		
	salam 4.give.PFV-CVB		female-OBL.H-DAT			
	'She o	pened the door	open	ed (it), he enter	red, said hello 1	to his wife.'
	'Дверь открыла, открыла, о			он зашел. Поздоровался с женой.'		
	(example from a text)					

The general converb is also frequently used in periphrastic verb forms; see the pluperfect in (2) which includes the past tense of the auxiliary 'be (located)'. Periphrastic forms with this structure are common for Lezgic languages (Maisak 2014), as well as for the other branches of East Caucasian. Also commonly for Lezgic languages (Maisak 2014, Netkachev in prep.), the general perfective converb may head an independent clause. In this case, it has the temporal value of aorist (perfective past); cf. (3).

- (2) $q \cdot i < r > q' \cdot i \cdot r = a \cdot j$ RE-1.come.PFV-CVB=be-PST '(he) had come'
- (3) q-i<r>q'i-r
 RE-1.come.PFV-CVB
 'having come' / '(he) came'

Another unexpected property of the -r converb is that it can head complement clauses under some matrix predicates, as in (4); by definition, adverbial clauses are main clause adjuncts³.

(4) za-s higa-r=a haje ž-ixi-r
I.OBL-DAT 4.want.IPFV-CVB=BE there NEG-1.go.PFV-CVB
'I want you not to go there.'
(Morozova 2018)

Since the general converb can occur independently, and since it can be both an argument and an adjunct of the main predicate, why call it converb at all? One could treat it as a finite verb form that can also be used in subordination (as an instance of non-marked subordination in the sense of Lander 2014). I call the *-r* form a converb because it is traditionally called so (Alekseev 1994) and not because this labelling is necessarily valid from a synchronical point of view. Furthermore, the intragenealogical perspective (Maisak 2014) suggests that, possibly, at an earlier stage, the Rutul general converb could not head independent predications. It has become insubordinated (Evans 2007) later, when the copula (cf. 2) became non-obligatory.

Functionally, the Rutul perfective converb is in many respects similar to Turkic converbs in *-p*. Similarly to the Rutul *-r* converb, the Turkic converbs are also used to express sequence of events⁴ (5) (Graschenkov 2015). They can be combined with light verbs in order to derive finite verb forms, nuancing their temporal modal semantics. For example, in (6), the converbial verb form *mahv olu-b* 'death become-CVB' is combined with a light verb *ket-m-ir* 'go.away-NEG-FUT'. Further, Turkic converbs can also be used independently, though, in this capacity, their use is

³ In (4), \tilde{j} -*ixi-r* 'NEG-1.go.PFV-CVB' is clearly a subordinate verb form, because the negation is expressed by the marker \tilde{j} -, which only combines with non-finites forms. Finite negation is expressed periphrastically.

⁴ They may also have other interpretations, e.g. attendant circumstance. This is due to the fact that, in Turkic languages, verbal stems are not specified for aspect.

restricted. In Azerbaijani (7), the independent use of a converb is only possible with third person subjects (Netkachev in prep.).

(5) Mishar Tatar

agač s &n-&-p aw-d & tree break-ST-CVB fall-PST 'The tree, having broken, fell.' (Tatevosov et al. 2017: 498)

(6) Azerbaijani

kitab yandırılırsa, şairin əsərləri **məhv olu-b** ket-m-ir book if.burned of.poet works death become-CVB go.away-NEG-FUT 'Even if the book is burned, the works of a poet do not die.' 'Даже если книга сжигается, то труды поэта не погибают.' (Shiraliev & Sevortyan 1971: 103 after Graschenkov 2015)

(7) Azerbaijani

o / on-larev-agal-ibthisthis-PLhome-DATcome-CVB'He/they came home.'(own data)(own data)

The Rutul *-r* converb conveys a very general meaning: that of the sequence of events. But its meaning may be specified in context. For example, the converb has a causal meaning in (8).

(8) rasul q-i<r>q'i-r did šad jiši-r=a-j
R. RE-<1>come.PFV-CVB father joyful 1.become.PFV-CVB=BE-PST
"Rasul came back (and because of that) the father rejoiced."

It seems that the *-r* converb is semantically vague. It has a basic temporal meaning which is present in all the contexts but is specified in certain contexts. Similar patterns of interpretation have been attested, e.g., for Russian converbs (Krave 2010). However, this semantics of the general converb will not be of my concern here.

In this paper, I consider the syntactic properties of the general converb. In section 2, I apply clausal relations tests. In section 3, I consider the interaction of the general converb with some main clause operators (e.g. with imperative). Finally, in section 4, I sketch out a tentative analysis in the minimalist framework.

2. Clausal relations tests

Above, I have indicated that -r converb can head both subordinate adverbial clauses and independent clauses. When it is combined with a finite clause, two alternative analyses are apparently available. It is either a full CP combined with another CP (9a), or it is an adjunct attached at a lower level (9b).

(9) a. Coordinate structure analysis (two CP's)

 $\begin{bmatrix} CP & [CP & q-i < r > q'i-r & \chi al-a] & [CP & rasul & a: & luku-r=a-j] \end{bmatrix}$ RE-1.come.PFV-CVB home-IN R. below 1.lie.down.PFV-CVB=BE-PST
"Rasul came back home and lay down."

b. Subordinate structure analysis (the *-r* converb is merged to the main clause at some level)

 $\begin{bmatrix} CP[TP[VP | VP q-i < r > q'i-r \chi al-a] rasul a: luku-r]=a-j] \end{bmatrix}$ RE-1.come.PFV-CVB home-IN R. below 1.lie.down.PFV-CVB=BE-PST
"Rasul came back home and lay down."

To see which of the two analyses in (9) is correct, I have applied clausal relations tests, of which section 2.1 is a brief overview.

2.1 An overview of clausal relations tests

I have used the following tests:

(10) Center-embedding test

It is possible to embed a subordinate clause into the main clause, but it is not possible to embed a coordinate clause into another one. (Haspelmath 1995 *inter alia*)

(11) **Tense-iconicity test**

"the clauses in coordinate constructions must be tense-iconic. That is, the temporal order of clauses must match the temporal order of the events denoted by the clauses" (Croft 2001:329-30; also see the references therein)

(12) Extraction test (aka coordinate structure constraint)
 Extraction out of coordinated clauses is not allowed.
 (Ross 1967)

What center-embedding and tense-iconicity tests actually show is that a subordinate clause is the adjunct of the main clause at some level. If it is an adjunct, the order of the main clause and the subordinate clause (e.g. center-embedded subordinate clause, or postposed subordinate clause) can be derived by movements⁵.

Extraction test (12) works differently. Coordinate structure constraint (Ross 1967) does not allow extraction from a conjunct. Then, extraction out of the main clause can be interpreted as corroborating the adjunct status of the respective clause (i.e. it being an adverbial clause). This is illustrated in (13) from English. We take relativization of an argument in one of the clauses as an extraction. Relativization of an argument out of the clause when the other clause is introduced by *when* is felicitous. That means that the whole is a subordinative construction, with *when* introducing a subordinate clause. Compare this to (13b) and (13c). Example (13c) is infelicitous, which may be interpreted as an indication that, in (13c), we deal with coordination.

a. When I am king, you will be first against the wall. (Radiohead, Paranoid android)
b. ^{ok} The guy [who will be the first against the wall [when I am king]] works at McDonald's.
c. * The guy [who will be the first against the wall [and I am king]] works at McDonald's.

A short note on the interpretation of grammaticality judgements and sources of data is in order. All of my examples are elicited. In most cases I have tested my examples with two or three consultants. In addition to standard symbols (^{ok}, ^{*},[#]), I use [%], which means that a sentence (or a particular interpretation of a sentence) is accepted by some consultants, but banned by others. Elicitation is a pseudoexperimental procedure since it usually does not involve any experimental control (Schütze 1996, 2016). Further, the judgements one gets from language consultants are

⁵ This analysis has been sketched out in (Weisser 2014: 115).

acceptability judgements, but not *grammaticality* judgements. Grammaticality is associated with *competence* in the sense of Chomsky, language 'as it is' in the consultants' mind, while acceptability is associated with performance (see Schütze 2016: ch. 1 for an overview of the issue). Linguists cannot access the competence, they can only make claims about it based on performance, which is to a certain extent problematic. Grammaticality judgements are linguist's reconstructions, and are not given by the consultants themselves. So, if I have an example (or interpretation) which some accept and others reject, I interpret it as in some respect problematic for the language, but not totally ill-formed. It may be due to the problems of parsing or interpretation, but the exact sources of ill-formedness remain unknown.

2.2 Subordination or coordination?

Applying the tests described in the previous section shows that some constructions favor the subordinate analysis, while the others favor the coordinate one. Apparently, a major factor is **subject coreference**⁶.

Not all of my stimuli have been tested in each condition. Some have been tested only in two. I will consider two tests a sufficient diagnostic of subordination.

2.2.1 Same subject converbial clauses

If the subjects of the combined clauses are coreferential, then the structure is subordinative (14, 15). In both examples, one of the clauses is headed by the general converb and the other by a periphrastic pluperfect (14) or imperfect (15).

(14) Subject coreference -> subordination (i)

a. Basic sentence

q-i < r > q'i-r χal -a rasul a: luku-r=a-jRE-1.come.PFV-CVB home-IN R. below 1.lie.down.PFV-CVB=BE-PST "Rasul came back home and lay down."

b. Tense-iconicity test: non-iconic order is possible

rasul	<i>a</i> :	luku-r=a-j	[xal-a	<i>q-i</i> < <i>r>q`i-r</i>]	
R.	below	1.lie.down.PFV-CVB=BE-PST	home-IN	RE-1.come.PFV-CVB	
"Rasul came back home and lay down." (= a)					

⁶ For the sake of simplicity, I assume that converbial clauses with coreferential subjects have covert subject, while converbial clauses converbial clauses with non-coreferential subjects have overt subject.

c. Extraction test: extraction out of the converbial clause is possible

^{ok} fatima-ra	lut'a	hi?i-r	[rasul	[xal-a	<i>q-i</i> < <i>r>q</i> ' <i>i-r</i>]		
FERG	wake.up.IMP	1.do.pfv-cvb	R.	home-IN	RE-1.come.PFV-CVB		
	<i>-d</i>] .down.PFV-ATTR oke Rasul, who a		me had i	lain down."			
Ŭ	Subject coreference -> subordination (ii) a. Basic sentence						
rasul-a	kaʁad-bɨr	kixi-r		sirga-r=a-	i		
RERG	letter-PL	NPL.write.PFV	-CVB	NPL.send.IF	PFV-CVB=BE-PST		
"Rasul write	es the letters and	sends them."					
b. Tense-iconicity test: non-iconic order is possible							
rasul-a	kaʁad-bɨr	sirga-r=a-j		[kix	ci-r]		
RERG	letter-PL	NPL.send.IPFV	-CVB=B	E-PST NPL	write.PFV-CVB		

"Rasul writes (lit. having written) the letters and sends them." (=a)

c. Extraction test: extraction out of converbial clause is possible

siena-biš-e	χatir	urxa-r=a	[rasul	kaʁad-bɨr	kixi-r
everyone-OBL.HPL-ER	G respect	LV.IPFV-CV	B=BE	R.	letter-PL	NPL.write.PFV-CVB
sirga-d]	rasul-d i					
NPL.send.PFV-ATTR	RATTR					
44 A 11 71 1	(D) 1 (1) 1	1 .	•,	1 1	1 (1))

"All the people respect Rasul, {because} he, having written the letters, sends them."

2.2.2 Different subject converbial clauses

(15)

If a clause headed by a general converb has an overt subject non-coreferential to the subject of the other clause, there are two syntactic possibilities depending on the semantics. If there is no causal relationship between the events expressed in the two clauses, then the whole structure is coordinate. If there is a causal link between the two events, then the structure is subordinate. However, as I show below, there are some intermediate cases.

The sentence in (16a) does not involve any evident causal link between the events expressed by the two clauses. Hence, in (16b), it is not possible to embed the converbial clause into the another clause. Non-iconic order of the two clauses is also impossible (16c).

(16) No subject coreference + no causal relationship -> coordination

a. Basic sentence

mihman-arq- $a < t > \chi i^{\varsigma}$ -rrasulq-i < r > q'i-r = a-jguest-PLRE-<HPL>leave.PFV-CVBR.RE-<1>come.PFV-CVB=BE-PST"When the guests left, Rasul came."

b. Center-embedding test: embedding is impossible

* rasul [mihman-ar q-a<t> χi^{ς} -r] q-i<r>q'i-r=a-j R. guest-PL RE-<HPL>leave.PFV-CVB RE-<1>come.PFV-CVB=BE-PST expected meaning: "When the guests left, Rasul came."

c. Tense-iconicity test: non-iconic order of clauses is impossible

# rasu	l q-i <r>q'i-r=a-j</r>	mihman-ar	q - $a < t > \chi i^{\varsigma}$ - r		
R.	RE-<1>come.PFV-CVB=BE-PST	guest-PL	RE- <hpl>leave.PFV-CVB</hpl>		
"Rasul came, and (after that) the guests left." \neq (a)					

In examples (17a) and (18a), a causal relationship between the two events is present. Centerembedding and tense-iconicity tests suggest (17 b-c, 18 b-c) that the whole structure is subordinate.

(17) No subject coreference + causal relationship -> subordination (i)

a. Basic sentence

rasul	jiq'i-r	χ i nimer	d-eši-r=a-j	
R.	1.die.PFV-CVB	child:PL	HPL-cry.PFV-CVB=BE-PST	
"Rasul died (and because of this) children cried."				

b. Center-embedding test: embedding is possible

 $^{ok}\chi inimer$ [rasul jiq'i-r]d-eši-r=a-jchild:PLR.1.die.PFV-CVBHPL-cry.PFV-CVB=BE-PST'Children cried (because) Rasul died.' (= a)

c. Tense-iconicity test: non-iconic order of clauses is possible

χ i nimer	d-eši-r=a-j	rasul	jiq'i-r	
child:PL	HPL-cry.PFV-CVB=BE-PST	R.	1.die.PFV-CVB	
'Children cried (because) Rasul died.' (= a)				

(18) No subject coreference + causal semantics -> subordination (ii)

a. Basic sentence

patimat-a	ile-s-d i	ǯ-ɨʔɨ-r	rasul	gaš-d i
PERG	4.eat-INF-ATT	RNEG-4.do.PFV-CVB	R.	hungry-ATTR

a < r > gi - r = a - j

<1>stay.PFV-CVB=BE-PST

"Patimat didn't cook the meal, and (because of that) Rasul remained hungry."

b. Center-embedding test: embedding is possible

rasul	[patimat-a	ile-s-d i	<i>ǯ-ɨʔɨ-r</i>]	gaš-d i
R.	PERG	4.eat-INF-ATTI	RNEG-4.do.pfv-cvb	hungry-ATTR

a < r > gi-r=a-j

<1>stay.PFV-CVB=BE-PST

"Rasul remained hungry because Patimat didn't cook the meal." (= a)

c. Tense-iconicity test: non-iconic order of clauses is possible

rasul	gaš-d i	a <r>gi-r=a-j</r>	[patimat-a	ile-s-d i
R.	hungry-ATTR	<1>stay.PFV-CVB=BE-PST	PERG	4.eat-INF-ATTR

ǯ-ɨʔɨ-r]

NEG-4.do.PFV-CVB

"Rasul remained hungry because Patimat didn't cook the meal." (= a)

There is some uncertainty with respect to examples (19-20). The consultants' judgements with respect to examples in (19) and (20) are mixed. I have no explanation for this inconsistent evaluation. In (19), there is an apparent causal relationship between the two events, yet, unexpectedly, for some consultants, this sentence behaves as a coordinate structure. In (20), there is no causal relationship between the two clauses unless in a very particular context, yet some consultants' evaluations allow for an analysis involving subordination.

(19) No subject coreference + causal relationship -> both coordinate and subordinate structures are possible (i)

a. Basic sentence

rasulq-i < r > q'i-rdidšadjiši-r=a-jR.RE-<1>come.PFV-CVB fatherjoyful1.become.PFV-CVB=BE-PST"Rasul came back (and because of that) the father rejoiced."

b. Center-embedding test: embedding possible (for some consultants)

[%] *did* [*rasul* q-*i*<*r*>q '*i*-*r*] *šad jiši*-*r*=a-*j* father R. RE-<1>come.PFV-CVB joyful 1.become.PFV-CVB=BE-PST "The father rejoiced because Rasul came back." (if interpretable, = a)

c. Tense-iconicity test: non-iconic order is possible (for some consultants)

[%] *did šad jiši-r=a-j rasul* q-*i*<*r*>q '*i*-*r* father joyful 1.become.PFV-CVB=BE-PST R. RE-<1>come.PFV-CVB "The father rejoiced because Rasul came back." (if interpretable, = a)

(20) No subject coreference + no causal relationship -> both coordinate and subordinate structures are possible (ii)

a. Basic sentence

rasul	q- $i < r > q$ ' i - r	xaladil ⁱ nik	č'iri	jiši-r=a-j	
R.	RE-<1>COME.PFV-CV	Bfridge	broken	4.become.PFV-CVB=BE-PST	
"When Rasul came back, the fridge broke."					

b. Center-embedding test: embedding is possible (for some consultants)

[%] xaladil ^j nik	[rasul	<i>q-i</i> < <i>r</i> > <i>q</i> ' <i>i</i> - <i>r</i>]	č'iri	jiši-r=a-j	
fridge	R.	RE-<1>come.PFV-CVB	broken	4.become.PFV-CVB=BE-PST	
"When Rasul came back, the fridge broke." (if interpretable, $= a$)					

c. Tense-iconicity test: non-iconic order is possible

[%] xaladil ^j nik	č'iri	jiši-r=a-j	rasul	<i>q-i</i> < <i>r>q</i> ' <i>i-r</i>	
fridge	broken	4.become.PFV-CVB=BE-PST	R.	RE-<1>come.PFV-CVB	
"When Rasul came back, the fridge broke." (if interpretable, $= a$)					

In none of different-subject clauses (16-20) is it possible to extract an argument from the main clause (21). This may be due to the fact that the different-subject construction is too heavy (in the sense of Hawkins 1999) to be relativized.

(21) Coordinate properties of different subject construction

a. Extraction test: extraction is impossible

?? mu ^s G ^w -a	za-s	xura	li <t>xu-r</t>	[xinimer	rasul	jiq'i-r
village-IN	I.OBL-DAT	in.front	<hpl>meet.PFV-CVB</hpl>	child:PL	R.	1.die.PFV-CVB

d-eši-d] χ*inimer*

HPL-cry.PFV-ATTR child:PL

intended meaning: "In the village I met the children who were crying because Rasul had died."

b. Extraction test: extraction is impossible

?? za-d	[patimat-a	ile-s-d i	ǯ-i?i-r		rasul	gaš-di
I.OBL-erg	PERG	4.eat-INF-AT	FTR NEG-4.do.IPI	FV-CVB	R.	hungry-ATTR
a < r > gi-d]	rasu	l-i-s	ile-s-d i	k- i wi-n	r	
<1>stay.PFV-A	ATTR Rasu	l-obl-dat	4.eat-INF-AT	TR CONT-	give.PF	V-CVB
"I fed Rasul, who – as Patimat didn't cook the meal – remained hungry."						

Overall, I assume that the causal semantics favors the subordinate analysis of different subject converbial clauses. Typologically, this situation is not unique. As it is known from the recent work on adverbial clauses, the syntax of subordination is highly sensitive to semantics. For example, in Japanese, the syntactic size of an adverbial clause depends on the semantics it has: causal clauses have more functional heads available than, for example, clauses with temporal semantics (Endo & Haegeman 2019, Endo 2012).

In Tsakhur, a closely related Lezgic language, similar phenomena are observed: different subject adverbial clauses are coordinate unless there is a causal relationship between the two clauses (Kazenin & Testelec 2004). A similar pattern is attested in Tsez (Polinsky m.s.), Korean (Kwon & Polinsky 2008), Japanese (Iida 1996 after Polinsky m.s.).

3. Interaction with main clause operators

Above we have seen that the -r converb can be a dependent (= subordinate) verb form. But to what extent can it be dependent? To put it in a formal perspective, what is the size of converbial clause, i.e. what functional heads are available inside the converbial clause⁷?

One way to answer this question is to consider how the converbial clause interacts with main clause operators. For example, if the converbial clause inherits the temporal reference of the

⁷ A possible alternative way to answer these questions is to try to combine an adverbial clause with different kinds of adverbs, since semantically different adverbs are associated with different functional heads (Cinque 1999). Unfortunately, I lack the data of that kind.

main clause (in other words, if it does not introduce a temporal anchoring of its own), then we may conclude that it lacks a TP (or has a defective TP, cf. Weisser 2014: sect. 4.2.1).

I use the term 'operator' in a loose, non-formal way here, as a cover term for a number of phenomena related to tense and modality. I assume it to be roughly equivalent to the term 'quantifier', since temporal reference involves quantification over time intervals, and modality involves quantification over possible worlds.

My data suggest that the *-r* converb may fall into the nuclear scope (in the sense of Partee 1995) of main clause operators. In many cases, however, more than one reading is available, with the main close operator either having scope over the converbial clause or not. For the sake of simplicity, I use the terminology suggested by Bickel (2010): "conjunct scope" means that the converbial clause is within the nuclear scope of a main clause operator, and "disjunct scope" means that the converbial clause is outside it.

In this section, I first consider same subject converbial clauses (section 3.1). Second, I consider different subject converbial clauses (sect. 3.2). In section 3.3, for the sake of comparisons I discuss the behaviour of another Rutul converb with respect to the main clause operators. The converb in -ga is semantically similar to, but syntactically different from the general converb. A similar situation is observed in Mishar Tatar, a Turkic language, for which I quote the relevant data from (Tatevosov et al. 2014).

3.1 Same subject converbial clauses

In most cases, converbial clauses with a coreferential non-overt subject allow for two readings: conjunct-scope reading and disjunct-scope readings. However, the conjunct scope is perceived as more natural.

In examples (22 a-c), the conjunct scope is preferable. In (22a), the converbial clause falls within the scope of the prohibitive, since the whole sentence is interpreted as a combination of two prohibitives (*don't write the letters* and *don't send the letters*). Some consultants also allow for a second reading: *having written the letters, don't send them*. This suggests that the converbial clause may be out of the scope of prohibitive, but this interpretation is marginal (not all consultants accept it).

In (22b), the converbial clause falls into the scope of an interrogative operator. The whole sentence is interpreted as a combination of two questions: *has Rasul written the letters?* and *has he sent them?*. However, some consultants also allow for the second interpretation: *Rasul has (already) written the letters, but did he send them?* This suggests that the converbial clause may be outside the scope of the interrogative operator, too.

The example in (22c) suggests that the converbial clause is also obligatorily within the scope of the main clause tense operator. The main clause predicate has a future temporal reference, and so does the converbial clause *Rasul is going to write letters*. It cannot have independent temporal reference, e.g. a past temporal reference: *Rasul has already written the letters*.

(22) a. Prohibitive (C-domain, conjunct/disjunct scope)

kaʁad-bɨr	kixi-r	si <me>rig</me>			
letter-PL	NPL.write.PFV-CVB	4.send <proh></proh>			
1. 'Don't write letters and don't send them.'					

2. %'Having written the letters, don't send them.'

b. Interrogative operator (C-domain, conjunct/disjunct scope)

rasul-a	kaʁad-bɨr	kixi-r	sigi-r-i-ma?
RERG	letter-PL	NPL.write.PFV-CVB	NPL.send.PFV-CVB-COP2-Q

1. 'Did Rasul write the letters and send them?'

2. % 'Rasul has (already) written the letters, did he send them?'

c. Tense operator (T-domain, conjunct/disjunct scope)

rasul-a kaʁad-bɨr	kixi-r	siga-s(-i)
RERG letter-PL	NPL.write.PFV-CVB	NPL.send-INF(-FUT)

1. 'Rasul is going to write letters and send them.'

2. * 'Rasul has written the letters and he will send them.'

Example (23) is peculiar: in this sentence, the converbial clause falls into the scope of the "imperative part" of prohibitive operator, but not into the "negative part" of prohibitive. The whole sentence is translated with a combination of imperative and prohibitive: *cook khinkal, do not eat it.*

(23) **Prohibitive (C-domain, conjunct scope of imperative)**

xink'alhi?i-rme-li? !khinkal4.do.PFV-CVBPROH-4.eat1. °k 'Cook the khinkal, (but) do not eat it!'2. * 'Having cooked the khinkal (if you have already cooked it), don't eat it!'

3. * 'Don't cook the khinkal and don't eat it!'

Examples in (24) are remarkable in that, in (24a), the converbial clause falls into the scope of both imperative and negation: the sentence is interpreted as if there were two prohibitives. Still, in (24b), the same converbial clause does not fall into the scope of an interrogative operator.

(24) **a. Prohibitive (C-domain, conjunct scope)**

lač'irχi-r lu<ma>ruk ! 1.slip.PFV-CVB 1.fall<PROH> 'Don't slip and don't fall!'

b. Interrogative operator (C-domain, conjunct scope)

rasul	lač 'irxi-r	luku-r=a-ma ?			
R.	1.slip.PFV-CVB	1.fall.PFV-CVB=BE-Q			
'When Rasul slipped, did he fall?'					

3.2 Different subject converbial clauses

In contrast to same subject converbial clauses, in different subject converbial clauses, the disjunct-scope interpretation is preferable. However, the conjunct-scope interpretation is also possible in most cases, although it is marginal.

In (25a), two interpretations are possible: the converb in -r may be either within or outside the scope of the main clause tense operator. The second interpretation, though, is rejected by some consultants. Further, the general converb cannot fall into the nuclear scope of the interrogative operator (25b).

(25) a. Tense (T-domain, conjunct/disjunct scope)
rasul-a darmam-bir lešu-r did (sab) q-iki-s-i
r.-ERG medicine-PL NPL.buy.PFV-CVB father healthy RE-1.become-INF-FUT
1. ^{ok} 'Rasul has bought medicine, (therefore) his dad will recover.'
2. % 'Rasul will buy medicine, (therefore) his dad will recover.'

b. Interrogative operator (C-domain, conjuct/disjunct scope)

rasul-a darmam-bir lešu-r did (sau) q-iki-s-i-ma? r.-ERG medicine-PL NPL.buy.PFV-CVB father healthy RE-become-INF-FUT-Q 1. ^{ok} 'Rasul has bought medicine, (so) will his dad recover?' 2. * 'Will Rasul buy medicine and will his father recover?'

In (26), similarly to (25a), the interpretation with disjunct scope of tense is preferable. The interpretation with conjunct scope is not allowed by some consultants.

(26) **Tense (T-domain)**

mihman-ar	q - $a < t > \chi i^{\varsigma}$ - r	rasul	q-iq'a-s- i		
guest-PL	RE- <hpl>leave.PFV-CVB</hpl>	R.	RE-1.come-INF-FUT		
1. ok 'The guests have gone, Rasul will come back.'					

2. % 'The guests will go, Rasul will come.'

3.3 Language internal and typological parallels

In Rutul, the converb in -ga, similarly to the -r converb, expresses the anteriority of an event with respect to another event (27). The main difference between the two converbs is that -ga is not used in converb chains to express long sequences of events in narratives, while -r converb is commonly used in this function (see 1). Also, the form in -ga cannot head independent clauses.

(27)	χal-a	q- $i < r > q$ ' i - r / q - $i < r > q$ ' i - ga	rasul	<i>a</i> :
	home-I	NRE-1.come.PFV-CVB / RE-1.come.PFV-TEMP	R.	below
	luku-r-	-a_i		

luku-r=a-j 1.lie.down.PFV-CVB=BE-PST "Rasul came back home and lay down."

However, the two converbs appear to have different syntactic properties. The converb in *-r* contrasts with the temporal converb in *-ga* converb in that, for the latter, the natural (and probably the only) interpretation is the one where the converbial clause falls into the restrictor of the imperative operator (which means that it does not fall within its scope). In (28), the converbial clause is translated as *having written the letters*, not as *write the letters*. Similarly, in (29), converb in *-ga* is obligatory outside the scope of the question operator. The converbial clause is translated as *when Rasul wrote the letters*, not as *did Rasul write the letters*?

- (28) kasad-bir kixi-ga siga
 letter-PL NPL.write.PFV-TEMP NPL.send.IMP
 'Having written the letters, send them / when you finish writing the letters, send them!'
- (29) rasul-a kaʁad-bɨr kixi-ga sigɨ-r-ɨ-ma?
 R.-ERG letter-PL NPL.write.PFV-TEMP NPL.send.PFV-CVB-COP2-Q
 1. ^{ok} 'When Rasul wrote the letters, did he send them?'
 2. * 'Did Rasul write the letters and send them?'

Mishar Tatar, a Turkic language of the Volga basin, has a converb in -p, which is, in many respects, functionally similar to the Rutul -r converb (see sect. 1). Mishar also has an anterior converb in -gac semantically comparable to the Rutul converb in -ga. The two Mishar converbs have a lot in common semantically, yet they have different syntax. The converb in -p may be both within and outside the scope of the main clause operators (30). The converb in -gac, in contrast, cannot fall within the scope of main clause operators⁸ (31) (Tatevosov et al. 2017: 498).

- (30) kil-e-p aš-a!
 come-ST-CVB eat-ST.IMP
 1. ^{ok} 'Come and eat!'
 'Приди и поешь!'
 2. ^{ok} 'Having come, eat!'
 'Придя, поешь!'
 (Тatevosov et al. 2017: 498)
- (31) kil-gäč aš-a!

come-ANT eat-ST.IMP

- 1. * 'Come and eat!'
- * 'Приди и поешь!'

2. ^{ok} When you come, eat!

'Как придешь, поешь!'

3. ^{ok} 'Since you have come, eat!'

'Раз ты пришел, ешь!'

(Tatevosov et al. 2017: 498)

⁸ A similar contrast holds between the anterior converb in -Ip and the sequential converb in *-ince* in Turkish (Johanson 1995: 323-4).

4. Possible accounts

In this section, I sketch out a tentative analysis for the observed facts.

Following Ramchand & Svenonius (2014: 153), I adopt a "fundamental tripartition of the clause into a V-domain, a T-domain, and a C-domain". They argue that this tripartition has a deep semantic and cognitive basis, since these functional heads are associated with fundamental ontological kinds: events, situations and propositions accordingly. They also introduce intermediary functional heads, which are responsible for the transition between the ontological kinds, the full hierarchy being C > Fin > T > Asp > V.

I also adopt Endo & Haegeman's (2019) assumption that the internal size of an adverbial clause should correlate with its site of merge. This means that, for example, adverbial clauses that are VPs can only be attached at V level; and adverbial clauses that are TPs can only be attached at T level.

My proposal is that a converbial clause headed by the *-r* converb may have different syntactic size in different constructions. I have shown above that the Rutul *-r* converb can head independent clauses fully anchored in time and discourse. Hence, I assume that it can be a CP, as in (32).

(32) -*r* converb heading a CP $q \cdot i < r > q'i \cdot r$ RE-<1>come.PFV-CVB '(he) has come'

When combined with another clause, the *-r* converb can fall within the scope of its tense and illocutionary force operators. I suggest that, in that case, the *-r* converb is an AspP, since Rutul verbal stems are specified for aspect, and since the converbial clause is within the scope of the main clause tense operator, i.e. it lacks a TP (33).

(33) -r converb heading an AspP
 rasul-a kaʁad-bir kixi-r siga-s(-i)
 R.-ERG letter-PL NPL.write.PFV-CVB NPL.send.INF-INF(-FUT)
 'Rasul is going to write letters and send them.'

There are other options available: possibly, the general converb may have some intermediate syntactic size (for example, it can be a TP, or a FinP). But in this paper, I only consider two options: AspP and CP.

When the *-r* converb is used in a polypredicative structure, it can be either a CP or an AspP. I suggest that this syntactic ambiguity gives rise to different readings of one and the same sentence. The converbial clause in (34) may be a full CP. In this case, it does not fall within the scope of main clause operators, giving rise to the interpretation (34.2). Still, it may form a syntactic unit of a smaller size, an AspP; in such a case, it does fall within the scope of main clause operators, giving rise to interpretation (34.1). For some reason, the latter interpretation is preferred, while the CP-interpretation of the converbial clause is less natural.

(34) kasad-bir kixi-r si<me>rig
letter-PL NPL.write.PFV-CVB 4.send<PROH>
1. 'Don't write letters and don't send them.'
2. %'Having written the letters, don't send them.'

In some cases, as in (29), one but not the other interpretation of the converbial clause is preferred. As I have shown above, the choice is sensitive to two factors: (a) subject coreference and (b) semantic relationship between the events expressed in the two clauses.

As the example (34) shows, same subject converbial clauses are preferably AspPs, but they can also be CPs, since both readings are available. This is further supported by the fact that the converbial clause in (34) is subordinate with respect to clausal relations tests (see section 2.2.1). These tests show that it is indeed an adjunct at some level, which is required for an AspP analysis. AspP can only be merged at AspP level (Endo & Haegeman 2019).

Different subject converbial clauses are preferably CPs. If there is no causal relationship between the two events, then, most probably, the converbial clause is coordinate with respect to clausal relations tests (see sect. 2.2.2), which suggests that it is not an adjunct but a conjunct. Still, if there is there is a causal relationship between the two events, then it can be subordinate, i.e. an adjunct at some level (presumably, an AspP). This generalization is not unproblematic, since both causal and non-causal converbial clauses show similar behaviour with respect to the main clause operators. Apparently, more data are needed to refine my current analysis.

List of abbreviations

1 – first gender	HPL – human plural
3 – third gender	IMP – imperative
3P – third person	IPFV – imperfective stem
4 – fourth gender	LAT – lative
ABSTR – abstract noun	OBL – oblique stem
ADD – additive	ORD – ordinal
ANT – anterior converb	PFV – perfective stem
ATTR – attributive	PL – plural
COM – comitative	POSS – possessive
COP – copula	PROH – prohibitive
CVB – converb	PST – past tense
DAT – dative	PV – preverb (verbal prefix)
EL – elative	QUOT – quotative
EMPH – emphatic	SG – singular
ERG – ergative	SIMIL – similative
GEN – genitive	SUP – super
H – human	TEMP – temporal converb

References

Alekseev, M. E. (1994). Rutul. The indigenous languages of the Caucasus, 4, 213-258.

- Bickel, B. (2010). Capturing particulars and universals in clause linkage. *Clause Linking and Clause Hierarchy: Syntax and Pragmantics*. Amsterdam: John Benjamins Publishing Company.
- Cinque, G. (1999). *Adverbs and functional heads: A cross-linguistic perspective*. Oxford: Oxford University Press.
- Croft, W. (2001). *Radical construction grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.
- Endo, Y. (2012). The syntax discourse interface in adverbial clauses. In Haegeman, L. (ed.). *Main clause phenomena: New horizons*. Amsterdam: John Benjamins Publishing Company.
- Endo, Y., & Haegeman, L. (2019). Adverbial clauses and adverbial concord. *Glossa: a journal of general linguistics*, 4(1).

- Graschenkov, P. V. (2015). Turkish converbs and serialization: syntax, semantics, grammaticalization [Tyurkskie konverby i serializatsiya: sintaksis, semantika, grammatikalizatsiya]. Moscow: Jazyki slavianskoĭ kul'tury.
- Kazenin, K. I. & Testelec, Ja. G. (2004). Where coordination meets subordination: converb constructions in Tsakhur (Daghestanian). In Haspelmath, M. (ed.). Coordinating constructions. Amsterdam: John Benjamins Publishing Company.
- König, E. (1995). The meaning of converb constructions. In Haspelmath, M. & E. König (eds). *Converbs in cross-linguistic perspective*. Berlin: Mouton de Gruyter.
- Kwon, N., & Polinsky, M. (2008). What does coordination look like in a head-final language. In Lewandowska-Tomaszczyk, B. (ed.). Asymmetric events. Amsterdam: John Benjamins Publishing Company.
- Krave, M. F. (2010). Russian converbs-temporal interpretation and information structure. *Bergen Language and Linguistics Studies*, *1*.
- Haspelmath, M. (1995). The converb as a cross-linguistically valid category. In Haspelmath, M. &E. König (eds) *Converbs in cross-linguistic perspective*. Berlin: Mouton de Gruyter.
- Hawkins, J. A. (1990). A parsing theory of word order universals. *Linguistic inquiry*, 21(2).

Iida, M. (1996). Context and binding in Japanese. Stanford, CA: CSLI.

- Johanson, L. (1995). On Turkic converb clauses. In Haspelmath, M. & E. König (eds) *Converbs in cross-linguistic perspective*. Berlin: Mouton de Gruyter.
- Lander, Yu. A. (2014). Typology of non-marked clausal subordination: relative clauses [Tipologiya nemarkirovannogo klauzalnogo podchineniya: otnositelnye konstruktsii]. *Voprosy Jazykoznanija*, (1).
- Maisak, T. (2014). Verbal systems of Lezgic languages: structure, semantics and paths of grammaticalization [Glagolnye sistemy lezginskikh yazykov: struktura, semantika i puti razvitiya perfektivnykh form]. Vestnik Instituta yazyka, literatury i iskusstva im. G. Tsadasy., 6.

Morozova, L. 2018. Complementation in Kina Rutul. Unpublished field report.

- Nedjalkov, V. P. (1995). Some typological parameters of converbs. In Haspelmath, M. & E. König (eds) *Converbs in cross-linguistic perspective*. Berlin: Mouton de Gruyter.
- Netkachev, I. (in prep.) Syntax of Lezgic converbs: towards an intragenetic typology. *In preparation*.
- Partee, B. H. (1995). Quantificational structures and compositionality. In Bach, E & B. Partee (eds). *Quantification in natural languages*. Dodrecht: Springer.
- Polinsky, M. (m.s.). Clause combining in Tsez: At the meaning/structure interface. *Unpublished abstract*.
- Ramchand, G., & Svenonius, P. (2014). Deriving the functional hierarchy. *Language Sciences*, *46*. Ross, J. R. (1967). Constraints on Variables in Syntax. PhD thesis. MIT.

- Shiraliev, M. Sh. & E. V. Sevortyan (eds). (1971). The Grammar of Azerbaijani [Grammatika azerbaijanskogo jazyka]. Baku.
- Schutze, C. T. (1996). *The empirical base of linguistics: Grammaticality judgments and linguistic methodology*. University of Chicago Press.
- Schütze, C. T. (2016). *The empirical base of linguistics: Grammaticality judgments and linguistic methodology*. Leipzig: Language Science Press.
- Tatevosov, S.G., Pazel'skaya, A. G., Suleymanov, D. Sh. (eds). (2017). Elements of Tatar language in typological perspective: Mishar dialect [Elementy tatarskogo yazyka v tipologicheskom osveshchenii. Misharskiy dialekt]. Moscow: Buki Vedi.

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