Universität zu Köln Philosophische Fakultät Institut für Linguistik, Abt. Allgemeine Sprachwissenschaft

Converbs in the Wagi dialect of Beria

Masterarbeit

im Studiengang Linguistik und Phonetik (2-Fach-M.A.)

Eingereicht von: Lukas Laureck

Erstgutachterin: Prof. Dr. Birgit Hellwig

Eingereicht am 25.03.2022

Table of contents

Li	ist of tables	. iii
Li	ist of figures	. iv
\mathbf{L}^{i}	ist of symbols and abbreviations	. iv
1	Introduction	1
2	Defining converbs	2
	2.1 Narrow sense vs. wide sense	
	2.2 Embedding	
	2.3 (Non-)Finiteness	
	2.4 Summary	. 10
3	Types of converbs	.10
	3.1 Syntactic types	. 11
	3.2 Semantic types	. 11
	3.2.1 Specialized converbs	. 11
	3.2.2 Contextual converbs	. 12
	3.2.3 Narrative converbs	. 13
	3.3 Referential types	. 14
4	Converbs in grammatical constructions	.14
5	The Beria language	.15
5	5.1 Background	
5		. 15
5	5.1 Background	. 15 . 16
5	 5.1 Background 5.2 Phonology 5.3 Morphosyntax and verbal system	. 15 . 16 . 18
	 5.1 Background 5.2 Phonology 5.3 Morphosyntax and verbal system 	. 15 . 16 . 18 . .21
	 5.1 Background	. 15 . 16 . 18 . .21 . 22
	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24 . 26
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27 . 27
6	 5.1 Background. 5.2 Phonology	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27 . 27 . 33
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27 . 27 . 33 . 36
6	5.1 Background 5.2 Phonology 5.3 Morphosyntax and verbal system Converbs in Kube 6.1 Morphology 6.2 Functions Converbs in Wagi 7.1 Dataset 7.2 Morphology 7.2.1 Are there two converb series in Wagi? 7.2.2 The converbal paradigm 7.2.3 Switch-reference marking	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27 . 27 . 33 . 36 . 37
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27 . 27 . 33 . 36 . 37 . 38
6	 5.1 Background	. 15 . 16 . 18 . 21 . 22 . 24 . 26 . 27 . 27 . 33 . 36 . 37 . 38 . 38

	7.3.4	Separate expression of path and manner	
	7.3.5	Complement clauses	42
-	7.4 Fun	ctions 2: Grammatical constructions featuring converbs	44
	7.4.1	The periphrastic perfect	44
	7.4.2	The periphrastic causative	44
	7.4.3	The benefactive construction	45
	7.4.4	The converb of 'say' as a quotative marker	46
	7.4.5	The converb of the comitative copula	
8	Beria	converbs in a typological perspective	48
9	Conclu	usion	52
Ap	pendix		54
]	Further e	xamples	54
]	Dataset		58
Ret	ferences.		60

List of tables

Table 1. Derived verb forms with different word class status	3
Table 2. Uses of the term "converb".	5
Table 3. Finiteness of converbs and functional equivalents.	8
Table 4. Consonant inventory of Kube.	16
Table 5. Consonant inventory of Wagi.	16
Table 6. Vowel inventory and harmony sets	17
Table 7. Properties of finite verbs, copulas and converbs.	18
Table 8. Overview of person indexes	19
Table 9. Structural slots of Beria verb classes.	19
Table 10. Basic vs. marked forms of the FM in Wagi.	20
Table 11. Structural slots of finite verb forms.	21
Table 12. Inflectional possibilities of converbs.	22
Table 13. awai- 'learn' (class I/2).	
Table 14. na- 'buy' (class II/1)	23
Table 15. Tonal features of Converb ₁ and Converb ₂ in Kube.	24
Table 16. Tonal syncretism of Converb ₁ and Converb ₂ in Kube	24
Table 17. Functional ranges of converbs in Kube.	25
Table 18. Converb forms of 'eat' (class II/1) according to Abdu El-Dawi Abdalla	29
Table 19. Converb forms of 'sit' (class I/2) according to Abdu El-Dawi Abdalla	30
Table 20. Paradigm of sūr- 'go out' (class II/1).	33
Table 21. Distribution of basic vs. marked forms of the FM including the converb	34
Table 22. Fusion of converb and conjunction =ru.	37

Table 23. Purposive forms in -or(I)	. 38
Table 24. Attested verb sequences expressing manner and path	. 42
Table 25. Paradigm of the comitative copula in Wagi.	. 47
Table 26. Dataset.	. 58

List of figures

Р

patient / undergoer

Figure 1. Pitch contour of 'write.CONV.SG' (cf. example (23))	35
Figure 2. Pitch contour of 'write.CONV.PL' (cf. example (23)).	36
Figure 3. Continuum of complex clauses	51

List of symbols and abbreviations

-	morpheme boundary	PART	partitive
	fused morpheme	PAST	past
:	unsegmented morphemes	PFV	perfective
=	clitic boundary	PL	plural
Ø	zero	PRES	present
1, 2, 3	first, second, third person	Q	polar question
А	agent / actor	REFL	reflexive
ABL	ablative	REL	relativizer
AUX	auxiliary	SG	singular
CAUS	causative	SS	same subject
CONC	concessive	SUB	subordinator / subjunctive
COND	conditional	VEN	ventive
CONV	converb	VOL	volitive
COP _{com}	comitative copula		
COP _{loc}	locative copula		
DS	different subject		
EMPH	emphatic		
EPEN	epenthetic element		
FIN	finite		
INDF	indefinite		
INS	instrumental		
INTERJ	interjection		
IPFV	imperfective		
LINK	linker		
LOC	locative-allative		
NEG	negative		
IDEO	ideophone		

1 Introduction

Converbs are a well-attested category in the inflecting languages of northeastern Africa (Amha & Dimmendaal 2006). The present thesis is concerned with converbs in Beria (also called by its Arabic exonym Zaghawa), a Saharan language of the Nilo-Saharan phylum originating from the border region of Sudan and Chad. Specifically, it is concerned with the morphological and functional characteristics of converbs in the yet poorly-described Wagi dialect, in contrast to the better-described Kube dialect of Beria.

In their description of the Kube dialect, Africanists Angelika Jakobi and Joachim Crass (Crass & Jakobi 2000; Jakobi & Crass 2004) were the first to use the then recently-established term "converb" in the context of a (Nilo-)Saharan language. In fact, their use of the term inspired other Saharanists to integrate it into their descriptive vocabulary which, until then, had comprised less conclusive terms such as "conjunctive" (Lukas 1937; Hutchison 1981), "consecutive" (Cyffer 1978) or "sequential" (Cyffer 1991). The term "converb" is now well-established within Saharan studies (see e.g. Bondarev 2005 and 2010 on Old Kanembu as well as Rothmaler 2011 and Löhr & Rothmaler 2016 on Modern Kanuri).

However influential Jakobi and Crass's grammar may have been, its exclusive focus on the Kube dialect obscures the considerable cross-dialectal differences in converb formation. While Kube is said to have two converb series, each derived from a differently tensed stem and with different functional ranges (Jakobi & Crass 2004: chap. 11), Wagi seems to have only one series of converbs, as, apparently, the other had to be replaced by non-converbal constructions due to a change in the inflectional paradigm of the finite verb in the imperfective. This change would have rendered the imperfective-based converb (near-)identical to it. This apparent fact was not recognized in in an earlier morphosyntactic study of Wagi (Abdu El-Dawi Abdalla 2010).

In general, converbs in Beria exhibit a rather high degree of finiteness, indexing both the agent and the patient, and allowing derivational morphology such as the causative. However, they are underspecified for TAM (though they are derived from tensed stems) and illocutionary force, for which they depend on the marking of the finite verb. Other than that, they fulfil most of the syntactic functions traditionally

associated with converbs, most prominently clause-chaining, and they appear in a number of grammatical constructions.

This thesis is organized as follows. In Chapter 2, I review some classic converb definitions (most prominently Haspelmath 1995; V.P. Nedjalkov 1995; van der Auwera 1998). After discussing the most problematic defining parameters embedding (2.2) and (non-)finiteness (2.3), I conclude that van der Auwera's definition is the most suitable in the present context. Chapter 3 provides an overview of converb types found throughout the world's languages; typologically, converbs can be categorized according to their syntactic (3.1), semantic (3.2), and referential properties (3.3). In Chapter 4, I briefly present an overview of grammatical constructions that converbs typically appear in apart from their more prototypical uses. Chapter 5 provides important background information on the Beria language. Chapter 6 is an overview of converbs in Kube as discussed by Jakobi & Crass (2004), and serves as a basis of comparison of the converbs in Wagi. Chapter 7, then, the heart of this thesis, presents morphological and functional analyses of converbs in the Wagi dialect. My analyses are primarily based on (semi-)spontaneous speech data as well as elicited data and first-hand information from two native speakers. Chapter 8 puts the results from the analyses into a typological perspective, in part referring back to Chapter 3, but also discussing alternative approaches to complex clauses and converb constructions in Saharan and cross-linguistically. Chapter 9 concludes the thesis.

2 Defining converbs

2.1 Narrow sense vs. wide sense

What are converbs, and how can they be defined? As a start, it can be anticipated that converbs are "generally taken to be dependent verb forms that are neither argumental nor adnominal, i.e. that are – roughly – neither used like a typical noun nor like an attributive adjective" (Rapold 2010: 7). Because of the plethora of parameters that have been used to define converbs, it is has, for the sake of clarity, become common practice to represent them in a feature matrix. Hence, converbs in the widest sense are

(1) [+dependent, -argumental, -adnominal]

and are thus normally regarded as distinct from verbal nouns (or *masdars*) and participles (verbal adjectives), which fulfil other syntactic functions, see Table 1 (Haspelmath 1995: 4).

Word class:	Noun	Adjective	Adverb	
Derived verb	masdar	participle	converb	
form:	(=verbal noun)	(=verbal	(=verbal adverb)	
		adjective)		
Syntactic function:	argument	adnominal	adverbial modifier	
		modifier		

Table 1. Derived verb forms with different word class status.

A typical converb construction is exemplified by the following Khalkha Mongolian sentence, where the converb phrase functions as an adverbial:

(2) Khalkha Mongolian

The above definition is regarded by Rapold as the "greatest common denominator" for all the circulating definitions. Not surprisingly, however, converbs have proven to be quite the apple of discord among various authors and areal traditions. This chapter aims to review the history of the term "converb", as well as a number of definitions that have been in circulation ever since the term was introduced into general linguistics. Furthermore, it aims to position the present thesis with respect to these definitions.

The term "converb" was originally coined by Finnish Altaicist Gustaf John Ramstedt in his 1903 study on Khalkha Mongolian verbal inflection and later adopted for Ethiopian languages by Polotsky (1951). It was not introduced into the broader typological literature until the publication of Nedjalkov & Nedjalkov (1987). However, this paper still lacked impact due to its inaccessibility, and is not referenced in, e.g., Müller-Bardey (1990), who uses the term "converb" in the context of copredication.

The first book-length resource on converbs from a cross-linguistic perspective is the anthology edited by Haspelmath & König (1995). However, it seems to have been impossible for the contributors of this volume to agree on one single definition. In his introductory chapter, Haspelmath (1995) delineates what is now commonly regarded as the narrow sense of the term. According to Haspelmath, a converb is "*a nonfinite verb form whose main function is to mark adverbial subordination*" or, in other words, converbs are "verbal adverbials, just like participles are verbal adjectives" (1995: 3; italics in original). Thus, Haspelmath defines converbs as

(3) [+dependent, +adverbial, -finite]

Haspelmath (1995: 7) prefers the positive formulation "adverbial" over the negative formulations "non-argumental" and "non-adnominal". But since he aims explicitly to exclude both masdars *and* participles from his definition, it seems useful to stick to the separate parameters [–argumental] and [–adnominal]. As subordination is also implied in [+adverbial], it is important to include the feature [+embedded]. Thus, the feature [+adverbial] can be reformulated as [–argumental, –adnominal, +embedded], which yields the new matrix in (4). This representation also facilitates comparison with other definitions like the one given in (1).

(4) [+dependent, -argumental, -adnominal, +embedded, -finite]

Interestingly, most of the following contributions in the Haspelmath & König book dismiss Haspelmath's narrow definition and return to some version of the wider definition in the Nedjalkovian tradition, which is congruent with the definition given in (1) above:

As a first approximation, we can define a converb as a verb form which depends syntactically on another verb form, but is not its syntactic actant, i.e, does not realize its semantic valencies. Thus, a *canonical* [...] converb can occupy (1) the position of an adjunct, i.e., an adverbial, but cannot occupy the positions: (2) of the only predicate of a simple sentence (without additional auxiliary elements); (3) of nominal attributes; (4) of a clausal actant (i.e., it cannot depend on verbs such as *begin, order,* etc.); (5) of a nominal actant (i.e., it does not occur in subject and object position) [...]. In the four last positions mentioned above, the following verb forms occur

canonically: in the second position – a finite form; in the third position – a participle; in the fourth position – an infinitive; in the fifth position – a gerund (i.e., a deverbal noun that is part of the system of verb forms). (Vladimir P. Nedjalkov 1995: 97)

If one compares the matrices in (1) and (4), it becomes apparent that both contain the features [+dependent, –argumental, –adnominal]. But there is disagreement on the parameters [\pm finite] and [\pm embedded]. While Haspelmath's narrow definition takes an explicit stance in stating that converbs must be [–finite] and [\pm embedded], these parameters do not play such a central role in the Nedjalkovian broad definition, which, logically, does not exclude [\pm finite] and [\pm embedded] forms. This becomes clearer later in Vladimir P. Nedjalkov's chapter (1995: 116–23).

Naturally, there is also room for other definitions between the narrow and the broad one (van der Auwera 1998). Expanding from van der Auwera's (1998) considerations, Rapold (2010: 10) identifies four levels of "broadness" of converb definitions with regard to the defining parameters; see Table 2 (Rapold 2010: 10).

verb form							
	+ dependent, -argumental, -adnominal						
+ emb	+ embedded –embedded						
+ finite	-finite	-finite	+ finite				
	narrow						
	converb (S)						
	broad converb (M)						
	broader converb (L)						
	broadest converb (XL)						

Table 2. Uses of the term "converb".

In this systematization, the narrow or "S-type" definition corresponds to Haspelmath's definition, whereas the broadest, "XL-type" definition corresponds to the Nedjalkovian one. Van der Auwera (1998) proposes a medium-wide definition, which corresponds to the broad, "M-type" definition. I know of no definition that would correspond to the L-type, and I take it to be a mere logical possibility that has not actually been brought forward in the literature (yet).

As a first summary, we can say that two definitions of the term "converb" have been central in the discussion: a narrow one (Haspelmath) and a wide one

(Nedjalkov). A middle ground is taken by van der Auwera (1998). All definitions operate with a number of defining parameters. While all seem to agree that converbs are [+dependent, -argumental, -adnominal], there are different standpoints on the parameters *embedding* and *finiteness*. In what follows, I will examine the problems connected to these parameters, and adduce arguments in favor of a medium-wide definition of converbs in van der Auwera's sense, i.e. converbs as [+dependent, - argumental, -adnominal, -finite], but unspecified for embedding. In so doing, I also discuss some morphological requirements for converbs in addition to the primarily syntactic ones discussed so far.

2.2 Embedding

The main reason to dismiss Haspelmath's narrow definition of converbs is his insistence on the notion of "adverbial subordination", or embedding (e.g. Bickel 1998: 384; Ebert 2008: 7; Rapold 2010: 11). It is explicitly meant to exclude clause-chaining functions, which are, according to Haspelmath, "not really adverbial" (1995: 8). Clause chaining can be understood as

a clause combining strategy involving a string of clauses that is dependent on a finite clause. In addition, the number of dependent clauses must be potentially unlimited and the dependent clauses must be able to advance the plot. (Rapold 2010: 19)

A typical clause-chaining construction is, however, provided by Haspelmath himself:

(5) Kumyk (Turkic)

Bu-lar, köl-nü arba-syn gör-üp, toqtat-yp, this-PL lake-ACC see-CONV cart-3.POSS stop-CONV čemodan-ny Manaj-ža köl-nü da göter-t-ip suitcase-ACC Manaj-DAT also take-CAUS-CONV lake-GEN jağa-syn-a bar-yp, čemodan-ny ač-yp, šišla-ny bank-3.POSS-DAT go-CONV suitcase-ACC open-CONV bottle-ACC čyğar-yp tiz-ip suw-dan toltur-up, qajtar-yp take.out-CONV put.in.row-CONV water-ABL fill-CONV return-CONV čemodan-ža sal-a. suitcase-DAT put-PRES

'They see the lake, stop their cart, make Manaj bring the suitcase, go to the bank of the lake, open the suitcase, take out the bottles, put them in a row, fill them with water, and put them back into the suitcase.' (Haspelmath 1995: 7; citing Džanmavov 1967: 234)

Haspelmath claims that this is "not a central, typical use of the converb" (1995: 8). He correctly adds, however, that a clear-cut distinction between temporal adverbial subordination and clause chaining is difficult to draw. Nevertheless, he insists on a distinction between converbs and "medial verbs", a term that he borrowed from Papuan linguistics. Medial verbs appear "sentence-medially" (hence the term), and are used to express *cosubordination*, i.e. [+dependent, –embedded] clause linkage types, and, consequently, to form clause chains (Haspelmath 1995: 20–3). Cosubordination differs from the traditionally recognized clause linkage types *coordination* and *subordination*, which can be characterized as [–dependent, – embedded] and [+dependent, +embedded], respectively (see Foley & Van Valin 1984; Van Valin & LaPolla 1997).

Haspelmath does acknowledge the fact that the notions of converb and medial verb overlap, and that a distinction might eventually turn out to be arbitrary (Haspelmath 1995: 23). Bickel (1998: 385, 389), furthermore, observes a "systematic conflation of – or at least some overlap between" adverbial-modifying functions and chaining-nonmodifying functions in the same verb forms especially in Central Asia (see also Johanson 1995 on Turkic languages). Given these facts, it seems advisable to discard the [+embedded] feature for converbs altogether, as in many languages, the same form can appear in both embedded clauses and unembedded clauses (clause chains). Vladimir P. Nedjalkov (1995) employs the term "narrative converbs" for converbs with clause-chaining function (see subsection 3.2.3 below). Since the feature [+dependent] covers both subordinate and cosubordinate clauses, it shall suffice as a defining component for the time being. Let us turn to (non-)finiteness.

2.3 (Non-)Finiteness

Although widely accepted today, nonfiniteness as a defining parameter for converbs is not unproblematic. Finiteness is in itself a rather vague concept in need of definition (Koptjevskaja-Tamm 1999). In the traditional view, which is based on the study of European languages, finite verb forms are morphologically marked for – or "delimited" (*finitum*) by – the categories person, number, tense, aspect, mood, etc., whereas nonfinite verb forms are not marked for these categories. In terms of syntactic function, a finite verb form can function as the single predicate of an independent sentence, while a nonfinite verb form cannot. However, even among the well-studied European languages, there are marginal cases where verb forms that are normally considered nonfinite do in fact show person/number agreement, like the personal infinitives found in Portuguese. Conversely, there are fully finite-marked verb forms that can only appear in subordinate rather than independent clauses, cf. the French and Spanish subjunctive or similar dependent moods in many other languages (Koptjevskaja-Tamm 1999: 146–7). In light of these analytical difficulties,

	А	prototypical converbs: no person or tense-aspect markers
	A'	person-sensitive forms ¹
nite	В	forms with nominal person or number markers
→ nonfinite	С	forms containing a tensed stem
\uparrow	C'	forms containing an aspect marker
finite \leftarrow	D	minimally reduced forms with respect to main verb
finit		(phonological reduction or lack of speech act marker) + suffix
		(linker or subordinator)
	Е	fully finite verb + suffix

Table 3. Finiteness of converbs and functional equivalents.

morphological finiteness with regard to converbs is best conceived of as a continuum (Ebert 2008: 8, 25–6); see Table 3 (slightly adapted by Rapold 2010: 15). Ebert draws the dividing line between converbs and their mere functional equivalents between types C' and D. Thus, when a verb form is composed of a morphologically finite form plus another, formally and semantically independent element with subordinating or linking function, it should not be considered a converb. Consider the following example:

¹ Ebert (2008: 19–20) gives the example of the Siberian language Nivkh, where converbs can be grouped according to two different "personal sets": 2SG and 3SG vs. the rest. These are not to be understood as person markers in the traditional sense. Interestingly, finite verbs in Nivkh are not marked for person at all (see Mattissen 2008 for further details).

(6) Dumi (Kiranti)

a-dzi:t-i-koa-sir-i-koa-hu:d-i.2-wet-2/3SG-LINK2-wash-2/3SG-LINK2-bring-2/3SG'You made it wet, cleaned it and brought it.'(Ebert 2008: 24; citing van Driem 1993: 245)

By excluding such finite-marked forms + linker, Ebert strongly disagrees with Vladimir P. Nedjalkov (1995), whose definition is based on purely functional grounds. However, in order to "set up converbs as a set of morphologically non-finite verb forms (analogous to participles), we have to decide which forms should count as non-finite" (Ebert 2008: 17). And, as Bickel (1998: 395) rightly concludes,

[w]hen reading that a language has converbs in this broader sense [i.e in the Nedjalkovian sense; LL], the only information we would gain is that in this language at least some interpropositional relations are marked by verbal affixes rather than free morphemes (conjunctions).

Since languages differ with regard to the verbal categories that are relevant for a finite/nonfinite opposition (Koptjevskaja-Tamm 1999: 147), deciding which forms count as nonfinite remains, of course, a language-specific question. However, a crosslinguistically applicable criterion for finiteness could be grounded on distributional terms, i.e. whether or not the form in question can appear as the only verb in the independent clause (Nedjalkov 1998: 421; cf. also Cristofaro 2003: 54). Rapold (2010: 15–6) is concerned that the feature [–finite] could become coextensive with [+dependent] with such an approach, rendering it superfluous as a separate defining parameter. To arrive at a satisfactory definition of finiteness in converbs, a synthesis of both morphological and syntactic approaches seems adequate.

2.4 Summary

In this chapter, I have reviewed different converb definitions. Two extreme positions have been recognized traditionally: Haspelmath's narrow definition of converbs as [+dependent, -argumental, -adnominal, +embedded, -finite] verb forms on the one hand, and the Nedjalkovian wide definition as [+dependent, -argumental, - adnominal] on the other. A medium-wide definition as [+dependent, -argumental, - adnominal, -finite] was proposed by van der Auwera (1998). In discussing the problematic defining parameters embedding and finiteness, a stance was taken for this medium-wide definition. The major advantage of this definition is that it includes clause-chaining functions, which are commonly regarded as [-embedded], but excludes [+finite] subordinate moods such as the French subjunctive.

In terms of morphology, it has been argued that in order to qualify as converb, a verb form should be "formally simple" in that there should be no possibility of analysis in more basic terms (following Ebert 2008). Furthermore, a synthesis of morphological and syntactic requirements for converbs has been proposed.

Apparently, the definitional battle over converbs is far from over. The term "converb" will likely continue to be used in the most diverse senses. It will always remain in need of individual fine-tuning in order to meet the explicatory needs of the researcher. The most important thing is to be clear and explicit in one's definition of converbs in the language under investigation, while ideally retaining some level of crosslinguistic comparability.

3 Types of converbs

Having defined converbs in van der Auwera's (1998) terms as [+dependent, – argumental, –adnominal, –finite] verb forms, I now turn to the typological characteristics that such verb forms exhibit crosslinguistically. Converbs can be further typologized according to their syntactic (3.1), semantic (3.2) and referential properties (3.3). This typology is based on Vladimir P. Nedjalkov (1995), who explicitly states that these types are to be understood as ideal types and that "[i]n reality, converbs are often characterized by a greater or lesser degree of closeness to these ideal types" (1995: 106). Also, most converbs seem to combine several of these functions (Vladimir P. Nedjalkov 1995: 98).

3.1 Syntactic types

Three syntactic types of converbs can be distinguished: *converb proper*, *coordinative converb* and *conjunctional converb*. Converbs proper are converbs in the narrow sense, i.e. converbs expressing adverbial subordination. Coordinative converbs are used to conjoin two or more clauses. Coordinative converb constructions are typically translated into English with the help of 'and' or asyndetic constructions of the type *I came, saw, conquered.*² Conjunctional converbs fulfil the function of the predicate of a subordinate clause. These are typically translated into English with the help of subordinate clause. These are typically translated into English with the help of 'ant' or 'after'.

3.2 Semantic types

Vladimir P. Nedjalkov (1995) furthermore distinguishes between three semantic types of converbs. There are *specialized converbs*, which are characterized by highly specific semantics (3.2.1), *contextual* or *general converbs*, whose semantics rely heavily on context (3.2.2), and *narrative converbs*, which are used to advance the plot in narrative clause chains (3.2.3).

3.2.1 Specialized converbs

Some languages, such as Korean or Turkish, feature a high number of different converbal forms (Korean, e.g., scores a number close to 60 different converbal affixes) with highly specialized semantics. Specialized converbs have only one or two possible meanings. It can further be distinguished between temporal (taxis) and nontemporal (nontaxis) specialized converbs (Vladimir P. Nedjalkov 1995; Nedjalkov 1998). Temporal specialized converbs can express simultaneity, anteriority or posteriority of an action with respect to the action of the main clause, see (7).

² The term "coordinative" converb is somewhat misleading, as the syntactic dependency relation between the converb and the main verb undermines the main criterion for coordination, which is syntactic equality (or "balance") between the conjoined clauses. Coordinative converb constructions are still co*sub*ordinate in the sense of Foley & Van Valin (1984).

(7) Simultaneity (Udmurt) *Uža-ku-m kuaź zoriz.* work-CONV-1SG rain went 'While I worked, it was raining.' (Vladimir P. Nedjalkov 1995: 107; citing Perevoščikov 1959: 56–70, 272– 84)

Nontemporal specialized converbs have all kinds of other meanings such as manner, cause, purpose, real and irreal condition, concession, comparison, intention, result, contrast, accompanying circumstance etc. (Vladimir P. Nedjalkov 1995: 107). See example (8).

(8) Concession (Nivkh)

čaxtuz-ginöla-gumrə-d'-yu-dawatercold-CONV.CONC child-PLbathe-FIN-PL-EMPH'Although the water was cold, the children bathed.'(V.P. Vladimir P. Nedjalkov 1995: 107; citing Panfilov 1965: 129)

3.2.2 Contextual converbs

Some languages feature only one or two different converbal forms. Consequently, their meaning is highly dependent on context and often on lexical properties like Aktionsart. They can express all sorts of temporal and nontemporal meanings. Such converbs can be called "contextual" (Vladimir P. Nedjalkov 1995) or "general" (Ebert 2008). European (quasi-)converbs are generally taken to be of this type:

(9) Estonian (Finno-Ugric, Uralic)

a.	Närveeri-des	könnib	(barilikult)	ta mööda		
	worry-CONV	walk:3SG	usually	s/he along		
	tuba.					
	room:PART.SG					
	'Worrying [i.e. when he is worried], he (usually) walks about					
	the room.'					
h	Ta könnih	mööda tu	ha	nörvaari daa		

b. *Ta könnib mööda tuba närveeri-des.* s/he walk:3SG along room:PART.SG worry-CONV 'He is walking about the room worrying.' (V.P. Vladimir P. Nedjalkov 1995: 108)

Depending on context and word order, the Estonian converb can have a habitual (9)a or a simultaneous reading (9)b.

Oftentimes, the interpretation of the converb construction is highly dependent on the tense, aspect and Aktionsart of the main verb. Similarly, the occurrence of modal verbs ('would have') and frequency adverbials ('often') in the English sentences in (10) also contribute hugely to the meaning of the converb construction (König 1995: 61–2):

(10) English

- a. Walking home, John saw Mary. [temporal, simultaneous]
- b. Walking home, John often watches for eagles. [temporal, general]
- c. Walking home, John would have seen the new billboards.
 [counterfactual conditional]
 (König 1995: 61; citing Stump 1985: 66)

3.2.3 Narrative converbs

Narrative converbs are used to form clause chains typical of narratives. Syntactically, narrative converbs are coordinative converbs. Strictly speaking, narrative converbs do not actually constitute a category on par with specialized and contextual converbs. Both general converbs and converbs specialized for clause-chaining are conceivable as narrative converbs. For instance, there is a converb specialized for narration in *-ip* in Turkish, which is used next to the other specialized converbs (König 1995: 58; Johanson 1995).

What sets narrative converbs apart from the other semantic types, however, is that their syntactic dependency is not accompanied by a semantic dependency, i.e. each converb denotes one independent, fully completed action in chronological sequence with another (Vladimir P. Nedjalkov 1995: 109). The order of the converb clauses is thereby iconic in that it reflects the order of the events described. A typical clause-chaining construction with narrative converbs has been provided in example (5) above.

3.3 Referential types

Converbs can also be distinguished according to their referential properties, i.e. whether their subject is coreferential with the subject of the main clause or not. On this basis it is possible to distinguish between *same-subject* (SS) converbs, whose subject is always coreferential with the subject of the main clause, and *different-subject* (DS) converbs, whose subject is never coreferential with the subject of the main clause. Some languages have developed dedicated markers for SS and DS reference, like Hopi:

(11) Hopi (Uto-Aztecan)

a.	Nu' pakí-t	pu'	<i>U.</i>				
	I come-CONV.SS then sit.d		sit.dov	.down			
	'I came and sat down.'						
b.	Nu' pakí-q	pu'	pam	qatuvtu.			

I come-CONV.DS then she sit.down 'I came and she sat down.'

(Vladimir P. Nedjalkov 1995: 114; citing Kalectaca 1978: 149-50)

4 Converbs in grammatical constructions

Converb constructions are prone to grammaticalization. It is thus not surprising that forms labelled "converbs" do not only occur in their "prototypical" functions as adverbials or clause-chaining devices, but also in fixed grammatical constructions with specific functions and meanings. Rapold (2010: 13–14) distinguishes between the following grammaticalized construction types:

- a. converb is part of a construction in which some other element is grammaticalized:
 - part of compound TAM or Aktionsart formation, e.g. continuous aspect: come-CONV stay-FIN = 'keep coming'
 - part of construction introducing additional participants into the sentence, e.g. benefactive: work-CONV **give**-FIN = 'work for'

- part of a construction involving a directional, e.g. fly-CONV go-FIN =
 'fly away'
- b. converb itself is grammaticalized
 - grammaticalization into adpositions, e.g. **last**-CONV = 'during'
 - grammaticalization into conjunctions, e.g. say-CONV = marker of direct quotes / complements of speech and cognition verbs / ideophones / purposive clauses, e.g. "How are you" say-CONV asked.
 = 'asked "How are you?"
 - grammaticalization into discourse particles
 - head-to-tail linking (in recapitulation clauses), e.g. ... and go-FIN.
 Go-CONV ... = '... and went. Having gone...'
- c. converb is part of a construction that is lexicalized
 - part of lexicalized combination of verbs, e.g. know-CONV hold = 'understand'

The construction types under a. and c. can be subsumed under labels such as "complex predicates", "complex verbs" or "compound verbs". Such compound verbs can be said to consist of a general converb + finite postverb (Ebert 2008: 12; following Drossard 2008). Grammaticalization into adpositions, conjunctions and grammatical markers is discussed in more detail in Haspelmath (1995: 37–45).

5 The Beria language

5.1 Background

Beria (also commonly called by its Arabic exonym Zaghawa) is an East-Saharan language of the Nilo-Saharan phylum originally spoken in the border region of Chad and Sudan. Due to droughts and conflict, Beria speakers are now scattered throughout the region and the globe. Speaker numbers vary widely throughout the literature. Osman (2006) speaks of 180,000 speakers in Sudan, whereas Ethnologue estimates the total number of speakers around the world to be 348,400 (Eberhard, Simons & Fennig 2022). There are four main dialects of Beria: Kube, Wagi, Tuba and Dirong-Guruf (Anonby & Johnson 2001). Most published materials are concerned with the Kube dialect (most notably, the reference grammar by Jakobi & Crass (2004)), but there has also been research on Wagi, most of which remains, unfortunately,

unpublished to date. However, data on Wagi is abundant. Materials on the Tuba and Dirong-Guruf dialects are scarce.

5.2 Phonology

Table 4 shows the consonant inventory of the Kube dialect (adapted from Jakobi & Crass 2004: 11).

	lab	oial	alve	alveolar		palatal		lar	glottal
stops	(p)	b	t	d	(c)	ţ	k	g	[?]
fricatives	t	f	S	5	(ſ)				h
nasals	n	n	1	1	ŋ		ŋ		
trills/flaps			r,	t					
laterals			(l)					
glides	v	V			j	i			

Table 4. Consonant inventory of Kube.

Consonants in round parentheses are marginal. /p/ does not occur word-initially. [?] is only found word-initially before vocalic onsets. Its phonemic status is unclear. Unvoiced stops are consistently weakened to their voiced counterparts in intervocalic position in Kube.

	lab	oial	alve	eolar	pal	atal	ve	lar	glottal
stops	(p)	b	t	d		ţ	k	g	
fricatives	i	f	S	(z)	ſ	(3)			h
nasals	n	n	1	n	J	1	1)	
trills/flaps			1	r					
laterals				1					
glides	v	V			j <	(y>			

Table 5. Consonant inventory of Wagi.

Table 5 shows the consonant inventory of Wagi. It is based on the results of various fieldwork methods classes taught by Birgit Hellwig and Isabel Compes at the Department of Linguistics, University of Cologne, since winter term 2014/15.

An important isogloss that distinguishes the two dialects is the n : l isogloss. In most contexts, /n/ has become /l/ in Wagi. Wagi seems to be the innovator here, compared not only to the other dialects of Beria, but also all other Saharan languages, which have retained /n/.

The vowel inventories seem to be identical for both dialects. According to advanced tongue root (ATR) vowel harmony, vowels can be grouped into two sets (see Table 6). /ɔ/ and /a/ can occur in free variation. It has been argued that [e] and [o] do not constitute phonemes in their own right, but are better analyzed as allophones of /ɛ/ and /ɔ/ in a [+ATR] environment (Anonby et al. 2007: 219; Mathes 2015).

	[+ATR] vowels						
	front central back						
high	i		u				
mid	[e]		[0]				
	[-ATR] vowels						
high	Ι		U				
mid	ε		э				
low		a					

Table 6. Vowel inventory and harmony sets.

Furthermore, Beria is a tonal language. There is both lexical and grammatical tone. For instance, plurality is almost always marked by a high tone on the last syllable of a phrase. There are at least three register tones and two contour tones: high (á), mid (\bar{a}) , low (à), rising (ǎ), and falling (â) (Jakobi & Crass 2004: 32–3; Osman 2006: 357). The intricate tonal system of Beria is still pending thorough analysis, but see Gayler (2021) for a valuable contribution on tone in noun phrases. More research on tone is being conducted at the moment (Omda Ibrahim Elnur n.d.), and it is anticipated that Osman's analyses for the Wagi dialect will have to be thoroughly revised. There seem to be a number of tonal restrictions that require that a distinction be made between surface and underlying tones.³

³ Compes (2021a: 214) states that phonetically, Wagi distinguishes the following tones: low, mid, high, high-low-falling, mid-low-falling and low-high-rising. In this thesis, I will restrict myself to the

5.3 Morphosyntax and verbal system

Typologically, Beria is characterized by a rigid SOV constituent order, a polysynthetic morphological structure, and extensive head-marking. There are only a handful of nominal markers which always attach to the rightmost element of an NP, and which are hence considered clitics. Like the other Saharan languages, Beria stands out for its intricate verbal system: verbs are characterized by a sizable number of inflectional and derivational affixes, polypersonal agreement, suppletive roots and portmanteau morphemes. Finite verbs can be distinguished from copulas and converbs on both morphological and distributional grounds, see Table 7 (adapted from Jakobi & Crass 2004: 47).

Table 7. Properties of finite verbs, copulas and converbs.

	Morphologically reduced	Sentence-final position
Finite verb	-	+
Copula	+	+
Converb	+	_

Traditionally, three verb classes have been identified in Saharan languages (see, e.g., Cyffer 1991; 2020). Jakobi & Crass (2004) follow the traditional analysis in their grammar. However, since Abdu El-Dawi Abdalla (2010), it is now commonly agreed upon that Beria has a fourth verb class (see also Compes 2021a; Jakobi 2011; Wolfe 2010; Kellenberger 2008). The four classes are mainly based on morphological structure and (arguably) semantic features. Transitive verbs index both their A and P arguments. The P-marker is prefixed to the root, while the A-marker is suffixed. The general template for the underived finite verb is thus

(12) (P)-root-A-FM

where FM stands for "final morpheme", a portmanteau morpheme conveying tense/aspect, mood, polarity as well as plurality information (Compes 2021a: 199). An overview of the P- and A-markers in the Wagi dialect is provided in Table 8, and an overview of the four verb classes in Table 9 (both based on Compes 2021a).

five tones assumed by Osman (2006), and only discuss potential differences between surface and underlying tone where deemed necessary in the context of converbs.

Table 8. Overview of person indexes.

		Р	Α
Person		Prefix	Suffix
	1	(V)-	-g
SG	2	<i>l(V)</i> -	-1
	3	\emptyset -4	-r/-l/-Ø
	1	t(V)-	-d
PL	2	<i>l(V)</i> -	-b
	3	Ø-	-r/-l/-Ø

Table 9. Structural slots of Beria verb classes.

Class	Structural slots	Description			
I/1	P-root-A-FM	monovalent "experiencer" or "medium" verbs; S-			
		argument indexed in P-slot, A-slot is occupied by a			
		third-person dummy			
I/2	P-IPFV-root-A-FM	like I/1, but secondary imperfective marker s- in all			
		persons			
II/1	(P)- 3PFV -root-A-FM	optionally bivalent, secondary perfective marker			
		k(V)- in the third person			
II/2	(P)-root- 3pfv -A-FM	optionally bivalent, secondary perfective marker -			
		(y)a in the third person			
III	LM = (P)-AUX-A-FM	"light verb construction": lexical morpheme (LM)			
		as "meaning carrier" + auxiliary <i>n</i> - (Kube)/ <i>l</i> - (Wagi)			
		which carries the grammatical morphology and has			
		the status of a clitic to the LM; AUX behaves like a			
		II/1 verb			
IV	LM = P-AUX-A-FM	like III, but AUX behaves like a I/1 verb			

Classes I and II are closed classes. Class I verbs mostly denote monovalent events of low transitivity. They index their only referential argument by means of a P-marker prefixed to the root. The A slot is occupied by a dummy third-person index. Class I thus constitutes the point of departure for further studies in terms of split-intransitivity or middle voice (Jakobi 2002; 2010; 2011; Compes 2021b; in prep.). Verb class II encompasses both bivalent and monovalent verbs with more active meaning. Verb classes III and IV are the most productive synchronically. Verbs of these classes are

⁴ For the sake of space and clarity, I will refrain from glossing zero third-person P-markers in the examples.

made up of an independent lexical morpheme (LM) or "meaning carrier" that can basically belong to any part of speech. The grammatical elements attach to an auxiliary n- (Kube) or l- (Wagi) which goes back to a verb meaning 'say'. The inflected auxiliary has the status of a clitic to the lexical element. Classes III and IV are distinguished from one another by the morphological structure of the auxiliary: in class III, the auxiliary has the structural characteristics of a class II/2 verb, while in class IV it behaves like a class I/1 verb.

The FM of the finite verb in Wagi, furthermore, distinguishes between what has been called a "basic" and a "marked" form (Compes 2021a), a distinction not attested for Kube. Roughly, the basic form is associated with singular contexts, whereas the marked form is associated with the plurality of either the A, the P or both. However, the marked form is restricted to contexts where person indices are syncretic between singular and plural. For instance, as can be seen from Table 8, the P-marker for the second person is l(V)- regardless of number. The marked form of the FM is hence used to disambiguate the plural form from the singular one:⁵

(13)	lè-rè-g-í	VS.	lè-rē-g-ŭ
	2P-hit-1sgA-pfv.sg		2P-hit-1sgA-pfv.pl
	'I hit you.SG'		'I hit you.PL.'
	(Compes 2021a: 223-	-4)	

A > 3	$3P(=\emptyset)$	FM		
		IPFV	PFV	
SG	1	-è/-è	-í/-í	
	2	-è/-è	-í/-í	
	3	-è/-è	-í/-í	
PL	1.EXCL	-è/-è	-í/-í	
	1.INCL	-é/-é	-ŭ	
	2	-è/-è	-í/-í	
	3	-é/-é	-ŭ	

Table 10. Basic vs. marked forms of the FM in Wagi.

⁵ For the sake of simplicity, the basic forms of the FM will be glossed as SG and the marked ones as PL, even though this distribution is not clearcut.

Additionally, the marked form is exploited to mark an exclusive/inclusive distinction in the first person plural, a distinction so far unattested in the other dialects of Beria. Table 10 (Compes 2021a: 213) provides an overview of the basic vs. marked forms of the FM for a simple paradigm. For complete paradigms and a more thorough discussion of the distribution of the marked form, see Compes (2021a). Note that Wagi makes a clear distinction between the imperfective and the perfective FM in terms of vowel quality: $-\epsilon/-\epsilon$ in the imperfective vs. $-\nu/-i$ or -u in the perfective. Kube does not make a distinction in vowel quality: the affirmative FM is always $-\nu/-i$. For a distinction between imperfective and perfective, Kube solely relies on tonal marking.

1	2	3	4	5	6	7	8
Р	3pfv	CAUS	root	CAUS	3pfv	А	FM=
APPL	IPFV		AUX				ТА
	VAL						mood
							polarity
							plurality

Table 11. Structural slots of finite verb forms.

Moreover, the verb has structural slots for derivational morphology before and after the verb root. The derivational morphemes are, in general, associated with valencyaltering operations (APPL, VAL, CAUS). This will not be discussed in further detail here. Table 11 provides an overview over all the morphological slots of the finite verb (Compes 2021a: 201; Jakobi 2010: 162). Whenever more than one category is listed in a slot, the categories are considered mutually exclusive.

Having outlined the general typological characteristics of Beria, and having given an overview of the intricate verbal system, we will now turn to converbs.

6 Converbs in Kube

This chapter aims to provide an overview of what is known about converbs in the Kube dialect, before we turn to the analysis of converbs in Wagi. Jakobi & Crass (2004: chap. 11) recognize two converbs for Kube, which they call Converb₁ and Converb₂. Converb₁ is derived from the perfective stem of the finite verb, while

Converb₂ is derived from the imperfective stem. Both are morphologically distinct from finite verbs in that the finite FM -i/-i is replaced by the converb marker $-\varepsilon/-e$. The following two subsections are dedicated to the morphology (6.1) and functions (6.2) of the converb forms in Kube.

6.1 Morphology

Jakobi & Crass (2004: 165) state that converbs have reduced inflectional possibilities compared to finite verb forms, as shown in Table 12 (adapted from Jakobi & Crass 2004: 165).

	converb	finite verb
A marker	+	+
P marker	+	+
plural	(+)	+
aspect	(+)	+
mood	-	+
derivation	+	+
interrogative	_	+

Table 12. Inflectional possibilities of converbs.

While plurality and aspect oppositions are retained in some converbal forms, they are often neutralized due to morphophonological and/or tonal syncretism (Jakobi & Crass 2004: 167).

Speaking of "morphologically reduced forms" or "limited inflectional possibilities", however, may be a little misleading, as individual converb forms are morphologically just as complex as finite verbs in that they allow all the structural slots from Table 11 to be occupied. The only morphological difference between converbs and finite verbs lies thus in the choice of the FM. Thus, Beria converbs score rather high on Ebert's (2008) finiteness continuum, appearing at rank C due to their tensed stems and overt person/number marking.

Table 13. awar- 'learn' (class I/2).

	AFF PFV	CONV ₁	AFF IPFV	CONV ₂
1sg	áwáárî	áwááré	ásáwáíŗí	ásáwáíŢé
2sg	náwááŗî	náwááré	násáwáírí	násáwáíré
3sg	áwáárî	áwááré	sásáwáírí	sásáwáíŗé
1pl	táwáárî	táwááré	tásáwáírí	tásáwáíré
2pl	náwááŗĭ	náwááŗē	násáwáíŗī	násáwáíré
3pl	áwááŗĭ	áwááŗē	sáwáíŗī	sáwáíté

Table 14. na- 'buy' (class II/1).

	AFF PFV	CONV ₁	AFF IPFV	CONV ₂
1sg	nàgí	nàgè	nàgì	nàgé
2sg	nàní	nànè	nànì	nàné
3sg	kìnàí	kìnàà (<kìnà-è)< th=""><th>nàrì</th><th>nàré</th></kìnà-è)<>	nàrì	nàré
1pl	nàdí	nàdí	nàdì	nàdé
2pl	nàbí	nàbí	nàbì	nàbé
3pl	kìnáĭ	kìnàá (<kìnà-é)< th=""><th>nàrí</th><th>nàré</th></kìnà-é)<>	nàrí	nàré

Table 13 and Table 14 are taken from Jakobi & Crass (2004: 166). They illustrate the difference between converb forms and the finite forms from which they derive for two verb classes: I/2 and II/2.⁶

The negative value for mood and polarity, as well as the frequent neutralization of plurality and aspect distinctions displayed in Table 12 result from the reduced *semantics* of the converb marker *-e/-e*, rather than from a lower degree of morphological complexity. While the finite affirmative FM *-t/-i* conflates plurality, aspect, and mood information, the converb FM simply expresses a syntactic dependency. In the finite verb, aspect and plurality are primarily expressed by tonal means (Jakobi & Crass 2004: 49–51). While a tonal modification of the converbal FM may also indicate the plurality of the converb subject, this distinction is sometimes neutralized due to syncretism of some forms. Jakobi & Crass (2004: 166–7) observe the following distribution of tones on the converb FM:

⁶ An unfortunate shortcoming of Jakobi & Crass's grammar is that they mostly provide third-person P forms, where the patient marker is always zero. However, considering the abundance of person forms they would otherwise have had to take into account, this is understandable.

- 1. When the affirmative FM -i/-i has a high tone in the perfective and a non-high tone in the imperfective, the converb FM $-\varepsilon/-e$ has a non-high tone in Converb₁ and a high tone in Converb₂ (Table 15).
- 2. When the affirmative FM -i/-i has a falling tone in the perfective and a high tone in the imperfective, both Converb₁ and Converb₂ have a high tone on the FM $-\epsilon/-\epsilon$. This leads to a syncretism of the two converb forms in the first and second person singular and plural (Table 16).

	PFV	IPFV	CONV ₁	CONV ₂	English
1sg	nàgí	nàgì	nàgè	nàgé	buy
2sg	séní	sénī	sénē	séné	eat
1pl	nờódí	nờớdì	nờớdè	nờódé	look

Table 15. Tonal features of Converb₁ and Converb₂ in Kube.

*Table 16. Tonal syncretism of Converb*₁ and Converb₂ in Kube.

	PFV	IPFV	CONV _{1/2}	English
1sg	bígî	bígí	bígé	catch
2sg	tàmàìnî	tàmàìní	tàmàìné	cook
1pl	hàìdî	hàìdí	hàìdé	cover
2pl	ófórbî	ófórbí	ófórbé	turn

6.2 Functions

Converb₁ and Converb₂ have different functional ranges. The perfective-based Converb₁ is much more frequent, and fulfills more functions than the imperfective-based Converb₂. Table 17 provides an overview of the functional ranges of Converb₁ and Converb₂.

Table 17. Functional ranges of converbs in Kube.

Converb ₁		Converb ₂		
1.	expressing sequential events	1.	expressing the purpose of an action	
	(clause-chaining)	2.	periphrastic volitive mood	
2.	periphrastic perfect			
3.	adversative events ('but')			
4.	benefactive construction with (k)éí-			
	'give'			
5.	potential construction with tàgà- 'be			
	able'			

The functional range of Kube Converb₁ shall not be further discussed here, as it is essentially congruent with that of the converb in Wagi to be discussed in the subsequent chapter. However, as there is reason to assume that there is no Converb₂ in Wagi, I will briefly introduce the uses of Converb₂ here. According to Jakobi & Crass (2004: 172–5), Converb₂ is primarily used to express the purpose of an action ("la finalité"). Thereby, the order of the converb clause expressing the purpose and the verb denoting the main action is anti-tense iconic (14):

(14) $bi\dot{e} \cdot g\dot{v}r\dot{v} = r$ $g\dot{v}\dot{v}$ $s\dot{e} \cdot d \cdot \dot{e}$ $t \cdot \dot{o}\dot{u} \cdot r \cdot \hat{i}$ house-1PL.POSS = LOC porridge eat-1PLA-CONV₂ 1PLP-come-3SGA-PFV 'We came to our house to eat porridge.' (Jakobi & Crass 2004: 173; my translation)

Furthermore, $Converb_2$ occurs in what could be called a periphrastic intentional construction, or volitive mood ("le volitif"). In this construction, $Converb_2$ is followed by an inflected form of the auxiliary *n*- in the imperfective. Apparently, the auxiliary cliticizes to the converb to the point of completely fusing with it. Converb₂ and the auxiliary agree in person and number, so the fused verb form is doubly marked.

(15) $k\dot{i}\dot{\epsilon} = g - \dot{\epsilon}\dot{\epsilon}g - \dot{i}$ $n\dot{\epsilon}$ $\dot{a}b\bar{a}$ $\dot{e}g\bar{i}$ $\dot{o}\dot{u} = g\dot{i} - n - \dot{i}$ leave = 1SGA-VOL-IPFV but father 1SG.POSS refuse = 3PFV-AUX-PFV 'I wanted to leave, but my father refused.' (Jakobi & Crass 2004: 175; my translation) Givent that they are derived from differently tensed stems, the functional distribution of the two converb series displayed in Table 17 can be explained in terms of the relative time of the action denoted by the converb and the main verb. In a clausechain expressing a sequence of events, the actions denoted by each instance of the perfective-based Converb₁ are fully completed once one "arrives" at the main verb. In contrast to that, the action denoted by the imperfective-based Converb₂ is not yet completed once one arrives at the main verb, as the action denoted by the main verb is only carried out with the *purpose* or the *intention* of performing the action denoted by the preceding converb.

Having outlined the morphological and functional characteristics of converbs in the Kube dialect, we can now turn to the Wagi dialect, which differs considerably from Kube with respect to converbs.

7 Converbs in Wagi

7.1 Dataset

The present study of Wagi converbs is based on both (semi-)natural and elicited data. The main body of data consists of natural speech, mostly narrative monologues, which promised a frequent occurrence of converb forms, given their main function as clause-chaining devices. The natural data were collected in various fieldwork methods classes that have been taking place at the Department of Linguistics, University of Cologne, since the winter term 2014/15. The data are to be archived in the forthcoming edition of Language Archive Cologne (LAC) that is currently under construction. For the purpose of this thesis, a selected corpus of approx. 20 minutes of annotated (semi-)spontaneous speech data (mostly monologues) was taken into account. Morphological, syntactic and tonal features of converbs where discussed with two native Beria speakers and fellow linguists, Elsadig Omda Ibrahim Elnur (speaker code: EOI) and Yahia Abdalla Mayo (YAM), to whom I am deeply indebted. **Error! Reference source not found.** in the appendix provides an overview of the data taken into account in the present study.

In terms of the morphological complexity of converbs, the generalizations made about Kube hold true for Wagi as well: All structural slots described for finite verb forms can be occupied, and there is overt person marking for both A and P that is identical to that of finite verbs:

(16) $l \check{o} \underline{v} t \hat{a} t \check{u} \check{r} \check{e} \acute{f} i b \bar{e} t \check{a} \underline{v} \acute{e} \dots$ $lou tatu = re \underline{e-fi-b-\bar{e}} tar-y\acute{e}$ $2PL back = ABL \underline{1SGP-follow-2PLA-CONV}$ go.PFV.1PL-CONV 'You follow me from behind, we go there, (and ...).' ZAG_EOI_20151215_3_MS 015⁷

However, the small morphological differences that set the overall verbal system of Wagi apart from that of Kube have far-reaching consequences for the converbal paradigm in Wagi.

7.2.1 Are there two converb series in Wagi?

In her PhD thesis, Abdu El-Dawi Abdalla (2010: 234–245) discusses – probably in order to mirror Jakobi & Crass's analyses for Kube – two different series of converbs, one derived from the perfective stem, and one from the imperfective stem. However, there is reason to assume that Wagi does not, in fact, have an imperfective-based "Converb₂".

Recall that the main difference between Kube and Wagi verbal morphology is the form of the FM on the finite verb. While the affirmative FM is always -t/-i in Kube – with tense/aspect solely marked by tone – there is a difference in vowel quality in Wagi. Here, the perfective FM take the forms -t/-i (basic) or -t (marked),

⁷ Wagi examples display 5 lines: (1) transcript according to the source file (if necessary with corrections and adaptations), (2) morphemic analysis, (3) interlinear glosses, (4) English translation, (5) source. Most file names adhere to the following conventions: ZAG_speaker code_YYYYMMDD and a running number and/or interviewer code if applicable. Whenever segments in the files are numbered, the corresponding number is provided as well. As tone was not the primary focus of this thesis, the tonal representation in the transcript line may not be accurate, or it may be missing completely. However, grammatical tone on verbal endings is represented in the morphemic analysis line.

whereas it is $-\dot{e}/-\dot{e}$ (basic) or $-\dot{e}/-\dot{e}$ (marked) in the imperfective. This results in a merger of the imperfective FM and the converb FM in Wagi, at least in terms of vowel quality.⁸ The morphological difference between the perfective form and the perfective-based "Converb₁" is largely retained due to the regular occurrence of secondary aspect markers, especially the frequent k(V)- and -(y)a extensions in class II verbs in combination with the FM -e/-e instead of the -i/-i or -ŭ otherwise expected in perfective verbs. In contrast, there would be a complete merger between the imperfective form and the converb derived from the imperfective stem. In fact, this is precisely the conclusion that Abdu El-Dawi Abdalla arrives at: "[I]t is obvious from the below tables that the form of the converb[2] and the imperfective is the same in all the verb classes which is a feature of the Wegi dialect[. They] can only be distinguished from their position in a sentence" (Abdu El-Dawi Abdalla 2010: 236). The tables she refers to are reproduced here as Table 18 and

⁸ The possibility of a tonal difference is not ruled out here – but as we will see, this possibility can be dismissed.

Table 19:9

	PFV/AFF	CONV ₁	IPFV/AFF	"CONV ₂ "
1sg	∫εgı	∫εgε	∫εgε	?∫ege
2sg	∫εlı	∫εlε	∫εlε	?∫εlε
3sg	kı∫erı	kı∫ere	∫εre	?∫ere
1pl	∫εdı	∫ede	∫εdε	?∫ede
2pl	∫εbı	∫εbε	∫εbε	?∫εbε
3pl	kı∫eru	kı∫ere	∫ere	?∫ere

Table 18. Converb forms of 'eat' (class II/1) according to Abdu El-Dawi Abdalla.

⁹ A few adjustments have been made: the suffix -u in the third person plural perfective was changed to -u, Newer research has shown that this suffix remains unaffected by the rules of vowel harmony, and is always [+ATR]. Moreover, dashes between morphemes were removed. The questionable forms in question are preceded by "?".

	PFV/AFF	CONV ₁	IPFV/AFF	"CONV ₂ "
1sg	εlı	εlε	esele	?esele
2sg	lɛlɪ	lele	lesele	?lesele
3sg	εlı	εlε	selle	?sɛllɛ
1pl	takkuri	takkure	taskure	?taskure
2pl	lakkuru	lakkure	laskure	?laskure
3pl	okkuru	okkure	sokkure	?sokkure

Table 19. Converb forms of 'sit' (class I/2) according to Abdu El-Dawi Abdalla.

However, as noted in the introductory chapters of this thesis, verb forms identical to their finite "counterparts" cannot qualify as converbs. At the very least, it would seem to be a highly arbitrary terminological choice. As can be judged from the tables, a clear-cut morphological distinction from the finite verb is already difficult for many non-third person forms of "Converb₁". As we will see in the subsequent section, this difference is marked by tone – an essential feature of Beria grammar widely disregarded by Abdu El-Dawi Abdalla. But if tone is already "taken" as a means for distinguishing otherwise identical verb forms, distinguishing between imperfective finite verbs and imperfective-based "converbs" becomes even more troublesome.

It seems that Wagi speakers can choose from a number of alternative constructions to bypass this problem. As we know from Kube, the main function of Converb₂ is to express the purpose of an action. In Wagi, however, there are multiple ways to express purpose, none of which involves a verb form that could justifiably be called converb, let alone correspond to what Abdu El-Dawi Abdalla identifies as Converb₂. To express the purpose of an action, Wagi speakers can use:

- a regular converb construction featuring the perfective-based converb whose interpretation is ambiguous between a sequential and a purposive reading, see (17)
- an imperfective-based verb form in -*or(I)* that we will call purposive form, see
 (18)
- an imperfective-based verb form marked by the subordinating clitic = l_1 and followed by the highly polysemous subjunction *gile*, see (19)

(17) yaiye sūkkí tīyē māŋgá lǎrè

Yahia suk = ri $ti-y\bar{e}$ manga la-r- \hat{e}

Yahia market = LOC go.3SG.PFV-CONV mangos buy-3A-IPFV.SG 'Yahia goes to the market and buys mangos.' or 'Yahia goes to the market to buy mangos.' ZAG_EOI_20220222_01 41

(18) gūllú lǎrōr súkkí kēìlí

gullula-r- σrr svk = rrker = gr-l- \hat{r} eggsbuy-3A-PURPmarket = LOCgo = 3PFV-AUX-PFV.SG'S/he went to the market in order to buy eggs.'ZAG_EOI_2022202_02_10

(19) bi kərreli gile bar keigili

bi $k \sigma r r - \varepsilon = li$ $gil \varepsilon ba = ri$ $k \varepsilon i = gi - l - i$ water bring-3A-IPFV.SG = SUB SUB well = LOC go = 3PFV-AUX-PFV.SG 'S/he went to the well to bring water' or 'Because she wanted to bring water, she went to the well' or 'S/he wanted to bring water, so she went to the well.' ZAG EOI 2022202 02 01 (see also Abdu El-Dawi Abdalla 2010: 242)

Compare these (especially (18)) to the often-cited Kube example (20) where the imperfective-based Converb₂ is used to express the purpose of an action:

(20) $g \dot{v} n \dot{v} - g - \dot{\epsilon}$ $s \dot{u} k - t \dot{u}$ $f \dot{u} - g - \dot{i}$ eggs buy-1SG-CONV₂ market-LOC go-1SG-PFV.SG 'I went to the market to buy eggs.' (Jakobi & Crass 2004: 173)

Whether the purposive form in $-\sigma r(t)$ qualifies as a sort of specialized purposive converb remains subject to debate. The form is sometimes said by speakers to be composed of the imperfective verb form plus the locative-allative marker = rt. Should this be the case, the form should not be considered a converb according to Ebert's (2008) morphological classification of converbs. However, the marking with =rtcannot account for the occurrence of the rounded vowel [σ], as there is no vowelharmonic motivation for that, unlike with the conjunctional clitic =rv (see 7.2.4 below). Jakobi & Crass (2004: 160) interpret similar Kube forms as negated verb forms in $-\sigma$ + locative-allative (which they call "adverbialisateur₁") and accordingly provide negative translations along the lines of "without doing x". However, we are dealing with different dialects here, and this could be a completely different form. For the time being, Wagi verb forms in $-\sigma r(t)$ are regarded as purposive forms in their own right, but not converbs.

The = h clitic from (19), furthermore, serves other subordinating functions. For instance, it appears in conditional constructions like the one in (21). However, here it attaches to the finite verb in the perfective.

(21) kúyà ùdó télè kièt tááyůlì ěj kúyà hùdíér tébéló

kuya	udo	tele kie=gi	<i>taa-y-ŭ</i> = <u>1</u>	
today	God	girl place = REF	go.PFV.1PL-EPEN-PFV.PL = SUBJ	
ei	kuya	hudie=ri te-l	be-lo	
INTERJ	today	shame = LOC 1PLP-put-IMP.PL.NEG		
'If we go to the place of God's daughters today, oh, please don't put us to				
shame today.'				

ZAG_EOI_20151215_3_MS 026

The subordinate marker = l(1) seems to correspond to the Kube conditional marker $= n \sim \eta$ which Jakobi & Crass suppose to be diachronically related to a converbal form of *n*- 'say' (*l*- in Wagi) (Jakobi & Crass 2004: 179; see also Bondarev 2010). The grammaticalization of illocutionary verbs into subordinate markers is believed to belong to near-universal grammaticalization paths (Ebert 1991), and is also observed in Beria (Crass 2002).

I hypothesize that Wagi compensated for the loss of a dedicated "Converb₂" form that would otherwise have been used in purposive constructions by employing any one of the three alternative constructions instead. If the main function of the supposed Converb₂ is fulfilled by other verb forms in Wagi, we can cautiously conclude that there is only one converb series in Wagi. Since an imperfective-based converb form is not attested in other contexts in the data, the remainder of this thesis will exclusively focus on the forms and functions of the perfective-based converb form.

7.2.2 The converbal paradigm

As discussed in the last subsection, some converb forms in Wagi are confusingly similar to their imperfective counterparts due to the merger of the imperfective and the converbal FM. That holds true especially for non-third person forms, because they never include secondary perfective markers identifying them as perfective-based converbs. However, the distinction between converb and imperfective forms is maintained, at least by tonal means.

Table 20 (partly based on Omda Ibrahim Elnur n.d.) displays the paradigm of $s\bar{v}r$ - 'go out, emerge', a monovalent class II/1 verb. As we can see, the converb forms are clearly distinct from both the imperfective and the perfective forms in all persons at least by a difference in tone (with one possible exception being the first person plural inclusive). Moreoever, the converb paradigm appears to retain the distinction between basic and marked FMs. The basic FM has a mid tone, whereas the marked FM has a high tone in the converb.

		IPFV	PFV	CONV ¹⁰
SG	1	sūrgè	sūrgí	sūrgē
	2	sūrlè	sūrlí	sūrlē
	3	sūrè	kūsūrí	kūsūrē
PL	1excl	sūrdè	sūrdí	sūrdē
	1 INCL	sūrdé	sūrdŭ	sūrdé ¹¹
	2	sūrbè	sūrbí	sūrbē
	3	sūré	kūsūrŭ	kūsūré

Table 20. Paradigm of sūr- 'go out' (class II/1).

To Table 10 we can add the information from Table 20, resulting in the paradigm of basic and marked forms of the FM (Table 21).

¹⁰ Source: ZAG_EOI_20220222_01.

¹¹ Elsadig produced an extraordinarily high tone on the FM here. It is not clear whether this was just for the sake of clarity or if we are indeed dealing with an extra-high tone, the existence of which he suspects in his thesis (Omda Ibrahim Elnur n.d.). Such a difference in tone might in fact be called for in order to prevent syncretism between the imperfective form and the converb form in the first person plural inclusive.

$A>3P(=\emptyset)$			FM			
		IPFV	PFV	CONV		
SG	1	-è/-è	-í/-í	-ē/-ē		
	2	-è/-è	-í/-í	-ē/-ē		
	3	-è/-è	-í/-í	-ē/-ē		
PL	1excl	-è/-è	-í/-í	-ē/-ē		
	1 INCL	-é/-é	-ŭ	-é/-é		
	2	-è/-è	-í/-í	-ē/-ē		
	3	-é/-é	-ŭ	-é/-é		

Table 21. Distribution of basic vs. marked forms of the FM including the converb.

It must not be left unmentioned that this paradigm is just the tip of the iceberg. $s\bar{v}r$ is a perfectly regular verb, and it does not take a direct object, hence there is no Pmarker that could potentially complicate the picture. In the perfective, third person As are frequently indexed by the zero allomorph $-\emptyset$. In converbs, consequently, this results in a collision of the stem-final vowel and the converb marker $-\varepsilon$, which is then fully assimilated to the preceding vowel:

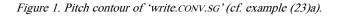
(22)
$$kIlaa < *kI-la-Ø-\epsilon$$
 [3PFV-buy-3A-CONV]
 $koddoo < *ko-k-do-Ø-\epsilon$ [3PFV-VEN-take_somewhere-3A-CONV]
 $kagaa < *ka-ga-Ø-\epsilon$ [3PFV-come-3A-CONV]

Also, the surface tone in the paradigm of $s\bar{v}r$ - 'go out' can be taken to be identical to the underlying tone. In some verbs, like the class III verb ketrbi=l- 'write' (a loan from Arabic), there seems to be a falling tone on the converbal FM in the third person plural instead (see examples (23)a vs. b as well as Figure 1 vs. Figure 2). According to Elsadig (personal communication), the differences result from tonal restrictions that remain to be investigated, rather than from verb class-specific differences.

(23) assadik juwap ketibi:lē jahiao gerilí a. assadik juwap <u>ketibi=gi-l-ē</u> jahia = o Elsadig letter write = 3PFV-AUX:3A-CONV.SG Yahia = CONJ geri=l-í read = AUX: 3A-PFV.SG'Elsadig wrote a letter and Yahia read it.' ZAG_YAM_20220206 17 pa juwap <u>ketibi:lê</u> jahiaɔ gerilí b. *Juwap* $k \epsilon t i b i = g i - l - \hat{\epsilon}$ jahia = o Ŋа child.PL letter write = 3PFV-AUX:3A-CONV.PL Yahia = CONJ

 $g \epsilon r I = l - i$ read = AUX:3A-PFV.SG 'The children wrote a letter and Yahia read it.'

ZAG_YAM_20220206 18



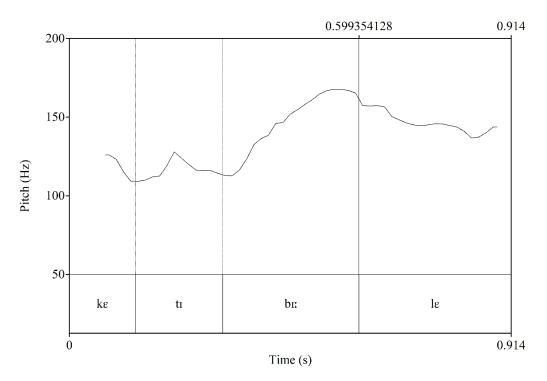
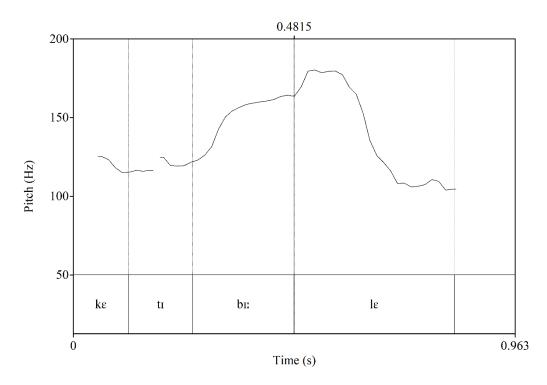


Figure 2. Pitch contour of 'write.CONV.PL' (cf. example (23)b).



7.2.3 Switch-reference marking

Despite their overt participant marking, converbs exhibit an additional tonal switchreference marker. In example (24)a, the subjects of both verb forms are coreferential, whereas they differ in (24)b.

ZAG_EOI_20220222_01 28-29

It is not clear at this point if DS converbs constitute a whole series of converbs on their own, or if tonal switch reference marking is only employed for disambiguating purposes, e.g. in cases where both subjects are third person.

7.2.4 Surface forms ending in -or

Surface forms ending in *-or* or occur frequently in the data. However, these are based on at least two different underlying forms.

In Wagi, converbs often occur with a cliticized conjunction =rv (Abdu El-Dawi Abdalla 2010: 199–201), which is =re in both Kube and Tuba.¹² It can be used to coordinate both noun phrases and verb phrases. In the latter case, it attaches to a converb. However, it frequently fuses with the FM of the converb, yielding surface forms such as the ones displayed in Table 22.

Surface	Underlying	English	Source
ketıbı:lər	ketibi = gi-l- ε = ru	write	ZAG_YAM_20220206 14
kegiyəru	kegi-ye=ru	give	zag_pear20150922_ais
kegılər	kegi-l-e = ru	go	ZAG_YAM_20220206 36
tebiyarər	$t\varepsilon bi-ya-r-\varepsilon = r\upsilon$	take	ZAG_YAM_20220206 41
tebigor	$t\varepsilon bI-g-\varepsilon = rU$	take	ZAG_MAM_EOI_20181129_2_LL
aıyər	ai-ye=ru	go to	ZAG_EOI_20151215_3_MS 030
kusurəru	ku-sur- $\varepsilon = ru$	go out	ZAG_EOI_20151215_5 016
kı∫əru	k1- $\int \varepsilon - \varepsilon = r \upsilon$	make	ZAG_EOI_20141204_1_NV 007
agıyər	agi-ye=ru	see	ZAG_EOI_20141204_3_PC 009
kılar	kı-la- $\varepsilon = r \upsilon$	buy	ZAG_EOI_20220222_02

Table 22. Fusion of converb and conjunction =ru.

Such a fusion does not occur in Kube or Tuba, as demonstrared by (25)a versus b:

$$fon gardt kegtlôr$$
 dar geer oulí $fon gardt kegt-l-e=rv$ dar gee=rtJohn street cross-3A-CONV=CONJland other=LOC $ou-l-f$ enter-3A-PFV.SG

¹² According to my consultant Yahia Abdalla Mayo, who speaks several dialects fluently (personal communication 2022).

b. Kube and Tuba

Jon gardı <u>keginere</u> geni geer oulí

jongardI $\underline{kegI-n-\varepsilon = r\varepsilon}$ genI $g\varepsilon\varepsilon = r$ Johnstreet $\underline{cross-3A-CONV = CONJ}$ townother = LOCou-1-ienter-3A-PFV.SG'John crossed the street and entered another land/town.'ZAG_YAM_20220206 37 and 39

The other surface form in $-\sigma r$ is the purposive form that was already discussed in subsection 7.2.1 above. It derives from the imperfective stem, and exhibits a different tonal pattern. The converb+conjunction form and the purposive form are clearly based on different underlying forms, as in example (26).

(26) $k \hat{\epsilon} t \hat{i} b \hat{i} \hat{l} \hat{\sigma} < k \hat{\epsilon} t \hat{i} \hat{b} \hat{i} = g \hat{i} \hat{l} \hat{\epsilon} = r \hat{v}$'s/he writing, and...' (CONV + CONJ) $k \hat{\epsilon} t \hat{i} \hat{b} \hat{l} \hat{\sigma} r < k \hat{\epsilon} t \hat{i} \hat{b} \hat{i} = l \hat{\epsilon} = r \hat{t}$ (?) 'in order to write' (purposive form) ZAG_EOI_20220222_02 17–20

Other attested purposive forms include the following (Table 23):

Surface	Underlying	English	Source
lăr o r	la-r- ε = r1?	in order to buy	ZAG_EOI_20220222_02 12
∫ērōr	$\int \varepsilon - r - \varepsilon = r I?$	in order to eat	ZAG_EOI_20220222_02 13
kārrōr	kar-r- ε = r1?	in order to bring	ZAG_EOI_20220222_02 14
làgālōr	laga-l- $\varepsilon = r_1$?	in order to greet	ZAG_EOI_20220222_02 16

Table 23. Purposive forms in -or(1).

7.3 Functions 1: Productive uses

7.3.1 Coordination and clause-chaining

The most frequent occurrence of the converb in Wagi is in coordinate (27) and clausechaining constructions (28)–(29). Only the chain-final verb is fully finite in that it conveys the relevant TAM, polarity and illocutionary force information. The marking on the finite verb has scope over all the preceding converbs in the chain.

- (27) mohamməd juwap ketibi:l \bar{e} kweyarí mohamməd juwap ketibi=gi-l- \bar{e} kwe-ya-r-í Mohammad letter write=3PFV-AUX-CONV send-3PFV-3A-PFV.SG 'Mohammad wrote a letter and sent it.' ZAG_YAM_20220206 15
- (28)āyé gèīdá sīré kīgé.. oo.. tērīrí bētìê kāddádaô lôlê kīgě: kēttě: ... ai-yé geida SI-T-E ki-ge-Ø-é 00 go-3-CONV geida do-3-CONV 3PFV-cut-3A-CONV INTERJ $kadda = d\beta$ $lo = gI - l - \hat{\varepsilon}$ *teri=ri* betie teri = LOC tree.PL good = DET look = 3PFV-AUX-CONVki-ge-Ø-é ke-k-te-Ø-é 3PFV-cut-3A-CONV 3PFV-VEN-take somewhere-3A-CONV 'They go and cut the geida-tree, erm, look for the best teri-tree, cut it and bring it, and...'

ZAG_EOI_20141204_1_NV 003

(29) û: á kéb:ēlùdð tèbiàré kìtě: ſĭgēr kīgāré tògǔ sèliǎrǔr úù а $k\varepsilon$ - $bb\varepsilon$ -l- \check{u} = $d\sigma$ time/when mouth.PL 3PFV-sprout-3A-PFV.PL = REL kı-te-Ø-é tebi-ya-r-é take-3PFV-3A-CONV 3PFV-take_somewhere-3A-CONV ∫ige=ri ki-ga-r-é grindstone = LOC 3PFV-grind-3A-CONV togu seli-ya-r-ŭ=ru flour make-3PFV-3A-PFV.PL = CONJ 'When it [the millet (PL)] has grown mouths [=when it has sprouted], they [the women] take it away, grind it on the grindstone, and make flour.' ZAG_EOI_20151215_1CAB 039-042

Clause-chains are potentially endless. It is not uncommon for speakers to cut off midchain before starting a completely new sentence. This results in a very low count of fully finite verb forms in narrative monologues, which constitute the lion's share of my data. Head-to-tail linking is very common in Beria narrative discourse. The last part of an utterance – typically a finite verb phrase – is repeated in the beginning of a subsequent utterance as a converb clause, see (30).

(30) bur mınnalı ajala korriyē ketti. Ajala korriyē kettiyē ...
bur mınna = lı ajala korriyē ketti
boy small = INDF bike ride:3SG:CONV come.3SG.PFV.SG
ajala korriyē kettiyē...
bike ride:3SG:CONV come:3SG:CONV
'A young boy came riding his bike. He came riding his bike and...'
ZAG_MAM_EOI_20181129_2_LL

7.3.3 Adverbial of manner

Converbs are also used adverbially to describe the manner in which the action denoted by the finite verb is executed. Naturally, such constructions are always samesubject.

- (31) $\dot{a}_{Ig}\dot{v}df \ g\bar{n}rg\bar{e} \ f\hat{e}:g\hat{e}$ $aI = gvdI \qquad gII - g-\bar{e} \qquad fee-g-\hat{e}$ $1SG = FOC \qquad weave_cobweb-1SG-CONV move-1SG-IPFV.SG$ '[The spider says:] It is me who moves by weaving cobwebs.' ZAG_EOI_20151215_3_MS 014
- $(32) \quad \bar{a}b\dot{a} \,\,\acute{a}fk\bar{v}r\bar{e}\,\,t\check{a}t\bar{v}r\dot{e}$

aba $a_{Ik} \upsilon - r - \overline{e}$ $ta - t \upsilon - r - \hat{e}$ father sing-3-CONV VAL-shave-3-IPFV.SG 'Father shaves (himself) singing.' ZAG_YAM_20220206 30

(33) *ēyī:rē hīrí lǎgè*

e-y-ii-r-ē	hiri	la-g-è
1sgP-epen-cry-3A-conv	cow	buy-3A-IPFV.SG

'I buy a cow crying.' ZAG_EOI_20220222_01 22

7.3.4 Separate expression of path and manner

In Beria, converbs also play a role in the separate expression of path and manner of motion events. According to Jakobi (2007), Beria motion verbs differ in whether they lexicalize the path or the manner of the motion. For instance, the Kube verbs *súr*-'emerge' and *débé*- 'enter' expresses path, whereas *hìr-n*- 'fly' and *jàr-n*- 'gallop' express manner (Jakobi 2007: 118). As the following Wagi examples suggest, multiple verbs are needed when path and manner are to be expressed within the same clause. All but the sentence-final verb appear as converbs.

(34) bá:sī gàrūr kébě: tōgōyǎré mǔk:ílé bá: òk:ūré ...

baa=si	garu=ri	<u>ke-be-e</u>		<u>togo-ya-r-é</u>
millet.PL = REF	pot = LOC	<u>3PFV-ir</u>	nsert-CONV	put-3PFV-3A-CONV
mukkı-l-é	ba	a	okku-r-é	
lock_airtight-3A-0	CONV mi	llet.pL	sit.PFV.PL-3	A-CONV
'They <u>put</u> the mil	let <u>into</u> the p	ot, lock i	t airtight, the	millet remains (there),
and'				

ZAG_EOI_20151215_1CAB 036-037

```
(35) s ta muselessi illeds dildildilgilē tendir huigilí
```

 \mathcal{D} tamuseles = ri $il-l-\varepsilon = d\mathcal{D}$ personheadtriangle = LOClook_like-3-IPFV.SG = REL $drldrldrl = gr-l-\overline{\varepsilon}$ tendi = r $hui = gr-l-\overline{t}$ IDEO = 3PFV-AUX-CONVtop = LOCclimb = 3PFV-AUX-PFV.SG'The person whose head looks like a triangle hopped up (going "dildildil").'

ZAG_EOI_20141204_8_SC 003

¹³ Ideophone for hopping.

(36) *à tā bondərar ılledə tendire gırıŋgılē keteí*

Э	ta	bəndəra = rı	ıl-l	$t - \varepsilon = d\sigma$
person	head	tomato = LOC		look_like-3-IPFV.SG = REL
tendi = re	e <u>gir</u> i	<u>19 = g1-1-ē</u>		<u>keteí</u>
top = ABL	<u>roll</u>	= 3PFV-AUX-CON	V	fall.3SG.PFV.SG
'The person whose head looks like a tomato rolled down from above.'				

ZAG_EOI_20141204_8_SC 004

Table 24 is a non-exhaustive list of attested verbal sequences where one verb expresses the manner while the other expresses the path of the motion. The extent to which these combinations can be said to be lexicalized compound verbs needs to be determined by future research. In any case, it seems as if Beria always expresses directional motion by verbal means, whereas other languages, like English, employ directional adpositions like 'into', 'up' or 'down'.

Verb sequence	Apparent meaning	Source
take-bring	carry somewhere	ZAG_EOI_20151215_1CAB 018
take-take out	take out	ZAG_EOI_20151215_1CAB 058
follow-go/come	follow	ZAG_EOI_20151215_3_MS 020
hop-climb	hop up	ZAG_EOI_20141204_8_SC 003
roll–fall	roll down	ZAG_EOI_20141204_8_SC 004
come-pass	come crossing (e.g.	ZAG_EOI_20141204_3_PC 028
	the road)	
insert-put	put into	ZAG_EOI_20151215_1CAB 036-037

Table 24. Attested verb sequences expressing manner and path.

7.3.5 Complement clauses

There is limited evidence for converbs serving as complements for complementtaking verbs like mental verbs ('know') or modal verbs ('can'). Strictly speaking, their use in complement clauses does not comply with the [–argumental] criterion for converbs. However, such a use of converbs is not only attested for other Saharan languages (e.g. Bondarev 2010; in prep.: 138), but is also observed in Evenki by Igor' V. Nedjalkov (1995) himself. (37) *ɔ húlā lállār tārrē ēgélāl ...*

by hula lalla = rI $tar-r-\bar{\varepsilon}$ $\varepsilon g\varepsilon = l-\vartheta = lI ...$ person hula how = LOC dance-3-CONV know = AUX-NEG = SUBJ 'If somebody doesn't know how to dance hula [traditional dance] ...' ZAG_EOI_20141204_2_HB 016

Also, as Abdu El-Dawi Abdalla (2010: 240–2) already observed, the potential construction also features a converb form of *taga*- 'can, be able', see (38). This is also a good exmaple for the fact that polarity is exclusively marked on the finite verb, which in turn has scope over the preceding converb clause.

(38) tagage madrasa yugo taga-g-ē madrasa yu-g-o can-1SG-CONV school go-1SG-NEG 'I can't go to school.' ZAG_EOI_20141111_1

Example (39) possibly also qualifies as a complement structure:

(39) $t\hat{\epsilon}i \ k\hat{\epsilon}t\bar{\epsilon}\hat{\epsilon}Ii \ ag\bar{i}y\bar{j}r \dots$ $t\epsilon_I \ k\epsilon t\epsilon - \epsilon = y_{II} \qquad ag_{I}-y\epsilon = r\upsilon$ hat fall:3-CONV = COP_{loc}.3SG see-3-CONV = CONJ 'A hat had fallen down, they saw it, and ...' ZAG_EOI_20141204_3_PC 009

An alternative translation could be 'They saw that a hat had fallen down, and...', which seems appropriate in the context of the narrative.

Interestingly, there is a difference in whether the complement-taking or the complementing verb is expressed as the converb (i.e. the syntactically dependent form). In the 'know' clause in (37), the complementing converb 'dance' precedes the complement-taking verb 'know', which is finite. In the 'can' clause (38), in contrast, the complement-taking verb 'can' appears as a converb and precedes the finite verb expressing the (semantic) complement. The latter case is also attested in the related Kanuri language and is considered typologically unusual (Bondarev 2010: 26). What this difference is motivated by is unknown.

7.4 Functions 2: Grammatical constructions featuring converbs

7.4.1 *The periphrastic perfect*

The term "perfect" usually refers to a tense/aspect category "that expresses continuing relevance of an earlier situation (usually an event)" (Comrie 2020: 2). Perfects are often constructed periphrastically, which is also the case in Beria, where the perfect is formed with a form of the converb and the locative copula. The converb and the locative copula both agree with the agent of the clause.

(40) téì kétēéyīi àgīyōr ...

ter $kete-e = y_{II}$ $ag_{I}-\emptyset-y_{E}=r_{U}$ hat fall:3-CONV = COP_{loc}.3SG see-3-CONV = CONJ 'A hat had fallen down, they saw it, and ...' ZAG_EOI_20141204_3_PC 009

(41) Idir teigilir ... Idi = ri $tei = gi - l - \bar{e} = yii = ri$ earth = LOC descend = 3PFV-AUX-CONV = COP_{loc}.3SG = LOC 'When he has climbed down...' ZAG_EOI_MAM_20181129_LL

(42) *ai agiti-g-5 gu* $\int \mathcal{E} \cdot g \cdot \bar{\mathcal{E}} \cdot \bar{\mathcal{$

7.4.2 *The periphrastic causative*

As Coenen (2017) has shown, the periphrastic causative construction involves the converb of $b\varepsilon$ - 'let' and a finite verb denoting the caused action, see example (43). This construction is used alongside lexical and morphological causatives, the latter of which is expressed by means of verbal affixes that differ according to verb class.

(43) ābà nā kíbērē bù īrrè

abapa $kI-b\varepsilon-r-\bar{\varepsilon}$ $b\upsilon$ $Ir-r-\dot{\varepsilon}$ fatherchild3PFV-let-3A-CONVstickbreak-3A-IPFV.SG'The father makes/lets the child break the stick.'(Coenen 2017: 31)

7.4.3 *The benefactive construction*

The benefactive construction is an interesting example of how converbs can be used to form compound verbs. In the benefactive construction, the main action – that which is carried out in favor of someone else – is always expressed by a converb. This converb is directly followed by a form of the verb *kei*- 'give', which is finite in chainfinal position, but may itself be realized as a converb when occurring chain-medially. Together, both verbs can be regarded as a compound verb of the structure $V_1 + V_2$. Within this compound verb, the argumental load is distributed between V_1 and V_2 : V_1 indexes the agent and the theme argument, whereas V_2 ('give') indexes the agent and the recipient/beneficiary. Consequently, the two verb forms used in the benefactive construction are always same-subject, but different-object.

(44) *újé súkkī kētê bàūr kīlǎā kégī*í

uje suk = rI $ke-te-\emptyset-\hat{e}$ next_time market = LOC 3PFV-take_somewhere-3A-CONV bau = rI $kI-la-\emptyset-\hat{e}$ kegiiwomen = LOC 3PFV-buy/sell-3A-CONV give:3A:PFV.PL 'Next time, they take them to the market and sell them to the women.' ZAG_EOI_20141204_1_NV 008

(45) *āī bjě ∫īgē lēkkè*

ai $bj\varepsilon \int I-g-\bar{\varepsilon}$ l-ei-g-è 1SG house build-3SGA-CONV 2P-give-1SGA-IPFV.SG 'I build you a house.' ZAG_MAM_20181129_LL More figurative uses of the 'give' verb serve as evidence for the grammaticalized status of the benefactive construction:

(46) kīlāāgí xārtú:m āīr tíyē ēgīí
kıla = egi xartu:m aı = rı tí-yē
sister = 1SG.POSS Khartoum 1SG = LOC go:PFV.3SG-CONV
e-gīí
1SGP-give:3A:PFV.SG
'My sister went to Khartoum for me (i.e. on my behalf).'
ZAG_MAM_20190822_LL

Judging from the overall discourse patterns observed in Beria and its clause-chaining constructions, it is very likely that this benefactive construction is diachronically related to multiclausal strategies for introducing new participants into the discourse (Laureck in prep.: 21–2).

It is hypothesized that the benefactive construction constitutes only one possibility of verbal compounding in Beria, and that there are other lexicalized V-V pairings with complex meanings that behave in largely analogous ways.

7.4.4 *The converb of 'say' as a quotative marker*

The converb of *I*- 'say' functions as a grammaticalized quotative marker. It occurs after quoted direct speech. An additional locutionary verb is needed, however, suggesting that the highly desemanticized converb of 'say' does not suffice as a lexical verb expressing a locutionary action.

(47)	hàlàs kàd:àỵ gílē kîêór kêịlŭ				
	halas kadda=yn	gīlē	kie=ru	kei-l-ŭ	
	okay good = $COP.3SG$	QUOT:3PL	say:3pl:conv = conj	go-3-PFV.PL	
	"Okay, this is good",	they said and	d so they went.'		
	ZAG_EOI_20151215_3	<u>MS 017</u>			

According to Crass (2002), in Kube the quotative marker is inflected for person and number, reflecting its synchronic status as the converb of 'say', see (48).

(48) áì kìēgō ēgè ígì
1SG leave:1SG:IPFV.NEG QUOT:1SG say:1SG:IPFV
"'I won't go", I say.'
(Crass 2002: 236; my translation)

I did not find a non-third person form functioning as a quotative marker in my Wagi data, as most narratives naturally revolve around third person protagonists, but there is no reason to assume that Wagi behaves differently in this respect. However, Crass observes that in a next grammaticalization step, the third person form *gínè* freezes to become a subordinator in causal and purposive constructions (Crass 2002: 237–9). This is attested in Wagi as well, as exemplified by example (19) in subsection 7.2.1 above. In the dataset, *g1le* also frequently occurs in other, less readily specifiable contexts, and it is glossed as 'so' or 'then' which suggests that it can also be used as a discourse marker.

7.4.5 *The converb of the comitative copula*

The comitative construction features the converb of the comitative copula (Abdu El-Dawi Abdalla 2010: 194, 218).

Person	Singular	Plural
1	έÌ	téì
2	léì	lèí
3	béì	bèí

Table 25. Paradigm of the comitative copula in Wagi.

Just like converbs derived from full lexical verbs, the converb of the comitative copula is formed with the marker $-\varepsilon$.

(49) ... $t \check{a}_{I} \check{y} \check{\varepsilon} h \hat{u} \hat{l} \grave{a} \check{u} t \check{\varepsilon} k \hat{\varepsilon}_{I} d \check{\sigma} t \hat{a} k \dot{s} \check{a}_{I} ...$ $t a_{I} \cdot y \bar{\varepsilon} h u \hat{a} = k o g u t \check{\varepsilon}$ $1 PL: go-CONV Hu \hat{a} = 3 PL. POSS COP_{com}. 1 PL. CONV$ $k \varepsilon_{I} \cdot d \cdot \varepsilon = r \upsilon t a \cdot k k a \cdot \mathcal{O} \cdot I$ $t a k e \cdot 1 PLA - CONV = CONJ 1 PLP - come \cdot 3 A - PFV. SG$ '(Let us) go and dance with them their Hula and come back' ZAG_EOI_20151215_3_MS 011

(50) *na bīrīrī bìē tārrè*
na bīri=ri bīē tar-r-è
child dog=LOC
$$COP_{com}$$
.3SG.CONV play-3-IPFV.SG
'The child plays with the dog.'
ZAG EOI 20141119 3 043

Interestingly, it is not the participant accompanying the subject that is indexed in the copula converb, but the subject itself. A form like $t t \dot{e}$ in example (49), then, can be translated literally as "we accompanying (them)". Unlike in English, for example, where the comitative is expressed by means of a simple adpositional phrase ("with them"), the comitative construction in Beria is structurally identical to other converb constructions with (co)subordinate status.

8 Beria converbs in a typological perspective

On the one hand, this chapter aims to integrate Beria converbs into the typology presented in Chapter 3 above. On the other hand, however, it discusses problems in connection to this approach, and proposes an alternative analysis.

Based on Vladimir P. Nedjalkov's (1995) typology, the Wagi converb can be assigned to the following categories:

- syntactic type:
 - *converb proper:* the Wagi converb can be used to modify the manner in which the action denoted by the main verb is executed (adverbial subordination, subsection 7.3.3)
 - *coordinative converb:* the Wagi converb is used to coordinate multiple clauses, resulting in a sequential reading of the actions denoted by the (con)verbs (subsection 7.3.1).
 - *conjunctional converb:* to a lesser extent, the Wagi converb can be said to fulfil "conjunctional" functions, for example in purpose expressions discussed in subsection 7.2.1; also, Jakobi & Crass (2004: 170) state for Kube that an

adversative ('but') interpretation is also possible, provided the subjects of the clauses differ and the sentence-final verb is negated.

- semantic type:
 - *contextual converb:* the key feature of the Wagi converb is that its interpretation is highly dependent on context, which will be further discussed below. There are no specialized converbs in Wagi, provided one does not count the purposive form in $-\bar{\sigma}r(t)$. Presumably, this form is not "formally simple", as speaker intuition hints at a possible presence of the nominal locative-allative marker =rt. However, this form seems to be the direct substitute for Kube Converb₂.
 - *narrative converb:* in coordinate clauses or clause-chains, the Wagi converb fulfils the function of a narrative converb, which, based on its frequency, can be said to be its main function.
- referential type: Overt argument marking on the Wagi converb generally guarantees felicitous reference tracking, so there should be no need for SS and DS marking. However, there is limited evidence for a tonal switch-reference marker in some contexts. This fact was not anticipated on the basis of earlier studies of Kube or Wagi and therefore, it requires more research.

The previous subsections of this thesis where organized according to the functions that converbs fulfil in Beria. That is to say, differences in interpretation (or even translation), as well as the need to fit the data into a pre-existing typology of converbs, drove the organization of the functional properties of the converb. However, this undermines the actual structure that converb constructions in Beria (and Saharan in general) share, regardless of their interpretation. Typical for an SOV language, (same-subject) converb constructions in Beria always conform to the following schematic:

(51) NP - CONV (
$$-$$
 CONV - $-$ CONV - ...) - finV

Based on its frequency in natural discourse, the sequential interpretation of such a construction may be considered the default, which is reflected in the term "narrative converb". But being highly contextual in their interpretation, converb constructions are often ambiguous between a coordinative/sequential or an adverbial ("converb proper") interpretation (52).

(52) $\bar{a}b\dot{a}\,\dot{a}t\bar{k}\bar{v}r\bar{e}\,t\dot{a}t\bar{v}r\dot{t}$

aba $aIk \upsilon - r - \bar{e}$ $taa - t \upsilon - r - I$ fathersing-3-CONV REFL-shave-3-PFV.SG'Father shaved singing.' (adverbial, simultaenous)'Father sang and shaved.' (coordinate, simultaneos)'Father sang and (then) shaved.' (coordinate, sequential)ZAG_YAM_20220206 29

Also consider example (53) from the Tomato Man stimulus.

(53) *o ta bondorar illedo mus aar biyare dildildilgile teigile ...*

 $I l - l - \varepsilon = d \vartheta$ bondora = ri Э ta look like-3-IPFV.SG = REL person head tomato = LOCmus aa = rIbi-ya-r-ē mouth = LOC hold-3PFV-3A-CONVbanana $dI dI dI dI = gI - I - \overline{\varepsilon}$ $tei = gI - l - \overline{\varepsilon} \dots$ IDEO = 3PFV-AUX-CONVdescend = 3PFV-AUX-CONV

'The person whose head looks like a tomato hops down (going "dildildil"), holding a banana in their mouth, and ...'

ZAG_EOI_20141204_8_SC 006

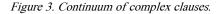
Despite its structural identity to other clause-chaining constructions, the chain here does not express a sequence of events, but rather a number of overlapping events: *while* holding a banana in his mouth, Tomato Man "descends hoppingly" (=hops down). The interpretation of such converb constructions clearly also depends on the Aktionsart of the verbs involved.

The "semantic parallelism of coordination and adverbial subordination" (Croft 2001: 328–9) observed here appears to render the distinction between "converb proper" and "coordinative converb" superfluous for Beria; also recall the "systematic conflation of" adverbial-modifying functions and chaining-nonmodifying functions of converbs observed by Bickel (1998).

The same goes, analogously, for what is traditionally called "complement clauses", which also allow for multiple translations in Beria:

(54) $t\hat{\epsilon}i \ k\hat{\epsilon}t\bar{\epsilon}\hat{\epsilon}y\bar{\imath}i \ ag\bar{\imath}y\bar{\imath}r \dots$ $t\epsilon i \ k\epsilon t\epsilon - \emptyset - \epsilon = yii \qquad agi - \emptyset - y\epsilon = rij$ hat fall:3-3A-CONV = COP_{loc} .3SG see-3-CONV = CONJ 'A hat had fallen down, they saw it, and ...' (sequential) 'They saw that a hat had fallen down, and...' (complement) ZAG_EOI_20141204_3_PC 009

A clearcut distinction between traditionally recognized types of complex clauses – coordinate, adverbial, complement etc. – does not seem to be suitable for a language like Beria, and may turn out to be a mere translation problem. Bondarev (2010) recognizes this problem and, after comparing his Old Kanembu data with data from Modern Kanuri and Kube, proposes an alternative view of complex clauses in Saharan as a continuum stretching from coordination at one end to subordination at the other, following authors such as Foley & Van Valin (1984), Givón (1990) and Croft (2001).



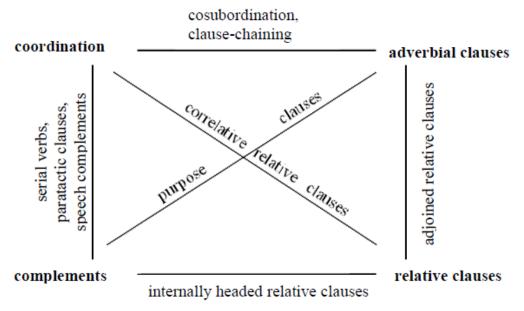


Figure 3 is taken from Croft (2001: 322). It depicts the crosslinguistic relationship between complex sentence types. Beria converb constructions span the categories adverbial clauses, cosubordination/clause-chaining, coordination, (speech) complements, and, to a somewhat lesser extent, purpose clauses. Bondarev (2010) observes that in Old Kanembu, the converb also spans relative clauses, which is

definitely not the case in Beria, where relative clauses are formed with the help of the referential clitic $= do.^{14}$ Converb constructions in Beria and the Saharan languages are thus prime examples for the "fuzziness of syntactic boundaries between the main traditional complex clauses" (Bondarev 2010: 28).

9 Conclusion

This thesis focused converbs in the Wagi dialect of Beria, a Saharan language of Sudan and Chad. Converbs in Beria generally show a rather high degree of finiteness, as they mark person and number in the same way that finite verbs do. However, they are underspecified for TAM, polarity and illocutionary force. There are considerable interdialectal differences in converb formation. For the Kube dialect, two clearly distinguishable series of converbs are attested, which have been called Converb₁ and Converb₂. The former derives from the perfective stem, and is primarily used in clause-chaining constructions, whereas the latter is used to express the purpose of an action. In Kube, converbs are easily morphologically distinguished from finite verbs on the basis of their final morpheme, which is -e/-e as opposed to the -t/-i of the finite verbs.

Wagi, however, does not seem to have a category corresponding to Kube Converb₂, contrary to what has been proposed by Abdu El-Dawi Abdalla (2010). In Wagi, the imperfective FM is $-\epsilon/-\epsilon$, such that it coincides with the converb FM, at least with regard to vowel quality. This would render a potential Converb₂ segmentally identical to its finite counterpart. To bypass this problem, Wagi speakers seem to have opted for a number of alternative constructions to express purpose. One of them features an imperfective-based verb form $-\sigma r(I)$, which is sometimes said by

¹⁴ This clitic is also involved in temporal clauses, which are, consequently, structurally identical to relative clauses, see (i), (29) above and (67) in the appendix. Hence, there seems to be a second continuum of complex clauses that, in a way, complements the one spanning adverbial subordination, cosubordination, coordination and complementation in Beria.

⁽i) $uu \ le \ gu \ fegeds \dots$ $uu \ le \ gu \qquad fe-g-e = ds$ time PROG food eat-1SG-IPFV.SG=REL

^{&#}x27;When I was eating...' (lit. 'The time that I was eating ...') ZAG_EOI_20141113_5_BS

speakers to include the nominal locative-allative marker =rr. This form seems to be the direct substitute for a Converb₂. Whether it qualifies as a specialized converb dedicated to purpose clauses requires further study. In any case, this thesis has not treated it as such, following Ebert's (2008) principle of formal simplicity for converbs.

Clearly, Wagi has a perfective-based converb form that is morphologically distinguishable by tone and by the presence of secondary aspect markers in some verb classes. This converb also fulfils most of the functions typically associated with converbs, i.e. in clause-chaining and as adverbials of manner, it can be used to form complex verbs, and it occurs in a number of grammatical constructions that are cross-linguistically attested for verb forms labelled "converb". Semantically, the Wagi converb is highly contextual, to the point of rendering traditional distinctions between different types of complex clauses superfluous. The Wagi data presented here corroborates Bondarev's (2010) assessment that converb constructions in Saharan languages form a continuum between coordination and subordination, spanning traditional notions such as "adverbial clauses", "cosubordination", "coordination" and "complementation" (Croft 2001).

Tone is an integral aspect of converb formation and verbal inflection in general. For example, segmentally (near-)identical surface forms like *kètìbi:lôr* vs. *kètìbìl5r* are primarily distinguished by tone, despite their being the realization of completely different underlying forms. Also, tone seems to be employed to mark switch reference, at least in some contexts. The possibility of switch-reference marking was not anticipated on the basis of earlier studies of Beria, and its discovery here was purely due to chance. The dimensions of switch reference marking and its potential interplay with the overt person indices on the one hand, and other tonally marked categories such as the basic/marked distinction on the other also require further research.

Appendix

(56)

Further examples

- - kòtóré kíbērè tàtūr wē:lé kèīlú bìēgū r^{15} koto=re kı-be-r-é tatu=ri wee-l-é place=ABL 3PFV-leave-3-CONV back=LOC pass-3-CONV kei-l-ŭ bıe=kogu=rı go-3-PFV.PL house=3POSS=LOC

'From there they left and went back to their home.'

ZAG_EOI_20141204_6_WGH

```
(57) bèr āīrí kōddō: ēgīí
```

ber aI = rI $k \circ k \cdot d \circ - \emptyset \cdot \varepsilon$ $e \cdot gii$ 3SG 1SG = LOC $3PFV \cdot VEN \cdot bring \cdot 3A \cdot CONV 1SGP \cdot give : 3A : PFV \cdot SG$'s/he brought him to me.' ZAG_MAM_20190627_LL_02

(58) *āī nă lār bīgē lēkk*è

ai pa la = ri $bi-g-\bar{e}$ $l-ei-g-\hat{e}$ 1SG child 2SG = LOC hold-1SGA-CONV 2P-give-1SGA-IPFV.SG 'I'll hold the child for you.' ZAG_MAM_20190822_LL

¹⁵ The appearance of an NP at the end of a sentence strikes me as rather strange, considering the normally rigid APV constituent order.

(59) *à tā bondorar ılledo mus àar biyare dıldıldılgıle teigile ...*

bəndəra = rı $II-I-\varepsilon = d\mathfrak{I}$ ta Э person head tomato = LOC $look_like-3$ -IPFV.SG = REL aa = rIbi-ya-r-ē MUS mouth = LOC hold-3PFV-3A-CONVbanana $dI dI dI dI = gI - l - \bar{\varepsilon}$ $tei = g_I - l - \bar{\varepsilon} \dots$ IDEO = 3PFV-AUX-CONVdescend = 3PFV-AUX-CONV'The person whose head looks like a tomato hops down (going "dildildil"), holding a banana in their mouth, and ...' ZAG EOI 20141204 8 SC 006

- (60) kèkt5 tâtùré kīfēlé wē:lê kéílŭ kek=to tatu=re kī-ſɛ-l-é wɛɛ-l-ê skunk=DET back=ABL 3PFV-follow-3A-CONVgo_away-3-CONV kei-l-ŭ go-3-PFV.PL
 'The skunk followed them from behind and they went away.' ZAG_EOI_20151215_5 018
- (61) $t \check{a}_{IJ} \check{e} h \hat{u} l \check{a} \check{u} t \check{e} k \check{e}_{I} d \check{o} r t \check{a}_{K} \check{i}_{I} g f l \acute{e} k \acute{e} k \acute{e} r d \cdot \varepsilon = r \upsilon$ 1PL:go-CONV Hula = 3PL.POSS COP_{com}.1PL:CONV take-1PLA-CONV = CONJ $ta \cdot k \cdot ka \cdot I$ $g \vec{l} \vec{e} k \acute{l} \acute{e}$ 1PLP-3PFV-come-3A_{IMP}-PFV.SG QUOT say:3PLA-IPFV.PL "(Let us) go and dance with them their Hula dance and come (back)", they say.'

ZAG_EOI_20151215_3_MS 011

(62) ùdò télè:r tíé hûlâ tìdó:r tàk:ài gìlè kìè $udo t \in l \in = r I$ tíέ ti-d-e=rvhula COP_{com}.1PL:CONV Hula God girl=LOC dance-1PL-CONV = CONJta-k-ka-i gílé kíé 1PLP-3PFV-come-3A-PFV.PL OUOT say:3PLA-IPFV.PL "Dance the Hula with God's daughters and after that come back", they say.'

ZAG_EOI_20151215_3_MS 016

- (63) jahra pakīdaər bè \bar{e} kettí jahra pakīda=kəgo=rī b \hat{e} - \bar{e} kettí Yahia wife=3SG.POSS=LOC COP_{com}.3SG-CONV come.3SG.PFV.SG 'Yahia came with his wife.' ZAG_YAM_20220206 11
- (64) póúpóúrādò gīrìyārē kēīlê poupoura=do giri-ya-r-ē kei-l-ê spider=DET wave_cobweb-3PFV-3-CONV leave-3-IPFV.SG
 'The spider leaves by weaving a web.' ZAG_EOI_20151215_5 018
- (65) kiédóre nôunóurádó gīrìyārē kéilê kie=do=re nounoura=do giri-ya-r-ē kei-l-ê place=DET=ABL spider=DET weave-3PFV-3-CONV leave-3-IPFV.SG 'The spider leaves from that place by weaving a web.' ZAG_EOI_20151215_3_MS 018
- (66) *š kôjdðrú tâtùré kífé kějlů*

[5 koi]=do=ru tatu=re ki-f-Ø-é [person.PL other]=REF=CONJ back=ABL 3PFV-follow-3A-CONV kei-l-ŭ go-3A-PFV.PL 'and the other people from behind went following (them).' ZAG_EOI_20151215_3_MS 020

(67) *utōrē bàd mūrŭldō bīyārē kàlǎ: ſìrɪyàrē ...*

 $u = t_2 = r\epsilon$ bad $muru = l = d_2$ time = DET = ABL after kind_of_beer = become = REL $b_{I-ya-r-\epsilon}$ ka-la- $\emptyset-\epsilon$ take-3PFV-3A-CONV 3PFV-take_out-3A-CONV $\int III-ya-r-\epsilon$... knead-3PFV-3A-CONV 'After it became *muru*, they took it out, kneaded it (and) ...' ZAG_EOI_20151215_1CAB 058

Dataset

Table 26 provides an overview of the data files that were taken into account in this study. The first column contains the file names after the restructuring of LAC, whereas the second contains the old names from the department-internal archive (ifl4studies). The numbering of annotated speech segments within individual files conform to the old file names (where applicable).

ELAN file name (new)	ELAN file name (old)	Bundle display title	Content description
ZAG_EOI_20141111_1	ZAG_EOI_20141111_1	Negation	EOI creates sentences in several different
			forms and topics
ZAG_EOI_20141113_5_BS	ZAG_EOI_20141113_5_BS	Tense Aspect 1	EOI translates different tense and aspect dis-
			tinctions of the different verb types
ZAG_EOI_20141119_3	ZAG_EOI_20141119_3	Grammatical rela-	EOI translates simple intransitive, transitive
		tions	and ditransitive sentences. The aim is to ex-
			plore how S, DO and IO are expressed in Be-
			ria
ZAG_EOI_20141204_1	ZAG_EOI_20141204_1_NV	Speech – Mortar	Free spoken text about the use of a mortar
ZAG_EOI_20141204_2_HB	ZAG_EOI_20141204_2_HB	The "hula" dance	Information about the special Beri dance
			"hula"

ZAG_EOI_20141204_3_PC	ZAG_EOI_20141204_3_PC	Pear Story 1	EOI retells the pear story in Beria
ZAG_EOI_20141204_6_WGH	ZAG_EOI_20141204_6_WGH	Frog Story	Retelling the frog story as the basis for up-
			coming transcriptions
ZAG_EOI_20141204_8_SC	ZAG_EOI_20141204_8_SC	Tomato Man	Video task Tomato Man (cartoons)
ZAG_EOI_20151215_1_CAB	ZAG_EOI_20151215_1CAB	Production steps	CAB asks EOI to talk about how to make
			beer, porridge and brandings.
ZAG_EOI_20151215_3_MS	ZAG_EOI_20151215_3_MS	Folktale	MS asks EOI to tell a folktale
ZAG_EOI_20220222_1	ZAG_EOI_20220222_01	Converbs 2	Elicitation of converb constructions
ZAG_EOI_20220222_2	ZAG_EOI_2022202_02	Converbs 3	Elicitation of converb constructions, discus-
			sion of tone and fused forms
ZAG_MAM_20190627_2	ZAG_MAM_20190627_LL_02	TAKE something	Paradigm of 'take sth. somewhere' (Laureck
		somewhere	BA thesis Laureck: Three-participant events
			in Zaghawa)
ZAG_MAM_20190822	ZAG_MAM_20190822_LL	BRING and mis-	Paradigm of BRING and misc. (Laureck BA
		cellaneous	thesis Laureck: Three-participant events in
			Zaghawa)
ZAG_MAM_EOI_20181129_2	ZAG_MAM_EOI_20181129_2_LL	Pear story	MAM tells EOI the pear story.
ZAG_YAM_20220206	ZAG_YAM_20220206	Converbs 1	Elicitation of converb constructions

References

- Abdu El-Dawi Abdalla, Maha. 2010. *The morphosyntactic structure of the Zaghawa language in Sudan. Focus: the Wegi dialect*. Unpublished PhD thesis, Department of Linguistics, University of Khartoum.
- Amha, Azeb & Gerrit J. Dimmendaal. 2006. Converbs in an African perspective. In Felix K. Ameka, Alan Dench & Nicholas Evans (eds.), *Catching language: The standing challenge of grammar writing*, 393–440. Berlin: De Gruyter Mouton. https://doi.org/10.1515/9783110197693.393.
- Anonby, Erik John, Koen Bostoen, Laura Downing, Maarten Kossmann, Zelealem Leyew, Doris Löhr, Jacky Maniacky, Wilhelm J. G Möhlig, Anne Storch & Thomas Widlok. 2007. Review of Angelika Jakobi & Joachim Crass. 2004. Grammaire du beria (langue saharienne). Köln: Köppe. *Journal of African Languages and Linguistics* 28(2). 217–253. https://doi.org/10.1515/JALL.2007.011.
- Anonby, Erik John & Eric Johnson. 2001. *A sociolinguistic survey of the Zaghawa (Beria)* of Chad and Sudan. Moursal-N'Djaména: Association SIL Tchad.
- Auwera, Johan van der. 1998. Defining converbs. In Leonid Kulikov & Heinz Vater (eds.), Typology of verbal categories: Papers presented to Vladimir Nedjalkov on the occasion of his 70th birthday, 273–282. Berlin: De Gruyter. https://doi.org/10.1515/9783110913750.273.
- Bickel, Balthasar. 1998. Converbs in cross-linguistic perspective. Review of Martin Haspelmath & Ekkehart König (eds.). 1995. Converbs in cross-linguistic perspective:
 Structure and meaning of adverbial verb forms – adverbial participles, gerunds.
 Berlin: Mouton de Gruyter. *Linguistic Typology* 2. 381–397.
- Bondarev, Dmitry. in prep. Grammar of Old Kanembu [working title].
- Bondarev, Dmitry. 2005. In search of the Saharan inflectional verbal paradigms in Old Kanembu. *Afrika und Übersee* 88. 35–51.
- Bondarev, Dmitry. 2010. Complex clauses in Old Kanembu/LG. In Norbert Cyffer & Georg Ziegelmeyer (eds.), Aspects of co- and subordination: Case studies from African, Slavonic, and Turkic languages, 213–250. Köln: Köppe.
- Coenen, Pascal. 2017. *Der Kausativ in Zaghawa*. Unpublished MA thesis, Department of Linguistics, University of Cologne.
- Compes, Isabel. in prep. Argument coding and the alignment system in Beria.
- Compes, Isabel. 2017. Zaghawa-Wagi: Towards documenting the Sudanese dialectal variant of Zaghawa. *Endangered Language Archive*. https://www.elararchive.org/uncategorized/SO_c598f546-1676-4a13-94bc-e497d0059452/.
- Compes, Isabel. 2021a. The morphology of argument marking in the Wagi dialect of Beria. *Studies in African Linguistics* 50(2). 196–226.
- Compes, Isabel. 2021b. Project proposal: The alignment system of Beria split-S or middle system? Talk presented at the General Linguistics Colloquium, 16 December, Department of Linguistics, University of Cologne.

- Compes, Isabel & Birgit Hellwig. 2020. Zaghawa field methods corpus 2014-2020. *Language Archive Cologne (LAC)*. https://lac2.uni-koeln.de/de/zaghawa-wagi-dialect-sudan.
- Comrie, Bernard. 2020. Introduction. In Robert Crellin & Thomas Jügel (eds.), *Perfects in Indo-European languages and beyond*, 1–13. Amsterdam: Benjamins. https://doi.org/10.1075/cilt.352.
- Crass, Joachim. 2002. Die Grammatikalisierung des Verbes "sagen" im Beria. In Theda Schuhmann, Mechthild Reh, Roland Kießling & Ludwig Gerhardt (eds.), Aktuelle Forschungen zu afrikanischen Sprachen: Sprachwissenschaftliche Beiträge zum 14. Afrikanistentag, Humburg, 11.-14. Oktober 2000, 231–242. Köln: Köppe.
- Crass, Joachim & Angelika Jakobi. 2000. Der Kube-Dialekt des Beria (Zaghawa) im Tschad. Eine erste Skizze. *Afrika und Übersee* 83. 3–46.
- Cristofaro, Sonia. 2003. Subordination. Oxford: Oxford University Press.
- Croft, William. 2001. *Radical Construction Grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.
- Cyffer, Norbert. 1991. The Zaghawa verb structure and its relation to other Saharan languages. In M. Lionel Bender (ed.), *Proceedings of the fourth Nilo-Saharan linguistics colloquium*, 79–90. Hamburg: Buske.
- Cyffer, Norbert. 2020. Saharan. In Rainer Vossen & Gerrit J. Dimmendaal (eds.), *The Oxford Handbook of African Languages*, 382–391. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199609895.013.13.
- Driem, George van. 1993. A grammar of Dumi. Berlin: Mouton de Gruyter.
- Drossard, Werner. 2008. Konverben und Konverbkonstruktionen bei der Bildung aspektotemporaler Formen in Turksprachen und ostkaukasischen Sprachen. In Karen H. Ebert, Johanna Mattissen & Rafael Suter (eds.), *From Siberia to Ethiopia: Converbs in a cross-linguistic perspective*, 35–62. Zürich: ASAS.
- Džanmavov, Jusup D. 1967. *Deepričastija v kumykskom literaturnom jazyke (sravnitel'no s drugimi tjurkskimi jazykami)* [Converbs in standard Kumyk (in comparison with other Turkic languages)]. Moskva: Nauka.
- Eberhard, David M., Gary F. Simons & CHarles D. Fennig (eds.). 2022. Zaghawa. In *Ethnologue: Languages of the world*. 25th edn. Dallas, TX: SIL International. https://www.ethnologue.com/language/zag.
- Ebert, Karen H. 1991. Vom Verbum dicendi zur Konjunktion ein Kapitel universaler Grammatikentwicklung. In Walter Bisang & Peter Rinderknecht (eds.), Von Europa bis Ozeanien - Von der Antonymie zum Relativsatz: Gedenkschrift für Meinrad Scheller, 77–95. Zürich: ASAS.
- Ebert, Karen H. 2008. Forms and functions of converbs. In Karen H. Ebert, Johanna Mattissen & Rafael Suter (eds.), *From Siberia to Ethiopia: Converbs in a cross-lin-guistic perspective*, 7–33. Zürich: ASAS.
- Foley, William A. & Robert D. Van Valin Jr. 1984. *Functional syntax and universal grammar.* Cambridge: Cambridge University Press.

- Gayler, Katharina. 2021. *Tone and number in the Zaghawa noun phrase*. Unpublished MA thesis, Department of Linguistics, University of Cologne.
- Givón, Talmy. 1990. *Syntax: A functional-typological introduction*. Vol. 2. Amsterdam: Benjamins.
- Haspelmath, Martin. 1995. The converb as a cross-linguistically valid category. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms – adverbial participles, gerunds*, 1–55. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110884463.
- Haspelmath, Martin & Ekkehard König (eds.). 1995. Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms – adverbial participles, gerunds. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110884463.
- Hutchison, John P. 1981. *The Kanuri language: A reference grammar*. Madison: University of Wisconsin, African Studies Program.
- Jakobi, Angelika. 2002. Medium im Beria. In Theda Schuhmann, Mechthild Reh, Roland Kießling & Ludwig Gerhardt (eds.), Aktuelle Forschungen zu afrikanischen Sprachen: Sprachwissenschaftliche Beiträge zum 14. Afrikanistentag, Hamburg, 11.-14. Oktober 2000, 157–170. Köln: Köppe.
- Jakobi, Angelika. 2007. Semantics and syntax of motion verbs in Beria (Saharan). *Annual Publication in African Linguistics* 5. 113–127.
- Jakobi, Angelika. 2010. Morphosyntax und Semantik der Medium-Verben im Beria (Saharanisch). In Armin R. Bachmann, Christliebe El Mogharbel & Katja Himstedt (eds.), *Form und Struktur in der Sprache: Festschrift für Elmar Ternes*, 161–185. Tübingen: Narr/Francke/Attempto.
- Jakobi, Angelika. 2011. Split-S in Beria. In Doris Löhr, Eva Rothmaler & Georg Ziegelmeyer (eds.), Kanuri, Borno and Beyond: Current studies in the Lake Chad region, 91–116. Köln: Köppe.
- Jakobi, Angelika & Joachim Crass. 2004. *Grammaire du beria (langue saharienne): Avec un glossaire français-beria*. Köln: Köppe.
- Johanson, Lars. 1995. On Turkic converb clauses. In Martin Haspelmath & Ekkehard König (eds.), Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms – adverbial participles, gerunds, 313–347. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110884463.
- Kalectaca, Milo. 1978. Lessons in Hopi. Tucson: University of Arizona Press.
- Kellenberger, Joshua. 2008. On classifying Beria verbs. Ms.
- König, Ekkehard. 1995. The meaning of converb constructions. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms adverbial participles, gerunds*, 57–95. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110884463.
- Koptjevskaja-Tamm, Maria. 1999. Finiteness. In E. Keith Brown & Jim E. Miller (eds.),
 Concise encyclopedia of grammatical categories, 146–149. Amsterdam: Elsevier.
 Laureck, Lukas. in prep. Three-participant events in the Wagi dialect of Beria.

- Löhr, Doris & Eva Rothmaler. 2016. Grammaticalized verbal and nominal forms in Kanuri/Kanembu. In Gratien G. Atindogbé & Evelyn Fogwe Chibaka (eds.), Proceedings of the 7th world congress of African linguistics, Buea, 17-21 August 2012, vol. 2, 564–591. Bamenda: LANGAA RPCIG.
- Lukas, Johannes. 1937. A study of the Kanuri language. London: Oxford University Press.
- Mathes, Timothy K. 2015. Acoustic phonetic aspects of a 7/9 vowel inventory: A study of the [ATR] harmony language Zaghawa. In Ruth Kramer, Elizabeth C. Zsiga & One Tlale Boyer (eds.), *Selected proceedings of the 44th annual conference on African languages*, 180–187. Somerville, MA: Cascadilla Proceedings Project.
- Mattissen, Johanna. 2008. Converbs in Nivkh. In Karen H. Ebert, Johanna Mattissen & Rafael Suter (eds.), *From Siberia to Ethiopia: Converbs in a cross-linguistic perspective*, 91–124. Zürich: ASAS.
- Müller-Bardey, Thomas. 1990. Koprädikation als grundlegende syntaktische Operation. In Hansjakob Seiler (ed.), Internationales interdisziplinäres Kolloquium "Sprache und Denken: Variation und Invarianz in Linguistik und Nachbardisziplinen", Lenzburg/Schweiz, 16.-19. Mai 1989, vol. II, 1–22. Köln: Universität zu Köln.
- Nedjalkov, Igor' V. 1995. Converbs in Evenki. In Martin Haspelmath & Ekkehard König (eds.), Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms – adverbial participles, gerunds, 441–464. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110884463.
- Nedjalkov, Igor' V. 1998. Converbs in the languages of Europe. In Johan van der Auwera (ed.), *Adverbial constructions in the languages of Europe, part 1*, 421–456. Berlin: De Gruyter Mouton. https://doi.org/10.1515/9783110802610.421.
- Nedjalkov, Vladimir P. 1995. Some typological parameters of converbs. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms – adverbial participles, gerunds*, 97–136. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110884463.
- Nedjalkov, Vladimir P. & Igor' V. Nedjalkov. 1987. On the typological characteristics of converbs. In Toomas Help & S. Murumets (eds.), *Symposium on language universals: "Estonian data contributing to the theory of language universals" & "The hierarchical nature of language" (Tallinn, July 28-30, 1987): Summaries*, 75–79. Tallinn: Academy of Sciences of the Estonian SSR, Institute of Language and Literature.
- Omda Ibrahim Elnur, Elsadig. n.d. *Tonal system of Beria*. Ongoing PhD project, Department of Linguistics, University of Cologne.
- Osman, Suleiman N. 2006. Phonology of the Zaghawa language in Sudan. In Al-Amin Abu-Manga, Leoma Gilley & Anne Storch (eds.), *Insights into Nilo-Saharan lan-guage, history and culture*, 347–361. Köln: Köppe.
- Panfilov, Vladimir Z. 1965. *Grammatika nivxskogo jazyka. Č. 2 [Grammar of the Nivkh language. Part 2]*. Moskva: Nauka.

- Perevoščikov, Petr N. 1959. *Deepričastija i deepričastnye konstrukcii v udmurtskom jazyke* [Converbs and converbal constructions in Udmurt]. Iževsk: Udmurtskoe knižnoe izdatel'tvo.
- Polotsky, Hans Jakob. 1951. Notes on Gurage grammar. Jerusalem: Israel Oriental Society.
- Ramstedt, Gustaf John. 1903. *Über die Konjugation des Khalkha-Mongolischen*. Helsinki: Société Finno-Ougrienne.
- Rapold, Christian J. 2010. Defining converbs ten years on a hitchhiker's guide. In Sascha Völlmin, Azeb Amha, Christian J. Rapold & Silvia Zaugg-Coretti (eds.), *Converbs, medial verbs, clause chaining and related issues*, 7–30. Köln: Köppe.
- Rothmaler, Eva. 2011. Can we speak of converbs in Kanuri? In Doris Löhr, Eva Rothmaler & Georg Ziegelmeyer (eds.), *Kanuri, Borno and Beyond: Current studies in the Lake Chad region*, 117–136. Köln: Köppe.
- Stump, Gregory T. 1985. *The semantic variability of absolute constructions*. Dordrecht: Reidel.
- Van Valin, Robert D., Jr. & Randy J. LaPolla. 1997. Syntax: Structure, meaning, and function. Cambridge: Cambridge University Press.
- Wolfe, Andrew M. 2010. Splits in the middle: On the confluence of split-intransitive and middle voice systems. Term paper. Canada Institute of Linguistics, ms.