

Participle-converbs in Iron Ossetic: syntactic and semantic properties¹

Oleg Belyaev
Arseniy Vydrin

This paper concerns the use of forms in *-gǎ* and *-gǎjǎ* in contemporary Ossetic. These forms have previously been under-described, and our aim is to produce a typologically informed study of the differences between them. As we show, the main difference is that while the form in *-gǎ* is a participle-converb (with a wide range of use), the form in *-gǎjǎ* is a converb proper. At the same time, there are a number of surprising syntactic effects and subtle semantic differences observed for both forms. In this paper we will provide a general description of the uses of the two forms and of some of the typologically interesting facts associated with them, and an explanation of the facts observed.

1. Introduction

The two deverbal Ossetic² forms under discussion are derived from the present stem via the affixes *-gǎ* and *-gǎjǎ* (ablative of *-gǎ*), e. g.

kǎn-ən ‘to do’ – *kǎn-gǎ(jǎ)*
žǎǧ-ən ‘to say’ – *žǎǧ-gǎ(jǎ)*

According to the main reference grammars (ABAEV 1970, AKHVLEDIANI 1963, BAGAEV 1965), the form in *-gǎ* can be used both as a participle (1) and as a converb³ (2), while the form in *-gǎjǎ* can only be used as a converb (2):

- (1) *wəsə lǎppu-jə ǎldar xǎd-tul-gǎ(*-jǎ) wǎrdon-ə š-bad-ən*
that boy-GEN⁴ landlord self-roll-PART-ABL cart-IN PV-sit-INF
kod-t-a
do-TR-PST.3SG
‘The landlord made that boy sit on a self-going cart’ (ABAEV 1970: 612)

- (2) *lǎpɯ kǎw-gǎ(-jǎ) ba-səd jǎ = xǎzar-mǎ*
boy cry-PART(-ABL) PV-go[PST.INTR.3SG] POSS.3SG=house-ALL
‘The boy, crying, came to his house’

Russian-language sources prefer to call these forms “participle-converbs” (*pričastie-deepričastie*), a term probably originating in ABAEV (1964, 1970). Prior grammars used different terms. MILLER (1882: 221-222) called the form in *-gǎ* a participle or a converb

¹ The research is carried out with the financial support of RGNF, grant No. 09-04-00168a. The authors would like to thank the native speakers of Ossetic who have provided invaluable material for this paper: Madina Darchieva, Zarina Dobaeva, Zalina Dzuceva, Angelina Gusalova and Alina Khozieva. We are also thankful to two anonymous reviewers for their insightful comments on an earlier draft of this paper. All errors are entirely our fault.

² North-East Iranian. This study is based on the Iron dialect of Ossetic spoken in the Republic of North Ossetia-Alania, Russia, which serves as the basis of the literary language. Most of the examples presented in this handout have been collected during our fieldwork in Vladikavkaz, North Ossetia, in 2008-2010. The examples which have references are borrowed from modern Ossetic (Iron) literature.

³ Word order in Ossetic NPs is fairly rigid, and attributes must always be preposed to the noun they modify. Therefore, the form in *-gǎ* in (2) is unambiguously converbal.

⁴ Animate direct objects are genitive-marked in Ossetic in a pattern of differential object marking.

depending on its use, while considering the form in *-gǎjǎ* to be a converb proper. In GAGKAEV (1952: 77) both forms are called converbs.

The term “gerund” is used in THORDARSON (1989, 2009) and in the English translation of ABAEV’s sketch grammar (1964). The reason is probably that the Ossetic *-gǎ* forms are functionally similar to English gerunds in that they act as both participles and converbs, but crosslinguistically the term *gerund* is typically used in the narrow sense of ‘action noun’ (HASPELMATH 1995: 45), which, as we will demonstrate, is not applicable to Ossetic *-gǎ*.

The semantics and use of these forms have only been previously partially studied in grammars (MILLER 1882, GAGKAEV 1952, 1956, AKHVLEDIANI 1963, BAGAEV 1965, ABAEV 1970), a doctoral dissertation by MEDOEVA (1969) and a single special study by THORDARSON (2009: 70-77). However, previous descriptions have only listed the most usual functions of these forms as participles and converbs, without clearly stating the distinctions between the two forms in converb function and without describing their uses in modal constructions in detail.

A description of some of the constructions with *-gǎ* and *-gǎjǎ* can be found in TEKHOV (1970). This monograph contains descriptions of the constructions of deontic necessity (section 5.3 of the present paper) and inevitability (section 5.5). However, the semantics and morpho-syntax of the constructions are not described; the distribution of the forms in *-gǎ* and *-gǎjǎ* is left unexplained. Also, no mention is made of the passive in *-gǎ* (section 5.2) and of possessive construction of necessity (section 5.4). Both of these constructions are, to our knowledge, first systematically described in the present paper.

The PhD dissertation of MEDOEVA (1969) is specifically dedicated to converbs in Ossetic. In this dissertation, the author defines *-gǎ* as a participle-converb and *-gǎjǎ* as a converb proper, which agrees with our data. The dissertation also contains an in-depth discussion of the semantics of converbs in Ossetic. However, some of the semantic labels the author attaches to certain examples are questionable; moreover, she does not consistently differentiate between forms in *-gǎ* and *-gǎjǎ*, and it is impossible to deduce their semantic distribution from her examples. The author also describes several constructions, some of which are not recognized as grammatical by our consultants. This may reflect the fact that these constructions are peculiar to the varieties spoken in South Ossetia, the region where Medoeva originates from.

The only other special study of the forms in question was carried out by THORDARSON (2009: 70-77). In this study, the author describes two main functions of the forms in *-gǎ* and *-gǎjǎ* (which are not treated separately): a deverbal adverb that “...marks an action concomitant with, and logically subordinate to, the action expressed by a finite main verb” (p. 70) and a noun which may be the head or a modifier of a NP, the nominal part of a compound verb, or a postposition” (p. 72). While giving examples on various kinds of control, the author does not specify their distribution. No modal or passive constructions with the forms in *-gǎ* are mentioned. In general, THORDARSON’s study, while rich in examples, fails to provide an adequate description of the use of Ossetic forms in *-gǎ* and *-gǎjǎ*.

Therefore, the present study aims to bridge the descriptive gap and determine the functions of these previously underdescribed verbal derivatives, as well as the major differences between them.

This paper is organized as follows. In section 2, we define the definitions of the terms we will be using in describing the forms in question. In section 3, we describe the participial functions

of the form in *-gǎ*, and in section 4, the converbal functions of both forms. In section 5 various constructions which include these forms are considered. Finally, section 6 is the conclusion, where we sum up our description and point out the typologically interesting elements of the Ossetic participle-converbs.

2. Defining the framework

There are two mainstream definitions of the term ‘converb’. According to the first one, by NEDJALKOV (1995), the converb is defined as “a verb-form which depends syntactically on another verb form, but is not its syntactic actant, i. e., does not realize its semantic valences... a canonical... converb can occupy (a) the position of an adjunct, i. e., an adverbial, but cannot occupy the positions: (b) of the only predicate of a simple sentence (without additional auxiliary elements); (c) of nominal attributes; (d) of a clausal actant... (e) of a nominal actant”.

An alternative, more restrictive definition is provided by HASPELMATH (1995), who defines the converb in the following way: “a non-finite verb form whose main function is to mark adverbial subordination”. Haspelmath’s definition has been criticized by a number of scholars (e.g. PELLARD 2010, CREISSELS 2010), since it relies on the notion of *adverbial subordination*, which is problematic for a number of languages where clause combining by means of converbs often has properties of coordination (so-called “clause chaining” languages, e.g. Tsakhur, KAZENIN and TESTELETS 1999). For these languages, one must either use some other term, like ‘medial form’, for the verbal derivatives in question, or use some other definition like Nedjalkov’s which does not *a priori* rely on complex syntactic notions such as “adverbial subordination”. This discussion is, however, irrelevant for the forms in question, since, as we will demonstrate, the Ossetic forms are clearly subordinate, non-finite, and are semantically associated with the range of meanings commonly identified as “adverbial” (THOMPSON et al. 2007). What we call converbs in Ossetic is such according to both definitions.

Nedjalkov’s article also contains several definitions which are descriptively useful for the study of converbs in a given language. He distinguishes between “same-subject”, “different-subject” and “varying-subject” converbs. The subject of clauses with same-subject converbs must be coreferent with the subject of the main clause, the subject of different-subject converbs must *not* be coreferent with the subject of the main clause, and varying-subject converbs can behave in both ways.

Another useful distinction is between “converbs proper”, or canonical converbs, verb forms whose unique function is converbial, and various kinds of polysemy, notably participle-converbs.

There is considerable discussion in HASPELMATH 1995 concerning the notion of “co-predicative participles”. The notion is originally introduced for a specific type of construction in some languages, mostly ancient Indo-European, where a detached participle agrees with an NP in the main clause, functioning similarly to a converb. Applied to a language with no agreement, this notion is essentially synonymous with Nedjalkov’s notion of “participle-converbs”, and we will use the two interchangeably.

3. Participle

The primary function of the forms in *-gǎ* is participial. When used with transitive verbs, they are object-oriented, while with intransitive verbs they are subject-oriented:

waj-gǎ bǎx “running horse” (run-PART horse)
dus-gǎ qug “milch cow” (milk-PART cow)

This participle is present-tense when the verb is imperfective and it is past-tense when the verb is perfective⁵ (cf. *ba-liz-gǎ-t-ǎ* “PV-run-PART-PL-NOM” “those who ran away”).

Semantically, *-gǎ* can only be used with stage-level predicates (CARLSON 1980) or processes⁶ (e. g. *žar-gǎ lǎppu* “sing-PART boy” can only mean “a boy who is now singing” but not *“a boy-singer”).

Participals in *-gǎ* only use nominal negation *ǎǎ* “without”, e.g. *ǎǎ-zur-gǎ čǎžg* “without-speak-PART girl” “a quiet girl”.

The form in *-gǎjǎ* is morphologically the ablative of the form in *-gǎ*, and can never be used as a participle. It can only function as a converb and in a modal construction, which will be demonstrated below.

As a participle, *-gǎ* can lexicalize to create nouns while *-gǎjǎ* cannot, e. g. *dǎm-gǎ* “blow-PART” > “wind”. In this respect, *-gǎ* is often used within complex predicates, e. g. *ba-žon-gǎ wǎv-ǎn* “PV-know-PART be-INF” “to get acquainted”. A complicated case is when a complex predicate with *-gǎ* is synonymous with a simple verb, e. g. *ra-sǎw-gǎ wǎv-ǎn* “PV-go-PART be-INF”, *ra-sǎw-ǎn* “PV-go-INF” “to go out”. The semantic difference between these forms, if any, remains to be discovered.

4. Converbs

Forms in *-gǎ* and *-gǎjǎ* can both function as converbs. In most cases, it is clear whether the form in *-gǎ* is a participle in attribute position or a converb: participles must immediately precede the nouns they modify, and they cannot attach to pronouns.

4.1. Semantics

In this section we will demonstrate that converbal usage of the forms in *-gǎ* is generally restricted to adverbial clauses expressing manner, time and depictive clauses. On the other hand, *-gǎjǎ* can express a wide range of meanings: manner, time, depictive, attendant circumstance, real condition, cause, unreal condition, concession. The inventory of meanings of converb constructions we are using is based on KÖNIG 1995. Narrative use, characteristic for languages of the North Caucasus, is not attested for converbs in Ossetic, and they are undoubtedly subordinate (e. g. they can be freely embedded in the main clause like in (4)).

(3) manner

<i>alan axǎm</i>	<i>rašǎg</i>	<i>wǎd-i</i>	<i>ǎmǎ</i>	<i>zew-zew</i>	<i>kǎn-gǎ(-jǎ)</i>
Alan so	drunk	be-PST.INTR.3SG	and	stagger	do-PART(-ABL)

⁵ Perfective aspect is mostly expressed by verbal prefixes in Ossetic.

⁶ Other participles can be used for individual-level predicates: *-ǎg* can be used for both individual- and stage-level (thus *žar-ǎg lǎppu* “sing-PART boy” can both mean “a boy who is now singing” and “a boy-singer”), while *-ag* can only be used for individual-level predicates.

səd

go[PST.INTR.3SG]

“Alan was so drunk that he went staggering”

(4) time

mad, jǎ = šəvällǎ-tt-ə xǎdtǎxǎg-mǎ fǎndarašt
mother POSS.3SG=child-PL-GEN airplane-ALL bon.voyage

kǎn-gǎ(-jǎ), š-k^wəd-t-a

do-PART(-ABL) PV-cry-TR-PST.3SG

“When mother was seeing her children off to the airplane she started to cry”

(5) attendant circumstance

*her ǎž televizor-mǎ kǎš-ən lǎw-gǎ-jǎ/*lǎw-gǎ*

now I television-ALL watch-PRS.1SG stand-PART-ABL/*stand-PART

“I am now watching television while standing”

(6) real condition

*tevizor-ə sur ǎnafon-mǎ bad-gǎ-jǎ/*bad-gǎ wǎd rajšom-ǎj*

television-GEN near late-ALL sit-PART-ABL/*sit-CONV then morning-ABL

ražə nǎ = šə-št-zənǎ

early NEG=PV-stand-FUT.2SG

“Sitting near the TV up till late, you will not get up early in the morning”

(7) cause

*jǎ = birǎ fǎllǎj-t-ǎn tǎrš-gǎ-jǎ/*tǎrš-gǎ, žanašpi kolxoz-ə*

POSS.3SG=many possession-PL-DAT fear-PART-ABL/fear-PART Janaspi kolkhoz-IN

ba-sǎw-ən-ə fǎnd nǎ = kod-t-a

PV-go-INF-GEN wish NEG=do-TR-PST.3SG

‘Fearing for his many possessions, Janaspi didn’t want to join the kolkhoz’ (Medoeva 1969: 13)

(8) unreal condition

*dǎ = urok xorž š-ax^wər = gǎn-gǎ-jǎ/*gǎn-gǎ, xorž nǎšan*

POSS.2SG=lesson well PV-learn=do-CONV-ABL good mark

ra-jšt-aiš

PV-receive-CNTRF.2SG

‘If you had learned your lesson well, you would have received a good mark’ (Medoeva 1969: 14)

(9) concession

*iron adǎm, štar zǎllǎ wǎv-gǎ-jǎ/*wǎv-gǎ, sǎ-xi š-k^wənǎg*

Ossetian people great nation be-CONV-ABL/be-CONV 3PL-REFL PV-meager

kod-t-oj, iwmiag ǎfšəmar-waržon-zinad-ǎj fidar nǎ = wəd-əštə

make-TR-PST.3PL common brother-love-AN-ABL strong NEG=be-PST.INTR.3PL

‘The Ossetian people, having been (in the past) a great nation, has become small, wasn’t strong by a common brotherhood’ (Medoeva 1969: 14)

The difference between “manner” and “attendant” circumstance has been defined by KÖNIG (1995: 65-66) in the following way: “[manner] should only be used for sentences describing two aspects or dimensions of only one event” (as in (3), where staggering is not a separate event, but a manner of walking), while “attendant circumstance... should be used for cases where two independent events or actions are involved, either of which could be stopped without affecting the other, but which manifest a unity of time and place and thus also a ‘perceptual unity’” (as in (5), where standing is not a manner of watching the TV, but is simply a state of affairs concomittant with the action in the main clause). Obviously, there are borderline cases, but the cases (3) and (5) are quite clearly separate from one another for the native speakers.

It is important to note that for some of the native speakers, examples like (5) and (6) are ungrammatical with *-gǎ*. For these speakers, then, this form can only mean manner. Therefore, for them it is not any different from other adjectives in Ossetic, most of which can also function as adverbs. However, for those native speakers who do allow temporal use of *-gǎ*, it must still be analyzed as having a distinct converbal function, since adjectives in Ossetic can only be used as manner adverbs, not as time adverbs (i. e. *rǎšubd* ‘beautiful’ can mean ‘beautifully’, but not *‘when s/he was beautiful’). Nevertheless, we will analyze the syntactic properties of the forms in *-gǎ* based on the judgements of those native speakers who do accept such uses of *-gǎ*.

Additionally, sentences like (8), which express irreal condition, are also prohibited for a number of native speakers, who only allow a finite subordinate clause in this context. In any case, converbs in *-gǎjǎ* have a wider range of meanings, as is reflected in examples (5)–(9); as such, they can be labeled contextual converbs by the terminology of NEDJALCOV 1995.

4.2. Word order

The position of the converbal clause in the sentence is free: it can stand in the beginning or the end of the sentence, or can be centrally embedded within it. Clauses in *-gǎjǎ* seem to be more often sentence-initial, while clauses in *-gǎ* are generally sentence-medial or final.

- (10) a. [xǎdtǎxǎg-mǎ sǎ = šǎvǎll-ǎt-ǎ fǎndǎrašt kǎn-gǎ(-jǎ)], mad
 airplane-ALL POSS.3PL=child-PL-GEN bon.voyage do-PART(-ABL) mother
 jǎ = q^wǎd-ǎt-ǎj š-k^wǎd-t-a
 POSS.3SG=thought-PL-ABL PV-cry-TR-PST.3SG
 ‘Mother cried from her thoughts when seeing her children off to the airplane’
 b. jǎ = q^wǎdǎtǎj, [xǎdtǎxǎgmǎ sǎ = šǎvǎllǎt-ǎ fǎndǎrašt kǎngǎ(jǎ)], mad šk^wǎdta
 c. mad jǎ = q^wǎdǎtǎj šk^wǎdta, xǎdtǎxǎgmǎ sǎ = šǎvǎllǎt-ǎ fǎndǎrašt kǎngǎ(jǎ)

Converbal clause-internal word order is more rigid than in Ossetic main clauses. While the unmarked word order in main clauses is SOV, any other variant is possible depending on information structure. Converbal clauses, on the contrary, tend to be verb-final, at least in most cases:

- (11) a. *televizor-ə sur anăfon-mă bad-gă(-jă), rajšom-ăj*
 television-GEN near late-ALL sit-PART(-ABL) morning-ABL
nă = šə-št-zənă
 NEG=PV-stand.up-FUT.2SG
 ‘Watching television up till late, you will not stand up early in the morning’
 b. **anăfonmă badgă(jă) televizorə sur, rajšomăj nă = šəštzenă*

4.3. Negation

The form in *-gă*, in the same way as in its participial function, can only be negated by the preposition *ănă* ‘without’ (typically used with nominals), while the form in *-găjă* can be negated either by using the normal verbal negation particle *nă* or the preposition *ănă* ‘without’:

- (12) *či = jăm fă-lăw-zăn *nă = / ănă = š-zur-gă?*
 who=3SG.ENCL.ALL PV-wait-FUT.3SG NEG=/without=PV-speak-PART
 “Who will wait for him when he didn't tell [anything]” (lit. “who will wait for him without telling”) (Kantemirova R.S., Bekuzarova V.G. Xrestomatija 10. Vladikavkaz, 2002, p. 299)

- (13) *săšt nă = nək'ul-gă-jă kăš-ə barăg-mă*
 eye NEG=blink:PRS-PART-ABL look-PRS.3SG horseman-ALL
 “Not blinking, he is looking at the horseman”
 (Max dug, № 10, 2002, p. 47).

- (14) *a-rdăm ănă = fărš-gă-jă sămăn ārba-səd-tă?*
 this-DIR without=ask-PART-ABL what.DAT PV-go-PST.INTR.2SG
 “Why have you come here without asking?”

4.4. Control of the implicit subject

The converbal clause, no matter if headed by *-gă* or *-găjă*, cannot have its own subject. According to our field data *-găjă* is preferably subject-controlled, with a strong tendency towards pragmatic control:

- (15) *jă = šizăr šabi-t-ə fen-gă-jă, Marină-jăn jă = žărdă*
 POSS.3SG=orphan child-PL-GEN PV+see-PART-ABL Marina-DAT poss.3sg=heart
š-wəngăg
 PV-tight
 ‘On seeing her orphaned children, Marina’s heart tightened’

In example (15), the NP *Marină* in the main clause is not the grammatical subject, but the external possessor of the noun *žărdă* ‘heart’⁷. However, this NP controls the subject of the converbal clause precisely due to the fact that it is the most salient participant of the main

⁷ The sentence can be reformulated with *Marină* as the genitive possessor (...*marină-jə žărdă*... ‘Marina-GEN heart’), in which case it will also be grammatical.

clause (and, presumably, of the discourse). This is not surprising: as shown by HASPELMATH (1995: 32-36), many (if not most) converbs traditionally believed to be subject-controlled are better described as pragmatically controlled by the most salient participant of the main clause (which is, incidentally, usually the subject).

Converbs in *-gǎ* exhibit a rather different kind of control. They seem to be controlled by either the subject or the object of the main clause, depending on which is linearly closer to the converb, and which is the pragmatically more plausible controller⁸:

- (16) *ǎž žnaž-ə_i ba-gǎrax kod-t-on [Ø_i bǎx-əl bad-gǎ]*
 I enemy-GEN PV-shooting do-TR-PST.1SG horse-SUPER sit-PART
 “I shot the enemy sitting on a horse”

- (17) *žawər_i tǎrquš ba-gǎrax kod-t-a [Ø_i bǎx-əl bad-gǎ]*
 Zaur hare PV-shooting do-TR-PST.3SG horse-SUPER sit-PART
 “Zaur shot the hare while sitting on a horse”, but ^{??}“Zaur shot the hare while it was sitting on a horse” (possible, but pragmatically implausible)

- (18) a. *[Ø_i xǎzar-ə sur-t-ə sǎw-gǎ], ǎž_i = ǎj fed-t-on*
 house-GEN near-PL-IN go-PART I=3SG.ENCL.GEN PV+see-TR-PST.1SG
 “I saw him **while I was passing near the house**”

- b. *ǎž = ǎj_i fed-t-on [Ø_i xǎzar-ə*
 I=3SG.ENCL.GEN PV+see-TR-PST.1SG house-GEN
sur-t-ə sǎw-gǎ]
 near-PL-IN go-PART
 “I saw him **while he was passing near the house**”

A tempting explanation would be to consider forms in *-gǎ* here to be used as participles and not as converbs. However, attributes in Ossetic are always preposed; moreover, they cannot be separated from their head NPs by other constituents. But the group of *-gǎ* in our examples is (a) in postposition (b) separated from the NP by the verb. Therefore, at least synchronically, the control of the implicit subject of the converbial clause in these examples is determined by word order. This correlation is not a strict rule: it does not apply if it is pragmatically implausible, cf. (17).

4.5. Cliticisation

Several important syntactic effects having to do with pronominal cliticisation are observed in converbial clauses. In order to allow the reader to follow the relevant discussion, we begin with a short introduction to second-position enclitics in Ossetic.

4.5.1. Second-position enclitics in Ossetic

⁸ The discussion below does not apply to those speakers who disallow *-gǎ* in all clauses except manner. For them, *-gǎjǎ* is used throughout, and the rules of subject control are more relaxed than what is defined herein.

- (23) a. *žawər fonz minut-ə [lāmbənāg = ām kăš-gă(-jă)]*
 Zaur five minutes-GEN closely=3SG.ENCL.ALL look-PART(-ABL)
lāwwəd-i
 stand-PST.INTR.3SG
 ‘Zaur stood for five minutes, watching them closely’
- b. *žawər fonz minut-ə = jām [lāmbənāg kăš-gă(-jă)]*
 Zaur five minute-GEN=3SG.ENCL.ALL closely look-PART(-ABL)
lāwwəd-i
 stand-PST.INTR.3SG

What is more, in some cases (the exact distribution of which is yet to be determined) canonical clitic climbing is also observed, but only with the converb in *-găjă*:

- (24) *žawər = ām lāwwəd-i [lāmbənāg kăš-gă-jă/*kăš-gă]*
 Zaur=3SG.ENCL.ALL stand-PST.INTR.3SG closely look-PART-ABL/look-PART
 ‘Zaur stood watching them closely’

To our knowledge, in the previous literature on the topic clitic climbing has only been observed for sentential complements and purpose clauses of verbs of movement. The facts of Ossetic are therefore extremely interesting from a typological point of view. In addition, the fact that the semantically “freer” converb in *-găjă* seems to be syntactically more integrated into the clause than the converb in *-gă* is also somewhat odd. A putative explanation will be proposed in the conclusion.

4.5.3. Possessive proclitics

Ossetic also has a series of possessive proclitics, which are generally homonymous with genitive forms of enclitic pronouns. They are immediately attached to the NPs they modify. They are proclitics according to both prosodic and morphophonological features: they form a single intonational group with the following NP, and the final vowel can undergo fronting before constituents beginning with *ă* (cf. example (25) with the form *je=* instead of *jă=*). Possessive proclitics can mark the direct objects of forms in *-găjă*, but not in *-gă*:

- (25) *čidār = āj nə-ffəšt-a je = nă = r-qʷədə-jă⁹*
 some-INDEF=3SG.ENCL.GEN PV-write-PST.TR.3SG POSS.3SG=without=PV-thought-ABL
*āmă je = nă-mbar-gă-jă/*je = nă-mbar-gă*
 and POSS.3SG=without-understand-PART-ABL/POSS.3SG=without-understand-PART
 ‘Someone wrote it without thinking and without understanding it’
 (‘Max Dug’, No. 5, 2001, p. 138)

⁹ This example is also evidence for the fact that *-jă* in *-găjă* is still analyzed as an ablative case marker. *jenār-qʷədəjă* is clearly a complex predicate *je=nă=r-qʷədə kăn-gă-jă* ‘POSS.3SG=without=PV-thought do-PART-ABL’ with the light verb omitted. There is no other possibility, since preverbs cannot attach to nominals in Ossetic. While the participle suffix *-gă* is nowhere to be found, the ablative marker *-jă* is left intact. The verb *kănən* in this case can be easily restored. Such an “omission” of the light verb is actually very common in Ossetic and deserves further research.

5. Additional uses of *-gǎ* and *-gǎǰǎ*

5.1. *-gǎ* in emphatic periphrastic verb forms

Forms in *-gǎ*, but not in *-gǎǰǎ*, can be used periphrastically with the light verb *kǎnən* “to do” to put some kind of emphasis on the action:

xǎrən “eat” – *xǎr-gǎ kǎn-ən* ‘eat’ (eat-PART do-IMP)

This construction appears in two cases (Natalia Serdobolskaya, p.c.):

1. Thetic sentences, where the whole sentence is focused:

- (26) – *Sə* *ǎr-səd-i,* *sǎwəl* *kǎw-ǎš?*
what PV-go-PST.INTR.3SG what.SUPER cry-PRS.2SG
– *Nǎ=fəd* *sǎw-gǎ* *kǎn-ə*
POSS.1PL=father go-PART do-PRS.3SG
“What happened, why are you crying? – Our father is going away”

2. Sentences with predicate focus:

- (27) *zul* *nǎ=xo* *fǎ-kǎn-ə,* *ǎž=ta=jǎ* *ǎlxǎn-gǎ*
bread POSS.1PL=sister PV-do-PRS.3SG I=CONTR=3SG.ENCL.GEN buy-PART
fǎ-kǎn-ən
PV-do-PRS.1SG
“It is our sister who bakes bread, but me, I just buy it”

Grammars also mention that the forms in *-gǎ* have an imperative function:

xǎr-gǎ! “eat-PART” “eat!”
xǎr-gǎ-ut! “eat-PART-IMP.2PL” “eat (PL)!”

However, as shown in VYDRIN (to appear), these forms are better analyzed as the same emphatic construction with *kǎnən* where the light verb is dropped. The evidence for this analysis is that the light verb must obligatorily be restored in the following cases:

- with negation (**ma=xǎr-gǎ* NEG=eat-PART, ^{OK}*xǎr-gǎ ma=kǎn* eat-PART NEG=do[IMP.2SG] “don’t eat”);
- in 1SG/PL (**xǎr-gǎ-ǎm* eat-PART-IMP.1PL, ^{OK}*xǎr-gǎ kǎn-ǎm* eat-PART do-IMP.1PL “let’s eat”) or 3SG/PL (**xǎr-gǎ-ǎd* eat-PART-IMP.3SG, ^{OK}*xǎr-gǎ kǎn-ǎd* eat-PART do-IMP.3SG “let him eat”) imperatives;
- with preverbs (**ba-xǎr-gǎ* PV-eat-PART, ^{OK}*xǎr-gǎ ba-kǎn* eat-PART PV-do[IMP.2SG] “eat”).

5.2. The passive construction

The standard passive, as described in grammars of Ossetic, is formed by using the past-tense participle and an auxiliary verb *wǎvən* ‘to be’, *vǎjjən* (habitual verb of being) or *sǎwən* ‘to go’ which agrees with the patient; the agent is marked by ablative, the patient — by Nominative:

(28) *xāzar kušž-ət-āj arāžt u*
 house worker-PL-ABL build.PART.PST be.PRS.3SG
 “The house has been built by workers”

(29) *xāzar kušž-ət-āj arāžt sǎw-ə*
 house worker-PL-ABL build.PART.PST go-PRS.3SG
 “The house is being built by workers”

Our data show, however, that there is another passive construction where *-gǎ* is used. It is formed by using the form in *-gǎ* and an auxiliary *wǎvən* ‘to be’ which agrees with the patient.

(30) *sjužet kǎn-gǎ u afǎqo-jǎ*
 script do-PART be.PRS.3SG Afaqo-ABL
 “The script was made by Afaqo” (Max Dug, № 8, 2002, p. 127)

As seen in (30), the agent is marked by ablative. The construction in (30) is probably the result of passivization of the emphatic construction with *kǎnən* (see section 5.1 above) with the light verb replaced by the auxiliary *wǎvən* ‘to be’.

The form in *-gǎjǎ* cannot be used in the passive construction.

5.3. The construction of deontic necessity

-gǎ can also be used in a “quasi-passive” construction of deontic necessity. It consists of the *-gǎ* form and an auxiliary *wǎvən* ‘to be’ which agrees with the patient (with transitive verbs) or is used in 3SG (with intransitive verbs); the Obligee is marked by Dative:

(31) *žawər-ǎn asə čingʷə-t-ǎ kǎš-gǎ štə*
 Zaur-DAT this book-PL-NOM read-PART be.PRS.3PL
 “Zaur must read these books”

(32) *mǎn-ǎn a-sǎw-gǎ(-jǎ) u*
 1SG-DAT PV-go-PART(-ABL) be.PRS.3SG
 “I have to go”

The only thing that distinguishes the construction of deontic necessity from an ordinary passive when it is used with transitive verbs is dative-marking of the subject. The dative is also usually positioned in the beginning of the sentence, while the ablative is either in the middle or at the end of the sentence. Since clause-internal word order in Ossetic is free, this is not a strict rule, but simply a tendency.

The construction of deontic necessity can also be used with non-agentive verbs:

(33) *...sǎr-gǎ ǎmǎ mǎl-gǎ kǎmǎn u, wǎj tox-ə bǎdər-ə*
 live-PART and die-PART who.DAT be.PRS.3SG 3SG battle-GEN field-IN
ra-vžar-ən-mǎ
 PV-decide-INF-ALL

“(We came here) to decide on the field of battle, who has to live and who has to die”
 (Max Dug, No. 10, 2002, p. 38)

An important observation is that this construction is analogous to the construction expressing inalienable possession (the *mihi est* construction), and the dative marking is also used in benefactive constructions:

(34) *žawər-ǎn iš ǎšǎmǎr*
 Zaur-DAT EXT brother
 ‘Zaur has a brother’

(35) *wəj kuš-ə jǎ = binont-ǎn*
 3SG work-PRS.3SG POSS.3SG=family-DAT
 ‘He works for his family’

Both patterns of non-canonical case marking are observed typologically (NARROG 2010). However, based on the fact that in the possessive construction, the existential form of the verb *wǎvən* ‘to be’, *iš*, is used, and not the copular form *u*, we prefer to link this construction to benefactive, rather than possessive semantics.

If the construction in (31) can be reformulated as “For Zaur, these books are what is read”, then examples such as (32) are an extension of the original construction to intransitive verbs¹⁰. Since *-gǎjǎ* can be used with intransitive verbs as well as *-gǎ*, the *-gǎ* form in (31) could have been reanalyzed as a converb. However, modal use is not typical of converbs; HASPELMATH (1995: 43-45) only lists resultative, perfect and applicative constructions as typologically common periphrastic constructions involving converbs.

When another dative-marked participant is present, it is impossible for two dative NPs or full pronouns to appear simultaneously, e. g.:

(36) **mǎn-ǎn fǎš šǎmax-ǎn argǎvd-gǎ u*
 1SG-DAT ram 2PL-DAT slaughter-PART be.PRS.3SG
 ‘I must slaughter a ram for you’

However, if one of the two datives is expressed via an argumental enclitic, the sentence is grammatical and the clitic invariably denotes the Obligee. This is explained by the fact that this dative is assigned higher in the clause, and it gets obligatorily cliticized to avoid conflict with the other dative-marked NP.

(37) *rajšom = wǎn mǎn-ǎn fǎš argǎvd-gǎ u*
 tomorrow=2PL.ENCL.DAT 1SG-DAT ram slaughter-PART be.PRS.3SG
 ‘Tomorrow you must slaughter a ram for me’, but *‘Tomorrow I must slaughter a ram for you’

¹⁰ One could claim that (32) originally meant something like “to Zaur is going”, i.e. an existential construction. But two objections can be made: (a) if so, the existential copula would be used, as in the possessive construction; (b) the *-gǎ* form does not function as an action noun and there is no evidence that it could do so previously.

We will now go over some common properties exhibited by the two constructions described above. Contamination of the passive construction and the construction of necessity is possible when the Obligee/Agent is not overtly expressed:

- (38) *āxšānad xisān adājmāg-t-āj kǎn-gǎ u*
 society separate person-PL-ABL do-PART be.PRS.3SG
 “The society is made of separate individuals” or “The society must consist of separate individuals” (Bestaev G.G. Works. Vol. 3. Vladikavkaz, 2004, p. 127).

In both constructions described above, any tense-aspect form of the verb *wǎvən* ‘to be’ can be used (except the imperative), including the habitual one:

- (39) *səma kʷəd ǎvǎr-gǎ vǎjj-ə axǎm minǎ?*
 I.wonder how put-PART be.HAB-PRS.3SG such landmine
 “I wonder how such a landmine is usually laid” or “I wonder how must such a mine usually be laid” (Besaeu T.U. Rodnik žizni. Vladikavkaz, 2002, p. 209).

Preverbs can only be attached to the participle form and not to the copula in both passive and modal constructions.

5.4. The possessive construction of necessity

The sentence in (31) can also be reformulated in Ossetic by making the Obligee the genitive possessor of the participle in *-gǎ* (40). As mentioned above, the link between possession and obligation, often without an overt modal marker, is a widespread typological pattern (cf. BHATT 1998, van der AUWERA, PLUNGIAN 1998).

- (40) *asə činəg žawər-ə ǎrba-xǎš-gǎ wəd*
 this book Zaur-GEN PV-carry-PART be[PST.INTR.3SG]
 “This book was to be carried by Zaur”

This construction is not recognized by all of the native speakers. Therefore, it is somewhat marginal compared to other construction mentioned herein.

5.5. The construction of inevitability

Another construction with dative-marking of Obligee is formed by using the *-gǎ* form (*-gǎjǎ* cannot be used), negated by *ǎnǎ* ‘without’, together with the negative form of the existential form *iš* of the verb *wǎvən* ‘to be’. All verbal arguments retain their respective marking:

- (41) *žawər-ǎn alan-ə ǎnǎ = fen-gǎ(*-jǎ) nǎ = j*
 Zaur-DAT Alan-GEN without-PV+see-PART(-ABL) EXT-NEG
 “Zaur definitely will notice Alan”

- (42) *žawər-ǎn ǎnǎ = a-sǎw-gǎ(*-jǎ) nǎ = j*
 Zaur-DAT without-PV-go-PART(-ABL) EXT-NEG
 “Zaur definitely will go”

6. Conclusion

Let us sum up the description above:

1. The primary function of *-gǎ* is participial, while *-gǎjǎ* can only be used converbally for a wide range of meanings, including manner, time, attendant circumstance, condition, cause and concession. Forms in *-gǎ* can also be used converbally, but their domain is very limited. While for most of the native speakers forms in *-gǎ* can only be used in clauses expressing manner and time, for some temporal use of *-gǎ* is prohibited.
2. Being a participle, *-gǎ* can be used in a number of periphrastic (quasi-)passive constructions, while using *-gǎjǎ* is mostly disallowed. The only case where *-gǎjǎ* is allowed can be viewed as an extension of the original construction, where the participle has probably been reanalyzed as a converb.

When used converbally, the two forms also have substantial syntactic differences:

1. While the implicit subject of clauses with *-gǎjǎ* is pragmatically controlled by the most salient participant, the implicit subject of converbal clauses with *-gǎ* is controlled by the linearly closest NP, provided that the resulting interpretation is pragmatically plausible.
2. When a converbal clause with the form in *-gǎ* or *-gǎjǎ* is not clause-initial, “weak” clitic climbing is observed: the clitics may either remain in the converbal clause or attach to the closest constituent of the main clause to the left. The latter position is distinct from the second position of the main clause.
3. When the converbal clause in *-gǎjǎ* (but not in *-gǎ*) is not sentence-initial, any enclitics present in it can ‘climb’ to the main clause and placed after its first constituent.
4. With forms in *-gǎjǎ*, the direct object can be expressed by a possessive proclitic attached to the converb. This is not possible for forms in *-gǎ* used converbally.

Therefore, the syntactic and semantic distributions of the properties of forms in *-gǎ* and *-gǎjǎ* do not align very well on a continuum of “desententiality” such as the one proposed in LEHMANN (1988). In some ways, the form in *-gǎjǎ* is more “nominal” and more integrated into the main clause than the form in *-gǎ*:

1. It carries a still analyzeable ablative case suffix;
2. Its direct objects can be expressed by possessive proclitics;
3. It allows “canonical” clitic climbing into the main clause, while the form in *-gǎ* only allows “weak” clitic climbing.

On the other hand, while *-gǎjǎ* allows both nominal and verbal negation, *-gǎ* only allows the former. Finally, from a semantic point of view converbs in *-gǎjǎ* are much more independent than converbs in *-gǎ*: they can be used in a wide range of adverbial contexts, while the converbal use of forms in *-gǎ* is very limited and is currently becoming even more marginal.

The key to explaining these conflicting properties lies in the prehistory of the forms. The form in *-gǎ* is derived from the ablative *-akā* (THORDARSON 1986) of the Proto-Iranian present participle in **-aka*. As noted by Thordarson, ablative forms of participles are commonly used

in Indo-European languages in so-called absolute constructions (e.g. in Latin *ablativus absolutus*). Therefore, we can assume that the form in *-gǎ* is the result of a contamination of two distinct forms: the ‘participle proper’ in **-aka* and its ablative form in **-akā*. The former is the source for the participle functions of *-gǎ*, the latter is the source for converbal functions.

Since *-gǎ* is both synchronically and diachronically a participle, it is no wonder that the control of the implicit subject of the converb in *-gǎ* is determined by linear order. While synchronically the NP-internal word order in Ossetic is fairly rigid, this was not the case for Old Iranian languages, and we can safely assume that participles could have been separated from their head nouns in Ossetic at some earlier point in time. In the absence of case agreement, they would be more likely associated with the nearest NP, which is what we find in contemporary Ossetic.

The form in *-gǎjǎ*, originally a depictive use of the participle in *-gǎ* (*-gǎjǎ* is the ablative of *-gǎ*, and this case is typically used for depictives in Ossetic), has undergone grammaticalization into a full-fledged converb to overcome the participle-converb ambiguity inherent in *-gǎ*. At present, converbal clauses with *-gǎjǎ* seem to be syntactically and semantically much less integrated into the main clause than clauses with *-gǎ*. This is also reflected in their ability to attach verbal negation. However, they preserve some of the syntactic deranking associated with their prior status: the direct object can be expressed by possessive proclitics, and pronominal enclitics can ‘climb’ into the main clause. This may be supported by the fact that the form in *-gǎjǎ* still contains an analyzeable ablative case suffix.

The co-existence of two same-subject converbs, one of which is semantically restricted and syntactically ambiguous with a participle, is not expected to be a stable linguistic situation. Indeed, what we see in contemporary Ossetic is that the domain of *-gǎ* is shrinking. For some native speakers, it is just a participle that can also be used as a manner adverb. In the long run we can expect the converbal uses of *-gǎ* to disappear altogether, with all its functions performed by the converb in *-gǎjǎ*.

Abbreviations

ABL - ablative case, ALL - allative case, AN - abstract noun; CONTR - contrastive particle, DAT - dative case, DIR - directive case, ENCL - enclitic pronoun, EXT - existential predicate, FUT - future tense, GEN - Genitive case, HAB - habitual aspect, IMP - imperative, IN - inessive-illative case, INDEF - indefinite pronoun, INF - Infinitive, INTR - intransitive verb, IPFV - imperfective preverb, NEG - negation, NOM - nominative case, PART - participle, PL - plural number, POSS - possessive pronoun, PV - (perfective) preverb, PRS - present tense, PST - past tense, REFL - reflexive pronoun, SG - singular number, SUPER - superessive-superlative case, TR - transitive verb

References

- ABAEV, Vasilij I. 1964: *A Grammatical Sketch of Ossetic*. Bloomington: Indiana University; The Hague: Mouton
- ABAEV, Vasilij I. 1970: “Grammatičeskij očerk osetinskogo jazyka” [A Grammatical Sketch of Ossetic]. In: B. B. BIGULAEV, K. E. GAGKAEV, N. Kh. KULAEV (eds.): *Osetinsko-russkij slovar’*. Ordžonikidze: Ir, pp. 543-702
- AKHVLEDIANI, Georgij S. (ed.) 1963: *Grammatika osetinskogo jazyka. Č. 1. Fonetika i morfologija* [A Grammar of Ossetic. Vol. 1. Phonetics and morphology]. Ordžonikidze: NII pri sovete ministrov Severo-Osetinskij ASSR
- van der AUWERA, Johan, Vladimir PLUNGIAN 1998: “Modality’s semantic map”. In: *Linguistic typology* 2, 79-124.
- BAGAEV, Nikolaj K. 1965: *Sovremennij osetinskij jazyk* [Contemporary Ossetic]. T. 1. Ordžonikidze: Severo-osetinskoe knižnoe izdatel’stvo

- BHATT, Rajesh 1998: "Obligation and Possession". In: Heidi HARLEY (ed.): *The Proceedings of the UPenn/MIT Workshop on Argument Structure and Aspect*, MITWPL 32. Cambridge, MA: MIT Press, pp. 21-40
- CARLSON, Gregory N. 1980: *Reference to kinds in English*. New York: Garland
- CREISSELS, Denis 2010: "Specialized converbs and adverbial subordination in Axaxdərə Akhvakh". In: Isabelle BRIL (ed.): *Clause Linking and Clause Hierarchy: Syntax and pragmatics*. Amsterdam: John Benjamins, pp. 105-142
- GAGKAEV, Konstantin E. 1952: *Očerk grammatiki osetinskogo jazyka* [A Sketch of Ossetic Grammar]. Dzaudžikau: Gosudarstvennoe izdatel'stvo Severo-Osetinskoj ASSR
- GAGKAEV, Konstantin E. 1956: *Sintaksis osetinskogo jazyka* [Syntax of the Ossetic language]. Ordžonikidze: Severo-osetinskoe knižnoe izdatel'stvo
- HASPELMATH, Martin 1994: "Passive Participles across Languages". In: Barbara FOX and Paul J. HOPPER (eds.): *Voice: Form and Function*. Amsterdam: John Benjamins, pp. 151-177
- HASPELMATH, Martin 1995: "The converb (adverbial participle, gerund) 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* [Empirical approaches to Language Typology, 13]. Berlin: Mouton de Gruyter, pp. 1-55
- KAZENIN, Konstantin I., Yakov G. TESTELETS 2004: "Where coordination meets subordination: Converb constructions in Tsakhur (Daghestanian)". In: Martin HASPELMATH (ed.): *Coordinating Constructions*. Amsterdam, Philadelphia: John Benjamins
- KEENAN, Edward L., Matthew S. DRYER 2007: "Passive in the world's languages". In: Timothy SHOPEN (ed.): *Language Typology and Syntactic Description. Second edition. Vol. 1: Clause Structure*. Cambridge: Cambridge University Press, pp. 325-361
- 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* [Empirical approaches to Language Typology, 13]. Berlin: Mouton de Gruyter, pp. 57-95
- LEHMANN, Christian 1988: "Towards a typology of clause linkage". In: John HAIMAN, and Sandra A. THOMPSON (eds): *Clause combining in grammar and discourse*. Amsterdam & Philadelphia: John Benjamins, pp. 181-225
- MILLER, Vsevolod F. 1882: *Osetinskie ètjudy. Č.2. Izslëdovanija* [Ossetic Studies. Vol. 2. Investigations]. Moscow: Tipografija byvš. F. B. Millera
- NARROG, Heiko 2010: "Voice and non-canonical case marking in the experssion of event-oriented modality". In: *Linguistic Typology* 14, pp. 71-126
- 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* [Empirical approaches to Language Typology, 13]. Berlin: Mouton de Gruyter, pp. 97-138
- PELLARD, Thomas 2010: "Converbs and desubordination in Ōgami Ryukyuan". In: *Syntax of the World's Languages IV. Book of Abstracts*, http://www.dcl.ish-lyon.cnrs.fr/colloques/SWL_IV/pageweb/pdf/book%20of%20abstracts_4_16sept_DC.pdf, p. 68
- RIZZI, Luigi 1978: "A Restructuring Rule in Italian Syntax". In: Samuel J. KEYSER (ed.): *Recent Transformational Studies in European Languages*. Cambridge, MA: MIT Press, pp. 113-158
- TEKHOV, Fedor D. 1970: *Vyraženie modal'nosti v osetinskom jazyke* [The expression of modality in Ossetic]. Tbilisi: Metsniereba
- THOMPSON, Sandra A., Robert E. LONGACRE, Shin Ja J. HWANG 2007: "Adverbial clauses". In: Timothy SHOPEN (ed.): *Language Typology and Syntactic Description. Second edition. Volume II: Complex Constructions*. Cambridge: Cambridge University Press, pp. 237-300
- THORDARSON, Fridrik 1986: "Ossetisch *nāxsk / uskā* 'Schulter'. Lexikalische Marginalien". In: Prods O. SKJÆRVØ, Rüdiger SCHMITT (eds.), *Studia Grammatica Iranica. Festschrift für Helmut Humbach*. Munich: Kitzinger, pp. 499-511
- THORDARSON, Fridrik 1989: "Ossetic". In: Rüdiger SCHMIDT (ed.): *Compendium Linguarum Iranicarum*. Wiesbaden: Reichert, pp. 456-479
- THORDARSON, Fridrik 2009: *Ossetic Grammatical Studies*. Wien: Verlag der Österreichischen Akademie der Wissenschaften
- VYDRIN, Arseniy P. (forthc.): "Vyraženie imperativnogo značenia v osetinskom jazyke" [The means of expressing Imperative in Ossetic]. To appear in: *Trudy Instituta lingvističeskix issledovanij RAN* (2010)