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# Coded and uncoded valency alternations in Nakh-Daghestanian languages

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## 1. Introduction

The topic of this presentation is the contribution of Nakh-Daghestanian languages to the general typology of valency-changing operations. After a survey of coded and uncoded valency alternations in Nakh-Daghestanian language, I discuss two types of constructions involved in alternations whose relationship to the notion of valency alternation is problematic. The theoretical and terminological framework is the one set up in Creissels 2024.

VALENCY ALTERNATION refers to the possibility that two different coding frames of the same verb, or of two formally related verbs, denote events that differ at most in the assignment of participant roles to individual participants or in the greater or lesser complexity of the causality chain.

CODED VALENCY ALTERNATIONS (or VOICE ALTERNATIONS) may be MORPHOLOGICALLY ORIENTED, in the sense that one of the two constructions (the DERIVED CONSTRUCTION) involves more morphological material than the other (the BASE CONSTRUCTION). However, coded valency alternations may also involve EQUIPOLLENT CODING.

FLEXIVALENCY is the term I use to characterize the verbs that have the ability to lend themselves to UNCODED VALENCY ALTERNATIONS OF ANY KIND. AMBITRANSITIVITY refers to flexivalency alternations involving a change in transitivity.

## 2. Coded valency alternations in Nakh-Daghestanian languages

As regards morphologically oriented valency alternations, in Nakh-Daghestanian languages,

- CAUSATIVE constructions involving verbal coding (section 2.1) are particularly common;
- ANTIPASSIVE constructions involving verbal coding (section 2.2) are less common than causative constructions, but still relatively widespread;
- DECAUSATIVE or PASSIVE constructions involving verbal coding (sections 2.3 and 2.4) are rare;
- coded valency alternations expressing REFLEXIVIZATION are exceptional, but not entirely unknown (section 2.2);

– as far as I am aware of, coded valency alternations expressing APPLICATIVIZATION or RECIPROCALIZATION are not attested.[1]

Noncausal-causal alternations involving equipollent coding (section 2.5) are also relatively common.

## 2.1. Causativization

### *2.1.1. Constructions meeting the narrow definition of causativization*

In the narrow sense of the term, causativization refers to morphologically oriented valency alternations in which the derived construction implies an additional participant in the semantic role of causer, coded as the A term of a transitive construction. If the base construction is intransitive, the participant coded as S in the base construction is coded as P in the derived construction, as in (1). In languages with ergative alignment in its most typical form, this means that the coding characteristics of the initial S are not modified in the causative construction. In (1), formally, the only difference between the causative construction and the base construction, apart from the presence of a causative marker in the verb form, is the mere addition of an ergative-marked noun phrase representing the causer. [2]

(1) Avar (Mallaeva & al. 2018)

(1a) *was w-orč'-ana.*
boy $I_{S/P}$:M-wake.up-CPL
'The boy wake up.'

(1b) *ebel-ał was w-orč'-iza-w-una.*
mother-OS(ERG) boy $I_{S/P}$:M-wake.up-CAUS- $I_{S/P}$:M-CPL
'The mother awakened the child.'

Example (2) shows that this also applies to bivalent verbs that do not select the transitive construction as their coding frame, such as Northern Akhvakh *hariguruƛa* 'see': the coding frame of this verb is <DAT, ZERO>, and the coding of the two essential participants is maintained without any change in the causative construction.

(2) Northern Akhvakh

(2a) *di-ƛa č'ĭda-be miq̄'i harig$^{w}$-ari.*
1SG.OS-DAT new-N road see-CPL
'I saw the new road.' lit. 'The new road got visible to me.'

(2b) *hu-s̄$^{w}$-e di-ƛa č'ĭda-be miq̄'i harig$^{w}$-a:ri.*
DEM-OS.M-ERG 1SG.OS-DAT new-N road see-CAUS.CPL[3]
'He showed me the new road.' lit. 'He made the new road visible to me.'

[1] In Nakh-Daghestanian languages, reflexivization and and reciprocalization are regularly expressed by means of special pronouns.

[2] Note that, in Avar, causative verb forms include an additional agreement slot immediately after the causative marker *-iza-*.

[3] *-āri* is the contraction of *-aj-ari*, where *-aj-* is the causative marker.

If the base construction is transitive, the treatment of the initial A and P depends on language specific rules. Example (3) illustrates a type of causative construction of transitive verbs particularly widespread in Nakh-Daghestanian languages. In this construction, the initial P undergoes no change, whereas the initial A is converted into an oblique marked by a spatial case (here, the superessive).

(3) Avar (Mallaeva & al. 2018)

(3a) *jas-ał* *karš* *ha-b-una.*
girl-OS(ERG) soup make-$I_{S/P}$:N-CPL
'The girl cooked the soup.'

(3b) *di-ca* *jas-al-da* *karš* *ha-b-iza-b-una.*
1SG.OS-ERG girl-OS-SUPESS soup make-$I_{S/P}$:N-CAUS-$I_{S/P}$:N-CPL
'I made the girl cook the soup.'

However, example (4) shows that, in causative constructions of transitive verbs, the coding of the causee as an oblique in a spatial case or as a P in the zero case may depend on the fact that the initial P is expressed or not.

(4) Northern Akhvakh

(4a) *mik'i-de* *ɬ̄eni* *c̄'ar-ari.*
child.OS-ERG water drink-CPL
'The child drank water.'

(4b) *ek'$^{w}$a-s̄$^{w}$-e* *mik'i-ge* *ɬ̄eni* *c̄'ar-āri.*
man-OS.M-ERG child.OS-LOC water drink-CAUS.CPL[4]
'The man made the child drink water.'

(4c) *ek'$^{w}$a-s̄$^{w}$-e* *mik'e* *c̄'ar-āri.*
man-OS.M-ERG child drink-CAUS.CPL
'The man made the child drink.'

### *2.1.2. Synthetic and analytical causatives*

Examples (1) to (4) above illustrate SYNTHETIC causatives, in which the verb in the causative construction includes a causative affix, but more or less grammaticalized CAUSATIVE PERIPHRASES are also very common in Nakh-Daghestanian languages. Semantically, when both options are available, synthetic causatives tend to specifically express direct causation, whereas analytical causatives typically express indirect causation.

Interestingly, some languages in their present state illustrate the transition from analytical causatives to synthetic causatives. This is in fact the case in Avar. As shown in (5), the causative suffix of Avar illustrated in (1) and (3) emerged from the univerbation of the analytical causative construction in which *ha-b-ize* 'do, make' is immediately preceded by the infinitive of another verb. In this process, the emerging causative suffix *-iza-* results from the fusion of the infinitive suffix *-ize* and the root *ha-* 'do'.

[4] *-āri* is the contraction of *-aj-ari*, where *-aj-* is the causative marker.

(5) Avar (Mallaeva & al. 2018)

(5a) *ebel-ał* *was* *w-orč'-**iza**-w-una.*
mother-OS(ERG) boy $I_{S/P}$:M-wake.up-**CAUS**-$I_{S/P}$:M-CPL
'The mother awakened the boy.' (synthetic causative)

(5b) *ebel-ał* *was* *w-orč'-**ize*** ***ha**-w-una.*
mother-OS(ERG) boy $I_{S/P}$:M-wake.up-**INF** **do**-$I_{S/P}$:M-CPL
'The mother awakened the boy.' (analytical causative)

Generally speaking, some causative periphrases (as for example the Russian causative constructions involving verbs such as *zastavit'* / *zastavljat'*) can be analyzed as BICLAUSAL CONSTRUCTIONS with a verb expressing causation as the nucleus of the matrix clause. Others (as for example the French 'make'-causatives) can be analyzed as MONOCLAUSAL CONSTRUCTIONS whose nucleus is a COMPLEX PREDICATE consisting of the lexical verb and another verb acting as a causative auxiliary. However, the evaluation of the degree of integration of causative periphrases is a complex question, which cannot be addressed in detail in this presentation. In the case of Avar, the repetition of the S/P index on the lexical verb and the causative auxiliary, as in (5b), can be viewed as evidence of monoclausality. See Daniel & al. (2012) for a detailed discussion of this question in Agul.

As regards the original meaning of the verbs expressing causation in analytical causatives, example (5b) illustrates an analytical causative in which the causative verb/auxiliary is a verb that also exists with the meaning 'do, make', but verbs with meanings such as 'give' (6), 'let', 'put', 'drive' or 'send' are also found in the causative periphrases of Nakh-Daghestanian languages.

(6) Rutul (Makhmudova 1999: 230)
*z-a* *Ismet-de* *elidzij* *v-uʔule-s* *vɨ-ri.*
1SG-ERG Ismet-ADESS pizza $I_{S/P}$:III-eat-INF give-CPL
'I made Ismet eat a pizza.'

*2.1.3. Restrictions on causativization*

Depending on language-specific rules, causativization may be subject to conditions on the source construction. Agul can be mentioned as a language with very few restrictions on 'do'-causatives (Daniel & al. 2012). In particular, in Agul, as illustrated in (7), double causatives in which the same marker or auxiliary occurs twice are allowed.

(7) Agul (Daniel & al. 2012)
*ħadad.a* *zun* *gada.ji-w* *ħabawa-s* *k'eǯ* *lik'.a-s*
grandfather.ERG 1SG.ERG son-ADESS grandmother-DAT letter write.IPFV-INF
*q'.a-s* *q'.u-ne.*
do.IPFV-INF do.PFV-CPL
'Grandfather made me make my son write a letter to the grandmother.'

As a rule, synthetic causatives are subject to stronger restrictions than analytical causatives. In Lezgi (Haspelmath 1993a: 163), the overwhelming majority of the verbs that lend themselves to morphological causativization are intransitive, whereas causativization of transitive verbs is

productively expressed by means of a periphrasis in which *tun* ‘make’ takes an infinitival complement clause. According to Haspelmath (1993a: 358), in the *tun*-periphrasis of Lezgi, there is no reason to analyze *tun* as a causative auxiliary rather than an ordinary complement-taking verb.

In Avar, as illustrated in (8), transitive verbs lend themselves to ‘make’-causativization (in either its synthetic or analytical variant). However, in contrast to the situation observed in other languages, ‘make’-causatives cannot be further causativized by repeating the causative auxiliary/marker (Mallaeva & al. 2018). In (8b), ‘make feed’ (where ‘feed’ is the causative derivate of ‘eat’) is expressed by means of a causative periphrasis in which *t’amize* ‘put, let’ takes an infinitival complement.

(8) Avar (Mallaeva & al. 2018)

(8a) *ebel-aɬ* *jas-al-da* *čed* *kʷana-za-b-una.*
mother-OS(ERG) girl-OS-SUPESS bread eat-CAUS- $I_{S/P}$:N-CPL
‘The mother fed bread to the girl (made the girl eat bread).’

(8a) *ebel-aɬ* *dun* *t’ama-na* *jas-al-da* *čed* *kʷana-za-b-ize.*
mother-OS(ERG) 1SG put-CPL girl-OS-SUPESS bread eat-CAUS- $I_{S/P}$:N-INF
‘The mother made me feed bread to the girl.’
lit. ‘...put me to make the girl eat bread’

### *2.1.4. A case study: synthetic / analytical causatives and restrictions on causativization in Northern Akhvakh*

Akhvakh has two causative suffixes *-a(j)-* and *-ut’-* in complementary distribution. They are semantically equivalent, and their distribution is entirely determined by the phonological structure of the verb root: *-ut’-* is selected by roots whose underlying form ends with *...a(j)*, *-a(j)-* occurs in all the other cases. The suffix *-ut’-* has an optional variant *-ut’a(j)-*.[5]

The suffix *-ut’- ~ -ut’a(j)*, like Avar *-iza-*, is a ‘young’ suffix, still in free variation with the analytic construction from which it developed. In this construction, *bit’uruƛa ~ bit’ōruƛa* ‘straighten, direct’ (root *-it’- ~ -it’a(j)*) in causative operator function combines with the short form of the infinitive of another verb, as in (9).[6]

(9) Northern Akhvakh

(9a) *hani-da* *surilāri.*
village-INT get.ashamed.CPL[7]
‘The whole village got ashamed.’

[5] A plausible explanation of the free variation that affects the Northern Akhvakh verb *bit’uruƛa ~ bit’ōruƛa* and the causative suffix that developed from it is that this verb was borrowed from Avar *bit’ize*. In Avar *bit’ize* is P-ambitransitive, and consequently the variation observed in Akhvakh might be the result of the incomplete adaptation of a P-ambitransitive verb borrowed from a language in which this kind of ambitransitivity is common (Avar) to the transitivity system of a language which has a very strong preference for the use of causative marking (Akhvakh).

[6] The infinitive suffix of Northern Akhvakh has a long variant *-uruƛa* and a short variant *-u*. These two variants are semantically equivalent and largely interchangeable, but the long variant is the only one given by speakers as the citation form of verbs, whereas the short variant is the only one occurring in the causative periphrasis with *bit’uruƛa ~ bit’ōruƛa*.

[7] *surilāri* results from the reduction of *surila(j)* (verb root) + *-ari* (TAM marker).

(9b) *hani-da* *surilōt'āri* *hudu-s̄ʷ-e.*
village-INT get.ashamed.CAUS.CPL[8] DEM-OS.M-ERG
'He brought shame on the whole village.'

(9c) *hani-da* *surilō* *b-it'āri* *hudu-s̄ʷ-e.*
village-INT get.ashamed.INF[9] $I_S$:N-straighten.CPL[10] DEM-OS.M-ERG
same meaning as (b)

In contrast to the 'young' causative suffix *-ut'-* ~ *-ut'a(j)*, the suffix *-a(j)-*, whose variant *-a-* fuses with the inflectional ending of the verb (as in (2) and (4) above), has cognates in the other Andic languages and shows all characteristics of 'old' affixes. There is some evidence that both the causative suffix *-a(j)-* and the ending *a(j)-* of some verb stems are reflexes of an ancient verb 'do, make' that was used in analytical causatives and in light verb constructions. In fact, a plausible hypothesis is that the complementary distribution that can be observed between the two causative suffixes found in present-day Akhvakh has its origin in a rule prohibiting the use of 'do' to causativize *do*-compounds, whose causativization required the use of a distinct auxiliary.

As regards the restrictions on causativization, in Northern Akhvakh, morphological causativization of intransitive verbs is equally exceptional with the suffixes *-a(j)-* and *-ut'-* and with the causative auxiliary *bit'uruƛa*. Causatives from transitives are easily accepted in elicitation, but this is probably due to the influence of Avar, since in spontaneous texts, the verbs of ingestion are the only ones commonly found in causative constructions. In fact, Northern Akhvakh seems to have no conventionalized way of expressing causation with transitive verbs. In elicitation, Akhvakh speakers render causative constructions involving transitive verbs (other than ingestion verbs) by combining the infinitive with *t'ōnuƛa* 'throw' (cognate with the Avar verb *t'amize* mentioned above), but I have found very few attestations of this construction or of any other construction analyzable as a causative periphrasis in spontaneous texts.

### *2.1.5. Uses of causative morphology that do not meet the narrow definition of causativization*

It is cross-linguistically usual that causative morphology does not always encode the addition of a participant in the role of causer, and has other uses that only have in common that the participant selected as the A term of the derived construction can be viewed as occupying the initial position in the causality chain. In example (10), causative morphology marks an increase in the agentivity of a participant, which can be analyzed as a combination of (overt) causativization and (covert) reflexivization ('learn' = 'make self know').

(10) Northern Akhvakh

(10a) *hu-s̄ʷ-a* *ʕara* *mic̄'i* *b-eq'-id-e.*
DEM-OS.M-DAT Arabic language $I_S$:N-know-ICPL-$I_S$:N
'He knows Arabic.'

[8] *surilōtāri* results from the reduction of *surila(j)* (verb root) + *-ut'a(j)* (causative marker) +*-ari* (TAM marker).
[9] *surilō* results from the reduction of *surila(j)* (verb root) + *-u* (infinitive suffix).
[10] *-it'āri* results from the reduction of *-it'a(j)* (verb root) + *-ari* (TAM marker).

(10b) *hu-s̄$^{w}$-e* *ʕara* *mic̄'i* *b-eq'-āri.*
DEM-OS.M-ERG Arabic language $I_P$:N-know-CAUS.CPL[11]
'He learnt Arabic.' i.e. 'He made (himself) know Arabic.'

In (11), sentence (b) (like its English equivalent) is ambiguous between an interpretation according to which the construction is causative in the narrow sense of this term ('The man consciously did something with the intention of scaring the child') and an interpretation according to which the causative suffix just marks the selection of the stimulus in a psychological event as the A term of a transitive construction ('By his appearance, the man inspired fear in the child').

(11) Northern Akhvakh
(11a) *mik'e* *ek'$^{w}$a-s̄u-gune* *ƛ̄eri.*
child man-OS.M-ABL fear.CPL[12]
'The child feared the man.'
(11b) *ek'$^{w}$a-s̄$^{w}$-e* *mik'e* *ƛ̄ib-āri.*
man-OS.M-ERG child fear-CAUS.CPL[13]
'The man frightened the child.'

Rochant (2018: 85-91) discusses in detail the uses of causative morphology in Andi that variously depart from the narrow definition of causative morphology as encoding the addition of a participant in the role of causer, as for example 'touch something with the hand' expressed literally as 'make the hand touch something', cf. (12).

(12) Andi (Rochant 2018: 85-86)
(12a) *Den* *obi* *r-ek̄'ub* *čajnik'u-ʔa.*
1SG touch.CPL N-hot teapot-LOC
'I touched the hot teapot.'
(12b) *Den-ni* *reʔa* *oboł̄i* *r-ek̄'ub* *čajnik'u-ʔa*
1SG-ERG hand touch.CAUS.CPL N-hot teapot(N)-LOC
'I touched the hot teapot with the hand.' lit. 'I made the hand touch the hot teapot.'

It has also been observed that the repetition of a causative marker may express meanings other than double causativization (Kulikov 1993). Among Nakh-Daghestanian languages, such a situation has been described in Hunzib by van den Berg (1995: 107–8). In Hunzib, when the causative suffix occurs twice on an intransitive verb, the meaning is double causativization, but when the causative suffix occurs twice on a transitive verb, the double occurrence of the causative suffix implies intensity of causation ('force s.o. to do s.th.'), but no extra participant is added.

[11] *-āri* results from the reduction of the underlying sequence *-aj-ari*, where *-aj-* and *-ari* are the causative marker and the completive marker, respectively.
[12] *ƛ̄eri* results from the reduction of *ƛ̄ib* (verb root) + *-ari* (TAM marker).
[13] *-āri* results from the reduction of *-aj* (causative suffix) + *-ari* (TAM marker).

## 2.2 Antipassivization

### *2.2.1. General properties of Nakh-Daghestanian antipassive constructions involving verbal coding*

Uncoded active-antipassive alternation will be dealt with in Section 3.1. Among Nakh-Daghestanian languages, verb-coded antipassive constructions are found in Avar, in some Andic languages (e.g. Godoberi), and in all Tsezic languages except Khwarshi. However, as discussed by Comrie & al. (2021), in Nakh-Daghestanian languages, the markers that trigger antipassivization of transitive verbs also combine with intransitive verbs. What is constant in the markers in question is that they express aspectual values such as durative, iterative, or habitual. The fact that they also trigger a change in the construction or not depends on the nature of the source construction. For example, in Bezhta, as illustrated by examples (13) to (16), the aspectual suffix *-la ~ -da ~ -ya ~ -wa* has the following effect on the construction of the verb to which it attaches:

- intransitive verbs whose coding frame includes a single core term in the zero case: no change, as in (13);
- intransitive verbs whose coding frame includes a single core term in the ergative: the single core term shows up in the zero case, as in (14);
- transitive verbs (i.e., verbs whose construction includes both an ergative core term (A) and a core term in the zero case (P)): the initial A shows up in the zero case, whereas the initial P is either left unexpressed, or expressed as an oblique (antipassivization), as in (15) & (16).

(13) Bezhta (Comrie & al. 2021)
(13a) *öždä b-ogi<ba>c'-iyo.*
boy.PL HPL-jump<PL>-CPL
'The boys jumped once.'
(13b) *öždä b-ogi<**ya**-ba>c-ca.*
boy.PL HPL-jump<***YA***-PL>-CPL
'The boys jump many times.'

(14) Bezhta (Comrie & al. 2021)
(14a) *öždi öhƛö-yö.*
boy.ERG cough-CPL
'The boy coughed (once).'
(14b) *öžö öh-**dä**-yö.*
boy.PL cough-***DA***-CPL
'The boy was coughing.'

(15) Bezhta (Comrie & al. 2021)
(15a) *öždi xo y-ü$^{n}$q-čä.*
boy.ERG meat(IV) $I_{S/P}$:IV-eat-PRS
'The boy eats the meat.'

(15b) *öžö xo-lo-d Ø-üⁿq-**dä**-š.*
boy(I) meat-OS-INS $I_{S/P}$:I-eat-***DA***-PRS
'The boy is busy eating the meat.'

(16) Bezhta (Comrie & al. 2021)
(16a) *öždi t'ek kib-ba-l niƛ-iyo.*
boy.ERG book girl-OS-ALL give-CPL
'The boy gave the book to the girl.'
(16b) *öžö kib-ba-l t'ek-lā-d niƛ-**da**-s.*
boy girl-OS-ALL book-OS-INS give-***DA***-PRS
'The boy is giving books to the girl.'

*2.2.2. Antipassive markers also used to mark other types of valency changes*

Cross-linguistically, the markers used to code antipassivization are often also used to code other types of detransitivizing operations. This is not common in Nakh-Daghestanian languages.

However, in Bezhta and Hinuq, the suffix whose antipassive use has been illustrated in section 2.2.1 also has a reflexive use, but only with the verb 'wash'. In Bezhta, the antipassive form of 'wash' can have the regular antipassive interpretation, but also the purely reflexive interpretation 'wash (oneself)' without durative/iterative semantics. In Hinuq, the antipassive form of 'wash' can only have the reflexive interpretation (Comrie & al. 2021).

In Kryz, according to Authier (2009), antipassivization involving verbal coding is found only with the verbs 'eat' and 'drink', and the suffix marking antipassivization of 'eat' and 'drink' is a detransitivizing suffix productively used in passive function (see section 2.3).

**2.3. Passivization**

In passivization, the participant encoded as the A of a transitive construction is backgrounded, but still present semantically. Depending on language-specific rules, it may be expressed as an oblique, or left unexpressed. Passivization involving derived verb forms or passive periphrases is not common among Nakh-Daghestanian languages.

Kryz has a verbal derivation described by Authier (2009: 165-167) as 'mediopassive', but judging from the examples he provides, this verbal derivation should rather be identified as passive, since the participant encoded as A in the source construction cannot be expressed, but is still present semantically.

According to Schultze (2014: 210), in Udi, the motion verb 'to go' "has developed into a full-fledged passive marker, at least in the dialect of Vartashen".

**2.4. Decausativization**

In decausativization (aka anticausativization), the participant encoded as the A of a transitive construction is not just backgrounded, as in passivization, but eliminated from the participant structure.

According to Haspelmath (1993a: 165-166), Lezgi has a decausative construction involving analytical verb forms consisting of the stem of the base verb combined with the verb *x̂un* 'become, be', as for example *aq'al-un* 'close (tr.) > *aq'al x̂un* 'close (intr.).

However, in Lezgi, with some verbs, the process denoted by the intransitive member of such pairs is not inactive, as in *čünüxun* 'hide (tr.)' > *čünüx x̂un* 'hide (intr.), hide oneself', or *ewlenmišun* 'marry' > *ewlenmiš x̂un* 'get married'. In such cases, the construction must rather be characterized as 'autocausative' (Geniušienė 1987) or 'quasi-reflexive (Creissels 2024).

### 2.5. Equipollent coding of valency alternations

Intransitive/transitive verb pairs in which the two members of the pair share the same stem but do not differ in morphological complexity are not rare in Nakh-Daghestanian languages. Such pairs are typically found with compound verbs consisting of a non-verbal word (often a borrowing) and a light verb. Semantically, they can be characterized as noncausal-causal pairs.

For example, in Lezgi, *qʰsan x̂un* 'improve (intr.)' consists of the adjective *qʰsan* 'good' and the light verb *x̂un* 'become', whereas *qʰsan-ar-un* 'improve (tr.)' is formed by adding the causative suffix to the same stem (Haspelmath 1993a: 117).

In Hinuq, compound verbs formed on Avar borrowings typically come in pairs such as *ħadur-iq-* 'be prepared' / *ħadur-uː-* 'prepare', where the Avar adverb *ħadur* 'ready' combines with the light verbs *-iq-* 'become, happen' and *-uː-* 'do, make' (Forker 2013: 334).

## 3. Uncoded valency alternations in Nakh-Daghestanian languages

### 3.1. A-ambitransitivy

In A-ambitransitivity, the A term in the construction of a verb used transitively corresponds to the S term in the construction of the same verb used intransitively. In the intransitive construction, the participant coded as the P of the transitive construction may be coded as an oblique, or left unexpressed.

Given the predominance of ergative alignment in Nakh-Daghestanian languages, A-ambitransitivity implies a change in the coding of the A/S argument, as in (17).

(17) Godoberi (Kibrik 1996: 117)

(17a) *makʼi-**di*** *šĩwu* ***b**-aʔaχa.*
child-**ERG** milk **I$_{S/P}$:N**-suck.CPL
'The baby sucked milk.'

(17b) *makʼi* ***w**-aʔaχa.*
child **I$_{S/P}$:M**-suck.CPL
'The baby sucked.'

Consequently, A-ambitransitivity is more 'visible' (and less problematic) in languages with ergative alignment than in languages with accusative alignment.[14]

In most Nakh-Daghestanian languages, A-ambitransitivity is a lexical property of a very limited set of verbs. The situation is different in Dargi languages.

Dargi languages have a relatively productive TRANSITIVE-ANTIPASSIVE ALTERNATION involving no specific coding on the verb, whose analysis is made difficult by the fact that, in Dargi languages, the morphological case labeled 'ergative' is used to flag not only agents, but also some types of obliques, such as instrumental adjuncts. The instrumental case is also the case used in the intransitive construction of A-ambitransitive verbs to flag the oblique term corresponding to the P of the transitive construction, which may give the (false) impression that the core terms of the transitive construction exchange their roles, as in example (18).

(18) T'ant'i Dargi (Sumbatova & Lander 2014: 270)

(18a) *murad-li t'ant'i-d qul-re **d**-irq'-u-le=sa-**j**.*
Murad-ERG T'ant'i-NPL(LOC) house-PL **$I_{S/P}$:NPL**-make.IPFV-PRS-CVB=COP-**$I_A$:M**
'Murad is building houses in T'ant'i.' (transitive construction)

(18b) *murad t'ant'i-w qul-ra-li **w**-irq'-u-le=sa-j.*
Murad T'ant'i-M(LOC) house-PL-ERG **$I_{S/P}$:M**-make.IPFV-PRS-CVB=COP-**$I_{S/P}$:M**
'Murad is building houses in T'ant'i.' (intransitive construction)

The observation of agreement is decisive for a correct analysis of A-ambitransitivity in Dargi languages. As illustrated by example (18a), in the basic transitive construction, both A and P act as agreement controllers: in the glosses, M (masculine) indicates agreement with the agent *Murad*, whereas NPL (non-human plural) indicates agreement with the patient *qul-re* 'houses'. By contrast, ergative-marked obliques do not intervene in agreement mechanisms, and in intransitive predication, all agreement mechanisms are controlled by the sole core term. Consequently, the fact that all the agreement marks in (18b) are masculine shows that the patient has been demoted to ergative-marked oblique, and that the zero-marked noun phrase representing the agent is the S term of an intransitive predication.

### 3.2. P-ambitransitivy

In P-ambitransitivity, the P term in the construction of a verb used transitively corresponds to the S term in the construction of the same verb used intransitively. In the intransitive construction, the participant coded as the A of the transitive construction may be coded as an oblique, or left unexpressed.

Two semantic varieties of P-ambitransitivity must be distinguished:

– in the UNCODED NONCAUSAL-CAUSAL ALTERNATION, as in causativization or decausativization, the intransitive construction does not imply the involvement of a participant corresponding to the A term of the transitive construction, as in English *I broke the glass / The glass broke;*

[14] For example, clauses such as English *The child ate (the soup)* are often quoted to illustrate the notion of A-ambitransitivity. However, in English, *The child ate* can also be analyzed as a P-less transitive clause in which the omission of the P term expresses reference to non-specific patients.

– in the UNCODED ACTIVE-PASSIVE ALTERNATION, as in passivization, the intransitive construction expresses backgrounding of participant expressed as the A of the transitive construction, in the sense that, even if it is left unexpressed, this participant remains present at semantic level, as in English *I am washing the cloth / The cloth washes easily.*[15]

In the languages that have ergative alignment, P-ambitransitivity implies no change in the coding of the P/S argument, which may be a source of difficulties in the analysis.

### *3.2.2. The uncoded noncausal-causal alternation*

In the uncoded noncausal-causal alternation, the S of the intransitive construction undergoes the same process as the P of the transitive construction of the same verb, but no agent is implied.

(19) Godoberi (Kibrik 1996: 109)
(19a) *im-u-di* *hincu* *χʷabi.*
father-OS-ERG door open.CPL
'Father opened the door.'
(19b) *hincu* *χʷabi.*
door open.CPL
'The door opened.'

(20) Avar
(20a) *mat'u* *b-ek-ana.*
mirror(N) $I_{S/A}$:N-break-CPL
'The mirror broke.'
(20b) *aħmad-i-ca* *mat'u* *b-ek-ana.*
Ahmad(M)-OS-ERG mirror(N) $I_{S/P}$:N-break-CPL
'Ahmad broke the mirror.'

The productivity of the uncoded noncausal-causal alternation in individual languages can be evaluated by means of the questionnaire of 31 verb pairs proposed by Haspelmath (1993) to investigate the cross-linguistic variation in the choice between the possible strategies for encoding verb pairs that can be characterized semantically as noncausal vs. causal:

– the noncausal verb and its causal counterpart may be formally unrelated (suppletivism);
– the noncausal verb and its causal counterpart may be identical (ambitransitivity);
– the causal verb may morphologically derive from its noncausal counterpart (causative derivation);
– the noncausal verb may morphologically derive from its causal counterpart (decausative derivation);

[15] In English, the uncoded active-passive alternation is limited to the expression of characteristic properties of the patient, excluding reference to concrete situations involving specific agents. Some other languages (for example Bambara (Mande)) have zero-coded passives that do not have this restriction.

– the noncausal-causal pair may involve equipollent marking (equipollent derivation).

Across Nakh-Daghestanian languages, there is important variation in the relative productivity of the strategies available for the coding of the noncausal-causal alternation. The ambitransitivity strategy is very productive in Avar, but most Nakh-Daghestanian languages make a limited use of ambitransitivity in the noncausal-causal alternation. The following table compares the coding of the 31 noncausal/causal pairs included in Haspelmath's (1993b) questionnaire in four Nakh-Daghestanian languages.[16]

| | Avar | Lezgi | Tsez | Akhvakh |
|---|---|---|---|---|
| causative derivation | 9 | 12 | 18 | 26 |
| decausative derivation | 0 | 8 | 3 | 0 |
| equipollent derivation | 0 | 6 | 8 | 0 |
| P-ambitransitivity | 20 | 5 | 0 | 4 |
| suppletivism | 2 | 0 | 1 | 1 |

Table 1: The coding of the noncausal/causal pairs included in Haspelmath's (1993b) questionnaire in four Nakh-Daghestanian languages

*3.2.1. Uncoded active-passive alternation, or omission of unspecified participants?*

As discussed by Haspelmath (1993a: 287-289) for Lezgi, in Nakh-Daghestanian languages, it is generally possible to leave unexpressed, not only specific participants whose identity can be recovered from the context (a phenomenon commonly called 'pronoun dropping'), but also non-specific participants, without changing anything else in the construction of the clause. A-less transitive clauses and S-less intransitive clauses can thus be used as the equivalent of English clauses in which the subject is *they* interpreted as referring to an unspecified group of people, or (if the verb is transitive) as the equivalent of English agent-less passive clauses.

In the case of transitive clauses, it might be tempting to analyze this phenomenon as an instance of uncoded active-passive alternation, but a strong argument against this analysis is that unspecified argument omission is not limited to the A term of the transitive construction.

For example, in Akhvakh, the sentences in (21) could be analyzed as instances of uncoded active-passive alternation. However, in the absence of any compelling evidence supporting the passive analysis, the unspecified A omission analysis must be preferred, since unspecified argument omission can also concern for example dative-marked experiencers of intransitive verbs such as 'see' in example (22).

(21) Northern Akhvakh

(21a) *ima-sːu* *amru-ɬ̄i-gułō* *ƛ̄'ʷarō* *gudi* *ek'ʷa.*
imam-OS.M(GEN) order-OS.N-MDTV kill.CVB.$I_{S/P}$:M COP.$I_{S/P}$:M man
'They killed the man / the man was killed on the orders of the Imam.'
lit. '*Ø* killed the man on the orders of the Imam'

(21b) *1936-liƛ̄'a* *reše-ɬ̄i,* *kaχuzi* *ʕuc̄'il-āri,*
1936-ORD year-OS.N(LOC) kolkhoz organize-CPL

[16] The data for Avar, Lezgi and Tsez are taken from the World Atlas of Transitivity Pairs (http://watp.ninjal.ac.jp).

*ħēma-na-la* *r-eƛ-ari* *kaχuzi-ƛ̄a.*
cow-PL-and $I_{S/P}$:NPL-lead-CPL kolkhoz-ALL
'In 1936 the kolkhoz was organized, and the cows were led to the kolkhoz.'
lit. '... Ø organized the kolkhoz and Ø led the cows to the kolkhoz'

(21c) *aš$^{w}$a-ƛ̄i* *reʔũ-ɬ̄i-ge* *boq'oda* *miᵓ'i* *m-ač-ide.*
Akhvakh-GEN district-OS.N-LOC four language(N) $I_{S/P}$:N-speak-PRS
'Four languages are spoken in the Akhvakh district.'
lit. 'In the Akhvakh district Ø speak four languages.'

(22) Northern Akhvakh
*beča-ge* *ãži* *harig-ere* *godi.*
mountain-LOC snow see-PROG.N COP.N
'One can see snow on the mountain.'

### 3.3. Others

Flexivalency alternations other that A-ambitransitivity and P-ambitransitivity are rarely mentioned in descriptions of Nakh-Daghestanian languages. Example (23) illustrates a case of reflexive ambitransitivity, in which the referent of the subject of 'wash' used intransitively is at the same time the agent and the patient of the washing event.

(23) Northern Akhvakh
(23a) *Aᵓ̄'o-de* *mik'e* *čab-e* *godi.*
woman.OS-ERG child wash-CVB.N $I_{S/P}$:N.COP
'The woman washed the child.'
(23b) *Mik'e* *čab-e* *godi.*
child wash-CVB.N $I_{S/P}$:N.COP
'The child washed.'

Interestingly, as mentioned above, in the Tsezic languages that have verb-coded antipassivization (which is not the case of Akhvakh), the same alternation is coded by means of a suffix more commonly used as an antipassive marker.

## 4. The involuntary agent construction

The term INVOLUNTARY AGENT CONSTRUCTION is commonly used with reference to intransitive constructions of typical transitive verbs (i.e., of transitive verbs whose A represents an agent) meeting the following conditions:

- as in the noncausal-causal alternation, the S of the involuntary agent construction corresponds semantically to the P of the transitive construction;
- the involuntary agent construction includes an oblique phrase representing an animate participant involved in the causality chain without really being an agent.

Involuntary agent constructions have sometimes be analyzed as transitive constructions with a special marking of the agent. However, an "involuntary agent" is semantically very different from a typical agent, and has more affinities with the semantic role of experiencer. Consequently, involuntary agent constructions are best considered as encoding a complex type of valency-changing operation implying a reshaping of the causality chain. This analysis is supported by the fact that, as observed by Fauconnier, involuntary agent constructions involving decausative marking, as in (24), are cross-linguistically the most widespread strategy for involuntary agent constructions.

(24) Spanish

(24a) *Quebré* *el* *vaso.*
break.CPL. $I_{S/A}$:1SG D.SG.M glass
'I broke the glass (on purpose).'

(24b) *Se* *me* *quebró* *el* *vaso.*
DECAUS to.me break.CPL. $I_{S/A}$:3SG D.SG.M glass
'I broke the glass (by accident).' lit. 'To me the glass got broken.'

Involuntary agent constructions are common in Nakh-Daghestanian languages. However, due the scarcity of detransitivizing markers in Nakh-Daghestanian languages, they mainly involve other strategies, whose analysis may be less obvious. Three possible variants are attested, illustrated in examples (25) to (27).

In (25), the verb in the involuntary agent construction is the underived intransitive verb *biq'uruƛa* 'break (intr.)', whereas the verb in the corresponding transitive construction is its causative derivate *biq'ōruƛa* 'break (tr.).[17]

(25) Northern Akhvakh

(25a) *mik'i-de* *istaka* *b-iq'$^{w}$-āri.*
child.OS-ERG glass $I_{S/P}$:N-break(intr.)-CAUS.CPL
'The child broke the glass.'
lit. 'The child made the glass break.'

(25b) *mik'i-gune* *istaka* *b-iq'$^{w}$-ari.*
child.OS-ABL glass $I_{S/P}$:N-break(intr.)-CPL
'The child broke the glass unintentionally.'
lit. 'The glass broke from the child.'

In (26), the involuntary agent construction involves a decausative periphrasis consisting of the masdar of the lexical verb and the auxiliary *x̂un* 'become, happen'.

[17] The underlying morphological structure of the infinitive form *biq'ōruƛa* is *b-iq'-aj-uruƛa*, where *-aj-* is the causative marker, but the presence of the causative marker is blurred by morphophonological processes. Similarly, in (23a), *biq'$^{w}$āri* is underlyingly *b-iq'$^{w}$-aj-ari*.

(26) Lezgi (Haspelmath 1993a: 91)
*Za-waj i šüše gadr-un xˆa-na.*
1SG-ADEL this bottle throw-MSD happen-CPL
'I accidentally threw away this bottle.'
lit. 'From me throwing away this bottle happened.'

In (27), the verb is P-ambitransitive, and consequently can feature in the transitive construction and in the involuntary agent construction without any change in its form.

(27) Lezgi (Haspelmath 1993a: 292)
(27a) *Zamira-di get'e xa-na.*
Zamira-OS(ERG) pot break-CPL
'Zamira broke the pot.'
(27b) *Zamira-di-waj get'e xa-na.*
Zamira-OS-ADEL pot break-CPL
'Zamira broke the pot accidentally/unvoluntarily.'
lit. 'From Zamira the pot broke.'

The analysis of (27) as involving a change in transitivity is not obvious, since no voice marker is present. An alternative analysis, put forward by Mel'čuk (1988: 227), is that both (27a) and (27b) are transitive clauses that differ only in the flagging of the A term. However, Haspelmath (1993a: 292) shows that there is compelling evidence that (27b) is not a transitive clause with an alternative flagging of the agent, and rather involves ambitransitivity of the noncausal-causal type.

## 5. The binominative construction

All Nakh-Daghestanian languages have a transitive construction with A in the ergative case, but in many of them, transitive verbs also have a BINOMINATIVE CONSTRUCTION (aka 'biabsolutive construction') in which both core arguments of transitive verbs are devoid of overt case marking. Semantically, this construction implies imperfective aspect, and its typical function is to express agent topicalization, as evidenced by the fact that its use is particularly natural in answer to the question 'What is X doing?'.

The question that arises is whether the relationship between the ergative construction and the binominative construction of transitive verbs should be analyzed as an uncoded valency alternation, or as something else.

In the binominative construction of Northern Akhvakh, both core arguments of transitive verbs are devoid of overt case marking, and both are indexed. However, this phenomenon only occurs with the progressive forms of the verb, i.e., with analytical verb forms consisting of *bik'uruƛa* 'be' (or the copula *godi*) in auxiliary function, and the progressive converb of the lexical verb. Example (28) illustrates the contrast between the basic transitive construction (a) and the binominative construction (b).

(28) Northern Akhvakh

(28a) *hušte* *m-ač-ene* *b-ik'$^{w}$-ari* *di-ga* *di* *ila-ī̄-e.*
thus $I_{S/P}$:N-tell-PROG $I_{S/P}$:N-be-CPL 1SG.OS-ALL 1SG.OS(GEN) mother-S.F-ERG
'This is what my mother used to tell me.' (basic transitive construction)

(28b) *di-ga* *če* *čula* *m-ač-ene* *j-ik'$^{w}$-ari* *di* *ila.*
1SG.OS-ALL one thing $I_{S/P}$:N-tell-PROG $I_{S/P}$:F-be-CPL 1SG.OS(GEN) mother
'My mother used to tell me something.' (binominative construction)

In both sentences, the progressive converb agrees with the P argument (the thing being told). But in sentence (a), in which the agent is assigned the ergative case by the transitive verb *mačunuƛa* 'tell', both the lexical verb and the auxiliary agree with the P argument, whereas in sentence (b), in which the noun phrase representing the agent of *mačunuƛa* is in the zero case, it also governs the agreement of the auxiliary. Consequently, sentence (a) can be analyzed as a monoclausal construction involving an analytical verb form that has exactly the same case assignment and agreement properties as a synthetic form of a transitive verb. By contrast, analyzing *mačene jik'$^{w}$ari* in sentence (b) as an analytical verb form in a monoclausal construction would not account for the fact that its two elements do not agree with the same argument. This phenomenon has, however, a very simple explanation if the binominative construction of Akhvakh is analyzed as a biclausal construction involving the phenomenon known as 'raising', which means that:

– the main verb is the intransitive verb *bik'uruƛa* 'be';
– the transitive verb is the nucleus of an embedded clause;
– instead of being expressed within the embedded clause, the participant normally expressed as the A of the transitive verb is expressed as the S of 'be'.

In the case of Northern Akhvakh, I am aware of no property of the binominative construction that could be viewed as evidence against the biclausal analysis. This precludes an analysis in terms of valency alternation, since the very definition of valency alternations as relationships between two possible coding frames of the same verb or of two verbs morphologically related excludes relationships between a monoclausal construction and a biclausal one.

However, in this respect, the situation is not uniform across the Nakh-Daghestanian family. Forker (2012) examines various types of properties of the binominative construction that may be viewed as evidence of monoclausality, and discusses possible alternatives to the biclausal analysis.

Functionally, the binominative construction has obvious affinities with antipassive constructions. However, SYNTACTIC demotion of the patient is an essential element of antipassive constructions as commonly defined, whereas in the binominative construction, the coding properties of the patient are not affected, and both arguments of transitive verbs show coding characteristics typical for core arguments (lack of overt flagging, and control of verb agreement). In fact, in the languages in which the binominative constructions has properties justifying a monoclausal analysis, the alternation can only be analyzed as an instance of SPLIT TRANSITIVE CODING CONDITIONED BY TAM, and by no means as a valency alternation.

Gagliardi & al. (2014) confirm that the cross-linguistic variation in the properties of binominative constructions is such that they must be analyzed differently in different languages. According to their analysis, the Tsez binominative construction is a biclausal

construction "including a PP complement embedded under the verb *be engaged in*", whereas the binominative construction in Lak is a monoclausal construction for which they propose a formal analysis in terms of "restructuring with an aspectual verb embedding a vP".

## 6. Conclusion

In this presentation, I have proposed an overview of the most salient aspects of the systems of valency alternations found in Nakh-Daghestanian languages. The main conclusions are that, in Nakh-Daghestanian languages:

- in comparison with other language families, causativization in Nakh-Daghestanian languages shows no typologically unusual property, but nevertheless provides interesting data about variation in causative constructions and uses of causative morphology that do not meet the narrow definition of causativization;
- antipassive constructions involving verbal coding are relatively widespread; however, the markers that trigger antipassivization of transitive verbs are basically aspectual markers that trigger a change in the construction of transitive verbs, but also combine with intransitive verbs without triggering any valency change;
- verb-coded decausativization and passivization are found in very few languages;
- valency alternations with equipollent coding are typically found with compound verbs;
- Dargi languages are the only ones in which A-ambitransitivity is relatively productive;
- in general, P-ambitransitivity of the noncausal-causal type is limited to relatively small sets of verbs, but Avar is a clear exception to this rule;
- constructions that could be analyzed at first sight as zero-coded passive constructions are best analyzed as a particular case of a more general phenomenon of unspecified participant dropping;
- three subtypes of involuntary agent constructions are attested in Nakh-Dagestanian languages, all analyzable as particular cases of the noncausal-causal alternation, in spite of the fact that this analysis is not always obvious;
- the so-called binominative constructions show important variation in their properties; they cannot be analyzed in a uniform way across Nakh-Daghestanian languages, but in no case do they lend themselves to an analysis in terms of valency alternations.

## Abbreviations

In the glosses, roman numbers refer to genders in complex gender systems. The other abbreviations used in the glosses are as follows: ABL = ablative, ADEL = adelative, ADESS = adessive, ALL = allative, CAUS = causative, COP = copula, CPL = completive,[18] CVB = converb, D = definite, DAT = dative, DECAUS = decausative, DEM = demonstrative, ERG =

[18] I have harmonized as CPL (completive) the glosses of the inflectional TAM markers (variously referred to as 'aorist', perfective', etc.) which constitute the usual way to refer to events presented simply as having occurred before some temporal landmark. This decision is motivated by the desire to avoid confusion between the inflectional categories commonly referred to as 'perfective / imperfective' and derivational distinctions between perfective and imperfective verb stems.

ergative, F = feminine, GEN = genitive, HPL = human plural, ICPL = incompletive, INF = infinitive, INS = instrumental, INT = intensive, IPFV = imperfective, $I_{S/P}$ = index refering to the S term of intransitive constructions or to the P term of transitive constructions, LOC = locative, M= masculine, MDTV = mediative, MSD = masdar, N = non-human, NPL = non-human plural, OS = oblique stem, PFV = perfective, PL = plural, PRS = present, SG = singular, SUPESS = superessive.

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