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Valency alternations and voice in Nakh-Daghestanian languages

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1. Basic definitions and terminology

1.1. The notion of valency alternation

VALENCY refers to the ability of verbs to combine with noun phrases or adpositional phrases representing various elements of the events they denote (participants, circumstances), and to determine the coding characteristics of those among the nominal terms of the clause that refer to the semantically essential participants (commonly referred to as ARGUMENTS, as opposed to ADJUNCTS, a notion encompassing non-essential participants and circumstances of the event).

VALENCY ALTERNATION refers to the possibility that two different constructions of the same verb, or of two formally related verbs, denote identical events, or 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.

Example (1) illustrates a valency alternation where the two constructions have the same denotative meaning, and differ only in the mapping of participants (the builder and the thing being built) onto morphosyntactic slots: in (1a), the builder is encoded as the nominative noun phrase (or 'subject'), and the thing being built as the accusative noun phrase (or 'direct object'), whereas in (1b), the subject represents the thing being built, and the builder is encoded as an instrumental oblique.

(1) Russian

(1a) *Ja* *stroju* *dom.*
1SG build.PRS.1SG house.ACC
'I am building a house.'

(1b) *Dom* *stroit-sja* *mnoju.*
house build.PRS.3SG-*SJA* 1SG.INS
'The house is being built by me.'

Example (2) illustrates a valency alternation where the two constructions denote events that are not identical, but can be analyzed as differing only in the assignment of participant roles to individual participants. In (2a), the roles of washer and person being washed are assigned

to two distinct participants, encoded as the subject and the direct object, respectively, whereas in (2b), a single participant, encoded as the subject, cumulates both roles.

(2) Russian
(2a) *Ja* *moju* *rebënka.*
1SG wash.PRS.1SG child.ACC
'I am washing the child.'
(2b) *Ja* *moju-s'.*
1SG wash.PRS.1SG- *SJA*
'I am washing (myself).'

Example (3) illustrates a valency alternation where the two constructions denote events that are not identical, but can be analyzed as differing only in the greater or lesser complexity of the causality chain. In (3a), the breaking process affecting the referent of the direct object is presented as triggered by an agent, encoded as the subject, whereas in (3b), nothing is implied about the causality chain resulting in the breaking process, and the thing undergoing this process is encoded as the subject.

(3) Russian
(3a) *Rebënok* *razbil* *čašu.*
child break.PFV.PST.SG.M cup.ACC
'The child broke the cup.'
(3a) *Čaša* *razbila-s'.*
cup break.PFV.PST.SG.F- *SJA*
'The cup broke.'

1.2. Coded and uncoded valency alternations

The valency alternations illustrated in (1-3) are CODED VALENCY ALTERNATIONS, in the sense that they involve a modification of the structure of the verb form (presence vs. absence of the suffix *-sja ~ -s'*). Moreover, they are MORPHOLOGICALLY ORIENTED, in the sense that one of the two constructions (the DERIVED CONSTRUCTION) involves additional morphological material in comparison to the other (the BASE CONSTRUCTION).

Valency alternations involving no modification of the structure of the verb form can be designated as UNCODED VALENCY ALTERNATION. For example, in English, no specific morphological material is involved in *The child broke the cup / The cup broke*, functionally similar to Russian *Rebënok razbil čašu / Čaša razbilas'*.

The term LABILITY is used in this presentation as a general term referring to the ability of verbs to lend themselves to uncoded valency alternations of any kind.[1] For uncoded valency alternations involving a change in transitivity, I will use the transparent term AMBITRANSITIVITY. For example *The child broke the glass* (transitive) / *The glass broke* (intransitive) is an instance of ambitransitivity.

[1] This use of the term 'lability' was proposed by Polinskaja (1986: 44).

1.3. The notion of voice

The term VOICE is used in this presentation as a general term for morphological operations on verbs regulating the relationship between the syntactic role of noun phrases and the way their referents participate in the event denoted by the verb. In other words, 'voice' refers to the verbal coding of valency alternations. [2]

A point to which particular attention must be paid in the investigation of coded valency alternations is the polyfunctionality of many voice markers. For example, as can be seen from the examples above, in Russian, the verbal suffix *-sja* may mark not only passivization, as in (1), reflexivization, as in (2), decausativization, as in (3), but also antipassivization, as in (4), where the same suffix blocks the expression of the patientive participant.

(4) Russian (Slavic)
(4a) *Sobaka kusaet rebënka.*
dog bite.PRS.3SG child.ACC
'The dog is biting the child.'
(4b) *Sobaka kusaet-sja.*
dog bite.PRS.3SG-*SJA*
'The dog bites (people).'

1.4. Syntactic roles of the nominal terms of clauses

Nakh-Daghestanian languages have alignment properties that make the use of the traditional notions of subject and (direct) object problematic. This is the reason why, in this survey of the valency alternations found in Nakh-Daghestanian languages, the syntactic roles of the nominal terms of clauses will be characterized as follows:

- in transitive clauses, A and P are the nominal terms whose coding characteristics are identical to those of the agent and the patient of prototypical action verbs in the basic transitive construction;
- in intransitive clauses (i.e., in clauses that do not include a pair of nominal terms meeting the definition of A and P), S is the nominal term whose coding characteristics are identical to those of the sole argument of (a subclass of) semantically monovalent verbs.

Throughout the discussion of valency alternations, it should be borne in mind that, in Nakh-Daghestanian languages, the general rule is that the coding characteristics of S coincide with those of P rather than A (ergative alignment). This is particularly apparent in case marking, with S and P devoid of overt case marking contrasting with A in the ergative case.

Example (5) illustrates ergative alignment in Northern Akhvakh, not only in core term flagging, but also in core term indexation. In the transitive construction, A in the ergative case is not indexed on the verb, and P in the nominative case (aka 'absolutive', characterized by a zero ending) controls verb agreement in gender and number, whereas in intransitive clauses, with very few exceptions, S has the same coding characteristics as P.

[2] This is also the definition adopted in Zúñiga & Kittilä' (2019) survey of grammatical voice.

(5) Northern Akhvakh

(5a) *ak'ːa-łː-e* *imiχi* *b-eƛ-ari.*
woman-OBL.F-ERG donkey N-lead-PRT
'The woman took the donkey with her.'

(5b) *ak'ːa-łː-e* *waša* *w-oƛ-ari.*
woman-OBL.F-ERG boy M-lead-PRT
'The woman took the boy with her.'

(5c) *milica-sːʷ-e* *ak'ːa* *j-eƛ-ari.*
policeman-OBL.M-ERG woman F-lead-PRT
'The policeman took the woman with him.'

(5d) *imiχi* *b-eq'-ari.*
donkey N-come-PRT
'The donkey came.'

(5e) *waša* *w-oq'-ari.*
boy M-come-PRT
'The boy came.'

(5d) *ak'ːa* *j-eq'-ari.*
woman F-come-PRT
'The woman came.'

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;
- derived verb forms marking applicativization, reflexivization or reciprocalization are not attested.[3]

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

2.1. Causativization

In causativization, 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 (6). In languages with ergative alignment in its most typical form, this

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

means that the coding characteristics of the initial S are not modified in the causative construction. In (6), 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 addition of an ergative-marked noun phrase representing the causer. [4]

(6) Avar (Mallaeva & al. 2018)

(6a) *was w-orč'-ana.*
boy M-wake.up-PRT
'The boy wake up.'

(6b) *ebel-ał was w-orč'-iza-w-una.*
mother-OBL(ERG) boy M-wake.up-CAUS-M-PRT
'The mother awakened the child.'

Example (7) shows that the same mechanism operates with bivalent verbs that do not follow the transitive construction, such as Northern Akhvakh *hariguruƛa* 'see', whose coding frame is <DAT, NOM>.

(7) Northern Akhvakh

(7a) *di-ƛa č'ĭda-be miq'ːi harigʷ-ari.*
1SG.OBL-DAT new-N road see-PRT
'I saw the road.' lit. 'The road was visible to me.'

(7b) *hu-sːʷ-e di-ƛa č'ĭda-be miq'ːi harigʷ-aːri.*
DEM-OBL.M-ERG 1SG.OBL-DAT new-N road see-CAUS.PRT[5]
'He showed me the road.' lit. 'He made the road visible to me.'

If the base construction is transitive, the treatment of the initial A and P depends on language specific rules. Example (8) 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 local case (here, the superessive).

(8) Avar (Mallaeva & al. 2018)

(8a) *jas-ał karš ha-b-una.*
girl-OBL(ERG) soup make-N-PRT
'The girl cooked the soup.'

(8b) *di-ca jas-al-da karš ha-b-iza-b-una.*
1SG.OBL-ERG girl-OBL-SUPESS soup make-N-CAUS-N-PRT
'I made the girl cook the soup.'

Examples (6) to (8) 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

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

[5] *-aːri* is the contraction of *-aj-ari*, where *-aj-* is the causative marker.

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 (9), the causative suffix of Avar illustrated in (6) and (8) above results from the contraction of an analytical causative construction in which *ha-b-ize* 'do, make' is immediately preceded by the infinitive of another verb.

(9) Avar (Mallaeva & al. 2018)

(9a) *ebel-ał* *was* *w-orč'-iza-w-una.*
mother-OBL(ERG) boy M-wake.up-CAUS-M-PRT
'The mother awakened the child.' (synthetic causative)

(9b) *ebel-ał* *was* *w-orč'-ize* *ha-w-una.*
mother-OBL(ERG) boy M-wake.up-INF make-M-PRT
'The mother awakened the child.' (analytical causative)

Some causative periphrases (as for example the Russian causative constructions involving verbs such as *zastavit'* / *zastavljat'*) can be analyzed as complex constructions with a verb expressing causation as the nucleus of the matrix clause, without any clear sign of grammaticalization. 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 grammaticalization of causative periphrases is a complex question, which cannot be addressed in detail in this presentation. See Daniel & al. (2012) for a detailed discussion of this question in a particular language (Agul).

Example (10) illustrates an analytical causative in which the causative auxiliary is a verb that also exists with the meaning 'give', but verbs meaning 'do, make', 'let, put' or 'drive, send' are also found in causative periphrases.

(10) Rutul (Makhmudova 1999: 230)
z-a *Ismet-de* *elidzij* *v-uʔule-s* *vɨ-ri.*
1SG-ERG Ismet-ADESS pizza III-eat-INF give-PRT
'I made Ismet eat a pizza.'

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 (11), double causatives in which the same marker or auxiliary occurs twice are allowed.

(11) 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-PRT
'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. For example, in Northern Akhvakh, morphological causativization of transitive verbs is uncommon, with the exception of 'eat' and 'drink', which behave in this respect like intransitive verbs.

In Lezgi (Haspelmath 1993a: 163), the overwhelming majority of the verbs that have causative derivates are intransitive, whereas causativization of transitive verbs is productively expressed by means of a construction in which *tun* 'make' takes an infinitival complement clause.[6]

In Avar, as illustrated in (12), 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 (12b), '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.

(12) Avar (Mallaeva & al. 2018)

(12a) *ebel-ał* *jas-al-da* *čed* *k^{w}ana-za-b-una.*
mother-OBL(ERG) girl-OBL-SUPESS bread eat-CAUS-N-PRT
'The mother fed bread to the girl (made the girl eat bread).'

(12a) *ebel-ał* *dun* *t'ama-na* *jas-al-da* *čed* *k^{w}ana-za-b-ize.*
mother-OBL(ERG) 1SG put-PRT girl-OBL-SUPESS bread eat-CAUS-N-INF
'The mother made me feed bread to the girl.'
lit. '...put me to make the girl eat bread'

2.2 Antipassivization

In antipassivization, the source construction is transitive, and the derived construction is an intransitive construction in which the participant encoded as the A of the transitive construction is encoded as S, whereas the initial P is either expressed as an oblique, or left unexpressed.

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, antipassive constructions involving verbal coding 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), they show some typologically unusual properties. Crucially, 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 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):

[6] According to Haspelmath (1993a: 358), in the *tun*-periphrasis, there is no reason to analyze *tun* as a causative auxiliary rather than an ordinary complement-taking verb.

– intransitive verbs whose construction includes a single core term in the nominative: no change, as in (13);
– intransitive verbs whose construction includes a single core term in the ergative: the single core term shows up in the nominative, as in (14);
– transitive verbs (i.e., verbs whose construction includes both an ergative core term (A) and a nominative core term (P)): the initial A shows up in the nominative, 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>-PRT
'The boys jumped once.'
(13b) *öždä b-ogi<ya-ba>c-ca.*
boy.PL HPL-jump<ANTIP-PL>-PRT
'The boys jump many times.'

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

(15) Bezhta (Comrie & al. 2021)
(15a) *öždi xo y-üⁿq-čä.*
boy.ERG meat(IV) IV-eat-PRS
'The boy eats the meat.'
(15b) *öžö xo-lo-d Ø-üⁿq-dä-š.*
boy(I) meat-OBL-INS I-eat-ANTIP-PRS
'The boy is busy eating the meat.'

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

2.2.2. Co-expression patterns involving antipassive markers

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 in conceptual structure. Depending on language-specific rules, it may be expressed as an oblique, or left unexpressed.

Kryz has a verbal derivation described by Authier (2009: 165-167) as ‘mediopassive’, but 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[7]

In decausativization, the participant encoded as the A of a transitive construction is not just backgrounded, as in passivization, but eliminated from the conceptual 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 decausative is not inactive, as in *čünüxun* ’hide (tr.)’ > *čünüx x̂un* ‘hide (intr.), hide oneself’, or *ewlenmišun* ‘marry’ > *ewlenmiš x̂un* ‘get married’. In such cases, according to Geniušienė’s (1987) typology of detransitivization, the construction must rather be characterized as ‘autocausative’.

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, *q^{h}san x̂un* ‘improve (intr.)’ consists of the adjective *q^{h}san* ‘good’ and the light verb *x̂un* ‘become’, whereas *q^{h}san-ar-un* ‘improve (tr.)’ is formed by adding the causative suffix to the same stem (Haspelmath 1993a: 117).

[7] The term ‘decausative’ was used by Geniušienė (1987) for derived verb forms more commonly designated as ‘anticausative’ in the recent literature. The reason for preferring ‘decausative’ is that ‘anticausative’ misleadingly suggests a parallelism between causative / decausative and passive / antipassive. In fact, causativization and decausativization differ in the addition / suppression of the same participant role, whereas passivization and antipassivization are equally backgrounding operations, and differ in the participant role on which they operate.

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

In this presentation, the discussion of uncoded valency alternations is limited to the two main varieties of ambitransitivity: A-ambitransitivity and P-ambitransitivity.

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 N.suck.PRT
‘The baby sucked milk.’
(17b) *makʼi w-aʔaχa.*
child M-suck.PRT
‘The baby boy sucked.’

Consequently, A-ambitransitivity is more ‘visible’ (and less problematic) in languages with ergative alignment than in languages with accusative alignment.[8]

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 ACTIVE-ANTIPASSIVE ALTERNATION involving no specific coding on the verb, whose analysis is made difficult by the polyfunctionality of the ergative case. The point is 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. This may give the (false) impression that the core terms of the transitive construction exchange their roles, as in example (18).

[8] 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.

(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 NPL-make.IPFV-PRS-CVB=COP-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 M-make.IPFV-PRS-CVB=COP- 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 CAUSAL-NONCAUSAL ALTERNATION, as in decausativization, the intransitive construction expresses the elimination of the agent from the conceptual structure, as in English *I broke the glass / The glass broke;*
- in the UNCODED ACTIVE-PASSIVE ALTERNATION, as in passivization, the intransitive construction expresses backgrounding of the agent, in the sense that, even if it is left unexpressed, the agent remains present in the conceptual structure, as in English *I am washing the cloth / The cloth washes easily.*[9]

In the languages that have ergative alignment, as illustrated by example (19), P-ambitransitivity implies no change in the coding of the P/S argument.

(19) Godoberi (Kibrik 1996: 109)

(19a) *im-u-di hincu χ^{w}abi.*
father-OBL-ERG door open.PRT
'Father opened the door.'

[9] 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.

(19b) *hincu* *χʷabi.*
door open.PRT
'The door opened.'

Consequently, in Nakh-Daghestanian languages, true P-ambitransitivity can easily be confused with the possibility of expressing reference to non-specific agents by simply omitting the A term of the transitive construction.

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.

For example, one might wonder whether the sentences in example (20) are best analyzed as an instance of uncoded active-passive alternation, or as A-less transitive clauses. However, in the absence of any compelling evidence supporting the passive analysis, the unspecified A omission analysis must be preferred, since unspecified argument omission also concerns for example dative-marked experiencers in the construction of verbs such as 'see' in example (21).

(20) Northern Akhvakh
(20a) *ima-sːu* *amru-łːi-guło:* *ƛ'ːʷaro:* *gudi* *ek'ʷa.*
imam-OBL(GEN) order-OBL.N-MEDT kill.CVB.M COP.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'
(20b) *1936-liƛ'ːa* *reše-łːi,* *kaχuzi* *ʕuc'ːil-aːri,*
1936-ORD year-OBL(LOC) kolkhoz organize-PRT
ħeːma-na-la *r-eƛ-ari* *kaχuzi-ƛːa.*
cow-PL-and NPL-lead-PRT 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'
(20c) *ašʷa-ƛːi* *reʔũ-łːi-ge* *boq'oda* *mic'ːi* *m-ač-ide.*
Akhvakh-GEN district-OBL.N-LOC four language(N) N-speak-PRS
'Four languages are spoken in the Akhvakh district.'
lit. 'In the Akhvakh district Ø speak four languages.'

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

3.2.1. The uncoded causal-noncausal alternation

As already mentioned above, in Nakh-Daghestanian languages, the distinction between two types of constructions in which a transitive verb is not accompanied by an ergative noun phrase is not immediately obvious. This explains why some authors have claimed for example that Lezgi doesn't have ambitransitive verbs at all, whereas others have claimed that ambitransitivity is pervasive in Lezgi.

Tests to distinguish the uncoded causal-noncausal alternation from A omission in transitive clauses have been discussed by Haspelmath (1993a: 289-293) for Lezgi, Kibrik (1996: 110-117) for Godoberi, Ljutikova (2001) for Bagvalal, Daniel & al. (2012) for Agul, and Creissels (2014) for Northern Akhvakh. An interesting observation made by Daniel & al. (2012) is that, however problematic it may be for linguists, the distinction is absolutely obvious for native speakers.

Across Nakh-Daghestanian languages, there is important variation in the relative productivity of P-ambitransitivity and the other strategies available for the coding of the causal-noncausal alternation. P-ambitransitivity is very productive in Avar, but most Nakh-Daghestanian languages have limited sets of P-ambitransitive verbs. According to Forker (2013), Hinuq has just 2 P-ambitransitive verbs. Lists of 11 P-ambitransitive verbs are given by Kibrik (1996) for Godoberi, by Haspelmath (1993a) also for Lezgian, and by Ljutikova for Bagvalal. Daniel & al. (2012) give a list of 28 P-ambitransitive verbs for Agul.

Haspelmath (1993b) proposed a questionnaire of 31 verb pairs to investigate the cross-linguistic variation in the choice between the possible strategies for encoding intransitive/transitive verb pairs that can be characterized semantically as noncausal vs. causal:

- the noncausal verb and its causal counterpart may be formally unrelated ($I \neq T$);
- the noncausal verb and its causal counterpart may be identical ($I = T$);
- the causal verb may morphologically derive from its noncausal counterpart ($I > T$);
- the noncausal verb may morphologically derive from its causal counterpart ($T > I$);
- the noncausal-causal pair may involve equipollent marking ($I \sim T$).

Table 1 compares the results obtained by means of this questionnaire in four Nakh-Daghestanian languages: Northern Akhvakh, Avar, Lezgi, and Tsez.[10] The main observation is that, within the limits of this questionnaire, Akhvakh has an extremely high number of $I > T$ pairs (26 out of 31, i.e., more than any of the languages included in Haspelmath's (1993b) language sample), whereas the proportion of ambitransitive verbs is considerably higher in Avar than in the other three languages.

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

	Avar	Lezgi	Tsez	Akhvakh
I > T	9	12	18	26
T > I	0	8	3	0
I ~ T	0	6	8	0
I = T	20	5	0	4
I ≠ T	2	0	1	1

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

5. 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 causal-noncausal 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 (typically marked by a spatial case or adposition) representing an animate participant involved in the causality chain without really being an agent.

Exemple (22) illustrates this type of construction in the Australian language Guugu Yimidhirr. In this example, the intransitive nature of the involuntary agent construction is marked by decausative derivation.

(22) Guugu Yimidhirr (Pama-Nyungan; Haviland 1979: 125)

(22a) *ngayu galga nhanu dumbi.*
1SG spear 2SG.GEN break.PST
'I broke your spear (on purpose).'

(22b) *ngadhungal galga nhanu dumbi-idhi.*
1SG.ADESS spear 2SG.GEN break-DECAUS.PST
'I broke your spear (by accident).'
lit. 'By me your spear broke itself.'

Involuntary agent constructions are common in Nakh-Daghestanian languages, with three possible variants, illustrated in examples (23) to (25).

In (23), 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'o:ruƛa* 'break (tr.).[11]

[11] The underlying morphological structure of the infinitive form *biq'o:ruƛa* 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'ʷa:ri* is underlyingly *b-iq'ʷ-aj-ari*.

(23) Northern Akhvakh

(23a) *mik'i-de* *istaka* *b-iq'^{w}-a:ri.*
child(N)-ERG glass(N) N-break(intr.)-CAUS.PRT
'The child broke the glass.'
lit. 'The child made the glass break.'

(23b) *mik'i-gune* *istaka* *b-iq'^{w}-ari.*
child(N)-ABL glass(N) N-break(intr.)-PRT
'The child broke the glass unintentionally.'
lit. 'The glass broke from the child.'

In (24), the verb is a transitive verb, and the involuntary agent construction involves a decausative periphrasis consisting of the masdar of the lexical verb and the auxiliary *x̂un* 'become, happen'.

(24) Lezgi (Haspelmath 1993a: 91)

Za-waj *i* *šüše* *gadr-un* *x̂a-na.*
1SG-ADEL this bottle throw-MSD happen-PRT
'I accidentally threw away this bottle.'
lit. 'From me throwing away this bottle happened.'

In (25), 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.

(25) Lezgi (Haspelmath 1993a: 292)

(25a) *Zamira-di* *get'e* *xa-na.*
Zamira-OBL(ERG) pot break-PRT
'Zamira broke the pot.'

(25b) *Zamira-di-waj* *get'e* *xa-na.*
Zamira-OBL-ADEL pot break-PRT
'Zamira broke the pot accidentally/unvoluntarily.'
lit. 'From Zamira the pot broke.'

Note that the analysis of (25) 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 (25a) and (25b) are transitive clauses that differ only in the flagging of the A term. However, as argued by Haspelmath (1993a: 292), there is compelling evidence that (25b) is not a transitive clause with an alternative flagging of the agent, and rather involves ambitransitivity of the noncausal-causal type.

6. 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?'.

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 (26) illustrates the contrast between the basic transitive construction (a) and the binominative construction (b).

(26) Northern Akhvakh

(26a)	*hušte*	*m-ač-ene*	*b-ik'^{w}-ari*	*di-ga*	*di*	*ila-ɬ:-e.*	
	thus	N-tell-PROG	N-be-PRT	1SG.OBL-ALL	1SG.OBL(GEN)	mother-OBL.F-ERG	
	'This is what my mother used to tell me.' (basic transitive construction)						
(26b)	*di-ga*	*če*	*čula*	*m-ač-ene*	*j-ik'^{w}-ari*	*di*	*ila.*
	1SG.OBL-ALL	one	thing	N-tell-PROG	F-be-PRT	1SG.OBL(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 nominative, it also governs the agreement of the auxiliary. Consequently, sentence (a) can be analyzed as 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 does 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 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. 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, within the frame of a monoclausal analysis of the binominative construction, the alternation can only be accounted for in terms of split transitive coding conditioned by TAM, and by no means as a valency alternation.

Gagliardi & al. (2014) argue 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".

5. 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:

- causativization is by far the commonest type of coded valency alternation; in comparison with other language families, causativization in Nakh-Daghestanian languages shows no typologically unusual property;
- coded antipassive constructions are relatively widespread, but 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;
- 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 causal-noncausal type is limited to relatively small sets of verbs, but Avar is a clear exception to this rule;
- involuntary agent constructions are widespread; they can be characterized as intransitive constructions in which a human participant involved in the causality chain without being a real agent is encoded as an oblique marked by a spatial case;
- binominative constructions show important variation in their properties, and cannot be analyzed in a uniform way across Nakh-Daghestanian languages.

Abbreviations

In the glosses, genders are indicated either by the usual abbreviations F (human feminine), M (human masculine), and N (non-human), or by means or roman numbers, in the case of more complex gender systems.

The other abbreviations used in the glosses are as follows: ABL = ablative, ACC = accusative, ADEL = adelative, ADESS = adessive, ALL = allative, ANTIP = antipassive, CAUS = causative, COP = copula, CVB = converb, DAT = dative, DECAUS = decausative, DEM = demonstrative, ERG = ergative, GEN = genitive, HPL = human plural, INF = infinitive, INS = instrumental, LOC = locative, MEDT = mediative, NPL = non-human plural, OBL = oblique stem, PFV = perfective, PL = plural, PRS = present, PRT = preterite,[12] PST = past, SG = singular, SUPESS = superessive.

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[12] I have harmonized as PRT (preterite) the glosses of the inflectional TAM markers (variously referred to as 'aorist', perfective', etc.) which constitute the usual way to refer to events that were completed in the past. This decision is motivated by the fact that, in some Nakh-Daghestanian languages, the inflectional categories commonly referred to as 'perfective / imperfective' coexist with a distinction between perfective and imperfective verb stems.

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