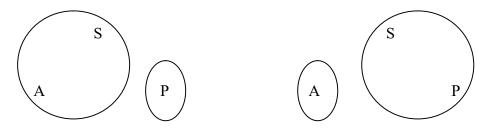
Chapter 18 Ergativity in the Caucasus

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1 Introduction

In Dixon's (1994) typological framework, ergative—absolutive alignment is defined as the layout of clausal syntax that groups together, in at least some linguistic properties, the subject of an intransitive verb, usually abbreviated as S(ole argument), with the direct object of a transitive verb, tagged as P(atient), whereas the subject of a transitive verb, labeled as A(gent), stands apart from both in those same linguistic properties. The ergative—absolutive alignment is opposed to the more familiar, and cross-linguistically more frequent, nominative—accusative alignment that groups subjects together regardless of transitivity, opposing them to other clausal arguments, including the direct object. The two major alignment types are shown in Dixon's classic schematic representation:



- a. Nominative-accusative alignment
- b. Ergative–absolutive alignment

Figure 1. Major alignment types.

Depending on exactly which linguistic phenomena show ergative—absolutive alignment, languages can be characterized as either morphologically or syntactically ergative. Morphological ergativity is made visible through surface morphological phenomena, such as the case marking of S, A, and P arguments, as well as patterns with which these arguments are cross-referenced in the verbal agreement system. In morphologically ergative languages, the form associated with S and P arguments is called *ergative* (e.g., case or series of agreement markers), whereas the form associated with the A argument is called *absolutive* (case or series of agreement markers), where the term *ergative—absolutive alignment* is derived from. Syntactic ergativity implies that not only the morphological marking of S, A, and P arguments shows the ergative—absolutive pattern, but also some syntactic processes identify S and P as contrasting to A; see more on morphological and syntactic ergativity in Dixon (1994), Deal (2015, 2016), Polinsky (2016b).

Recent theoretical literature shows a revival of interest in the typology of ergativity, now in a formal-syntactic framing. The Caucasus is one of geographical regions with a high concentration of ergative languages and is thus of particular interest to both typology and the theory of ergativity. This chapter provides an overview of linguistic phenomena typically associated with ergativity in the world's languages, and it places the languages of the Caucasus within the bigger typological picture. The discussion is organized around classic phenomena, such as case marking and agreement, as well as certain parameters of variation recently brought to attention by theoretically-oriented research on ergativity.

Section 2 is a survey of the morphologically ergative alignment of core argument marking in languages of the Caucasus. Section 3 discusses the absence of evidence for

syntactic ergativity. Section 4 gives an overview of ergative splits observed in the Caucasus. Section 5 describes attested patterns of split subject case marking in intransitive clauses. Section 6 discusses various properties usually thought to attest to the inherent or structural nature of ergative arguments: theta-relatedness (6.1), behavior in subject-to-subject raising (6.2), ability to participate in hierarchical agreement (6.3), the DP vs. PP distinction (6.4), the structural locus of ergative case marking (6.5), and some problems for configurational approaches to case assignment (6.6).

2 Case and agreement in the languages of the Caucasus

2.1 Nakh-Daghestanian languages

Languages of the Nakh-Daghestanian family present the most straightforward example of the ergative—absolutive pattern in case marking and, in most languages, also in gender agreement: subjects of intransitive verbs and direct objects of transitive verbs are in the same morphological case—the absolutive—whereas subjects of transitive verbs bear ergative case marking, as shown in example (1) from Lezgian.

- (1) Lezgian
- a. Ahmed χtα-na.Ahmed.ABS come.back-AOR
 - 'Ahmed came back.'
- b. Mehamed-a Ahmed gata-na.
 Mehamed-OBL.ERG Ahmed.ABS beat-AOR
 'Mehamed beat Ahmed.'

All Nakh-Daghestanian languages that feature verbal gender agreement, show the ergative—absolutive pattern in gender agreement, which goes in parallel with case marking: only absolutive arguments can trigger gender agreement, whereas ergative arguments never do so.¹ (See Chapters 3 and 20.) This is shown in example (2) from Aqusha Dargwa: in all of (2)a–c), it is the absolutive argument that triggers gender agreement, whereas gender agreement with the ergative argument in (2)b) and (2)c) is impossible.

(2) Aqusha Dargwa

a. urši w-ak'-ib. boy.ABS M.SG-come:PFV-AOR

'The boy came.'

¹ This is true of gender agreement appearing on the lexical verb in monoclausal structures. Agreement in bi-verbal constructions may superficially look like agreement with an ergative argument, as, for example, in Tsez backward control structures with the matrix verbs 'begin' and 'continue' (Polinsky and Potsdam 2001). As convincingly argued by the authors, however, this apparent ergative agreement is in fact agreement with a null absolutive argument. Although some issues, such as gender agreement alternation on the auxiliary in Dargwa languages (van den Berg 1999, Sumbatova & Lander 2014, Belyaev 2016, Belyaev 2017a, Ganenkov 2018) have yet to be resolved, no unambiguous case of gender agreement with an ergative argument has been identified so far, and the current consensus in the field seems to be that all apparent instances of ergative agreement can be reduced to the regular pattern of agreement with a (null) absolutive argument.

b. urši-ni rursi {r/*w}-it-ib.
boy-ERG girl.ABS F.SG/M.SG-beat:PFV-AOR
'The boy beat the girl.'
c. rursi-li urši {w/*r}-it-ib.
girl-OBL.ERG boy.ABS M.SG/F.SG-beat:PFV-AOR
'The girl beat the boy.'

The morphological ergative pattern in case marking and gender agreement is quite consistent across the family. Two phenomena exhibit a split-ergative pattern, though: case marking on personal pronouns and the biabsolutive construction, often taken to represent an aspect-based ergativity split in Nakh-Daghestanian; both splits are discussed in Section 4 below.

A small number of Nakh-Daghestanian languages have developed verbal person marking that tends to either follow the nominative–accusative pattern or show sensitivity to the relative person specification of two core arguments. None of the languages demonstrates the ergative–absolutive pattern in person agreement; see Chapters 3 and 20.

2.2 Northwest Caucasian languages

All NWC languages demonstrate the ergative pattern in person agreement. Absolutive and ergative arguments are obligatorily cross-referenced on the verb. Ergative—absolutive alignment is made visible through choice between two sets of agreement markers: intransitive subjects and transitive direct objects use one set of markers, which are always placed first in the sequence of agreement/applicative prefixes, whereas ergative subjects use the other set, which always goes last in the sequence of agreement markers, being placed closest to the verbal root. Examples in (3) illustrate the arrangement of person prefixes in Adyghe (see Chapter 9, for inventories of person prefixes).

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(3) Adyghe a. we
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we wə-čəja-в. 2sg.abs 2sg.abs-sleep-pst

'You slept.'

b. se we wə-s-λew»ə-κ.
1SG.ERG 2SG.ABS 2SG.ABS-1SG.ERG-see-PST
'I saw you (sg.).'

c. we se sə-p-λeʁ^wə-ʁ. 2SG.ERG 1SG.ABS 1SG.ABS-2SG.ERG-see-PST

'You saw me.' (Lander and Testelets 2017: 950)

In (3)a, the intransitive subject is cross-referenced on the verb by means of the second person singular marker wa-. We see the same marker in the same morphological slot showing agreement with the transitive direct object in (3)b. By contrast, person marking of the transitive subject in example (3)c is different in both its form and morphological position.

Number agreement residing in a dedicated suffixal position also demonstrates the ergative behavior: only absolutive plural arguments induce the plural suffix -x in that position (see Chapter 9).

Abkhaz and Abaza lack morphological case, so agreement is the only overt morphosyntactic property showing the ergative behavior. In Adyghe and Kabardian, ergative

alignment in person agreement corresponds to argument case marking: intransitive subjects and transitive direct objects are in the absolutive, while transitive subjects are in the ergative (see also Chapter 9). Both the ergative and the absolutive have overt marking in Circassian: the ergative case suffix is -m; the absolutive case suffix is -r. However, depending on their type, arguments can remain without overt case marking in both the ergative and absolutive position, as discussed in Section 4 below.

2.3 Kartvelian languages²

Although Kartvelian languages, just like other languages of the Caucasus, are usually thought of as ergative languages, the morphosyntactic alignment of Kartvelian is considerably different from the ergative prototype. Some Kartvelian languages are simply not ergative. For example, Ardeshen Laz has lost core nominal cases (ergative, nominative, and dative collapsed into a single unmarked case) and does not show any morphological difference in case between the S, P, and A arguments (Holisky 1991: 408).

Megrelian lacks ergativity for a different reason. Unlike any other Kartvelian language, it has uniform subject case marking in transitive and intransitive clauses, but morphological cases employed to mark the subject and direct object vary according to aspect (series); see Chapter 12. In Series II forms (perfective aspect), the subject is in the narrative (also called ergative) case and the direct object is in the nominative case; in all other series, the subject is in the nominative case, while the direct object bears dative case marking (Harris 1991b: 365–367). Consider the following examples:

- (4) Megrelian: transitive subject marking
 - a. muma arzen-s cxen-s skua-s. father.NOM give-3SG.SUBJ horse-DAT child-DAT 'The father is giving a horse to his child.'
 - b. muma-k cxen-i kimeč-u skua-s. father-NARR horse-NOM give-3SG.SUBJ child-DAT 'The father gave a horse to his child.' (Harris 1991b: 365–366)
- (5) Megrelian: intransitive subject marking
 - a. iš t'erep-i žar-sə yur-u. his enemies-NOM grief-DAT die-3SG.SUBJ 'His enemies are dying with grief.'
 - b. k'oč-k doyur-u. man-NARR die-3SG.SUBJ 'The man died.' (Harris 1991b: 366)

As is seen from these examples, the pattern of subject case marking depends on aspect, but not on transitivity. Transitive and intransitive subjects bear identical case marking in each aspect different from the case of the direct object in the same aspect; cf. (4)a and (5)a, on the one hand, and (4)b and (5)b, on the other. Note also that unlike Georgian (see below), Megrelian shows no difference in case marking between unergative and unaccusative verbs.³

² The Kartvelian examples throughout this chapter preserve the orthography of the original.

³ The division of intransitive verbs into unergative and unaccusative classes can still be seen in "inversion" constructions, see Harris (1991b: 367–371).

Megrelian is thus best characterized as a nominative—accusative language with differential case marking. The same morphological case—nominative—plays a different role in different aspects. In imperfective aspect, the nominative case marks the subject and is thus a true nominative (with the morphological dative case used in the function of abstract accusative case in this environment). In the perfective aspect, however, the morphological nominative case marks the direct object and thus functions as abstract accusative case. The morphological narrative case that expresses the subject in the perfective aspect then acts as abstract nominative case in Megrelian. Case marking in Megrelian is summarized in (6)' see also Harris (1991b: 367) and Chapter 12.

(6) Morphosyntactic alignment in Megrelian

		A	S	P
abstract case		NOM		ACC
morphological case	IPFV	-i		-S
morphological case	PFV	-k		-i

Georgian shows a similar split in case marking according to aspect. In imperfective forms, the transitive subject is in the nominative and the direct object in the dative, whereas in perfective forms, the transitive subject is in the ergative and the direct object is in the nominative. The following examples illustrate case marking in Georgian transitive clauses.

(7) Georgian⁴

- a. nino ačvenebs surateb-s gia-s.
 Nino.NOM she.shows.him.it pictures-DAT Gia-DAT
 'Nino is showing pictures to Gia.'
- b. nino-m ačvena surateb-i gia-s.
 Nino-ERG she.showed.him.it pictures-NOM Gia-DAT
 'Nino showed the pictures to Gia.' (Harris 1981: 40)

The difference between Georgian and Megrelian concerns intransitive subject marking. In imperfective aspect, all intransitive verbs have a nominative-marked subject, just like transitive ones. In perfective aspect, case marking works differently for subjects of unergative and unaccusative verbs in Georgian: with unergative intransitives, the subject is in the ergative case, just like the transitive subject, whereas with unaccusative intransitives, the subject is in the nominative, just like the transitive direct object, as shown in the following example:

(8) Georgian

- a. nino-m daamtknara.
 Nino-ERG she.yawned.II.I
 'Nino yawned.'
- b. vaxtang-i ekim-i iqo. Vakhtang-NOM doctor-NOM he.was.II.2

⁴ Glosses are from the original.

In (8)a, the subject of the intransitive verb 'yawn' is marked ergative, whereas the subject of the copula verb 'be' in (8)b is in the nominative. The division of intransitive verbs into two classes is reported to reflect the active—inactive distinction: deliberately acting subjects of intransitive verbs are in the ergative, while stative and non-deliberate subjects of intransitive verbs are in the absolutive (Harris 1981).

The unergative class includes intransitive activities such as verbs of manner of motion ('dance', 'run', 'skate', 'roll', 'swim', 'crawl'), verbs of sound and noise emission ('scream', 'yell', 'grumble', 'whistle', 'snore', 'croak'), and denominal verbs ('reign', 'work', 'study', 'guard'). The unaccusative class includes some underived verbs, such as statives ('be', 'remain'), and change-of-state verbs ('break'), as well as inchoatives ('become white', 'begin to cry') and several types of passives.

A similar pattern is observed in Laz, the only difference being that case marking is consistent across perfective and imperfective aspects: transitive verbs always have their subject in the ergative and their direct object in the absolutive, whereas intransitive verbs require their subject to be either ergative or absolutive, thus showing the same intransitive split as in Georgian.

As clear as this pattern is on the descriptive level, a number of different proposals have been put forth concerning the structural analysis of Georgian (and Laz) case marking, the crux of the problem being an adequate analysis of case marking with intransitive verbs.

In practice, Georgian is often considered ergative (with an aspect-based ergative split and split intransitivity) in typological and theoretical literature (see Coon 2013, Baker & Bobaljik 2017). The primary reason for this seems to be purely morphological and terminological: in perfective aspect, the subject is expressed by the marked morphological case called *ergative* (the traditional label is *narrative*, see examples(4)b and (5)b above, or *active*).

This practice is in agreement with the view, recently expressed by Nash (2017b), that the apparent unergative verbs are in fact concealed transitives, based on the observation that unergative verbs actually have the morphology of transitive verbs, cf. also Baker & Bobaljik (2017). On this account, no intransitive split should be posited in Georgian (or Laz), which thus turns out to be a regular ergative language with the aspect-based split ergativity.

If, however, Georgian does feature structurally-based split intransitivity, as proposed by Harris (1981), it is not clear whether it can be qualified as ergative or not. On Harris' (1981) proposal, the case marking of intransitive subjects is determined on the basis of the structural position where this argument is base-generated, in line with the Unaccusativity Hypothesis (Perlmutter 1978). Intransitive subjects that are base-generated in the same position as transitive subjects receive ergative case, whereas intransitive subjects that are base-generated in the same position as transitive direct objects receive nominative case. Importantly, Harris (1981) suggests that the site where an argument is base-generated is determined exclusively by the thematic role of the argument. According to Harris (1982: 303), subjects in Georgian can be agents, experiencers, bearers of cognitive states, and possessors, whereas direct objects include patients, stimuli of experiencer verbs, and possessees. This analysis thus suggests that descriptively, Georgian must be characterized as active-inactive rather than as ergative. As Baker & Bobaljik (2017) observe, unlike most active-inactive languages, Georgian shows split intransitivity via case marking of the intransitive subject. Hewitt (1983, 1987b) argues against Harris' claim that the subject case marking is determined exclusively by the thematic role, pointing out verbs like 'go' that have a clearly agentive subject which is nonetheless in the nominative case. Amiridze (2006) argues against using the term *ergative* (or *split ergative*) to characterize argument marking in Georgian.

Person agreement in Kartvelian provides no evidence for ergative—absolutive alignment. Disregarding minor differences between individual languages, person agreement works largely the same in all Kartvelian languages. For example, in Georgian, all finite verbs feature a person prefix reflecting person and number of the controller. Three arguments compete for this position: the indirect object, the direct object, and the subject, with the preference in this order, as shown in (9):

(9) Georgian

- a. namcxvar-s v-acxob.pastry-DAT 1SG-bake.it.I.I'I am baking pastry.'
- b. gela g-irvevs supra-ze.
 Gela-NOM 3SG-invites.you.I.I table-on
 'Gela is inviting you to the banquet.'
- c. miscems sasmel-s stumar-s. he.gives.him.it-I.I drink-DAT guest-DAT 'He is giving a drink to the guest.' (Harris 1981: 30)

In a sentence with a first/second person indirect object, the latter controls prefixal person agreement irrespective of the person value of the subject or direct object, as in (9)c. The first/second person direct object can control person agreement only in the absence of the indirect object, again ignoring the person value of the subject, as shown in (9)b. The subject thus can control prefixal person agreement only in a sentence with third person direct and indirect objects, as in (9)a.

Plural agreement in the suffixal position is subject-oriented in Standard Georgian, nominative-oriented in Old Georgian and some modern dialects, and discourse-regulated in some other modern dialects, where suffixal agreement shows the feature of the topical animate arguments, regardless of their case marking and thematic role (Tuite 2017). While showing some variation in the choice of the controller of suffixal number agreement, no Kartvelian language or dialect shows the ergative—absolutive pattern in that slot either. See Tuite (2017) for an overview of major historical steps in the study of alignment in Kartvelian languages; Harris (1985) is a diachronic study of alignment in Kartvelian.

3 Languages of the Caucasus: absence of syntactic ergativity

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⁵ Georgian has a version of the Person-Case Constraint ("strong PCC") that bans the combination of a first/second person direct object with an indirect object, which means that ditransitive clauses in Georgian cannot have a first- or second-person direct object expressed by the personal pronoun in the usual object case (nominative in perfective forms, dative in imperfective forms). To express a first/second person direct object in the presence of the indirect object, the direct object undergoes "object camouflage" whereby it surfaces as a possessive pronoun with *tavi* 'self' (Harris 1981). Morphosyntactically, the latter is a third person argument, as is seen from its inability to compete for the prefixal agreement slot.

Languages of the Caucasus are commonly believed to be only morphologically ergative, but not syntactically ergative; that is, only morphological case marking and (in some languages) agreement follow the ergative–absolutive alignment, whereas in syntactic processes the distinction between core arguments follows the nominative–accusative model: the subjects of transitive and intransitive verbs pattern together in most syntactic constructions, to the exclusion of the transitive direct object.

The principal diagnostic for syntactic ergativity is so called A-bar extraction, a cover term for a family of syntactic phenomena analyzed in generative syntax as involving the movement of an argument from the base-generated position to a position not associated with a thematic role of a specific grammatical function, such as relativization with a gap inside the relative clause, *wh*-question formation, topicalization, or focusing (Deal 2015; Polinsky 2016b), with relativization known to be the most reliable diagnostic for syntactic ergativity (Kazenin 1994). In syntactically ergative languages, relativization on the transitive direct object or intransitive subject is grammatical, whereas relativization on the transitive subject is not possible and can only be obviated by the conversion of the clause into an intransitive one or using a nominalization.

Nakh-Daghestanian languages use prenominal participial constructions to form relative clauses (see Chapter 3). No Nakh-Daghestanian language has been reported to relativize on transitive subjects differently than on intransitive subjects or transitive direct objects.

Kartvelian languages do not show any specific behavior with respect to relativization on transitive subjects either; see a recent study of Georgian relativization strategies in Foley (2013).

Circassian languages present a different pattern of relativization which, at least superficially, resembles the syntactically ergative one: if the absolutive argument is relativized, no overt marking of any kind is required; if the ergative argument is relativized, the prefix zə- obligatorily appears in the ergative agreement slot.

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(10)
        Adyghe
                                  s-\lambda e \kappa^w \partial - \kappa e.
a.
                   wəne-r
       se
       1SG.ERG house-ABS 1SG.ERG-see-PST
       'I saw a house.'
b.
                     \overline{\phantom{a}} s-yer<sub>m</sub>9-re ]
                                                 wəne-r,
         1SG.ERG ABS 1SG.ERG-see-PST house-ABS
       'the house I saw'
       č'ale-m
                   apč'ə-r
c.
                                  \partial-q^w \partial t a-s.
       boy-ERG glass-ABS 3SG.ERG-break-PST
       'The boy broke the glass.'
               apč'ə-r
                            z \partial - q^w \partial t a-s e ]
d.
                                                      č'ale-r,
        ERG glass-ABS REL.ERG-break-PST boy-ABS
       'the boy who broke the glass' (Lander & Testelets 2017: 966)
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In (10)b, the absolutive direct object is relativized, agreement prefixes on the verb in the relative clause look the same as in the finite clause in (10)a. In (10)d, which shows relativization of the ergative transitive subject, the relative prefix appears in place of the ergative agreement suffix. Relativization of the transitive subject is to a certain degree

reminiscent of resumption. It remains to be seen what the correct analysis of this pattern is. One option would be to analyze it as special morphology appearing in A'-extraction of the ergative argument, thus implying that Circassian languages are syntactically ergative. Another analysis, put forth by O'Herin (2002) for Abaza, is based on the fact that the special agreement morphology is used not only to show agreement with the relativized argument inside the relative clause, but also with wh-words. O'Herin proposes that the special morphology is agreement with elements bearing the [wh] feature, that is, wh-words and the null relative operator (see also Chapter 10 and Chapter 20). Unlike Circassian languages, Abaza has wh-agreement with all arguments, including absolutives. O'Herin's analysis can also be extended to Circassian. The absence of the prefix zə- in relativization on the absolutive argument could then considered to be a purely morphological fact, especially given that (singular) absolutive arguments have null agreement morphology (see Caponigro and Polinsky 2011 for a detailed theoretical discussion of Circassian relativization).

Outside A-bar phenomena, no other syntactic rule appears to operate on the ergative—absolutive basis in Northwest Caucasian languages: for the purposes of clause combining, control, and anaphoric binding, transitive and intransitive subjects are grouped together, contrasting with the direct object (see Polinsky 2016b, Lander and Testelets 2017). In a similar vein, Forker (2017) examines a number of syntactic diagnostics in Nakh-Daghestanian languages, such as the ability to be the imperative addressee, behavior in causative constructions, in obligatory control, and anaphoric binding. The conclusion is that none of those shows specific signs of ergative syntax, the diagnostics being either accusative-oriented or neutral with respect to the grammatical function (see also Kibrik 1987 for a discussion of cross-clausal referential dependencies in Nakh-Daghestanian). Finally, Harris (1981: 257) notes that only two grammatical rules—case marking in nominalizations and in causative constructions—could be considered ergative in Georgian. It is known, however, that these two constructions often treat S and P together even in well-behaved nominative—accusative languages, so the two constructions should not be taken as evidence for syntactic ergativity.

4 Split ergativity

4.1 Biabsolutive construction in Nakh-Daghestanian

In addition to the regular ergative–absolutive construction of the transitive clause, many Nakh-Daghestanian languages have a second possible configuration. In contrast to the ergative construction, the biabsolutive (binominative) construction requires both core arguments, the subject and the direct object, to be absolutive, as shown in example (11) from Archi.

- (11) Archi
- a. Butta-mu buq' b-eark'u-r-ši b-i.
 Butta(I)-SG.ERG grain(III).SG.ABS III.SG-<IPFV>sort-IPFV-CVB III.SG-be.PRS
 'Butta is sorting grain.'
- b. Butta buq' b-eark'u-r-ši w-i.

 Butta(I)[SG.ABS] grain(III)[SG.ABS] III.SG-<IPFV>Sort-IPFV-CVB I.SG-be.PRS

 'Butta is sorting grain.' (Chumakina and Bond 2016: 91)

Example (11)a shows the regular ergative construction with the transitive verb 'sort': the subject is in the ergative, the direct object is in the absolutive. Example (11)b shows the

corresponding biabsolutive construction where both the subject and the direct object are in the unmarked absolutive case.

This difference in case marking leads to a difference in gender agreement. In the ergative construction in (11)a, both the lexical verb and the auxiliary show gender agreement with the direct object, since only absolutive arguments can trigger gender agreement in Archi. In the biabsolutive construction in (11)b, two absolutive arguments are present, each triggering gender agreement: the lexical verb shows agreement with the absolutive direct object, just as in the ergative construction, whereas the auxiliary agrees with the absolutive subject.

The biabsolutive construction is attested in many languages across the family: most Avar-Andic and Tsezic languages, Lak, and some Lezgic languages. An important property of the biabsolutive construction is that it is only possible in imperfective verbal forms. In most languages, it is restricted to periphrastic imperfective forms, such the periphrastic progressive in Archi in (11)b above. Lak is unusual in that it also allows the biabsolutive construction with some synthetic imperfective forms (Kazenin 2013b; Gagliardi et al. 2014).

On the interpretative side, the biabsolutive construction differs from the ergative construction in putting the focus of attention on the subject. As Forker (2012: 80) points out, "the typical functions of the BCs [biabsolutive constructions—DG] are agent topicalization and its counterpart patient demotion." The biabsolutive construction highlights the current engagement of the agent into an activity. The direct object is the biabsolutive construction is often indefinite or non-specific.

Based on a sample of Nakh-Daghestanian languages, Forker (2012) concludes that the biabsolutive construction often displays some morphosyntactic restrictions. First, many languages do not easily allow the biabsolutive construction with dative subject verbs, though the Nakh languages Chechen and Ingush seem to be an exception to this rule.⁶

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(12) Hinuq

*ked hago Ø-ik-o goł.

girl.ABS he(I).ABS I-see-IPFV.CVB be.PRS

('The girl sees him.') (Forker 2012: 83)
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Second, the biabsolutive construction usually does not allow inanimate causers as the subject, as shown by the Lak data below:

(13) Lak

*marč nuz t'it'-l-ej b-u-r.

wind(III).ABS door(IV).ABS open-DUR-CVB III-AUX-3SG

('The wind is opening the door.') (Forker 2012: 83)

⁶ However, as Gagliardi et al. (2014) propose for Tsez and Lak, this constraint is most likely not absolute. Rather, it has interpretive roots: many dative subject verbs do not lend themselves well to the activity interpretation associated with the biabsolutive. When such an interpretation is available to a speaker, the biabsolutive construction is grammatical, at least in some languages.

Other restrictions on the biabsolutive construction observed in the literature include: (i) word order: while the order of the subject, direct object and verb is free in the ergative construction, in many languages the verb and the direct object must come together in the biabsolutive construction; (ii) clitic placement: the direct object in the biabsolutive construction cannot bear topic- and focus-associated clitics, (iii) relativization: the direct object in the biabsolutive construction cannot be relativized. A detailed discussion of the biabsolutive construction in Nakh-Daghestanian can be found in Forker (2012); Gagliardi et al. (2014) present an account of the biabsolutive in Lak and Tsez; several chapters in Bond et al. (2016) discuss the biabsolutive construction in Archi: Bond and Chumakina (2016) provide a description, Borsley (2016), Sadler (2016), and Polinsky (2016a) discuss the analysis of the biabsolutive in HPSG, LFG, and Minimalism, respectively.

The biabsolutive construction has been considered in the literature as evidence for aspect-based split ergativity: perfective tense—aspect forms only allow the ergative construction, whereas imperfective tense—aspect forms display a deviation from the ergative—absolutive alignment, as often happens in split-ergative languages. However, this is not quite the case. First, unlike in true split-ergative languages, the biabsolutive construction in Nakh-Daghestanian is never obligatory: as the examples above show, the biabsolutive freely varies with the ergative construction.

Second, it has been established for some ergative languages, such as Basque (Laka 2006) and Mayan (Coon 2010, 2013), that the presumed non-ergative construction in imperfective tenses actually represents a complex-clause construction with two separate domains of case assignment, for example, a PP containing the subject PRO, the direct object, and the lexical verb, on the one hand, and the intransitive verb which selects the PP, on the other hand. A similar analysis was proposed by Gagliardi et al. (2014) for Tsez. However, as these authors suggest, not all instances of the biabsolutive can be reduced to complex-clause constructions. According to their analysis, the Lak biabsolutive construction instantiates restructuring: the matrix intransitive verb (identical to the copula/auxiliary) 'be engaged in' selects a bare VP. Since the transitive ν head is never projected in this structure, ergative case cannot be licensed. Instead, the subject is assigned absolutive case by T.

There is an indication that a complex-clause analysis along the lines proposed for Basque, Mayan, and Tsez can also be extended to other Nakh-Daghestanian languages, including Lak. Evidence comes from case marking of intensifiers and complex anaphors in the biabsolutive construction, as shown in the following examples:

- (14) Lak

 harca q'ini insan-tal kunna-l kuw q'at' b-ullaj b-ija.

 every day person-PL.ABS one-ERG one.ABS destroy HPL-do.PROG HPL-AUX.PST

 'Every day people were destroying one another.'
- (15) Avar

 žin-c:a = go Saka b-eč:'-ule-j j-igo jas:.

 REFL-ERG=EMPH cow.ABS N-milk-PTCP.PRS-F F-COP girl.ABS

 'The girl is milking the cow by herself.' (Boris Ataev, pers. comm.)

These examples instantiate the biabsolutive construction, as can be seen from the absolutive case marking of the subject. However, both sentences also have an ergative-marked element: the first part of the reciprocal in (14) and the reflexive in the function of intensifier in (15). As discussed in Chapter 21, intensifiers always bear the morphological case of the argument they

are associated with, whereas reciprocals in many Nakh-Daghestanian languages often also show the case of the antecedent. As we see, complex anaphors and intensifiers associated with the subject appear in the ergative case in the biabsolutive construction in (14) and (15), despite the absence of any overt ergative argument, which indicates that the ergative case is licensed by the lexical verb in the biabsolutive construction. How the biabsolutive can best be analyzed in different Nakh-Daghestanian languages is a matter of future research.

4.2 Ergative-absolutive syncretism

The most important factor that conditions alignment split in the languages of the Caucasus is the semantic type of the nominal argument. Silverstein's hierarchy predicts for the position of transitive subject that lower elements on the hierarchy (inanimate third person nouns) are more likely to receive ergative marking than elements higher up on the hierarchy (first/second person pronouns). In accordance with this prediction, the major split in argument marking is between first- and second-person pronouns, on the one hand, and all other types of NPs, on the other hand. In many, though not all, languages first and second person pronouns do not morphologically distinguish between ergative case and absolutive case, which results in neutral alignment for pronouns: all three core grammatical roles—S, A, and P—are encoded with the unmarked absolutive. All other types of NPs, including third person (demonstrative) pronouns, display ergative—absolutive alignment. This is the pattern observed in Kartvelian languages.

Nakh-Daghestanian languages show variation with respect to the morphological case of first/second person pronouns. First of all, a considerable number of languages, such as Avar, Aqusha Dargwa, and Lezgian, fully distinguish ergative case from absolutive case with all types of arguments, including personal pronouns. By contrast, some other languages show no such distinction with any first and second person pronouns. Yet another group of languages distinguishes between ergative and absolutive with some but not with other first/second person pronouns. Table 1 illustrates variation among Nakh-Daghestanian languages with respect to morphological case marking of first- and second-person pronouns.

Table 1. Ergative vs. absolutive in first and second person pronouns.

	0					1	
		1sg	2sg	1PL.INCL	1PL.EXCL	2PL	other languages ⁷
Avar	ABS	dun	mun	nił	niž	nuž	Aqusha, Lezgian, Lak,
	ERG	di-c:a	du-c:a	nił-ec:a	niž-ec:a	nuž-ec:a	Bagvalal
Agul	ABS	zun	wun	xin	čin	čun	Bezhta, Kryz,
	ERG						Godoberi, Tabasaran
Chirag	ABS	du	u°	- nux:a	nus:a	nuš:a	Chamalal, Khinalug
	ERG	di-c:e	a ^s -c:e				
Tsez	ABS	di mi	el-a:		mež-a:	Andi	
	ERG	aı	di mi	eli		meži	Allui
Archi	ABS	zon	1112	nen(CL)u	nen	ž ^w en	
	ERG	za-ri	- un	nena‹CL›u			
Ingush	ABS	so	hwo	vai	txo	sho/shu	Chechen

⁷ This only concerns the distinction between ergative and absolutive cases. The languages may differ with respect to the inventory of first- and second-person pronouns. For example, unlike Avar, Lezgian and Lak do not have the lexical distinction between inclusive and exclusive forms in the first-person plural.

 _				
ERG	aaz	wa	oaxa	oasha

With two notable exceptions, the absence of the ergative—absolutive distinction with (some) first- and second-person pronouns is the only alignment split found in the Caucasus. The two exceptions are case marking in Circassian languages and in Udi.

Circassian languages extend neutral alignment beyond first and second person pronouns. In fact, only specific definite common nouns can bear case morphology (absolutive or ergative) in Circassian (see also Chapter 9). Specific indefinite and non-specific common nouns as well as proper names are not marked with morphological marking in either ergative or absolutive case (recall that both are marked with a dedicated case suffix). Example (16)a shows an indefinite direct object morphologically unmarked for case; example (16)b illustrates the absence of ergative case marking with proper names (see also example (3) above, which shows the absence of case marking on pronouns).

```
(16) Adyghe a. č'ale-m pjəsme
```

- a. *č'ale-m pjəsme ə-txə-s*.
 boy-ERG letter 3SG.A-write-PST
 - 'The boy wrote a letter.'
- b. mwese $?_wefə-r$ $qə-gwə-r-ə?_wa-s$. Mos deal-ABS DIR-heart-INSTR-3SG.A-say-PST

'Mos (proper name) understood the deal.' (Arkadiev et al. 2009b: 57, 78)

Udi presents another extension to split ergativity: it is unique among Nakh-Daghestanian languages in having the nominative–accusative alignment with personal pronouns, as shown in for the 1sg pronoun zu in (17)a-c:

(17) Nij Udi

- a. zu häjsä e=s=sa. 1SG[S] now come=1SG=STEM+PRS'I am coming now.'
- b. zu=al va mija bo=s=s-e. 1SG[A]=ADD 2SG.DAT[O] here throw=1SG=STEM-PRF'And I left you here.'
- c. hun za bar-t-e=nu.
 2SG[A] 1SG.DAT[O] leave-LV-PRF=2SG
 'You left me (there).' (Ganenkov 2008: 25)

Example (17)a shows that the intransitive subject is in the morphologically unmarked form zu, just like the transitive subject in example (17)b. In contrast, the transitive direct object shown in (17)c is in the morphological dative case. It is clear, though, that this nominative–accusative pattern is the result of the interaction between two independent phenomena. On the one hand, following the common Nakh-Daghestanian pattern, first and second person pronouns do not morphologically distinguish between ergative and absolutive cases. On the other hand, Udi has differential object marking, that is, two different ways to mark transitive direct objects depending on properties of the latter (see Harris 2002; Kasyanova 2017). Human and specific non-human DPs have dative case marking in the direct object position,

whereas non-specific non-human arguments are in the absolutive case. Personal pronouns are always human/specific and thus must appear in the dative case when in the direct object position. The combination of the two phenomena—uniform subject marking with first- and second-person pronouns and differential object marking—therefore results in the overall nominative—accusative pattern with personal pronouns.

5 Split intransitivity

While most languages of the world treat subjects of all intransitive verbs the same way in case marking and agreement, it is known that some languages divide their intransitive verbs into two classes, depending on whether the subject of an intransitive verb patterns with transitive subjects or transitive direct objects in some respect, the phenomenon known as *semantic alignment* in functionalist literature (Mithun 1991, Van Valin 1991, Dixon 1994, Donohue and Wichmann 2008) and *unaccusativity* in formal approaches (Perlmutter 1978, Levin and Rappaport Hovav 1995, Alexiadou et al. 2004). Subjects of some intransitive verbs display the behavior also shown by transitive subjects (*agentive* or *unergative* verbs); subjects of other intransitive verbs display the behavior typical of transitive direct objects (*non-agentive* or *unaccusative* verbs).

Split intransitivity in Georgian is discussed in Section 2 above. Some Nakh-Daghestanian languages show the distinction between unergative and unaccusative intransitive verbs in verbal person marking, as in Tabasaran clitic-doubling (see Chapter 3). Akhvakh, of the Andic branch, employs a different pattern: only the subjects of transitive verbs and unergative intransitive verbs trigger person agreement, whereas neither the subjects of unaccusative verbs nor the direct objects of transitive verbs can do so (Creissels 2008).

Udi and Batsbi are the only Nakh-Daghestanian languages that show split intransitivity in the case marking of intransitive subjects. The Udi case is presented in Chapter 3 of this volume, which also mentions examples of split intransitivity in phenomena other than case marking and agreement. Batsbi shows the split between unaccusative and unergative verbs in both case marking and verbal person indexing, as shown in (18). The subject of the intransitive verb 'undress' is in the ergative case, whereas the subject of the intransitive verb 'hang' is in the absolutive.

```
(18)
      Batsbi
     (as)
                daħ japxjail-n-as.
a.
                PV
                     undress-AOR-1SG.ERG
      1sg.erg
     'I got undressed.'
     (so)
b.
                xe-n-mak
                              qac'-u-sO.
     1sg.abs
               tree-DAT-on hang-PRS-1SG.ABS
      'I'm hanging in a tree.' (Holisky 1987: 105)
```

Holisky (1987) discovers that in addition to verbs that always have their subject in the ergative case or in the absolutive, some intransitive verbs vary between the two options, that is, display the fluid-S pattern, with differences in semantic interpretation concerning, first of all, volitionality and control. Batsbi is also typologically unique in that fluid intransitivity is restricted to first- and second-person subjects, while third person subjects are invariably in the absolutive case with all intransitive verbs. Despite numerous mentions in the literature, this property of Batsbi remains mysterious.

6 Properties of the ergative case

Apart from the morphological vs. syntactic distinction among ergative languages discussed above, ergative languages can be further divided into smaller classes. In this section, I go over some of parameters of variation.

6.1 Ergative case and theta-roles

Much discussion in the literature revolves around the structural vs. inherent nature of ergative case (Woolford 1997, 2006; Legate 2012, Rezac et al. 2014, Sheehan 2017). The empirical dimension of this distinction boils down to a number of differing predictions made by the two approaches. One point of divergence concerns the theta-relatedness of ergative case. The inherent ergative approach predicts that ergative case must be associated with a closed set of theta-roles: first of all, agents and, less restrictively, causers and instruments. The structural ergative approach makes no such prediction and allows for a broader spectrum of theta-roles. Ergative subjects in Circassian can express the agent, the causer, and the instrument, as well as the experiencer (see also Chapter 9). Besides, the nominal ergative case functions as the general oblique case that marks indirect objects introduced both lexically by verbs and by applicative heads; see Chapters 9 and 10. Given that Circassian languages feature a relatively large set of applicative derivations (benefactive, malefactive, comitative, and a few locative applicatives), the ergative (oblique) case in Circassian is clearly not associated with any particular theta-role. Note, however, that ergative subjects, on the one hand, and ergative indirect and applied objects, on the other hand, employ slightly different sets of agreement markers (see Chapter 9). This difference in the agreement pattern opens up the possibility to analyze the Circassian case system as including two homophonous cases, the ergative used to mark transitive subjects and the oblique used for indirect/applied objects. This approach is adopted in Caponigro and Polinsky (2011); see also Introduction to this volume. On the other hand, Arkadiev and Lander do not distinguish between the ergative and the oblique, treating this form as a single case (Chapter 9; Arkadiev et al. 2009b).

The distribution of verbs between transitive and intransitive classes in Circassian languages is sensitive to the properties of the situation described. Smeets (1992b: 130) points out that ergative subjects are "prototypically strong control agents." Some experiencer verbs, such as 'forget', are not transitive, but rather belong to the inversive class, where the argument cross-referenced in the indirect object agreement slot displays some subject properties (Smeets 1992b: 122–123, Arkadiev et al. 2009b: 64–65).

Nakh-Daghestanian languages present a more difficult case. Prima facie, they seem to come relatively close to what is predicted by the inherent ergative case approach. First, the transitive verb class indeed primarily includes verbs subcategorizing for the Agent. Aside from agentive subjects of transitive verbs, ergative marking also occurs with causers, as in (19) and (20).

- (19) Lezgian

 ci sar-ar-a behemdiz t'al t'wa-da.

 water.ERG tooth-PL-IN enough pain.ABS put.in-HAB

 'The water causes rather strong pain in teeth.'
- (20) Aqusha Dargwa da^s?-li bajraq-uni lawšar-d-ik'-aq-uli sadbi. wind-OBL.ERG flag-PL.ABS wave-N.PL-LV:IPFV-CAUS-CVB (N.SG)AUX 'The wind is waving flags.'

Instruments can also be ergative subjects, as shown in (21), though transitive clauses with instrumental subjects are a relatively rare phenomenon in natural speech.

(21) Chirag Dargwa

ja^s alxani-le mex urs-l-aknu.

this saw-ERG iron.ABS saw:IPFV-PRS-NEG

'This saw does not cut metal.'

Many languages also have oblique ergative instruments, as illustrated below:

(22) Chirag Dargwa

k'as:-e nus:a naq:-le d-urc-ade. fish-PL.ABS 1PL.EXCL.ERG hand-ERG N.PL-catch:IPFV-HAB.PST.1 'We used to catch fish by hands.'

Second, most Nakh-Daghestanian languages do not employ ergative case to express experiencer subjects. Instead, a separate class of verbal predicates with non-canonically marked subjects is found in Nakh-Daghestanian in the dative or a locative case (see Comrie and van den Berg 2006, Ganenkov 2006, and Chapter 3 of this volume), similar to non-nominative subjects in Icelandic (Zaenen et al. 1985 and much subsequent literature), as shown in the following Lezgian and Avar examples.

- (23) Lezgian

 za-z q'if akru-na.

 1SG-DAT mouse.ABS see-AOR

 'I saw a mouse.'
- (24) Avar di-da nuž r-ix:-ana. 1SG-LOC 2PL.ABS PL-see-AOR 'I saw y'all.'

However, the association of ergative case with the causer (including agent) theta-role is considerably deteriorated in Dargwa languages and Udi, where a generalized Actor macrorole seems to be developing.⁸

Lezgian (and some other Lezgic languages) also shows further extensions of the use of ergative case. One type of non-causer ergative subjects in Lezgian is attested with transitive verbs of sound and light emission. Although normally such verbs are intransitive in Nakh-Daghestanian, Lezgic languages instead use transitive predicates with the inanimate

⁸ Many Dargwa varieties have only one dative subject verb: 'love, want'; other verbs usually associated with dative subject marking have been included into the transitive class. In Nij Udi, the class of dative subjects has disappeared completely, while Vartashen Udi still preserves a separate set of agreement markers with experiencer subjects, though case marking of the latter is nevertheless ergative (Harris 2002). A historical reconstruction of the dative-to-ergative shift is proposed in Ganenkov (2013).

sound/light emitter subject in the ergative. Morphosyntactically, these predicates are complex verbs consisting of a non-inflected ideophone and a transitive light verb ('do', 'give', 'hit', 'say').

- (25) Lezgian
- a. star-PL-OBL.ERG IDEOPH give-PRS 'Stars are shining.'
- b. diwan-di žaq'raq' awu-na. couch-OBL.ERG IDEOPH do-AOR 'The couch squeaked.'

Lezgian also has a number of complex verbs based on a transitive light verb (most often the verb qračuz 'take' or q'az 'seize, hold') with a fixed absolutive argument. An important property of these idioms is that their resulting meaning is often an inchoative change-of-state or non-agentive process. The subject of such verbs, however, is marked with ergative case, as required by the transitive light verb. Clearly, ergative subjects do not receive the agent/causer theta-roles in these idioms, as in the examples in (26):

- (26) Lezgian
- a. k'''al-er-i c'aj $q:a\check{c}u-nwa$. house-PL-OBL.ERG fire.ABS take-RES 'The houses caught on fire.'
- b. zi ʁil-er-i k:\(k:\) q:aču-nwa. my hand-PL-OBL.ERG itching take-RES

'My hands are itching.' (lit. 'My hands have taken itching.')

As explained in Section 2.3, Georgian has a split intransitive system distinguishing ergative intransitive subjects and nominative intransitive subjects in perfective forms. The inherent case approach usually takes this distinction as evidence confirming the inherent nature of ergative case: the Agent theta-role and ergative case are assumed to be in one-to-one correspondence (Woolford 1997, 2006).

With regard to thematic roles, Harris (1981, 1982) puts great effort into showing that ergative case marking in Georgian is indeed related to agentivity. For instance, the examples in (27) show that only the agentive subject of 'sing' can receive ergative case, whereas inanimate non-agentive subjects cannot, even though the verb is compatible with inanimate subjects.

- (27) Georgian
- a. *čaidan-ma imγera. teakettle-ERG 3SG.sang ('The tea kettle sang.')
- b. vano-m imγera.Vano-ERG 3SG.sang'Vano sang.' (Harris 1982: 300)

However, Hewitt (1987b) shows that examples similar to (27)b are in fact accepted by his consultants, as shown by (28):

```
    (28) Georgian
    čaidan-ma iγiγina.
    teakettle-ERG 3sG.whistled
    'The teakettle whistled.' (Hewitt 1987b: 331)
```

The situation is complicated by the fact that Georgian dialects demonstrate a great deal of variation in ergative marking of intransitive subjects. Alice Harris, B. G. Hewitt, and other authors freely use examples from different dialects to support their claims, without first laying out the entire system of a specific dialect. The only system we can safely deal with for the time being is that of Standard Georgian, which has been described in detail, whereas split intransitivity in Georgian dialects has yet to be studied systematically. Given that agentive verbs like 'go' can only have nominative subjects in Standard Georgian, we have to conclude that ergative marking of intransitive subjects is not systematically associated with the thematic role of agent and thus cannot be taken as evidence for the inherent status of ergative case.

Turning to the ergative case marking of transitive subjects in Kartvelian, it is also clear that ergative subjects need not be always agentive. In Georgian, experiencers with such verbs as 'see' appear in the ergative; example (28) demonstrates that the verb 'whistle' can have a non-agentive subject. To be sure, case assignment in Georgian is complex enough, being sensitive to the lexical semantics and syntactic transitivity of the verb, the thematic role of the subject, tense—aspect marking, and derivational applicative morphology. For what it seems now, ergative case in Georgian may well happen to be structural rather than inherent, as is often assumed. Accurate in-depth analyses of case assignment are still needed even for Standard Georgian, let alone numerous Georgian dialects or Svan.

6.2 Raising

Raising constructions in languages of the Caucasus are poorly studied. Most of the typical matrix verbs are either control verbs or restructuring verbs in Nakh-Daghestanian, Northwest Caucasian, and Kartvelian. As a result, for most languages almost no information about the behavior of ergative case under raising is available, whether that be the behavior of the ergative subject of the embedded verb or the existence of raising verbs assigning ergative case to their subject. Potsdam and Polinsky (2012) and Polinsky (2016b) are the only existing sources providing evidence from Adyghe and Tsez concerning the behavior of transitive subjects in raising constructions, as in (29) and (30).

(29) Adyghe

a-xe-r_i [__i pjəsme-r a-txə-new] 0-fjež'a-ʁe-x.

DEM-PL-ABS ERG letter-ABS 3PL.ERG-write-INF 3.ABS-begin-PST-3PL.ABS

'They began to write a letter.' (Polinsky 2016b: 152, Potsdam and Polinsky 2012: 78)

(30) Tsez

⁹ Arkadiev & Lander (Chapter 9) suggest that this analysis is untenable but do not offer actual counterexamples or an alternative analysis.

ža aği, [__i ko y-ac'-a] b-iči-xosi yol.

DEM bird(III).ABS ERG raspberry(II).ABS II-eat.TR-INF III-stay-PTCP.PRS be.PRS

'This bird keeps eating (the) raspberries.' (Polinsky 2016b: 317)

As these examples show, the ergative case assigned by the embedded verb is not preserved under subject-to-subject raising in Adyghe and Tsez: the overt subject appearing in the matrix clause bears absolutive case as required by the matrix raising verb, thus pointing to the structural nature of ergative case in the two languages.

6.3 Person interaction phenomena

The additional piece of evidence that confirms the structural status of ergative case in at least some languages of the Caucasus is that it participates in person hierarchy interactions. Some Nakh-Daghestanian languages have hierarchical person agreement where the controller is determined on the basis of the grammatical function and the person value of the two core arguments. Georgian and other Kartvelian languages show a similar pattern where the subject and the direct object compete for the prefixal agreement slot in monotransitive constructions. While no analysis of hierarchical agreement is uniformly accepted (see Anagnostopoulou 2003, 2005; Nevins 2007, 2011; Béjar and Rezac 2009; Béjar 2011 for different approaches), current theoretical literature seems to assume that person interaction of various kinds arises in syntactic configurations where two arguments in structural cases are involved (see Ormazabal and Romero 2007 for an explicit claim about the ditransitive Person—Case Constraint). If so, ergative subjects participating in hierarchical person agreement bear structural case.

6.4 Is the ergative argument a DP or a PP?

To account for the behavior of ergative case in syntactically ergative languages, a number of proposals were formulated suggesting that from a structural point of view, ergative arguments are PPs, not DPs (Markman and Graschenkov 2006, Stepanov 2004). Polinsky (2016b) formulates several diagnostics that can distinguish ergative as a DP from ergative as a PP: behavior in A'-extraction, binding, accessibility to A-movement, the possibility of subextraction, the ability to function as PRO subject in obligatory control, and the ability to trigger agreement. Relativization as a showcase of A'-structure has been already discussed in Section 3 above. Below I show that three other diagnostics—binding, obligatory control, and agreement—also identify ergative case in Caucasian languages as a DP, not a PP.

The second diagnostic used by Polinsky (2016b) to distinguish between ergative as a DP or PP is whether or not the ergative argument can serve as the referentially dependent element in obligatory control constructions. The diagnostic is based on the typological observation that unambiguous PPs can never be null subjects in obligatory control. Polinsky (2016b) shows that ergative arguments are DPs in Tsez and Adyghe. The same is true of ergative arguments in other Nakh-Daghestanian languages, as shown in (31) and (32):

- (31) Lezgian

 za-z_i [__i am req'-iz] k'an-da-č.

 1SG-DAT ERG DEM.ABS kill-INF want-FUT-NEG

 'I don't want to kill him.'
- (32) Avar

 awiacija-λ^{*}_i [__i hawa-du-l hužum-al ha-r-ize] bajbix-ana.

 aviation-ERG ERG air-OBL-GEN attack-PL.ABS make-PL-INF begin-AOR

The third property of the ergative case that confirms its DP status is agreement. While gender agreement in Nakh-Daghestanian languages can never be determined by the ergative argument, person agreement can, just as person agreement in Kartvelian, as discussed in Section 2 above.

The fourth property, accessibility to A-movement, raising in particular, also characterizes ergative arguments as DPs, at least in Tsez and Adyghe. Finally, another property may distinguish ergative PPs from ergative DPs: subextraction. Polinsky (2016b) shows that sub-extraction from ergative arguments is allowed at least in Tsez. In contrast, other non-absolutive arguments do not allow sub-extraction (see Polinsky 2016b: 301-305). This suggests that Tsez ergative expressions are DPs, not PPs.

6.5 Locus of case assignment

One important difference between ergative languages and accusative ones is the mechanism of case assignment they employ to license clausal arguments. Accusative languages are known to be relatively homogenous in how they deal with case assignment. The standard derivation assumes that two different functional heads on the clausal spine are responsible for case assignment. One functional head assigns accusative case to the direct object (v or Voice in different proposals), while the functional head T assigns nominative case to the subject. By contrast, previous research has revealed that the same surface ergative—absolutive alignment may have different structural sources. While in some ergative languages, such as Basque (Rezac et al. 2014), case assignment proceeds in roughly the same way as in accusative languages, the syntax of case licensing appears to work in a different way in most ergative languages (a recent overview can be found in Deal 2015).

At least Tsez, Lak, and Archi present evidence for *in-situ* (vP-internal) assignment of case to both the subject and the direct object (Gagliardi et al. 2014, Polinsky 2016a, Polinsky 2016b). The evidence comes from non-finite structures that presumably lack the functional head T. The fact is that in these three Nakh-Daghestanian languages, the availability of either ergative case or absolutive case bears no relation to finiteness: non-finite structures often show the same case marking as finite clauses. The examples from Archi illustrate.

- (33) Archi
- a. Rasul-li tilivizor b-esde
 Rasul(I)-SG.ERG TV.set(III).SG.ABS III.SG-buy.PFV
 'Rasul bought a TV.'
- b. Rasul-li tilivizor b-uš-mul
 Rasul(I)-SG.ERG TV.set(III).SG.ABS III.SG-buy-NMLZ(IV)
 'Rasul's buying of a TV'
- c. [Rasul-li tilivizor b-ešde-tru-t] biq'^w
 Rasul(I)-SG.ERG TV.set(III).SG.ABS III.SG-buy-ATTR-IV.SG place(IV).SG.ABS
 'the place where Rasul bought a TV'
- d. [Rasul-li tilivizor b-ušbu-s] edətti
 Rasul(I)-SG.ERG TV.set(III).SG.ABS III.SG-buy-FIN (III.SG)become.PFV
 'Rasul managed to buy a TV.' (Polinsky 2016a: 201)

Example (33)a shows the baseline transitive sentence in Archi: the subject of the transitive verb 'buy' is marked ergative, while the direct object is in the unmarked absolutive case. The other data points in (33) show that both the subject and direct object preserve this case marking in non-finite environments: nominalization in (33)b, prenominal participial relative clause in (33)c, and infinitival clause in (33)d.

The situation observed in Archi seems to be typical of Nakh-Daghestanian languages: nominalized, participial, and infinitival clauses show the same case marking pattern as finite clauses. Importantly, in many cases one can show that the relevant non-finite structure lacks the regular T head. For example, as Gagliardi et al. (2014) show, Tsez nominalizations in -(a)ni are built directly from the verbal stem and cannot mark aspect, tense, or mood. Yet, the subject and direct object show up in ergative and absolutive, respectively, in -ani nominalized clauses, just as they do in finite clauses.

As always, variation is attested across the family, and some languages do display changes in argument case marking with nominalizations. In some languages, only the agent can be expressed by the genitive DP, as in Bagvalal (Kibrik 2001). Other languages impose no restrictions on exactly which argument—the subject or the direct object—appears in the genitive. For example, in Tsez (Polinsky 2015b), either of the two core arguments can be expressed as the genitive DP with nominalizations; the other argument then shows up in its usual case.

Northwest Caucasian languages are similar to Nakh-Daghestanian in that they do not associate ergative—absolutive case marking with finiteness, as seen in (18) above.

Kartvelian languages are different from both Nakh-Daghestanian and Northwest Caucasian, since the ergative—absolutive (as well as nominative—accusative) case marking is only available in finite clauses. In non-finite (nominalized) clauses, regular marking is not available to either the subject or the direct object.

(34) Georgian

- a. vano-ø iqo [nino-s mier] nakebi Vano-NOM was Nino-GEN by praise.PTCP.PST 'Vano was praised by Nino.'
- b. ga-v-igon-e [[nino-s mier] vano-s keba]-ø
 PV-1SG-hear-AOR Nino-GEN by Vano-GEN praising-NOM
 'I heard Nino('s) praising (of) Vano.' (Nash 2017b: 190-191)

The sentence in (34)b shows that the direct object of a transitive verb can only appear in the genitive, whereas the transitive subject may be introduced by the posposition *mier*, just like agents in passive constructions, as in (34)a (see also Harris 1981). Legate (2008) suggests that this pattern is best explained by assuming that Georgian nominalizations nominalize lexical verbs rather than any verbal projection. Nash (2017b) proposes that the ergative—absolutive layout appears in clauses where both the subject and direct object receive their cases from the same functional head T in line with the dependent case approach to case assignment (Baker 2015). In T-less nominalized clauses, neither the subject case nor the direct object case can be assigned, so that only genitive case licensed by the nominal head is available. Genitive is

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¹⁰ Whether such cases are to be analyzed as having a defective T or lacking T at all is beyond the scope of this chapter due to space considerations.

assigned to the sole argument of an intransitive verb and to the direct object of a transitive verb, while the subject optionally shows up as a *mier*-PP as found in passive constructions.

6.6 Configurational case assignment

In contrast to approaches claiming that the ergative case is assigned by specific functional heads in the clausal structure, assumed in the previous section, configurational (dependent-case) theories of case assignment argue that ergative DPs only appear in a certain structural configuration: an argument in the unmarked absolutive case must be present in the same case assignment domain (Marantz 1991, Bittner and Hale 1996, Baker 2015 and references therein). If this approach is basically correct, every sentence containing the ergative subject must also have an absolutive argument in languages of the Caucasus.

Northwest Caucasian languages seem to behave consistently with the predictions of the configurational approach, for no evident examples have been presented of sentences hosting the ergative subject where the absolutive direct object would be missing. As far as Kartvelian and Nakh-Daghestanian are concerned, this approach no doubt correctly predicts the basic pattern of argument case marking. However, there remain examples that need special effort to be accounted for under the configurational approach to ergative case assignment, an effort that has yet to be made for the majority of languages.

First of all, as discussed earlier, Georgian intransitive verbs, at least superficially, present an immediate counterexample to the claim. As mentioned in the previous section, Nash (2017b) aims to show that all unergative intransitives in Georgian are in fact concealed transitives, featuring a covert absolutive argument. While this is definitely a plausible theoretical option, more research is needed to see whether it indeed empirically wins over the competing functional head approach to case assignment.

In a similar vein, many Nakh-Daghestanian languages seem to display examples diverging from the expectations of configurational case assignment. First, many languages have isolated verbs that take an ergative subject even though they lack an overt absolutive argument, as exemplified in (35):

(35) Chirag Dargwa

babaj-le gal-a-la d-ik'-l-akru. mother-ERG boy-PL-GEN N.PL-care:IPFV-PRS-NEG

'The mother does not care about the sons.'

In this example, the subject is in the ergative case, and the oblique argument is in the genitive, but no absolutive argument is present. Note, however, that the gender agreement on the verb, which usually shows the features of the absolutive argument, bears the neuter plural feature here, thus suggesting that there may be a null absolutive direct object present in the clause.

A more systematic family of examples relates to complex verbs consisting of a light verb and a non-inflected lexical component (see Chapter 3), as shown in (36):

(36) Aqusha Dargwa

rasul-li nuša-zi wa^sw ib.
Rasul-OBL.ERG we-LOC <call> say:PFV+AOR
'Rasul called us.' (Ganenkov 2018)

The verb wa^sw es 'shout, call' in Aqusha Dargwa is a complex verb consisting of the light verb es 'say' and the non-inflected part wa^sw . The verb requires the subject to be in the ergative case. A plausible hypothesis would be that the component wa^sw occupies the position of the absolutive direct object, especially given that wa^sw is also attested as noun. Other empirical facts, however, indicate that the situation is not as straightforward as it might seem. Consider example (37), showing argument case marking with the verb wa^sw bares, another complex verb featuring the non-inflected part wa^sw .

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(37) Aqusha Dargwa
rasul-li madina wa<sup>s</sup>w r-ar-ib.
Rasul-OBL.ERG Madina.ABS <call> F.SG-do:PFV-AOR
'Rasul called Madina.' (Ganenkov 2018)
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As seen from this example, the subject of the verb wa^sw bares is in the ergative case, like that of wa^sw es in (36). Unlike the latter, however, the former verb also has a direct object expressed by the DP madina. This pattern is unexpected on the assumption that wa^sw is the absolutive argument creating the domain for the assignment of ergative case to the subject. Assuming that the non-inflected component wa^sw has the same status within these two complex verbs, we have to conclude that it is not the absolutive argument with the complex verb wa^sw es either. Given that this pattern is fairly systematic in Aqusha and other Dargwa languages, it is clearly something that needs analysis in order to see whether the dependent-case account is tenable.

7 Summary

The Caucasus is known for being one of the world's few places with a high concentration of languages demonstrating the ergative—absolutive alignment. Three indigenous language families spoken in the Caucasus—Nakh-Daghestanian, Kartvelian, and Northwest Caucasian—are often considered to be prime examples of ergative languages. This chapter reviewed the morphologically ergative nature of the languages, revealed in case marking and gender agreement in Nakh-Daghestanian as well as person marking in Northwest Caucasian. Case marking in Georgian, is not straightforwardly ergative—absolutive, primarily due to its famous split pattern. No manifestation of syntactic ergativity is observed in languages of the Caucasus, with the exception of relativization in Circassian. The biabsolutive constructions appearing with periphrastic imperfective forms are often taken to represent the split ergative pattern according to aspect. A more likely option, however, is that the biabsolutive construction instantiates a complex structure involving two domains of case assignment.

Ergative case is closely related to the theta-roles of agent, causer, and instrument in Nakh-Daghestanian, but apparently less so in Kartvelian and Northwest Caucasian. Ergative arguments show the properties of DPs rather than PPs in languages of the Caucasus, with ergative case generally appearing to be structural case rather than inherent. The licensing of ergative case is related to the thematic layer of the clause in Nakh-Daghestanian and Northwest Caucasian, whereas in Kartvelian, the ergative may be related to the inflectional domain.

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References

- Alexiadou, Artemis, Elena Anagnostopoulou, and Martin Everaert (eds.). 2004. *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*. Oxford: Oxford University Press.
- Amiridze, Nino. 2006. Reflexivization Strategies in Georgian. PhD Thesis. University of Utrecht.
- Anagnostopoulou, Elena. 2003. The syntax of ditransitives. Berlin: Mouton de Gruyter.
- Anagnostopoulou, Elena. 2005. Strong and weak person restrictions: A feature checking analysis. In L. Heggie and F. Ordoñez (Eds.), *Clitics and Affixation*, 199–235. Amsterdam: John Benjamins.
- Arkadiev, Peter, Alexander B. Letuchiy, Nina R. Sumbatova, Yakov G. Testelets. 2009. Vvedenie. Osnovnye svedenija ob adygejskom jazyke. In Peter Arkadiev, Alexander B. Letuchiy, Nina R. Sumbatova, Yakov G. Testelets (eds.), *Aspekty polisintetizma: Očerki po grammatike adygejskogo jazyka*, 17–120. Moscow: Russian University for the Humanities.
- Baker, Mark. 2015. Case: Its Principles and its Parameters. Cambridge: Cambridge University Press.
- Baker, Mark C. and Jonathan David Bobaljik. 2017. On inherent and dependent theories of ergative case. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *The Oxford Handbook of Ergativity*, 111–134. Oxford: Oxford University Press.
- Béjar, Susana, and Milan Rezac. 2009. Cyclic Agree. Linguistic Inquiry 40(1). 35-73.
- Béjar, Susana. Remarks on Omnivory and Complementarity: A Commentary on the Paper by Andrew Nevins. *Natural Language & Linguistic Theory* 29(4). 973–997.
- Belyaev, Oleg. 2013. Optimal agreement at m-structure: person in Dargwa. In Miriam Butt and Tracy Holloway King (eds.), *Proceedings of the LFG'13 Conference*, 90–110. Stanford, CA: CSLI Publications.
- Belyaev, Oleg. 2016. Ergative gender agreement in Dargwa "backward control" or feature sharing? In Arnold, Doug, Miriam Butt, Berthold Crysmann, Tracy Holloway King, and Stefan Müller (eds.), *Proceedings of the Joint 2016 Conference on Head-driven Phrase Structure Grammar and Lexical Functional Grammar, Polish Academy of Sciences, Warsaw, Poland*, 83–103. Stanford, CA: CSLI Publications.
- Belyaev, Oleg. 2017a. Information Structure Conditions on the Agreement Controller in Dargwa. In Butt, Miriam and Tracy Holloway King (eds.), *Proceedings of the LFG'17 Conference, University of Konstanz*, 66–82. Stanford, CA: CSLI Publications.
- Bittner, Maria, and Ken Hale. 1996. The Structural Determination of Case and Agreement. *Linguistic Inquiry* 27(1). 1–68.
- Bobaljik, Jonathan David, and Phil Branigan. 2006. Eccentric Agreement and Multiple Case Checking. In Alana Johns, Diane Massam, and Juvenal Ndayiragije (eds.), *Ergativity: Emerging issues*, 47–78. Dordrecht: Springer.
- Bogomolova, Natalia K. 2012. Semantika i funkcii ličnogo soglasovanija v tabasaranskom jazyke. *Voprosy jazykoznanija* 3. 101–124.

- Bogomolova, Natalia. 2018. The rise of person agreement in East Lezgic: assessing the role of frequency. *Linguistics* 56(4).
- Bond, Oliver, Dunstan Brown, Marina Chumakina, and Greville Corbett (eds.), *Archi:* complexities of agreement in cross-theoretical perspective. Oxford: Oxford University Press.
- Bond, Oliver, and Marina Chumakina. 2016. Agreement domains and targets. In Bond, Oliver, Dunstan Brown, Marina Chumakina, and Greville Corbett (eds.), *Archi:* complexities of agreement in cross-theoretical perspective, 43–76. Oxford: University Press.
- Borsley, Robert D. 2016. HPSG and the nature of agreement in Archi. In Bond, Oliver, Dunstan Brown, Marina Chumakina, and Greville Corbett (eds.), *Archi: complexities of agreement in cross-theoretical perspective*, 118–149. Oxford: Oxford University Press.
- Caponigro, Ivano, and Maria Polinsky. Relative Embeddings: A Circassian Puzzle for the Syntax/Semantics Interface. *Natural Language & Linguistic Theory* 29(1). 71–122.
- Chumakina, Marina, and Oliver Bond. 2016. Competing controllers and agreement potential. In Bond, Oliver, Dunstan Brown, Marina Chumakina, and Greville Corbett (eds.), *Archi:* complexities of agreement in cross-theoretical perspective, 77–117. Oxford: Oxford University Press.
- Colarusso, John. 1992. A grammar of the Kabardian language. Calgary: The University of Calgary Press.
- Comrie, Bernard and Helma van den Berg. 2006. Experiencer constructions in Daghestanian languages. In Bornkessel, Ina, Matthias Schlesewski, Bernard Comrie, and Angela D. Friederici (eds.), Semantic Role Universals and Argument Linking: Theoretical, Typological, and Psycholinguistic Perspectives, 127–154. Berlin: Mouton de Gruyter.
- Coon, Jessica. 2010. Rethinking Split Ergativity in Chol. *International Journal of American Linguistics* 76(2). 207–253.
- Coon, Jessica. 2013. TAM Split Ergativity, Part I. Language and Linguistics Compass 7(3). 171–90.
- Creissels, Denis. 2008. Person variations in Akhvakh verb morphology: functional motivation and origin of an uncommon pattern. *Sprachtypologie und Universalienforchung* 61. 309–325.
- Deal, Amy Rose. 2015. Ergativity. *In Syntax Theory and Analysis. An International Handbook. Volume 1*, ed. by Artemis Alexiadou and Tibor Kiss, 654–707. Berlin: Mouton de Gruyter.
- Dixon, R. M. W. Ergativity. 1994. Cambridge: Cambridge University Press.
- Donohue, Mark, and Søren Wichmann (eds.). 2008. *The Typology of Semantic Alignment*. Oxford: Oxford University Press.
- Foley, Steven. 2013. The syntax of Georgian relative clauses. Senior Honors Thesis, New York University.
- Forker, Diana. 2012. The bi-absolutive construction in Nakh-Daghestanian. *Folia Linguistica* 46(1). 75–108.
- Forker, Diana. 2017. Ergativity in Nakh-Daghestanian. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *The Oxford Handbook of Ergativity*, 851–872. Oxford: Oxford University Press.
- Gagliardi, Annie, Michael Goncalves, Maria Polinsky, and Nina Radkevich. 2014. The biabsolutive construction in Lak and Tsez. *Lingua* 150. 137-170.

- Ganenkov, Dmitry. 2006. Experiencer coding in Nakh-Daghestanian. In: Kulikov, Leonid, Andrej Malchukov, and Peter de Swart (eds.), *Case, Valency and Transitivity*, 179–202. Amsterdam: John Benjamins.
- Ganenkov, Dmitry. 2008. Morfologičeskaja i semantičeskaja xarakteristika padežej v udinskom jazyke. In: Alekseev, Mikhail, Timur Maisak, Dmitry Ganenkov, and Yuri Lander (eds.), *Udinskij sbornik: grammatika, leksika, istorija jazyka*, 27–61. Moscow: Academia.
- Ganenkov, Dmitry. 2013. Diachrony of experiencer subject marking: Evidence from East Caucasian. In: Seržant Ilja and Leonid Kulikov (eds.), *The Diachronic Typology of Non-Canonical Subjects*. Amsterdam: John Benjamins, 231–256.
- Ganenkov, Dmitry. 2018. Gender agreement alternation in Aqusha Dargwa: A case against information structure. *Studies in Language*.
- Ganenkov, Dmitry. 2019a. Case and agreement. In: Michael Daniel, Dmitry Ganenkov, and Nina Dobrushina (eds.), *Mehweb: Selected essays on phonology, morphology and syntax*. Berlin: Language Science Press.
- Harris, Alice C. 1981. *Georgian Syntax: A Study in Relational Grammar*. Cambridge: Cambridge University Press.
- Harris, Alice C. 1982. Georgian and the Unaccusative Hypothesis. Language 58(2). 290-306.
- Harris, Alice C. 1985. Diachronic Syntax: The Kartvelian Case. Academic Press.
- Harris, Alice C. 1991b. Mingrelian. In Alice C. Harris (ed.), The *Indigenous Languages of the Caucasus. Volume 1: The Kartvelian Languages*, 313–394. Delmar, New York: Caravan Books.
- Harris, Alice C. 2002. *Endoclitics and the Origins of Udi Morphosyntax*. Oxford: Oxford University Press.
- Hewitt, Brian George. 1979. Abkhaz. Amsterdam: North-Holland.
- Hewitt, Brian George. 1983. Review of Alice C. Harris, Georgian syntax: A study in relational grammar. Lingua 59. 247–274.
- Hewitt, Brian George. 1987. Georgian: ergative or active? Lingua 71. 319–340.
- Holisky 1987. The case of the intransitive subject in Tsova-Tush (Batsbi). *Lingua* 71. 103–132.
- Holisky, Dee Ann. 1991. Laz. In Alice C. Harris (ed.), *The Indigenous Languages of the Caucasus. Volume 1: The Kartvelian Languages*, 395–472. Delmar, New York: Caravan Books.
- Kasyanova, Polina A. 2017. Differencirovannoe markirovanie ob'ekta v nidžskom dialekte udinskogo jazyka. *Acta Linguistica Petropolitana* 13(1). 635–661.
- Kazenin, Konstantin. 1994. Split syntactic ergativity: Toward an implicational hierarchy. *Sprachtypologie und Universalienforschung* 47. 78–98.
- Kazenin, Konstantin I. 2013b. Sintaksis sovremennogo lakskogo jazyka. Makhachkala: DNC RAN.
- Kibrik, Alexander E. 1987. Constructions with clause actants in Daghestanian languages. *Lingua* 71. 133–178.
- Kibrik, Alexander E. and Jakov G. Testelets (eds.), *Elementy caxurskogo jazyka v tiplogičeskom osveščcenii*. Moscow: Nasledie.
- Kibrik Alexander E. 2003. Konstanty i peremennye jazyka. Sankt-Petersburg: Aletheia.
- Laka, Itziar. 2006. Deriving Split Ergativity in the Progressive. In Alana Johns, Diane Massam, and Juvenal Ndayiragije (eds.), *Ergativity: Emerging issues*, 173–196. Dordrecht: Springer.

- Lander, Yury A., and Yakov G. Testelets. 2017. Adyghe (Northwest Caucasian). In Michael Fortescue, Marianne Mithun, and Nicholas Evans (eds.), *The Oxford Handbook of Polysynthesis*, 948–970. Oxford: Oxford University Press.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39(1). 55–101.
- Legate, Julie Anne. 2012. Types of Ergativity. Lingua 122(3). 181–191.
- Letuchiy, Alexander. 2007. Reciprocals, reflexives, comitatives, and sociatives in Adyghe. In Vladimir P. Nedjalkov (ed.), *Reciprocal constructions. Volume 2*. 773–812. Amsterdam: John Benjamins.
- Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity*. Cambridge, MA: MIT Press.
- Marantz, Alec. 1991. Case and licensing. In *Proceedings of the 8th Eastern States Conference on Linguistics (ESCOL 8)*, ed. by German Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Columbus: Ohio State University: Department of Linguistics.
- Mithun, Marianne. 1991. Active/Agentive Case Marking and its Motivations. *Language* 67. 510-546.
- Nash, Léa. 2017. The structural source of split ergativity and ergative case. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *The Oxford Handbook of Ergativity*, 175–204. Oxford: Oxford University Press.
- Nevins, Andrew. 2007. The Representation of Third Person and Its Consequences for Person-Case Effects. *Natural Language & Linguistic Theory* 25(2). 273–313.
- Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29(4). 939-971.
- O'Herin, Brian. 2002. Case and agreement in Abaza. Dallas: SIL International and the University of Texas at Arlington.
- Ormazabal, Javier, and Juan Romero. 2007. The Object Agreement Constraint. *Natural Language & Linguistic Theory* 25(2). 315–47.
- Perlmutter, David. (1978). Impersonal passives and the unaccusative hypothesis. *Papers from the Annual Meeting of the Berkeley Linguistic Society*, 4. 157-189.
- Polinsky, Maria. 2015. Tsez Syntax: A Description. Manuscript. Harvard University.
- Polinsky, Maria. 2016a. *Deconstructing Ergativity: Two Types of Ergative Languages and Their Features*. Oxford: Oxford University Press.
- Polinsky, Maria. 2016b. Agreement in Archi from a minimalist perspective. In Bond, Oliver, Dunstan Brown, Marina Chumakina, and Greville Corbett (eds.), *Archi: complexities of agreement in cross-theoretical perspective*, 184–232. Oxford: Oxford University Press.
- Potsdam, Eric, and Maria Polinsky. 2012. Backward Raising. Syntax 15(1). 75–108.
- Polinsky, Maria, and Eric Potsdam. Long-Distance Agreement and Topic in Tsez. *Natural Language & Linguistic Theory* 19(3). 583–646.
- Rezac, Milan, Pablo Albizu, and Ricardo Etxepare. 2014. The Structural Ergative of Basque and the Theory of Case. *Natural Language and Linguistic Theory* 32(4). 1273–1330.
- Sadler, Louisa. 2016. Agreement in Archi: An LFG perspective. In Bond, Oliver, Dunstan Brown, Marina Chumakina, and Greville Corbett (eds.), *Archi: complexities of agreement in cross-theoretical perspective*, 150–183. Oxford: Oxford University Press.
- Sheehan, Michelle. 2017. Parameterising ergativity: an inherent case approach. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *The Oxford Handbook of Ergativity*, 59–85. Oxford: Oxford University Press.
- Smeets, Rieks. 1992. On valencies, actants and actant coding in Circassian. In Brian George Hewitt (ed.), *Caucasian Perspectives*, 98–144. Munich: Lincom Europa.

- Sumbatova, Nina R. 2011. Person hierarchies and the problem of person marker origin in Dargwa: facts and diachronic problems. In Gilles Authier and Timur Maisak (eds.), *Tense, aspect, modality and finiteness in East Caucasian languages*. Universitätsverlag Dr. N. Brockmeyer: Bochum.
- Sumbatova Nina R. and Yuri A. Lander. 2014. *Darginskij govor selenija Tanty:* grammatičeskij očerk, voprosy sintaksisa. Moscow: Jazyki slav'anskoj kul'tury.
- Sumbatova, Nina R. and Rasul O.Mutalov 2003. A Grammar of Icari Dargwa. Munich: Lincom Europa.
- Tuite, Kevin. 2017. Alignment and orientation in Kartvelian. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *The Oxford Handbook of Ergativity*, 1114–1138. Oxford: Oxford University Press.
- Vamling, Karina. 1989. Complementation in Georgian. Lund: Lund University Press.
- Van Valin, Robert D. 1991. Semantic parameters of split intransitivity. *Language* 66. 221-260.
- van den Berg, Helma. 1999. Gender and person agreement in Akusha Dargi. *Folia Linguistica* 33(1-2). 153–68.
- Woolford, Ellen. 1997. Four-way case systems: Ergative, nominative, objective and accusative. *Natural Language & Linguistic Theory* 15(1). 181–227.
- Woolford, Ellen. Lexical Case, Inherent Case, and Argument Structure. *Linguistic Inquiry* 37(1). 111–130.
- Yamada, Hisanari. 2013. Reciprocal constructions in Avar. Lingua 126. 150–171.
- Zaenen, Annie, Joan Maling and Höskuldur Thráinsson. 1985. Case and Grammatical Functions: The Icelandic Passive. *Natural Language & Linguistic Theory* 3(4). 441–483.