

John Benjamins Publishing Company



This is a contribution from *Studies in Language* 41:3
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Multiple ergatives

From allomorphy to differential agent marking

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This paper presents a cross-linguistic survey of case systems with several non-phonologically distributed markers of ergative case, based on a convenience sample of more than 70 languages from all over the world. It is shown that in most languages the distribution of different ergative markers splits along the lines predicted by the referential hierarchy (local pronouns > non-local pronouns > proper names > kinship terms > humans > nonhumans > inanimates), thus complementing the much better known ergativity splits. Other types of conditioning of “multiple ergatives” include gender, such nominal morphosyntactic features as number and (in)definiteness, as well as clausal morphosyntactic features like tense/aspect, polarity and person of co-arguments. “Fluid” systems where the choice of ergative marker is based on semantic or pragmatic factors are attested as well. The article also discusses the implications of ergative allomorphy and ergative alternations for the typology of ergativity and case marking in general.

Keywords: case, morphology, allomorphy, ergativity, referential hierarchies

For Bernard Comrie

1. Introduction¹

In this paper I investigate case systems with several markers of ergative case distributed on non-phonological grounds – a relatively rare and heretofore almost completely neglected phenomenon (cf. McGregor 2009: 497–498). Most cross-linguistic

1. Most of the material for this study has been collected during my stays at the Max Planck Institute for Evolutionary Anthropology in Leipzig in 2010 and 2014. Preliminary results of the investigation have been presented at the 7th Young Researchers' Conference on Typology and Grammar (Saint-Petersburg, 2010), at the workshop “Referential Hierarchies in Alignment Typology” at the 44th Annual Meeting of the Societas Linguistica Europaea (Logroño, 2011), at the 15th International Morphology Meeting (Vienna, 2012), and at seminars at the Max Planck Institute for Evolutionary Anthropology (October 2014) and at the Institute of Modern Linguistic

studies of ergativity have focused either on the issues of syntax, i.e. whether ergative alignment of case marking or verbal cross-referencing is reflected in syntactic processes such as relativization, reflexivization etc., or on the distribution of ergative case marking across different types of nominals or constructions (so-called “split ergativity”), see e.g. McGregor (2009) and Bickel (2010) for a typological overview and Coon (2013) and Deal (2015) for discussions within the generative framework. However, I am not aware of any studies where ergativity would have been discussed from the perspective of the form of case markers themselves – admittedly since it has always been tacitly assumed that purely morphological phenomena such as allomorphy do not yield interesting typological generalizations and have little if anything to do with the functional makeup of grammatical categories (with a possible exception of Aristar 1997 and Keine & Müller 2015; see, however, Bybee 1985 for a different view based on verbal morphology).

In this paper on the basis of some seventy languages from all over the world I will show that such a view is ill-founded and that case systems with several ergative markers can in fact yield interesting and unexpected cross-linguistic generalizations complementing the more familiar typological results in this domain. Limiting myself to instances of non-phonological distribution of overt ergative case markers, i.e. to situations where different expressions of ergative case are sensitive to such parameters as lexical-semantic class of the base they attach to or grammatical features on the level of the noun phrase or of the clause, I will show that in general the factors guiding this kind of distribution of ergative case markers are very similar to those which have been shown to determine the more familiar ergativity splits.

The remainder of the paper is structured as follows. In Section 2 I will define the domain of my inquiry and discuss several problematic issues. In Section 3 I will present my language sample and the general overview of the typology of “multiple ergative” systems. Sections from 4 to 7 constitute the main body of the article and focus on the types of conditioning of multiple ergative markers which emerge from my empirical study. In Section 8 I will summarize my results. The appendix contains the information about the languages of my sample.

Research, Sholokhov Moscow State University for the Humanities (May 2015). I thank the audiences of these talks, especially Martin Haspelmath and Anton Zimmerling, as well as Gilles Authier, Oleg Belyaev, Guillermo González Campos, Willem de Reuse, Stephanie Fauconnier, Guillaume Jacques, Thomas Jügel, František Kratochvíl, Randy LaPolla, Sara Pacchiarotti, Alexander Rostovtsev-Popiel, Erich Round, Amos Teo, Thomas Wier and two anonymous reviewers for their useful comments on the first version of this paper. The work has been supported by the Russian Foundation for the Humanities, grants No. 14-04-00580 and 17-04-00444.

2. The domain of inquiry

Ergativity is understood here following Comrie (1978) as a pattern of alignment of core relations S (the sole core argument of an intransitive verb), A (the agent of a canonically transitive verb) and P (the patient of a canonically transitive verb), whereby S is treated similarly to P and differently from A. Hence, *ergative case* is a grammatical marker (bound affix, stem alternation, clitic or free-standing adposition) or a set of such markers distributed according to some phonological, lexical or grammatical conditions and appearing on A nominals in ergative alignment, as e.g. in Basque:

BASQUE (isolate, Europe; Hualde & Ortiz de Urbina 2003: 180, 181)

- (1) a. *Zakurr-a etorri da.*
 dog-DEF(ABS) come AUX.INTR.3SG
 ‘The dog has come.’
- b. *Gizon-a-k zakurr-a ikusi du.*
 man-DEF-ERG dog-DEF(ABS) see AUX.TR.3SG>3SG
 ‘The man has seen the dog.’

It has to be kept in mind that the definition above does not imply that A-marking should be the only or even the primary function of the ergative case, and below we will see a number of languages where marking of the transitive A is just one of the numerous functions of more general “oblique” cases. Also, I include in my sample languages where in addition to the transitive A ergative case systematically appears on S arguments of certain intransitive verbs, e.g. Georgian, thus yielding the so-called “active” or “semantic” alignment (see Donohue & Wichmann 2008), as well as some languages with the so-called “tripartite” alignment, where all three core participants have distinct marking (e.g. Yakima), see e.g. Deal (2015) for a fine-grained formal typology of ergativity.

The focus of my investigation is on situations when a language possesses several *overt* markers of ergative case whose distribution is neither reducible to purely phonological factors, nor completely arbitrary, i.e. determined by lexically specified inflectional classes of nominals. The purely phonological allomorphy is exemplified by Warrongo, where it is determined by the stem-final consonant, a pattern attested in many Pama-Nyungan languages (cf. Sands 1996), see Example (2). The arbitrary inflection-class based distribution of ergative allomorphs is attested in another Pama-Nyungan language, Kuuk Thaayorre,² see Example (3) and Table 1.

2. The fact that a particular system is synchronically opaque does not mean that it cannot be made sense of in diachronic terms; specifically on Kuuk Thaayorre, see Gaby (2010) for an interesting historical scenario linking the synchronic inflectional classes with discourse-driven use of cases. I thank an external reviewer for pointing this out to me.

WARRONGO (Pama-Nyungan³ > Greater Maric, Australia; Tsunoda 2011: 165–165)

- (2) a. *-nggo* vowel-final stems: *bama* ‘man’ ~ *bama-nggo*
 b. *-C_[aplace]^o* nasal-final stems: *jojam* ‘locust’ ~ *jojam-bo*
 c. *-do* liquid-final stems + deletion of the final liquid: *jambal* ‘snake’
 ~ *jamba-do*
 d. *-jo* *y*-final stems: *magoy* ‘big carpet snake’ ~ *magoy-jo*

KUUK THAAYORRE (Pama-Nyungan > Paman, Australia; Gaby 2006: 158–164; Anderson et al. 2006: 7–9)

- (3) a. phonologically conditioned allomorphy with I declension nouns: *-thurr* after nasals and coronals vs. *-nthurr* elsewhere
 b. lexically determined allomorphy in II and III declensions; class membership is unpredictable

Table 1. Ergative allomorphy in Kuuk Thaayorre

	I declension		II & III declensions		
	Nom	Erg		Nom	Erg
‘one’	<i>thono</i>	<i>thono-nthurr</i>	‘woman’	<i>paanth</i>	<i>paanth-u</i>
‘saw’	<i>so:</i>	<i>so:-nthurr</i>	‘man’	<i>pam</i>	<i>pam-al</i>
‘large’	<i>ngamal</i>	<i>ngamal-thurr</i>	‘dog’	<i>kuta</i>	<i>kuta-n</i>
‘sun’	<i>pung</i>	<i>pung-thurr</i>	‘bad’	<i>waarr</i>	<i>waarr-an</i>

In fact, it is precisely these two “poles” which I exclude from my investigation which seem to have received most attention in the morphological literature under the heading of *allomorphy* (cf. Carstairs 1987; Booij 1997, 2012), either phonologically conditioned, see e.g. Paster (2006) for a recent typological overview, or lexically determined, see the growing body of works on inflectional class systems, e.g. Corbett (2009) and Stump (2015). Some authors, e.g. Andrew Carstairs-McCarthy (1994, 1998, 2001, 2010) and in a very different vein Bobaljik (2000), have argued that such purely morphological information as inflection-class specification may be a part of the “lexical” representation of morphemes and hence in a sense contribute to the “meaning” of grammatical markers. However, I will only focus on those cases where the factors conditioning the choice of an “allomorph” of the ergative case (the scare quotes will be explained immediately below) are independent of the fact of “allomorphy” itself, i.e. have grounds in semantics or morphosyntax rather than “pure morphology”. Such a delimitation of the object of study is justified not only by the fact that these issues have not been much investigated, but primarily by

3. All genealogical affiliations are given in accordance with Glottolog (glottolog.org).

the needs of typological comparison: extramorphological factors lend themselves to cross-linguistic comparison and generalization much more readily than purely morphological ones.

On the other hand, the domain of my study is broader than determined by the most commonly accepted notion of “allomorphy”, since it involves not only the complementary distribution of ergative markers conditioned either by lexical semantics of nominals (e.g. human vs. non-human) or by some nominal morpho-syntactic feature (e.g. singular vs. plural), but also variation of ergative markers determined by factors external to the nominal base to which the case marker attaches (e.g. tense-aspect of the clause) and therefore lying outside of the domain of allomorphy proper. The inclusion of such cases is important because, despite their extreme cross-linguistic rarity, they constitute revealing typological parallels to the more familiar cases of “split ergativity” where it is the alignment pattern rather than just the shape of case markers that alternates. Hence, I survey both languages where a single morphosyntactic feature “ergative case” has several overt realizations, and languages whose case systems can be argued to include more than one “ergative case” (in the above understanding of the term, i.e. more precisely, “case playing the role of ergative”), or, to use Spencer’s (2006, 2009) useful distinction between morphological and syntactic case (the latter, however, should not be confused with the “abstract case” of generative grammar), more than one morphological ergative case corresponding to a single syntactic ergative case.

However, here it is important to draw boundaries between alternations of distinct realizations of a single morphological or syntactic case and alternations between different syntactic cases, i.e. *differential argument marking* (cf. e.g. de Hoop & de Swart 2008; Seržant & Witzlack-Makarevich 2016). These boundaries are necessarily fuzzy, because the distinctions between “meaningful” variation of formal expression of a single case, on the one hand, and semantically or pragmatically determined alternations between different cases, on the other, are extremely subtle and, to my knowledge, have never been systematically addressed from this point of view in the typological literature (apart from, perhaps, work on “optional ergativity”, see McGregor 2006, 2010). Therefore, I do not a priori exclude from consideration instances where different cases can assume the function of A marking depending on particular semantic or pragmatic factors (see the discussion in Section 7). However, I attempt to restrict my focus only to those situations when it can be argued that the alternating constructions with different cases all instantiate versions of the “basic transitive construction” (cf. Hopper & Thompson 1980 and much following literature, e.g. Lazard 2002 and Malchukov 2006) as defined by the grammar of individual languages, and not an alternation between a transitive construction and a two-argument intransitive construction associated with some particular meaning.

Thus, for me Georgian, where the A (apart from a subsystem with nominative-accusative alignment) can be expressed either by the dedicated Ergative case in the “Aorist” tenses or by the Dative case in the “Perfect” tenses (see Section 6), is a legitimate instance of a “multiple ergative” language, because the distribution of A marking in Georgian is determined by grammatical features of the clause and is not related to its propositional content. By contrast, I exclude cases like ‘involuntary agent constructions’ (see Kittilä 2005; Fauconnier 2011) like that in Agul in Example (4), which involve a clear semantic contrast associated with the choice of case for the A role and, moreover, can be argued to be syntactically intransitive (see Section 7 for a more detailed discussion).

AGUL (Nakh-Daghestanian > Lezgif, Russia; Ganenkov et al. 2008: 177)

- (4) a. *baw-a* *nek* *aṭuzu-ne*.
 mother-OBL(ERG) milk(ABS) pour.out-PST
 ‘Mother poured out the milk.’
- b. *baw-a-fas* *nek̄* *aṭuzu-ne*.
 mother-OBL-ADELAT milk(ABS) pour.out-PST
 ‘Mother accidentally spilled the milk.’

Likewise, I do not consider situations when different verbs assign different cases to their most agent-like argument, treating as relevant only those verbs which occur in the basic transitive construction. Nevertheless, I admit that drawing sharp boundaries here is very problematic if at all possible, and discuss several borderline cases of differential agent marking, as well as their differences from the involuntary agent constructions, in Section 7.

I conclude this section by considering the more general question a reader may ask, i.e. why I have chosen the variation in the expression of ergative and not some other case (or case in general) as the object of my study. My answer is twofold. First, though it is of course equally interesting to survey the “allomorphy” of any other case and of cases in general, for a start one necessarily has to delimit one’s field of inquiry in such a way that the investigation is both feasible and meaningful. Ergative cases are both quite widespread and not as pervasive as accusatives or datives, moreover, due to their function and to the fact that they are “exotic” from a European perspective, they are relatively easy to identify in grammatical descriptions of various languages. Second, among the other core cases, the prevailing pattern for accusatives seems to be null vs. overt (the well-known “differential object marking” phenomena, see e.g. Iemmolo 2011 for a recent overview), while nominatives and absolutes are overwhelmingly encoded by zeroes (for a study of notable exceptions see Handschuh 2014). Of course, investigating datives, genitives or locatives, despite potential problems of their cross-linguistically valid definition

and identification, from the perspective taken here would be very instructive, but this can only be a subject of a separate study. Finally, it has to be admitted that in some languages of my sample (e.g. Una, Pitjantjatjara, Diyari, Meryam Mir, Kuku Yalanji, Niuean) the allomorphy of the ergative is part of a more general pattern involving other cases as well, but this is by no means so in the majority of the languages surveyed.

3. Language sample and overview of the typology

The phenomenon of non-phonologically determined ergative allomorphy does not at first glance seem to be widespread: Palancar (2002: 262) reports less than 8% of the ergative languages of his sample to have more than one ergative marker. My convenience sample however includes seventy three languages from thirty language families (including isolates) from all over the world (see Table 2 for an overview and Appendix for full details). The languages have been selected by looking into grammatical descriptions of all languages listed as displaying ergative alignment of noun phrases in the World Atlas of Language Structures (Comrie 2013), as well as into the descriptions of their relatives and of any other languages belonging to the language families or areas known to show ergativity (e.g. Sino-Tibetan, Chukotko-Kamchatkan; Australia, Caucasus).

Table 2. Overview of the language sample

Linguistic area	Number of families	Number of languages
North Eurasia	1	3
West Eurasia	4	14
South Eurasia	2	14
Africa	2	2
Australia	7	19
Oceania	5	9
North America	2	2
Mesoamerica	2	3
South America	6	7
total	31	73

Needless to say, my convenience sample formed by the “include everything relevant” principle is by no means balanced; however, since my study does not really ask the question “how often does this or that pattern occur in the languages of the world”, this lack of balance appears to be legitimate, especially when coupled with an admittedly good degree of representativeness. Since the sample includes only

languages with ergative case marking in the first place, certain areas (such as the Caucasus and Australia) are represented by a much greater number of languages than others (such as Africa or North Eurasia). Basically, it appears that wherever ergative case marking is widespread, “multiple ergatives” occur as well, though different language families seem to show different preponderance towards this phenomenon. “Multiple ergatives” are widespread in the Caucasus, occurring in all three indigenous language families, especially in the Circassian branch of the West Caucasian family and in various branches of Nakh-Dagestanian, but much less so in the Tibetan languages, where there is usually no ergative allomorphy at all, or in Pama-Nyungan languages, where phonologically conditioned allomorphy prevails. The best represented families in my sample are Pama-Nyungan with 13 languages, Indo-European (more precisely, Indo-Iranian) with 10 languages, and Nakh-Daghestanian with 7 languages.

Interestingly, the phenomenon of “multiple ergatives” does not seem to depend on the degree of boundedness of the ergative marker, since cases of “allomorphy” are attested with affixal, clitic and free word markers. In Table 3 I show the comparison between my sample and the results of Dryer (2013) from the World Atlas of Language Structures concerning the status of case markers in the languages of the world in general; the two samples show no significant difference (Fisher’s exact test $p = 0,296$).

Table 3. Morphological status of ergative markers

	WALS	my sample
bound markers	505	61
clitics and words	147	12

Another obvious parameter of the typology of “multiple ergatives” is the number of distinct overt ergative markers available in a language.⁴ Here the number of languages decreases predictably with the increase of the number of markers from the logical lower bound and mode of two till the largest attested number of ten in Lezgian, cf. Table 4. Systems with exuberant ergative allomorphy are found almost exclusively in the Nakh-Daghestanian languages (Avar, Ingush and Lezgian).

4. Some languages have allomorphy conditioned by inflectional class or phonological patterns in addition to more “meaningful” kinds of conditioning; in such cases purely lexically or phonologically distributed allomorphs are counted as one.

Table 4. Number of ergative markers in the languages of the sample

2	3	4	>4
42	15	12	4

Now I turn to the most important parameter of the typology of “multiple ergative” systems, around which the whole discussion in the remainder of the article will revolve, i.e. the factors conditioning the choice of case markers on the A participant. In the languages of the sample, the following types of conditioning of ergative “allomorphy” are attested, listed in the order of increasing “scope”:

1. Semantic and referential properties of the lexeme or noun phrase to which the case marker attaches, e.g. such distinctions as pronoun vs. noun, animate vs. inanimate, proper noun vs. common noun etc. (discussed in Section 4).
2. Morphosyntactic features of the nominal, e. g. number (discussed in Section 5).
3. Clause-level features such as tense-aspect, negation or properties of co-arguments (discussed in Section 6).
4. Semantic or pragmatic factors manipulable by the speaker (discussed in Section 7).

Combinations of several conditioning factors, especially of lexical and morphosyntactic features of nominals, are also well attested. The distribution of the types based on these factors in the languages of the sample is shown in Table 5.

Table 5. “Multiple ergatives” by type of conditioning factor

nominal semantics	nominal morphosyntax	clausal morphosyntax	pragmatics	combined nominal factors	combined other factors
35	7	3	5	20	3
Araona, Diyari, Siuslaw etc.	Kathmandu Newar, Panará etc.	Bribri, Cabécar, Yakima	Guugu Yimidhirr, Kuku Yalanji, Marrithiyel, Waray, Warrwa	Adyghe, Chechen, Meryam Mir etc.	Georgian, Kohistani Shina, Nêlêmwa

As is evident, only the first type of system, the one based on nominal lexical-semantic features, either alone or together with nominal morphosyntactic features, mainly number, is systematically attested across languages, while other types are mostly instantiated by sporadic individual cases. This, however, does not make them less interesting from a typological and theoretical point of view.

4. Ergative allomorphy conditioned by lexical-semantic class of the nominal

An investigation of more than fifty languages showing ergative allomorphy (here I do not use scare quotes since the use of the term is in accordance with the accepted practice) conditioned by nominal lexical-semantic features has revealed the following at first glance rather surprising generalization given in (5).

- (5) a. If a language possesses several ergative markers distributed according to the lexical-semantic class of nominals, different markers cover contiguous areas on the hierarchy in (5b).
 b. local pronouns > non-local pronouns/demonstratives > proper names > kinship terms > humans > non-human animates > inanimates

In other words, the distribution of overt allomorphs of the ergative case cross-linguistically follows the same “referential hierarchy” proposed by Silverstein (1976) as the much better known “splits” in alignment (which may be considered as alternations of overt vs. zero ergative markers, see e.g. Goddard 1982 and Legate 2014). The detailed presentation of the distribution of ergative allomorphs in the languages of the sample is given in Table 6. Shaded cells show allomorphy patterns violating the generalization in (5). Languages where allomorphs of the ergative case are distributed according to parameters not covered by the hierarchy (e.g. gender) are not included into the table and will be discussed separately.

As is evident from the table, the most commonly attested divisions of the hierarchy by means of the allomorphs of ergative cases involve the distinction between local pronouns (1st and 2nd persons) and everything else or between pronouns in general (including 3rd person and/or demonstratives) and nouns, which seems to be the dominant pattern in alignment splits as well, see e.g. Filimonova (2005), Iggesen (2005: 585). Special ergative allomorphs for just 3rd person pronouns, proper names and/or kinship terms, or nonhuman nouns are also attested in a number of languages. Although most of the languages surveyed conform to the hierarchy, some contradict it by featuring non-contiguous allomorphy patterns; notably all such cases seem to involve kinship terms: in Siuslaw they pattern with local pronouns to the exclusion of 3rd person pronouns, in Rawa they have a dedicated ergative marker of their own, with pronouns and all other nouns sharing a different marker, while in Gumbaynggir and Djingili kinship terms have a special ergative marker (see below). This suggests that the position of proper names and kinship terms on the nominal hierarchy is not fixed and individual languages may treat ones or the others as occupying a higher rank, similarly to the varying position of first vs. second person pronouns (see e.g. Haspelmath 2015 on language-particular vs. cross-linguistic hierarchies).

Table 6. Cross-linguistic distribution of lexico-semantically determined ergative allomorphy

Language	1SG	2SG	1PL, 2PL	3rd pers. pronouns	proper names	kinship terms	human	animate	inanimate
Trumai, Tamang, Northern Pumi	Erg1				Erg2				
Malayo	Erg1	Erg2			Erg1				
Khaling	Erg1	Erg2			Erg3				
Rayón Zoque, Sanumá	Erg1					Erg2			
Wagdi	Erg1	-	-	Erg2			Erg3		Erg3
Tsova-Tush	Erg1				Erg2				
Araona	irreg.		Erg1 ~ Erg2				Erg2		
Gaahmg			Erg1				Erg2		
Bumthang			Erg1 ~ Erg1 + Erg2				Erg2		
Dumi, Epena			Erg1 (sg) ~ Erg2 (Pl)				Erg2		
Georgian, Dhuwal, Djambarrpuyngu	-			Erg1			Erg2		
Kabardian, Temirgoy Adyghe	-			Erg1	(-)		Erg2		
Kala Lagaw Ya	Erg1		-	Erg1 (sg)	-		Erg2 (sg)		
Bzhedug Adyghe	-			Erg1	Erg2		Erg2 ~ Erg3		
Chukchi, Odoodee			Erg1		Erg2		Erg3		
Koryak, Alutor			Erg1		Erg2		Erg2 ~ Erg3		
Niuean				Erg1			Erg2		
Wajjarri	-			Erg1			Erg2		
Pitjantjatjara			-		Erg1		Erg2		
Diyari	(irregular)			Erg1 ~ Erg2 (f)			Erg1		
Una		Erg1			Erg2		Erg3		
Chechen	Erg1		(irregular)		Erg2		Erg3		
Ingush		(irregular)		Erg1 ~ Erg2		Erg2 ~ Erg3 & Erg4	Erg3 ~ Erg4		
Stuslaw	Erg1		Erg2	?	Erg1		Erg3		
Rawa		Erg1			Erg2		Erg1		
Kalkatungu	irregular		Erg1	?	Erg1		Erg2		
Gumbaynggir	-			Erg1	?		Erg3		
Pendau	-			Erg1			Erg2		
Nélémwa				Erg1			Erg2		
Tsakhur	-			Erg1			Erg2		
Djingili		Erg1 ~ Erg2 (f)			Erg1 ~ Erg3 (f)		Erg1 ~ Erg2 (f)		Erg4
Khwarshi	Erg1				Erg2		Erg2 ~ Erg3		

Below I will provide illustrative examples of each type of lexical-semantic conditioning of ergative allomorphy and discuss some relevant details.

4.1 Two-way systems

First I will discuss systems of ergative allomorphy involving just two markers and then will turn to more complex systems.

1st singular vs. others

This pattern is attested in Trumai, Northern Pumi and Tamang, cf. the following examples from Trumai.

TRUMAI (isolate, Brazil)

- (6) a. *hai-ts atlat mapa*
1SG-ERG1 pan break
'I broke the pan.' (Guirardello 1999: 260)
- b. *hi-k de taf naha-n?*
2-ERG2 already navel cut-3ABS
'Will you cut its navel?' (Guirardello 1999: 446)
- c. *ine-k atlat mapa*
3-ERG2 pan break
'He broke the pan.' (Guirardello 1999: 259)

2nd singular vs. others

This pattern is found in only one language, Malayo (also known as Dəməna).

MALAYO (Chibchan, Columbia; Williams 1993: 30)

- (7) a. *rá-gə lorénso tuw-á*
1SG-ERG1 Lorenzo see-PFV
'I saw Lorenzo.'
- b. *ma-kə mogwán-že aŋg-á m-u-yé*
2SG-ERG2 parasite-POSS drink-PFV 2SG.SBJ-do-PFV.Q
'Have you taken parasite medicine?'
- c. *əná-gə pákə kə-k-i-ne-š-á*
3SG-ERG1 COW 3PL.OBJ-ADV-LOC-go-CAUS-PFV
'He sold them a cow.'

With respect to these two cases where one of the ergative allomorphs is restricted to just a single nominal, it is important to note that I decided not to exclude such examples as just instances of morphological irregularity so characteristic of pronouns, because apart from the special allomorphs of the case marker the ergative pronominal forms of Trumai, Tamang and Malayo are fully regular.

1st person + 2nd singular + 3rd person vs. others

This rather idiosyncratic pattern is attested in the Sino-Tibetan language Bumthang (van Driem 2015: 27–28), cf. *ngai* 1SG.ERG, *ngei* 1PL.ERG, *wi* 2SG.ERG, *boi* 3PL.ERG vs. *yinle* 2PL.ERG, where *-le* is the default ergative suffix used with nouns and possible also with all pronouns (cf. the variant forms like 1SG.ERG *ngaile* or 3PL.ERG *boile*).

Local pronouns vs. others

In its “simple” form such distribution of ergative allomorphs is attested just in Rayón Zoque, cf. Example (8).

RAYÓN ZOQUE (Mixe-Zoquean > Zoquean, Mexico)

- (8) a. *mij-t* *maka* *m-nü-maw-e*
 2SG-ERG1 FUT.ICP 2-CAUS-go-DEP
 ‘You will take it.’ (Faarlund 2012: 56)
- b. *te’=is* *ñu-jay-u*
 DEM=ERG2 3+say-APL-CMPL
 ‘He said to them.’ (Faarlund 2012: 44)
- c. *te’ yomo=’is* *ñü-jay-u* *te’ jyaya*
 DEM woman=ERG2 3+say-APL-CMPL DET 3+husband
 ‘The wife said to her husband.’ (Faarlund 2012: 30)

In the other language with this kind of allomorphy, Sanumá, the system is more complicated. In Sanumá there is a distinction between the “short” and “long” (emphatic) forms of local pronouns. “Short” forms show special Ergative marking (suffix loss), compare Example (9a) with the Absolutive form of the same pronoun in (9b), while all other nominals, including emphatic ones (9c), form the Ergative with the suffix *-nö*.

SANUMÁ (Yanomam, Venezuela)

- (9) a. *sama* *töpö wapa kupili*
 1PL.EXCL.ERG1 3PL test DIST.PST
 ‘We tested them.’ (Borgman 1990: 120)
- b. *samakö* *hu pia kule*
 1PL.EXCL.ABS go intend PRS
 ‘We are about to go.’ (Borgman 1990: 119)
- c. *kamakö-nö* *ma* *te mö*
 2PL[LONG]-ERG2 2PL[SHORT].ERG1 3SG look.at
hāto asa-ö
 secretly exclusively-TAM
 ‘Only you secretly look at it.’ (Borgman 1990: 151)

- d. *ipa hao-nö hama te niha masulu kökö toto-ki kite*
 my father-ERG2 visitor 3SG to beads 3DU give-FOC FUT
 ‘My father will give beads to the visitor.’ (Borgman 1990: 121)

Pronouns vs. others

This pattern in its pure form is attested in Gaahmg, one of the two African languages of my sample, where the ergative marker is restricted to clauses with focus on the agent (see Stirtz 2014). Here pronominal As are flagged by the prefix *ɔ-*, cf. Example (10a), while nouns undergo tonal modification (cf. ‘hunter’: root *àgáár* ~ ERG *āgā̀ar*, Stirtz 2014: 252) and optionally take the preposition *é*, cf. Example (10b).

GAAHMG (Eastern Jebel, Sudan; Stirtz 2014: 249; transcription somewhat simplified, translations adapted)

- (10) a. *kāsán cōrs=é ɔ-één*
 boy.DEF help.CMPL=ENCL ERG1-3SG
 ‘He helped the boy.’
 b. *kāsán cōrs=é (é) āgā̀ar*
 boy.DEF help.CMPL=ENCL (ERG2) hunter.ERG
 ‘A hunter helped the boy.’

In Dumí, Epena and Kala Lagaw Ya one of the ergative allomorphs is restricted to just singular pronouns of all persons, cf. Example (11) from Dumí, where *-a* occurs with singular pronouns, and *-ʔa* with all other nominals. Kala Lagaw Ya is different in that its non-singular nominals (nouns and pronouns alike) do not inflect for ergative case, and this concerns also proper names (see Comrie 1981: 7–9; Ford & Ober 1991: 136, 138; Round & Stirling 2015).

DUMI (Sino-Tibetan > Himalayish, Nepal; van Driem 1993: 69)

- (11) a. *aŋ-a ani-bi phi:t-n-t-ini*
 1SG-ERG1 2PL-LOC ask.for-1SG>2-NPST-2/3.P
 ‘I shall ask you guys for it.’
 b. *antsi-ʔa im-bi phi:s-t-i*
 2DU.EXCL-ERG2 he-LOC ask.for-NPST-EXCL
 ‘We shall ask him for it.’

The situation in Epena is more complex, since, like in Sanumá, the distinction between “unmarked” and “marked” (emphatic) pronouns is relevant. According to Harms (1994: 9–10), the ergative is formed with *-a* in singular pronouns and emphatic plural pronouns, while the suffix *-pa* occurs elsewhere, including the plural “unmarked” pronouns, see Table 7 and Example (12).

Table 7. Epena ergative pronouns (Harms 1994: 58)

	“unmarked”	“marked”
1SG	<i>mi-a</i>	<i>mi-či-a</i>
2SG	<i>pi-a</i>	<i>pi-či-a</i>
3SG	<i>iru-a</i>	<i>i-či-a</i>
1PL	<i>tai-pa</i>	<i>ta-či-a</i>
2PL	<i>pāra-pa</i>	<i>pā-či-a</i>
3PL	<i>āra-pa</i>	<i>ā-či-a</i>

EPENA (Chocoan, Colombia)

- (12) a. *mí-a* *p^háta* *k^ho-hí*
 1SG-ERG1 plantain eat-PST
 ‘I ate the plantain.’ (Harms 1994: 9)
- b. *usá-pa* *et^hérre* *pee-hí*
 dog-ERG2 chicken kill-PST
 ‘The dog killed a chicken.’ (Harms 1994: 10)

It is worth noting that in the two languages where the distinction between emphatic vs. non-emphatic pronouns is relevant, i. e. Epena and Sanumá (both in the northern part of South America), emphatic pronouns pattern in the opposite ways: together with nouns in Sanumá, distinctly from them in Epena.

Finally, in Araona (Pano-Tacanan, Bolivia; Emkow 2006: 181, 250) the general ergative suffix *-(h)a* attaches to nouns and 2nd singular, 1st plural and 3rd plural pronouns, while other pronouns form the ergative either irregularly or by means of a stem alternation, cf. Table 8.

Table 8. Ergative formation in Araona pronouns

	Absolutive	Ergative
1SG	<i>ema</i>	<i>yama</i>
2SG	<i>midya</i>	<i>midyaha</i>
3SG	<i>hoda</i>	<i>wada</i>
1DU.INCL	<i>tseda</i>	<i>tseada</i>
1DU.EXCL	<i>tsema</i>	<i>tseama</i>
2DU	<i>metseada</i>	<i>metseada</i>
3DU	<i>watseada</i>	<i>watseada</i>
1PL.INCL	<i>kwada</i>	<i>kwadaha</i>
1PL.EXCL	<i>kwama</i>	<i>kwamaha</i>
2PL	<i>mikana</i>	<i>mikanaha</i>
3PL	<i>kana</i>	<i>kanaha</i>

Demonstratives vs. other nominals

This pattern is found in the languages of the Caucasus, i.e. Temirgoy Adyghe, Kabardian and Georgian (but just in Kabardian, this is the only pattern of “multiple ergatives” attested), which lack overt case marking (either ergative or accusative) on personal pronouns, and in the Australian languages Dhuwal and Djambarrpuyngu, where local pronouns show accusative alignment. Thus in Kabardian, nouns (except proper names, which usually lack case marking) and plural demonstratives take the ergative (in fact a highly polyfunctional oblique, see Kumakhov & Vamling 2009: 22–23) suffix *-m*, while singular demonstratives take *-bə* (Kumakhov & Vamling 2009: 21–23), cf. examples in (13). In Temirgoy Adyghe the distribution is more or less the same (though nominal number is an additional parameter, see below), but the ergative suffix occurring with demonstratives is *-s'* or *-j* (Kumakhov & Vamling 2009: 70).

KABARDIAN, standard variety (Abkhaz-Adyghe > Circassian, Russia; Kumakhov & Vamling 2009: 70)⁵

- (13) a. *šak^we-m dəb^vežə-r jə-wəç-a-š.*
 hunter-ERG2 wolf-ABS 3SG.A-kill-PST-DCL
 ‘The hunter killed the wolf.’
- b. *a-bə wəne-r j-e-š.*
 DEM-ERG1 house-ABS 3SG.A-PRS-do
 ‘He builds the house.’

Proper names vs. others

This pattern is attested in Niuean and several Pama-Nyungan languages of Australia (this pattern is even reconstructed for the proto-language, see the discussion in Sands 1996: 12–24, 38–40). In Niuean different sets of case prepositions, including ergative, exist for pronouns and proper names, on the one hand, and common nouns, on the other, cf. Example (14).

NIUEAN (Austronesian > Malayo-Polynesian > Oceanic, Polynesia):

- (14) a. *Koe tele e Sione a Sefa.*
 PRS kick ERG1 PN ABS1 PN
 ‘Sione is kicking Sefa.’ (Massam 1996: 93)
- b. *Kua hahala he tagata e akau.*
 PRF chop ERG2 man ABS2 tree
 ‘The man is chopping the tree.’ (Massam 1996: 84)

5. Transcription and glosses of Kabardian and Adyghe examples are adapted to the standards used by the “Moscow Circassian Research Group”, see Testelec (ed. 2009).

Turning to the Pama-Nyungan languages of Australia, in Pitjantjatjara proper names have the ergative suffix *-lu*, while common nouns take *-ngku*; pronouns do not have an ergative case (Bowe 1990: 10). More or less the same system is found in Watjarri (Douglas 1981: 214–215), though here it is complicated by a cross-cutting phonological factor, so the contrast between *-lu* on proper nouns vs. *-ngku* on common nouns is visible only with vowel-final stems (on Watjarri see also below). In Diyari (Austin 2013: 55) feminine 3rd person pronouns and proper names take the ergative in *-ndru* (identical to the ablative) while all other nominals except the irregular 1st and 2nd singular pronouns form ergative in *-(ya)li*, cf. Example (15).

DIYARI (Pama-Nyungan > Karnic, Australia)

- (15) a. *wangapula-li wima wangka-yi kunarra-ndru*
 Wangapula-ERG1 song.ACC sing-PRS Cooper.Creek-ABL
 ‘Wangapula is singing a song about Cooper Creek.’ (Austin 2013: 139)
- b. *Dora-ndru nhinha ngari-lka-yi nganthi-nganthi-ya*
 Dora-ERG2 he.ACC go.down-TR-PRS RDP-meat-ALLAT
 ‘Dora takes him down to the animals.’ (Austin 2013: 140)
- c. *mankarra-li nganha nhayi-rna wara-yi parlpa-li*
 girl-ERG1 1SG.ACC see-PST AUX-PRS some-ERG1
 ‘Some girls saw me.’ (Austin 2013: 99)

Kinship terms vs. others

The pattern of ergative allomorphy where the cut-off point occurs between kinship terms and human nouns is attested in Kalkatungu, Pendau and Rawa, but the systems are different. In Pendau (Austronesian), the ergative case (called “genitive” by Quick 2001) is realized by the proclitic *ni=* with 3rd person plural pronoun (16a), proper names (16b) and kinship terms (16c), while common nouns use the proclitic *nu=*, identical to the instrumental marker, cf. (16d).

PENDAU (Austronesian > Malayo-Polynesian > Celebic, Indonesia)

- (16) a. *ogo 'uo ni-posiponuana ni=jimo api 'uo*
 water yonder REAL.INV-pour.on.together ERG1-they fire yonder
 ‘Together they poured water on the fire.’ (Quick 2001: 106)
- b. *japing 'uo ni-sambale ni=Yusup nu=piso*
 cow yonder REAL.INV=butcher ERG1=Joseph INS=machete
 ‘Joseph butchered that cow with the machete.’ (Quick 2001: 100)
- c. *si=ama='u ni-tuju ni=ina='u*
 ABS1=father=1SG.GEN REAL.INV=send ERG1=mother=2SG.GEN
 ‘My mother sent my father.’ (Quick 2001: 97)
- d. *a'u sura ni-bagi-i nu=odo uli=nyo*
 1SG.ABS only REAL.INV-give-DIR ERG2=monkey skin=3SG.GEN
 ‘The monkey only gave me its skin.’ (Quick 2001: 99)

The situation in Kalkatungu (Pama-Nyungan > Galgadungic, Blake 1979: 29–32) is not fully clear since Blake’s grammar does not specify how proper names are inflected; from the description it appears that Kalkatungu may violate the hierarchy by using one ergative allomorph (or rather a set of phonologically distributed allomorphs) for plural pronouns and kinship terms and another set of phonologically distributed allomorphs for other nouns, including proper names (singular pronouns are irregular, as well as a number of nouns, see Blake 1979: 30–31), see Table 9.

Table 9. Kalkatungu ergative allomorphy

		Absolutive	Ergative
type 1	1st dual	<i>ŋaʎi</i>	<i>ŋaʎi-ji</i>
	3rd dual	<i>puju</i>	<i>puju-ju</i>
	‘father’	<i>kuʎa</i>	<i>kuʎa-ju</i>
type 2	‘young man’	<i>kalpin</i>	<i>kalpin-tu</i>
	‘spider’	<i>kupu</i>	<i>kupu-ŋku</i>

Finally, Rawa (Nuclear Trans-New-Guinea > Finisterre-Huon, Papua New Guinea, Toland & Toland 1991: 18, 21, 24), as has already been mentioned above, clearly contradicts the nominal hierarchy by showing a dedicated ergative marker for kinship terms (*-mbo* ~ *-bo*) opposed to the default ergative marker *-ndo* ~ *-do* occurring both on the pronouns and on all other nouns. The rationale behind this allomorphy lies in the classification of all Rawa nouns into inalienably possessed (kinship terms and body parts) vs. alienably possessed (all other nouns and pronouns) ones showing distinct morphology not limited to ergative allomorphy (Toland & Toland 1991: 13–21). Not surprisingly, the ergative marker used with kinship terms is employed as instrumental with body parts.

Humans vs. non-humans

Clear cases of this pattern of ergative allomorphy are attested in Tsakhur, Example (17), and Nêlêmwa, Example (18).

TSAXHUR (Nakh-Daghestanian > Daghestanian > Lezgetic;
Kibrik & Testelec 1999: 350)

- (17) a. *za-s ham-ni anna wasilewn-ē dars hiwo.*
I-DAT that-OBL PN PN-ERG1 lesson give.PFV
‘This Anna Vasiljevna has taught me.’
- b. *balkan-i-n balkan-na iš=i hāʔ-a.*
horse-OBL-ERG2 horse-ATR work=EVD do-IPF
‘The horse was doing horse’s work.’

NĒLĒMWA (Austronesian > Malayo-Polynesian > Oceanic, New Caledonia)

- (18) a. *hla odaxa-hla a kââma-hla.*
 they go.to.meet-3PL ERG1 father-3PL
 ‘Their father is going to meet them.’ (Bril 2002: 135)
- b. *i khua-na ru mabo hleny.*
 he eat-1SG ERG2 wasp that
 ‘A wasp bit me.’ (Bril 2002: 136)
- c. *i thege ve khayoot ru loto ena*
 he run APL fence ERG2 car this
 ‘The car drew the fence.’ (Bril 2002: 128)

Interestingly, nouns denoting children and groups of people belong to the non-human class in NĒlĒmwa, cf. Example (19):

NĒLĒMWA (Austronesian > Malayo-Polynesian > Oceanic, New Caledonia;
 Bril 2002: 136)

- (19) a. *hla kaage habwali-n ru âbeen.*
 they steal clothes-3SG ERG2 stranger
 ‘Some strangers stole his clothes.’
- b. *i fhe me pwâ-ciic hleny ru âlô.*
 he bring here fruit-tree this ERG2 child
 ‘The child brings here this fruit.’

A rather peculiar and very much reduced case of this kind of conditioning is attested in two closely related Pama-Nyungan languages, Djabugay and Yidiny, not included into Table 6, where a special ergative allomorph is used just with the “prototypical” human noun *bama* ‘Aboriginal man’ (see Patz 1991: 264 on Djabugay and Dixon 1977: 127 on Yidiny), while other nominals except local pronouns attach one of the phonologically distributed allomorphs of the general ergative marker, cf. Djabugay *bama-lu* ‘man’ vs. *nyumbu-nggu* ‘father’, *bungan-du* ‘sun’.⁶

Ergative allomorphy conditioned exclusively by the opposition between animate vs. inanimate nouns is not attested in my sample, but is found among languages with more than two way contrast (see Djingili below), and the “fluid” ergative system of Kuku Yalanji is also based on a feature close to animacy (see Section 7 below).

A different parameter playing a role in several systems of ergative allomorphy, most notably in the Indo-Iranian languages, is gender, but almost nowhere is it the only factor, cf. Diyari above and Section 5 below. Here I will mention just one rather peculiar case. In Uduk, the second African language of my sample, the two ergative

6. As Erich Round (p.c., May 2016) has pointed out to me, diachronically, this kind of ergative allomorphy can stem from an earlier arbitrary system of declension classes (as attested e.g. in Kuuk Thaayorre, see above), given that such systems are widespread among the Cape York languages.

prepositions are distributed according to the grammatical gender of the noun, which is reported by Killian (2015: 67) to be “largely arbitrary”, cf. Example (20).

UDUK (Koman, Ethiopia; Killian 2015: 80)

- (20) a. *gù'b dhĩth ā wàthĩz.* (CL.I)
 house sweep:IPF ERG.CL.I man(CL.I)
 ‘The man has swept the house.’
- b. *gù'b dhĩth mā 'cí.* (CL.II)
 house sweep:IPF ERG.CL.II child(CL.II)
 ‘The child has swept the house.’

According to Killian (2015: 67–73), “semantics ... appears to play almost no role in the choice of which gender a noun is placed in, even with a small semantic group related to humans or animate nouns”, although, conspicuously, examples in Killian (2015: 71–72) show the words for ‘man’ and ‘woman’ to belong to different classes. Grammatical gender in Uduk manifests itself in agreement of verbs and other constituents (Killian 2015: 68), so even if gender is (largely) semantically opaque in this language, it cannot be treated as a purely morphological feature akin to inflection class.

4.2 More than two-way systems

Languages with three or more allomorphs of the ergative case conditioned by nominal features largely pattern along the referential hierarchy. Thus, Khaling (Sino-Tibetan > Himalayish; Guillaume Jacques, personal communication) has distinct dedicated ergative markers for 1st person singular ($\text{ʔúŋ} \sim \text{ʔúŋ}\lambda$) and 2nd person singular ($\text{ʔín} \sim \text{ʔín}\epsilon$) pronouns and a default ergative marker $-\text{ʔ}\epsilon$ for all other pronouns and nouns. Wagdi (Indo-Aryan, India; Phillips 2013: 203–205) has three types of ergative formation: substitution of *u* by *i* in singular local pronouns (1SG. NOM *mu* ~ 1SG.ERG *mi*, 2SG.NOM *tu* ~ 2SG.ERG *ti*), suffixation of $-\text{ne}$ together with a stem alternation with demonstratives (3.REM.NOM *vo* ~ 3.REM.ERG *va-ne*), and suffixation of $-\epsilon$ to nouns, both proper and common.

Tsova-Tush (also known as Batsbi, Nakh-Daghestanian > Nakh, Georgia; Holisky & Gagua 1994: 165, 173–175) distinguishes ergative formation with local pronouns (by metathesis), with demonstratives and singular human nouns, which attach $-\text{s}$, and other nominals taking $-\text{v}$, see Table 10 (I abstract from the stem alternations).

In Khwarshi (Nakh-Daghestanian > Dagestanian > Tsezic; Khalilova 2009: 57–64, 68, 143–145), apart from a number of purely lexically determined oblique stem markers simultaneously serving as exponents of the ergative case, the latter is formed with most nouns by the suffix $-(y)i$, cf. ‘rabbit’ Abs $q^{\text{f}}e \sim$ Erg $q^{\text{f}}e-yi$; the productive oblique stem marker $-\text{mo}/-\text{ma}$ primarily attaches to inanimate nouns

Table 10. Ergative markers in Bats

	Abs	Erg
2SG	<i>ho</i>	<i>aħ</i>
1PL.EXCL	<i>txo</i>	<i>atx</i>
'that'	<i>o</i>	<i>oqu-s</i>
'father'	<i>dad</i>	<i>dada-s</i>
'fox'	<i>cok'al</i>	<i>cok'le-v</i>
'knife'	<i>nek'</i>	<i>nek'e-v</i>

ending in a vowel, cf. 'rope' Abs *rač'i* ~ Erg *rač'i-mo*, while personal pronouns and demonstratives form the ergative with the suffix *-e* replacing the final vowel of the absolutive form, cf. 1SG.ABS *do* ~ 1SG.ERG *de*, 'these' ABS *izzu* ~ ERG *izze*.

The extinct isolate Siuslaw (Oregon; Frachtenberg 1922: 462–463, 570–572, 576) constitutes a clear counterexample to the generalization in (5a), since it groups local pronouns together with kinship terms (prefix *q-*) to the exclusion of 3rd person pronouns (suffix *-s*); how ergative is marked with proper names is unknown, while the formation of the ergative with common nouns involves complex stem alternations.

Gumbaynggir, a Pama-Nyungan language of Southeastern Australia, displays a system similar to that of Kalkatungu discussed above, with the exception that kinship nouns apparently do not pattern with demonstratives but have an ergative marker of their own, used also for names of clan sections (Eades 1979: 272–274), in opposition to both demonstratives and common nouns.

Bzhedug Adyghe (Zekox 1969: 93–94; Sitimova 2004: 62–70, 76–79) singles out (consonant-final) personal names and some kinship terms, which form the ergative (oblique) case with the suffix *-ə*, distinctly from both demonstratives with the ergative in *-š^h* ~ *-j* and common nouns with the ergative in *-m*, cf. examples in (21).

BZHEDUG ADYGHE (Abkhaz-Adyghe > Circassian, Russia)

- (21) a. *a-j* *q-ə-hə-β* *š^wewəš^hEB^w*
 DEM-ERG1 DIR-3SG.A-bring-PST sugar
 'He brought sugar.' (Sitimova 2004: 78)
- b. *č'elemet^h-ə* *bzəw* *q-ə-wəbətə-β*
 PN-ERG2 bird DIR-3SG.A-catch -PST
 'Chelemet caught a bird.' (Zekox 1969: 94)
- c. *p-šəpχ^w-ə* *a* *ž'ane*
 2SG.POSS-sister-ERG2 DEM dress(ABS)
qə-w-jə-t^hə-ž'ə-β-a
 DIR-2SG.IO-3SG.A-give-REP-PST-Q
 'Did your sister give you back that dress?' (Sitimova 2004: 65)

- d. *č'ale-m* *bzəw* *q-ə-wəbətə-ɛ*
 boy-ERG3 bird DIR-3SG.A-catch-PST
 'The boy caught a bird.' (Zekox 1969: 94)

Somewhat similar systems are found in Chukchi and Koryak. In Chukchi (Dunn 1999: 100–101) personal pronouns take the ergative marker *-(n)an*, cf. Example (22a), proper nouns attach *-ne*, Example (22b), and common nouns take *-e*, Example (22c).

CHUKCHI (Chukotko-Kamchatkan, Russia)

- (22) a. *ɣəm-nan* *tə-n-walom-at-ənat* *ənpənacy-ət.*
 1SG-ERG1 1SG.A-CAUS-understand-CAUS-3PL.P old.man-3PL.ABS
 'I informed the old men.' (Dunn 1999: 212)
- b. *Nutekew-ne* *Majkələ-na* *rə-ɟp-annen*
 PN-ERG2 PN-ALLAT CAUS-wear-3SG>3SG
cinitkin *witəcy-ən.*
 REFL.POSS overtunic-3SG.ABS
 'Nutekew put his overtunic on Michael.' (Dunn 1999: 135)
- c. *taŋqonpə* *ənqen* *ɹeqe-njiw-e* *n-in-iw-qin...*
 always that(ABS) bad-uncle-ERG3 HAB-TR-say-3SG
 'The bad uncle always said to him...' (speech of non-relative)
 (Dunn 1999: 103)

In Koryak the basic system is the same, but the ergative marker used for proper names has been extended to definite common nouns, see Section 5 below. A system similar to the one found in Chukchi is attested in the Papuan language Odoodee (Hays & Hays 2002: 67), where (emphatic) pronouns take the ergative suffix *-yō*, proper names take the ergative enclitic = *ye*, while all other nouns take the ergative enclitic = *so*.

The Papuan language Una (Louwerse 1988: 107–109) also has three ergative markers: personal pronouns use the suffix *ci*, proper names, inalienably possessed kin terms and nominalizations denoting males use the postposition *beji*, while with other nouns the postposition *aji* occurs, see examples in (23).

UNA (Nuclear Trans New Guinea > Mek, Western New Guinea)

- (23) a. *er-ci* *kaling* *tentok* *kareb-kwan-si-r*
 he-ERG1 necklace one give-FUT-1PL-3SG
 'He will give a necklace to us.' (Louwerse 1988: 109)
- b. *ni-nay* *beji* *nyi-siy* *siyenyi* *kib-reyb-ma-n-ow*
 1SG-father ERG2 me-DAT headman be-CAUS-ICP-1SG.P-PST.3SG
 'My father installed me as a headman.' (Louwerse 1988: 108)

- c. *ton nang aji ato eb-ma-y*
 some persons ERG3 like say-ICP-PST.3PL
 ‘Some persons say so.’ (Louwerse 1988)

Likewise, in Chechen (Nakh-Daghestanian > Nakh, Russia; Nichols 1994: 24) the special ergative allomorph *-s* is reserved for personal names and kin terms, while the more regular allomorph *-uo* occurs with other nouns, cf. *da:-s* ‘father-ERG1’ vs. *a:xaɾxuo-č-uo* ‘peasant-OBL-ERG2’ (Nichols 1994: 72); local pronouns form the ergative by metathesis, like in Bats (cf. 1SG.ABS *swo* ~ 1SG.ERG *as*, Nichols 1994: 32), and 3rd person pronouns are suppletive.

Even more complex systems are attested in Djingili, Nalca, Ingush and Lezgian. In the Northern Australian language Djingili (also known as Jingulu; Pensalfini 1997) there are four ergative markers whose distribution is determined by the animacy hierarchy and gender, see Table 11 and examples in (24). Note that the inanimate A in (24c) is not an instrumental adjunct of an intransitive or passive verb, but a genuine core argument, as evidenced by its triggering the appropriate cross-referencing suffix on the verb. Moreover, as (24d) shows, the instrumental case marking of inanimate As triggers the masculine ergative marker on the determiner agreeing with it, so both are realizations of the same morphosyntactic case value (cf. the discussion of these examples in Fauconnier & Verstraete 2010: 195).

Table 11. Ergative markers in Djingili

female kinship terms (24a)	<i>-ka</i>
other female nominals (including personal pronouns and certain inanimates) (24a)	<i>-(ni)nga</i>
other animate nominals (including personal pronouns) (24b,d)	<i>-rni</i>
inanimate nouns (24c,d)	<i>-(C)arndi = Ins</i>

DJINGILI (Mirndi, Northern Australia)

- (24) a. *kunyangulanama ya-miki ngaja-nga-nu*
 other.day 3SG-came see-1SG-PST
lala-ka ngarri-ninga.
 aunt-ERG.FKIN my-ERG.F
 ‘The other day my father’s sister came to visit me.’ (Pensalfini 1997: 273)
- b. *babi-rni ikiya-rnarna-nu ibilkini.*
 older.brother-ERG.M wet-3SG>1SG-PST water
 ‘My brother wet me.’ (Pensalfini 1997: 273)
- c. *darrangku-wardni maya-ngarna-nu.*
 tree-ERG.INAN/INS hit-3SG>1SG-PST
 ‘I ran into a tree.’ (lit. ‘a tree hit me’, Pensalfini 1997: 284)

- d. *wukalu ngilma-ju nginda-rni-ni buba-arnđi.*
 smoke make-do this-ERG.M-FOC fire-ERG.INAN/INS
 ‘This fire is giving us smoke.’ (Pensalfini 1997: 285)

The use of a special marker (the causal case) for the inanimate A as opposed to the animate one is also reported in the Pama-Nyungan language Arabana-Wangkangurru (Hercus 1994: 78), but here it is hardly possible to speak about allomorphy or case syncretism because the regular ergative can also occur with inanimate As; moreover, since the language lacks explicit marking of transitivity or cross-referencing, it is unclear whether the construction with the causal is at all transitive. See Fauconnier & Verstraete (2010: 195–199) on special marking of inanimate As in Australian languages.

Ingush (Nakh-Daghestanian > Nakh, Russia; Nichols 2011: 127) also has four types of ergative formation apart from irregular personal pronouns, viz. *-z* for proper names and certain kinship and human nouns, *-a* for consonant-final proper names, *-uo* as a default allomorph for consonant-final stems, and *-aa* as a “conservative” marker restricted to certain noun types. The role of the nominal hierarchy in Ingush is obscured by morphological idiosyncrasies, but still shows a distinction between proper names, other human nouns and non-human nouns.

In Nalca (Nuclear Trans-New Guinea > Mek, Western New Guinea) there is a whole set of postpositions inflecting for one of the five noun classes, including the ergative postposition *-edyā* with such variants as *adyā* (CL.I), *bedya* (CL.II), *gedya* (CL.III), *edyā* (CL.IV) and *nedya* (CL.V), see Svård (2013: 29). According to Svård (2013: 23–24), the noun class system in Nalca is based on both semantic and formal factors.

Finally, in Lezgian (Nakh-Dagestanian > Daghestanian > Lezgian, Russia, Azerbaijan; Haspelmath 1993: 74–77) there are as many as ten ergative suffixes (identical to the oblique stem) distributed roughly according to semantic parameters, but with a fair amount of unpredictability, see Table 12 (capital letters indicate vowels subject to harmony rules).

Table 12. Ergative markers in Lezgian

condition	marker	Abs	Erg
consonant-final proper names	<i>-a</i>	<i>Farid</i>	<i>Farid-a</i>
abstract nouns and masdars, most plurals	<i>-i</i>	<i>jaruwal</i> ‘redness’	<i>jaruwili-i</i>
plurals in <i>-bur</i>	<i>-u</i>	<i>jarubur</i> ‘red ones’	<i>jarubur-u</i>
non-discreet mass	<i>-Ađi</i>	<i>nek</i> ‘milk’	<i>nek’-edi</i>
monosyllabic nouns denoting animals	<i>-rA</i>	<i>lam</i> ‘donkey’	<i>lam-ra</i>
lexically determined	<i>-Uni</i>	<i>kam</i> ‘trap’	<i>kam-uni</i>
	<i>-A</i>	<i>q’el</i> ‘salt’	<i>q’el-e</i>
	<i>-U</i>	<i>siw</i> ‘mouth’	<i>siw-i</i>
	<i>-Ci</i>	<i>žin</i> ‘ghost’	<i>žin-ži</i>
default	<i>-di</i>	<i>fil</i> ‘elephant’	<i>fil-di</i>

The relevance of hierarchy-related semantic parameters in Lezgian manifests itself in the fact that common nouns take a different ergative marker when used as proper names, cf. the base *cükwer* ‘flowers’, whose regular ergative is *cükwer-i*, but *Cükwer-a* when used as a proper name (Haspelmath 1993: 75).

4.3 Phonology of allomorphs

It is also worth asking whether the type of nominal the ergative marker attaches to correlates with its phonological weight or length, which can be measured in segments or syllables (for segmental markers only). The hypothesis here could be that nominals lower at the hierarchy in (5b) should tend to select longer allomorphs of the ergative than nominals higher at the hierarchy (this formulation was suggested by Martin Haspelmath; see Keine & Müller 2015 for a similar proposal related to case markers in general). The motivation for this hypothesis lies in the idea that more frequent wordforms should be shorter, and ergative wordforms of nominals higher on the hierarchy are admittedly more frequent than those lower on the hierarchy (due to, first, greater overall frequency of pronouns, and, second, human or animate agents vis-à-vis non-human or inanimate ones; however, there should be no a priori grounds to assume that proper names and/or kinship terms should be more frequent in the A function than other human nouns), see e.g. Haspelmath (2009).

In order to test this hypothesis I compared the relevant ergative allomorphs in the languages with nominal type conditioning, assuming the following weight asymmetries (only segmental allomorphs were considered):

- i. nonsyllabic < syllabic
- ii. V < CV < CCV < CVC
- iii. monosyllabic < disyllabic

Of the 39 languages surveyed, 16 (41%) support the hypothesis. Thus, the nonsyllabic vs. syllabic ergative allomorphs conform to the nominal hierarchy in Rayón Zoque, Gaahmg and Chechen, monosyllabic allomorphs increase in complexity in accordance with the hierarchy in Tamang, Khaling, Puma, Bumthang,⁷ Khwarshi, Dumi, Epena, Niuean, Pitjantjatjara, Watjarri, Kalkatungu and Nêlêmwa, and finally monosyllabic allomorphs are found to the left of disyllabic in Una. Seven languages (18%) expressly contradict the hypothesis. Thus, in Wagdi and Kabardian the longest allomorphs are used with demonstratives, and in Bzhedug Adyghe with proper names and kinship terms. Chukchi and Koryak show a decrease rather than

7. However, Bumthang may be counted as belonging to the opposite group if the pronominal forms with two ergative markers *-i-le* are taken into consideration.

increase of the weight of ergative markers from pronouns to proper names to other nouns; in Tsakhur, human nouns have a syllabic allomorph, while nonhuman a non-syllabic one. Finally, the remaining 16 languages (41%) are inconclusive in one of two ways. First, 13 languages (Trumai, Malayo, Sanumá, Kala Lagaw Ya, Siuslaw, Gumbaynggir, Bats, Araona, Georgian, Dhuwal, Djambarrpuynu, Temirgoy Adyghe, Odoodee and Pendau) use allomorphs of identical complexity for different positions on the hierarchy. Second, in three languages (Diyari, Ingush, and Djingili) there are patterns which both confirm the hierarchy and contradict it, e.g. Diyari uses an allomorph with complex consonant structure *-ndru* for the ergative of feminine pronouns and proper names, while the rest of nouns form the ergative either with the allomorph *-li* (less complex in terms of consonants) or with the allomorph *yali* (more complex in terms of syllable count), which are distributed phonologically (Austin 2013: 55).

With respect to nonsegmental ergative markers it has to be noted that although it is fairly natural for such exponents to be restricted to pronouns (this happens in Sanumá, Araona, Chechen and Bats), there are opposite cases as well, most notably Siuslaw, where nominals high on the hierarchy form the ergative by prefixes, and those low on the hierarchy undergo complex morphophonological changes, see Frachtenberg (1922: 570–572).

From this survey I conclude that the hypothesis linking the phonological weight of ergative allomorphs with the nominal hierarchy is only weakly supported, because although there are twice as many languages supporting the hypothesis than contradicting it, the inconclusive cases occur just as often as the supporting ones.

4.4 Summary

Thus we have seen that most of the languages with several non-phonologically distributed ergative markers tend to choose ergative allomorphs in accordance with the independently established referential hierarchy in (5b), repeated here for convenience as (25).

- (25) *local pronouns > non-local pronouns/demonstratives > proper names and/or kinship terms > humans > non-human animates > inanimates*

By itself the fact that ergative allomorphs in the languages of different genealogical origin and geographic location tend to cover contiguous stretches on the hierarchy in (25) seems highly significant and non-trivial. Indeed, nothing a priori predicted such a distribution, as opposed to any other factors having to do with nominal semantics, e.g. masculine vs. feminine (which is robustly, though less frequently,

attested, see below) or distinctions having to do with shape, concreteness vs. abstractness etc. (cf. the Lezgian system above).

Nonetheless, it is not obvious whether the cross-linguistic effects of the referential hierarchy on ergative allomorphy can be regarded as supporting the validity of this hierarchy as an explanatory device in the typology of case marking and grammatical relations (cf. recent critique of the hierarchy-based explanations of case marking in Filimonova 2005; Bickel 2008; Bickel et al. 2015). Indeed, since ergative allomorphy always results from diachronic changes in individual languages and language families, it might well be the case that observed hierarchical patterns are merely epiphenomenal to a more general tendency to group together cognitively salient lexical-semantic distinctions such as animate vs. inanimate, human vs. non-human, masculine vs. feminine, some of which are reflected in the referential hierarchy (cf. Cristofaro 2013). It must also be borne in mind that multidimensional systems, where ergative allomorphy depends not only on the position of the nominal on the referential hierarchy, but also on such independent parameters as gender (Djingili) or number (standard Adyghe or Meryam Mir, see below), may actually violate the generalization in (5a). Besides that, as the discussion of individual cases above has shown, language-particular details of the distribution of ergative markers are normally much less clear-cut than the general picture in Table 6 is able to show, and that each language employs its own version of the nominal hierarchy, cf. Haspelmath (2015).

5. Ergative allomorphy conditioned by nominal morphosyntactic features

Situations when the choice of the marker of one morphosyntactic feature or value is dependent on the value of another feature in the representation of the same wordform have been widely discussed in the literature (e.g. Plank 1986; Carstairs 1987; Carstairs-McCarthy 1998, 2001; Bobaljik 2000; Adger et al. 2003; Bonet & Harbour 2012), but have not been subject to large-scale typological investigations. Grammatically conditioned allomorphy should be distinguished from *cumulative exponence* whereby the values of two or more different morphosyntactic features (e.g. number and case) have no dedicated markers of their own and are expressed by portmanteau exponents, cf. Table 13 contrasting grammatically conditioned allomorphy of person-number suffixes in Latin (the underlined Perfect suffix selects a special set of person-number inflections) vs. cumulation of person-number with tense in Spanish.

Table 13. Cumulative exponence (Spanish) vs. allomorphy (Latin)

SPANISH ‘speak’		
	Presente	Preterito
1SG	<i>habl-o</i>	<i>habl-é</i>
2SG	<i>habl-as</i>	<i>habl-aste</i>
3SG	<i>habl-a</i>	<i>habl-ó</i>

LATIN ‘decorate’		
	Praesens	Perfectum
1SG	<i>orn-o</i>	<i>ornā-v-i</i>
2SG	<i>ornā-s</i>	<i>ornā-v-isti</i>
3SG	<i>orna-t</i>	<i>ornā-v-it</i>

In the domain of case, cumulation, especially with number, is fairly widespread, though, according to Bickel & Nichols (2013), is a minority pattern (16 languages of their sample as opposed to 71 with no cumulation involving case). In my investigation, I included both instances of cumulation of ergative with some other feature and grammatically conditioned allomorphy of the ergative marker. Interestingly, here cumulation is clearly a predominant pattern, being the only option in 16 languages (five of them Indo-Iranian and four Nakh-Daghestanian) and one of the options in another four (two of them Indo-Iranian), while purely grammatically conditioned allomorphy is attested only in six languages (mostly non-Indo-European). It is important to note that in the majority (20 out of 27) of the languages where nominal grammatical features affect the choice of the ergative marker, this type of conditioning is combined with some other factors, most commonly, the lexical-semantic types of the nominal, including gender. I will present the rare “pure” cases first and after that will survey the “mixed” ones.

The “ideal” case of ergative allomorphy conditioned by number is presented by Kathmandu Newar (Sino-Tibetan > Himalayish, Nepal; Hargreaves 2003: 373). Here the ergative with singular nouns and pronouns is expressed by the suffix *-nɔ* or nasalization of the preceding vowel, while after the plural suffix the ergative marker has a distinct shape *-sā* (see an example paradigm in Table 14).

Table 14. Singular vs. plural ergative markers in Kathmandu Newar

	SG	PL
Abs	<i>pasa</i> ‘friend’	<i>pasa-pī:</i>
Erg	<i>pasā:</i>	<i>pasa-pi-sā:</i>

A similar, though formally mirror-image, pattern is attested in Panará (Dourado 2001: 91), where the ergative is marked by the enclitic *hē* in the singular and by nasalization of the final vowel of the plural suffix in non-singular, cf. examples in (26).

PANARÁ (Nuclear-Macro-Je > Je, Brazil)

- (26) a. *atōsi ĩpi=hē ti=pi-ri yi=piɔw*
ammunition man=ERG 3SG.ERG=buy-PRF REAL.INTR=finish
'The ammunition that the man bought ran out.' (Dourado & Gildea 2008: 4)
- b. *ĩpi-arā ne=mē=rowa mī pītira ĩko kō*
man-PL.ERG 3PL.ERG=3DU.ABS=kill alligator two river LOC
'The men killed two alligators in the river.' (Dourado & Gildea 2008: 3)

Likewise, Parkatêjê (a.k.a. Pará Gavião, Nuclear-Macro-Je, Brazil; Ferreira 2003) distinguishes between singular and plural ergative markers (their status as suffixes or enclitics is not fully clear; ergativity in this language is attested only in clauses with perfective aspect); notably, with nouns, the plural itself is expressed separately as a proclitic, cf. examples in (27). By contrast, in personal pronouns the case markers serve as the only exponents of number, cf. examples in (28).

PARKATÊJÊ (Nuclear-Macro-Je > Je, Brazil)

- (27) a. *Samuew-te kokoy pupun.*
Samuel-ERG.SG monkey saw
'Samuel saw a monkey.' (Ferreira 2003: 164)
- b. *mē ntia tem ton tozo.*
PL woman ERG.PL armadillo hunt
'The women are hunting an armadillo.' (Ferreira 2003: 56)
- (28) a. *i-te Samuew pupun.*
1-ERG.SG Samuel saw
'I saw Samuel.' (Ferreira 2003: 164)
- b. *a-tem hōpun inūare.*
2-ERG.PL see NEG
'You did not see him.' (Ferreira 2003: 197)

Similar systems are attested in a number of Indo-Iranian languages of Afghanistan. Thus in Pashto (Tegey & Robson 1996: 47–56) there exist a number of lexically distributed allomorphs of the ergative/oblique case in the singular and a general allomorph *-o* occurring in the plural, which is cumulative in some nouns, e.g. 'woman-OBL.PL' *xádz-o*, and non-cumulative in others, e.g. 'kitchen garden-PL-OBL' *pālez-ún-o*. Similarly, in Phalura (Liljegren 2016: 111) there are several declensions with distinct allomorphs of the oblique singular, and a general oblique plural allomorph *-m* attaching to the plural suffix, itself dependent on the declension class.

Finally, Torwali (Edelman 1983: 227) distinguishes the oblique singular in *ē* vs. the oblique plural in *-ā*.

In Ubykh, the extinct Abkhaz-Adyghe language and the only non-Circassian language of the family with core case marking on nominals, the general oblique case used to mark As and other non-absolute participants cumulatively expresses number (Charachidzé 1989: 370; Fenwick 2011: 33), cf. the following examples:

UBYKH (Abkhaz-Adyghe > Ubykh; Turkey, extinct; Fenwick 2011: 33)

- (29) a. *sí-pχʲʒʷí-n* *ji-dʷí-n*.
 1SG.POSS-WOMAN-ERG.SG 3SG.ABS-SEW-PRS
 'My wife is sewing it.'
- b. *v-ʃindʒʒ:ʃʷ3-n3* *wibix* *v-bjʒ-b3...*
 DEF-Abdzakh-ERG.PL Ubykh 3PL.ERG-see-COND
 'If the Abdzakhs see an Ubykh...'

This cumulative marking of number with ergative/oblique case is the only means of expressing number on nominals in Ubykh.

Cumulation of ergative case markers with number is also attested in several languages of the Morehead-Wasur family of Papua New Guinea (see e.g. Evans 2015: 555 on Nen and Döhler 2015 on Komnzo), but the full details of these systems are not yet described, so I decided not to include them into my sample.

Other languages with grammatically conditioned allomorphy of the ergative or its cumulation with some other nominal morphosyntactic feature show other types of conditioning as well. Thus, in Temirgoj and Bzhedug Adyghe, in addition to the aforementioned distinction in the expression of the ergative between demonstratives and common nouns there is a special optional plural ergative marker, with a non-trivial ability to function both as a cumulative marker and as a grammatically conditioned allomorph (see Arkadiev 2014a, 2014b for a discussion), cf. examples in (30).

TEMIRGOJ ADYGHE (Abkhaz-Adyghe, Russia; own fieldwork data)

- (30) a. *čʰale-m* *čʰale-xe-m* no allomorphy
 boy-ERG boy-PL-ERG
 'boy' 'boys'
- b. *čʰale-me* ~ *čʰale-xe-me* cumulation vs. allomorphy
 boy-ERG.PL boy-PL-ERG.PL
 'boys'

Likewise, in Khwarshi, in addition to the ergative allomorphs conditioned by the nominal type (see above), there is a special ergative (= oblique stem) marker *-za* occurring exclusively in the plural (Khalilova 2009: 53–54, 64–55), cf. 'chimney' ABS.SG *taxwán* ~ ERG.SG *taxwan-í* ~ ERG.PL *taxwan-za*. In Chechen and Ingush

there is also a special marker for the ergative plural *-a* (Nichols 1994: 24; Nichols 2011: 127, 139). More generally, Nakh-Daghestanian languages usually have a set of (often irregularly distributed) ergative allomorphs in the singular and a distinct ergative allomorph in the plural, all or most of them, apart from marking the A, also functioning as oblique stems used for formation of other cases, see Kibrik (1991).

Chukchi and Alutor not only distinguish ergative markers used for pronouns, proper names and common nouns, but also show cumulation of ergative with number for proper names (on Chukchi see Dunn 1999: 101; Skorik 1961: 180; on Alutor see Kibrik et al. 2000: 250–251), thus Chukchi *Rintəje-ne* ‘Rintyna (a person)’ vs. *Rintəje-rək* ‘the Rintynas (a family)’. By contrast, in Meryam Mir, a Papuan language of Northern Australia (Piper 1989: 31–33), ergative is cumulative with number with common nouns: some animate common nouns mark the ergative in the singular by *-et*, Example (31a), while non-singular common nouns take the cumulative marker *-gize*, as in (31b), and all other nouns (including, counter-hierarchically, both inanimates and proper names, which apparently don’t distinguish number), take *-(i)de*, Examples (31c, d).

MERYAM MIR (Eastern Trans-Fly, Northern Australia)

- (31) a. *kári berbet-et dorge ike-li idim-lam...*
 1SG.GEN sibling-SG.ERG work make-PRS.IPF morning-ABL
 ‘My brother has been working since this morning.’ (Piper 1989: 32)
- b. *koskir-gize yábi na-wer-da*
 married.female-PL.ERG them 3NSG.P-weave-PFV.PL
 ‘The women wove them (the mats).’ (Piper 1989: 32)
- c. *able wag-ide no ad-em yába nar etkamrik-i*
 DEM wind-ERG only out-ALLAT their boat make.drift-PFV
 ‘The wind only drifted their boat further out.’ (Piper 1989: 32)
- d. *Gílam-ide abab-ise dikepwar-er lamar koskir*
 Gilam-ERG former-like think-NPRS.IPF spirit married.female
 ‘Gilam thought as he had the last time that she was a ghost.’
 (Piper 1989: 50)

Another language of Australia, Wambaya (Nordlinger 1998: 83–84), has a dedicated ergative marker occurring after the dual suffix, see Example (32a), as well as three other mostly lexically or phonologically conditioned ergative allomorphs, see Examples (32b–d).

WAMBAYA (Mirndi, Australia)

- (32) a. *bungmaj-buli-ji wurl-aji daguma juwarramba*
 old.person-DU-DU.ERG 3DU.A-HAB.PST hit men
 ‘The (two) old women had been killing all the men.’ (Nordlinger 1998: 83)

- b. *ngabulu-nu ngiyi-ng-agba dawu murlu*
milk-ERG2 3SG.NM.A-1.P-HYP bite eye
'The sap might sting my eyes.' (Nordlinger 1998: 83)
- c. *gugu.ga-yi ngiy-a wugbardi ngarra*
grandmother-ERG3 3SG.NM.A-PST cook 1SG.OBL
'Grandmother cooked (dinner) for me.' (Nordlinger 1998: 84)
- d. *bungmanyi-ni gini-ng-a jwayu*
old.man-ERG4 3SG.M.A-1.OBJ-NFUT give
'The old man gave it to me.' (Nordlinger 1998: 84)

In Kasua, a Bosavi language of Papua New Guinea (Logan 2007: 4), there is a dedicated ergative marker *-te* for dual personal pronouns (1Du *na:te*, 3Du *a:te*) opposed to the ergative suffix *-ye* used elsewhere (1SG *neye*, 3PL *iye*, *Yesuye* 'Jesus', Logan 2007: 10).

In a number of Indo-Iranian languages, such as Munji (Grjunberg 1972: 405–406), Kashmiri (Koul & Wali 2006: 32–33), Kati (Grjunberg 1980: 176–177; Edelman 1983: 60), Dimili (Zaza; Todd 2008: 38–39), the ergative (more generally, oblique) case has three realizations depending on number and gender (distinguished only in the singular), cf. the case-number paradigm of Kati in Table 15.

Table 15. Nominal paradigms in Kati

	Feminine 'girl'		Masculine 'man'	
	SG	PL	SG	PL
Nom		<i>juk</i>		<i>manči</i>
Erg/Obl	<i>juk-a</i>	<i>juk-o</i>	<i>manč-e</i>	<i>manč-o</i>

Besides that, Munji also has a special allomorph for singular feminine demonstratives (Grjunberg 1972: 411), while in Dimili there is a special subsystem for certain kinship terms, which is independent of gender (Todd 2008: 38–39).

A similar system is attested in the Pama-Nyungan language Wagaya, where singular masculine nominals take the ergative suffix *-rl*, cf. Example (33a), singular feminine ones take *-k*, cf. Example (33b), while plural nominals of both genders attach the suffix *-j*, cf. Example (33c). Differently from the Indo-Iranian languages, the plural ergative in Wagaya occurs after the dedicated plural suffix.

WAGAYA (Pama-Nyungan > Ngarna, Northern Australia)

- (33) a. *urinhathe-rl kukumu kurrkumerniy*
young.brother-ERG.M fish catch.PST
'My young brother caught a fish.' (Breen 1974: 74)

- b. *urinhathi-k kuwerniy*
 young.sister-ERG.F cook.PST
 'My young sister cooked it.' (Breen 1974: 74)
- c. *kere-wul-ij purnngu thuketiy*
 child-PL-ERG.PL stone throw.PRS
 'Those kids are throwing stones.' (Breen 1974: 78)

Largely the same, as can be inferred from Jones (1986), happens in the West Papuan language Yawa, where four ergative postpositions are distinguished: *po* masculine singular, *mo* feminine singular, *yo* dual and *wo* plural.

A gender-plus-number based system is also found in Avar (Nakh-Daghestanian > Dagestanian, Russia; Alekseev & Ataev 1997: 42–43, 50–52), where productive markers of the so-called oblique stem coincide with the ergative and distinguish gender and number: *-as*: masculine vs. *-al*: feminine and inanimate vs. *-az* plural; besides that there is the default ergative marker *-c:a* used after vowels and occurring, among other nominals, with pronouns, as well as several other, less regular ways of ergative formation.

The choice of ergative allomorphs can be conditioned not only by number, but also by another nominal feature, i.e. definiteness. This occurs in just two languages of my sample, Koryak and Kurmanji (Northern Kurdish; though cf. Nêlêmwa in Section 7). In Koryak, this is obviously an extension of the basic animacy-driven pattern. Not very surprisingly, a correlation between animacy and definiteness (cf. Comrie 1979; Bossong 1985; Aissen 1999, 2003) is observed, whereby the marker associated with greater animacy is used for definiteness while that used with less animate nominals marks indefiniteness. Thus, in Koryak the choice of the ergative marker with kinship terms depends on the presence of the definiteness affix (see Žukova 1972: 95–103 on Koryak case marking in general), cf. Example (34).

KORYAK (Chukotko-Kamchatkan, Russian Far East; Žukova 1972: 99)

- (34) *an'a-ta* vs. *an'a-na-k*
 grandmother-ERG2 grandmother-DEF-ERG1
 'some grandmother' 'the grandmother'

In Kurmanji, there is a special Oblique plural allomorph *-a* used after the Indefinite Plural marker *-in* (Bedir-Khan & Lescot 1991: 104–106), cf. the definite and indefinite paradigms in Table 16. Note that while the definite subparadigm involves cumulative exponence of number and case, in the indefinite subparadigm number is expressed cumulatively with indefiniteness but separately from case.

Table 16. Indefiniteness and case inflection in Kurmanji (*mirov* ‘man’)

	Definite		Indefinite	
	SG	PL	SG	PL
Dir	<i>mirov</i>	<i>mirov</i>	<i>mirov-ek</i>	<i>mirov-in</i>
Obl	<i>mirov-î</i>	<i>mirov-an</i>	<i>mirov-ek-î</i>	<i>mirov-in-a</i>

To conclude this section, it is only possible to say that the allomorphy of ergative markers dependent on such nominal morphosyntactic features as number, gender or definiteness does not seem to yield really interesting typological generalizations. The latter, however, might emerge if the domain of investigation is broadened to include case systems in general; this, however, is beyond the scope of the current study.

6. “Multiple ergatives” conditioned by clause-level features

When the choice of formal marking of a nominal in a particular grammatical role depends on morphosyntactic features external to this nominal, it is no longer possible to speak about “allomorphy” proper (cf. discussion in Section 2). Here we go into the domain of genuine differential agent marking, a yet not very well understood phenomenon (see Fauconnier 2012 for a recent fairly comprehensive overview). In my sample there are only five languages where the choice of ergative marker depends on clause-level features, solely or in combination with other types of conditioning. All these cases are different, though it is possible to single out three types of condition:

- i. tense-aspect (Georgian, Kohistani Shina, Cabécar, Bribri);
- ii. polarity (Cabécar, Bribri);
- iii. person of the patient (Yakima).

Here I would like to note that I decided to exclude a fourth potential type of clause-level conditioning for A-marking, i.e. main vs. dependent status of the clause. The main reason for this decision (not unobjectionable, perhaps) is that in all such cases that I am aware of (some Daghestanian languages and Cavineña) A-marking in those subordinate clauses where it differs from A-marking in main clauses is identical to the expression of adnominal possessors and such clauses themselves are clearly nominalized. Consider, for example, the discussion of the “general purpose clauses” in Cavineña by Guillaume (2008: 707–714). Here the A argument appears in the genitive case instead of the common ergative appearing in main and other types of subordinate clauses, cf. Example (35), and the construction shares certain important features with nominalizations, see (Guillaume 2008: 713–714).

CAVINEÑA (Tacanan, Bolivia; Guillaume 2008: 711)

- (35) *e-kwe ea-tsweki=ke epuna=ra tya-ti-chine ena*
 1SG-GEN 1SG-sibling=LIG female=ERG give-go-IPF water
[e-kwe iji=ishu]
 1SG-GEN drink-PURP
 ‘My sister went to give me water for me to drink.’

Below I will discuss all the five attested cases of clausal features conditioning the choice of ergative markers, providing typological parallels from similar phenomena, especially in the domain of “alignment splits”.

6.1 Tense-aspect based “multiple ergatives”

Different expression of ergative depending on the tense-aspect form of the verb is attested in Georgian and Kohistani Shina (the “mixed” cases of Bribri and Cabécar will be discussed in the subsection on negation). The Georgian case is fairly well-known (see e.g. Harris 1981, 1985) and is in some respects less complex than that of Shina. Somewhat simplifying, in Georgian the A argument of transitive and “active” intransitive verbs can be marked either by the dedicated ergative case in the so-called “second series of tenses” (aorist and optative), see Example (36a), or by the dative case in the so-called “third series of tenses” (inferential “perfect” and counterfactual “pluperfect”), where the change of case marking is accompanied by the “inversion” of verbal agreement (see Harris 1981: Chapter 8; Wier 2011: Chapter 3), cf. Example (36b). Notably, Harris (1981: 124–127) shows that the argument structure of the “third series of tenses” is identical to that of the other series, as reflected by such tests as reflexivization and verb suppletion according to the number and animacy of the P argument, hence I consider it legitimate to treat the “inversion” construction with transitive verbs as a variant of the basic transitive construction in Georgian rather than as a derived intransitive construction.

GEORGIAN (Kartvelian, Georgia; Harris 1981: 1)

- (36) a. *glex-ma da-tes-a simind-i*
 peasant-ERG PVB-SOW-AOR.3SG.SBJ CORN-NOM
 ‘The peasant sowed corn.’
 b. *glex-s da-u-tesav-s simind-i*
 peasant-DAT PVB-3SG.IO-SOW.PRF-3SG.SBJ CORN-NOM
 ‘The peasant has [apparently] sown corn.’

Turning to Kohistani Shina, it must be said that this language displays admittedly the most complex system of “multiple ergatives” yet attested, employing four markers distributed according to three different types of conditioning (Schmidt

& Kohistani 2008: 51–57). The basic distinction is between the set of inherited Indo-Aryan ergative markers used in perfective clauses, see Example (37a) and an innovated ergative marker for imperfective clauses, cf. Example (37b), apparently borrowed from the neighboring Sino-Tibetan languages (see Bailey 1924: 211–212; Hook & Koul 2004: 214).

KOHISTANI SHINA (Indo-European > Indo-Iranian > Indo-Aryan, Pakistan; Hook & Koul 2004: 214)

- (37) a. *dadii* *gaa maamad sher aly-o* *wake dye*
 grandmother and Muhammad Sher Ali-ERG.PFV.SG.M fight give.PFV
 ‘Grandmother and Muhammad Sher Ali fought.’
 b. *mehefil-ijaa maamad sher ali-se* *noje dyũũ asilo*
 party-LOC Muhammad Sher Ali-ERG.IPF dance give.IPF AUX.PST
 ‘Muhammad Sher Ali was dancing in the party.’

The perfective ergative markers themselves cumulatively express number and are differentiated according to the gender of the base, see Table 17.

Table 17. Ergative markers in Kohistani Shina

	Masculine ‘cloud, rain’		Feminine ‘night’	
	SG	PL	SG	PL
Nom	<i>ázo</i>	<i>áza</i>	<i>ráati</i>	<i>ráati</i>
ErgPfv	<i>ázo-e</i>	<i>ázo-ji</i>	<i>ráaty-oo</i>	<i>ráatyo-ji</i>
ErgIpf	<i>ázo-s</i>	<i>áza-s</i>	<i>ráatyi-s</i>	<i>ráaty-e-s</i>

The situation in Kohistani Shina and Georgian is certainly reminiscent of the much more familiar and widespread instances of the so-called tense-aspect based split ergativity, see Malchukov & de Hoop (2011) and Coon (2013) for recent overviews. In fact, in Georgian the latter kind of split is also attested, since in the so-called “first series of tenses” (present, imperfective, future, conditional) the marking of core grammatical relations follows the nominative-accusative alignment. Tense-aspect based split ergativity is well-attested in Indo-Aryan languages (including all the languages mentioned above), for instance, in Hindi, cf. the following example with the neutral marking of A and P in the imperfective (38a) vs. the ergative marking of A in the perfective (38b).

HINDI (Indo-European > Indo-Iranian > Indo-Aryan, India; Mohanan 1994: 59)

- (38) a. *Ravī kelā khā rahā thā.*
 Ravi(NOM) banana(NOM) eat DUR AUX.PST
 ‘Ravi was eating a banana.’

- b. *bacce-ne kītāb paḏhī.*
 child.OBL-ERG book read.PFV
 ‘The child read a book.’ (ibid.)

However, Shina is not the only language where change in case marking is not accompanied by change in alignment. Thus in Mingrelian, a relative of Georgian, there are two case markers each functioning on the S/A (nominative) basis, distributed roughly according to the imperfective vs. perfective aspect (the Kartvelian “first” vs. “second” series), see Harris (1991: 365–366) and Examples (39) and (40).

MINGRELIAN (Kartvelian, Georgia; Harris 1991: 365–366,
 checked by Alexander Rostovtsev-Popiel)

- (39) a. *bayana ṛude-s skid-u.*
 child(NOM) house-LOC stay-3SG.SBJ.PRS
 ‘The child stays in the house.’
 b. *muma arḡen-s cxen-s skua-s.*
 father(NOM) give-3SG.SBJ.PRS horse-DAT child-DAT
 ‘The father gives a horse to his child.’
- (40) a. *ḡoč-k do-yur-u.*
 man-NAR PVB-die-3SG.SBJ.AOR
 ‘The man died.’
 b. *muma-k cxen-i ki-me-č-u skua-s.*
 father-NAR horse-NOM PVB-PVB-give-3SG.SBJ.AOR child-DAT
 ‘The father gave a horse to his son.’

The alternations in case marking without change in alignment, such as those surveyed above, regardless of whether they combine with ergative (Shina), active (Georgian) or accusative (Mingrelian) alignment, nicely complement the existing typology of “alignment splits”, demonstrating that tense-aspect can affect case marking without necessarily affecting alignment (cf. also Kalin & van Urk 2015 and Coghill 2016 on similar patterns in Neo-Aramaic). Besides that, such cases are also possibly instructive for the typology of “nominal TAM” developed by Nordlinger & Sadler (2004). The cross-linguistic rarity of such patterns of case alternation might be explained by the complexity of their structure and history, requiring a combination of factors and processes themselves not very frequent (see Harris 2008); note, however, that the system of Kohistani Shina became unique only by introducing the imperfective ergative, otherwise its system of ergative allomorphy does not differ from that attested in a number of other Indo-Iranian languages discussed in Section 5.

6.2 Polarity-based multiple ergatives

Alternations of ergative case markers conditioned by affirmative vs. negative polarity is attested only in the closely related Chibchan languages Cabécar and Bribri forming the Viceitic branch of this family, cf. Cabécar examples in (41).

CABÉCAR (Chibchan, Costa Rica; Verhoeven 2013: 4):

- (41) a. *Jiska i të kököblö jajátaná*
 here 3 ERG1 basket leave.PST.PFV
 ‘She left the basket here.’
- b. *Ká i wā jiska kököblö janējátaná*
 NEG 3 ERG2 here basket leave.NEG.PST.PFV
 ‘She did not leave the basket here.’

However, Quesada (1999: 32–39) and Pacchiarotti (to appear) show that polarity is not the only and even not the main conditioning factor for the choice of ergative markers in Cabécar and Bribri. The marker *wā* occurring in negative clauses is also triggered by perfect aspect, cf. Example (42), and occurs on the possessor in the predicative possession construction, cf. Example (43), which, as argued by Pacchiarotti (to appear), is the diachronic source of the perfect construction, though she states (Pacchiarotti to appear: 45, fn. 27) that “it is unclear at the present time why the differential ergative marker *wā* appears in negative domains in Cabécar and Bribri”. Moreover, as shown by Quesada (1999: 36–39), the very appearance of overt ergative markers in these languages is dependent of discourse factors.

BRIBRI (Chibchan, Costa Rica); fully parallel constructions exist in Cabécar, too

- (42) a. *ye’ tō ú sū’*
 1SG ERG1 house see.PFV.REM
 ‘I saw the house.’ (Pacchiarotti to appear: 1)
- b. *ye’ wā ú sū’-ule*
 1SG ERG2 house see.PFV.REM-PRT
 ‘I have seen the house.’ (Pacchiarotti to appear: 2)
- (43) *ye’ wā kró tso’*
 1SG POSS rooster exist
 ‘I have a rooster.’ (Pacchiarotti to appear: 4)

Splits in alignment triggered by negation are attested in certain languages, primarily also in South America. Thus, in Marubo the ergative marker is not used in negative (as well as habitual) clauses (Costa 1998: 76–80), cf. Example (44), while in Kayapó the mirror-image situation is attested, whereby the ergative is found in negative and some types of irrealis clauses, while elsewhere the alignment is neutral (Silva 2001; Miestamo 2013), cf. Examples (45) and (46).

MARUBO (Panoan, Brazil)

- (44) a. *matu-n nami pi-ai*
 2PL-ERG meat eat-PRS
 ‘You eat meat.’ (Costa 1998: 74)
- b. *mayanpa nami pia-ma*
 Mayanpa meat eat-NEG
 ‘Mayanpa does not eat meat.’ (Costa 1998: 79)

KAYAPÓ (Je > Northern, Brazil; Miestamo 2013: 21)

- (45) a. *ga ηo kam re*
 2.NOM river LOC swim
 ‘You swim in the river.’
- b. *ga ηo kam a-rere ket*
 2.NOM river LOC 2.ABS-swim.NFIN NEG
 ‘You don’t swim in the river.’
- (46) a. *ba i-kra mɣ*
 1.NOM 1.POSS-son hold
 ‘I held my son.’
- b. *ije i-kra mɣj ket*
 1.ERG 1.POSS-son hold.NFIN NEG
 ‘I didn’t hold my son.’

Interestingly, in Apinajé, a close relative to Kayapó, “the ergative marker does not ever occur in the negation of transitive predicates” (de Oliveira 2005: 251). Moreover, according to Quesada (1999: 34) the occurrence of the ergative in negative clauses in Cabécar is also dependent on tense, e.g. ergative marking is not attested in immediate future clauses.

Alternations of case marking triggered by polarity and not involving alignment change are well-known in the nominative-accusative languages with the genitive/partitive marking of the P argument with negated verbs, such as Polish, Lithuanian or Finnish (see Miestamo 2014 for a general survey). Consider, for instance, Lithuanian in (47):

LITHUANIAN (Indo-European > Baltic; Arkadiev 2016: 38)

- (47) a. *Jon-as perskait-ė laišk-ą.*
 Jonas-NOM.SG read-PST(3) letter-ACC.SG
 ‘Jonas read the letter.’
- b. *Jon-as ne-perskait-ė laišk-o.*
 Jonas-NOM.SG NEG-read-PST(3) letter-GEN.SG
 ‘Jonas did not read the letter.’

That the marking of the A participant of transitive verbs can also be affected by negation is probably more surprising, and it is possibly non-coincidental that alternations of ergative markers depending exclusively on negation are actually not attested.

6.3 Coargument-based “multiple ergatives”

In one language of my sample, Yakima, the choice of the ergative marker is determined by the person of the other argument of the transitive verb (Jansen 2010: 134–136). When the P argument is 1st or 2nd person, the A argument appears with the suffix *-nim*, as in Example (48a), while 3rd person P arguments trigger the ergative marker *-yin*, as in (48b).

YAKIMA (Sahaptian, Washington, USA)

- (48) a. *tamánwit-nim=nash i-nápayun-ta.*
 law-ERG1=1SG.P 3SG.SBJ-defend-FUT
 ‘The law will support me.’ (Jansen 2010: 134)
- b. *pá-k’ínu-sha Máali-yin Sáam-nan.*
 INV-see-IPF Mary-ERG2 Sam-ACC
 ‘Mary sees Sam.’ (Jansen 2010: 136)

This peculiar patterning is not shared by the other languages of the Sahaptian family (see Rude 1997: 119–120). Thus in Nez Perce, whose non-trivial alignment patterns have been recently discussed by Deal (2010), the ergative is *-n(i)m* regardless of the person of the other argument, cf. examples in (49).

NEZ PERCE (Sahaptian, Washington, USA; Rude 1991: 25)

- (49) a. *’iin-e he-’wii-ye háama-nm*
 1SG-OBJ 3SBJ-shoot-PST man-ERG
 ‘The man shot me.’
- b. *wewúkiye-ne pée-’wi-ye háama-nm*
 elk-OBJ 3>3-shoot-PST man-ERG
 ‘The man shot an elk.’

According to Rude (1997: 119, 125), the Yakima ergative marker *-(y)in* occurring when the P argument is 3rd person and the construction is marked inverse by the prefix *pa-*, is an associative or comitative case; see also Jansen (2010: 161–162), who treats the two markers as only historically related, cf. Example (50).

YAKIMA (Sahaptian, Washington, USA; Jansen 2010: 161)

- (50) *pa-túx-sha-na k’áxnu áyat-in*
 3PL.SBJ-return.home-IPF-PST prairie.chicken woman-ASSOC
 ‘Prairie Chicken came home with his wife.’

Such instances of “global” case marking rules (see e.g. Silverstein 1976; Malchukov 2006; Georgi 2012; Baker 2015: 127–130) are attested with accusative marking as well, as e.g. in Southern (Kolyma) Yukaghir (Maslova 2003: 89), where the marking of the P differs depending on whether the A is a speech-act participant or a 3rd person, cf. examples in (51).

SOUTHERN YUKAGHIR (Yukaghir, Russia)

- (51) a. *met-ul amde-l-get polde-mek*
 1SG-ACC1 die-PRF-ABL save-TR.2SG
 ‘You have saved me from death.’ (Maslova 2003: 94)
- b. *tet kimnī met-kele kudede-m*
 2SG whip 1sg-ACC2 kill-TR.3SG
 ‘Your whip has killed me.’ (Maslova 2003: 93)

The mirror-image situations in Yakima and Yukaghir are similar to the somewhat more common patterns when the “global” rule affects not the choice between two overt case markers but the presence vs. absence of a case marker and, hence, alignment. Alternation between the ergative and the neutral alignment triggered by the properties of the P argument is attested, for example, in Tauya (McDonald 1990: 120–121), where the ergative is obligatory when the P is human and optional otherwise, cf. Example (52).

TAUYA (Nuclear Trans New Guinea > Madang, Papua New Guinea)

- (52) a. *ʔe fenaʔa-ni fanu yau-a-ʔa*
 DEM woman-ERG man see-3SG.SBJ-IND
 ‘The woman saw the man.’ (McDonald 1990: 120)
- b. *ʔe fenaʔa(-ni) pai yau-a-ʔa*
 DEM woman(-ERG) pig see-3SG.SBJ-IND
 ‘The woman saw the pig.’ (McDonald 1990: 121)

6.4 Summary

Though certainly rare from the cross-linguistic point of view, instances of variation of ergative marking conditioned by tense-aspect, polarity and person of the patient argument nicely supplement the more general picture of case variation and in particular suggest that case alternations need not necessarily entail splits in alignment (cf. also Coon & Preminger, to appear). Hopefully, future investigations will reveal more such and similar cases.

7. “Fluid” “multiple ergative” marking

In this section I will discuss several cases of variation in ergative marking which are determined not by any morphosyntactic feature, either internal to the nominal occupying the A position or external to it, but by factors having to do with subtle semantic and/or pragmatic distinctions manipulable by the speaker. The phenomena discussed here belong to the domain of genuine differential agent marking and are even less amenable to the term “allomorphy” than the still morphosyntactically conditioned alternations discussed in the previous section.

Ergative alternations of this kind are attested only in five languages of my sample, though several other languages, where the primary conditioning factors are different, also display this kind of variation as a marginal pattern. Thus, I will start with Nêlêmwa, which I did not include into this group in my overview in Section 3, since in this language the pragmatically-determined uses of the two ergative markers are obviously extensions of the more general humanness-driven pattern. As has been shown above, see examples in (18), nouns denoting groups normally co-occur with the non-human ergative marker *ru*, cf. Example (53a); however, the human ergative preposition *a* may be used for marking definite groups, as in Example (53b).

NÊLÊMWA (Nêlêmwa; Austronesian > Malayo-Polynesian > Oceanic, New Caledonia; Bril 2002: 136)

- (53) a. *hla khiibo-e ru agu.*
 they hit-3SG ERG2 people
 ‘Some people hit him.’
- b. *hla fhe a hleena agu.*
 they take ERG1 these people
 ‘These people took it away.’

Besides that, according to Bril (2002: 134, fn. 1), “the use of *ru* with reference to humans is pejorative; it has connotations of indifference or irony”,⁸ however, no examples of such use are provided. Similar phenomena are reported with nominative marking as well, e.g. in Polish (Indo-European > Slavic), according to Wierzbicka (1988: 455–459), for masculine human hard-stem nouns, NomPl *-i* is neutral, *-owie* implies ‘importance’ or ‘dignity’, and *-y*, “which is otherwise characteristic of non-human masculine nouns, implies contempt” (ibid.: 455).

All languages where “online” factors are the only or the principal ones in determining the choice of ergative markers are located in Australia and belong to different language families. In Kuku Yalanji (Patz 2002: 124–129; Fauconnier &

8. “L’emploi de *ru* en référence à des humains est péjoratif; il connote l’indifférence ou l’ironie”.

Verstraete 2010: 197–199) nominals have two sets of case markers, including the ergative: the “potent” (X) and the “neutral” (Y) (the “neutral” ergative coincides with the instrumental). As Patz (2002: 124) observes, “[a] wide range of nouns around the mid-section of the animacy hierarchy accept case markers from either set”, see Table 18, adding that “where a choice is possible, a speaker may exercise this choice according to their own interpretation” (Patz 2002: 126). Examples in (54)–(56) illustrate this.

Table 18. Animacy hierarchy and case inflection in Kuku Yalanji

humans, personified mythical beings, ghosts and spirits, dogs	set X
generic terms with animate reference, animals, natural forces	set X or set Y
plants, food, geographical features, body parts, language, illness, ceremonies, some kinship terms	set Y

KUKU YALANJI (Pama-Nyungan > Yimidhirr-Yalanji-Yidinic, Queensland, Australia) – “real referent” vs. “abstract concept” (Patz 2002: 126):

- (54) a. *dingkar-angka karrkay kuni-ny*
 male-ERG1 child hit-PST
 ‘That was a man who hit the child. (not a woman; I saw him)’
- b. *dingkar-abu karrkay kuni-ny*
 male-ERG2 child hit-PST
 ‘Some man hit the child. (I think it was a man; but it could’ve been another child)’

– animate vs. inanimate (Patz 2002: 129):

- (55) a. *yinya-ngka kubarr-angka yalbay-ngka maral bayka-ny.*
 that-ERG1 eel-ERG1 big-ERG1 girl bite-PST
 ‘That big eel bit the girl.’
- b. *nganya bambaybunga-ny kubarr-da.*
 1SG.ACC sick-PST eel-ERG2
 ‘The eel [meat] made me sick.’

– voluntary action vs. “unpremeditated reflex action on provocation” (Patz 2002: 126):

- (56) a. *malal-angka kamu karrba-ny*
 spider-ERG1 mosquito grab-PST
 ‘The spider grabbed the mosquito.’ (Patz 2002: 129)
- b. *nganya murrajamun-du baka-ny*
 1SG.ACC stonefish-ERG2 poke-PST
 ‘A stonefish poked me.’ (Patz 2002: 129)

With respect to examples like (55) it has to be said that in fact it is quite natural that “animate/human” ergative markers may be employed for personification of non-human or inanimate referents, and, accordingly, “inanimate/non-human” ergative markers may attach to human nouns in pejorative or derogatory contexts (see e.g. Nêlêmwa above). This happens, e.g., in Chukchi and Koryak, where lower-animacy nouns used in the function of proper names take the ergative suffix reserved for the latter, cf. Examples (57) and (58).

CHUKCHI (Chukotko-Kamchatkan, Russia; Dunn 1999: 103)

- (57) *epeepeqeja-ne iw-nin...*
 spider-ERG1 say-3SG>3SG
 ‘The spider said...’ (from a folktale with a spider as a protagonist)

KORYAK (Chukotko-Kamchatkan, Russia; Žukova 1972: 101)

- (58) *kajŋ-a kajŋ-na-k*
 bear-ERG2 bear-DEF-ERG2
 ‘bear’ ‘Kajŋyn (proper name, lit. “bear”)’

In yet another Chukotko-Kamchatkan language, Alutor, according to Kibrik et al. (2000: 250), human nouns can take both the ergative marker for proper names and the one for common nouns, but the conditions for this variation have not been determined.

The situation in another Pama-Nyungan language, Guugu-Yimidhir, a close relative of Kuku Yalanji, is much less well described (see Haviland 1979: 47, 49–51). There are at least four distinct ergative markers, mostly phonologically distributed, but sometimes able to occur with the same nominal base and implying a subtle change in interpretation, cf. examples in (59) with comments by Haviland.

GUUGU-YIMIDHIR (Pama-Nyungan > Yimidhirr-Yalanji-Yidinic, Queensland, Australia; Haviland 1979: 51)

- (59) a. *Gabirr-inh / gabiirr-nda nganhi gunda-y.*
 girl-ERG1 / girl-ERG2 1SG.ACC hit-PST
 ‘The girl hit me [just now, recently – and I still have the mark to show it].’
 b. *Gabiirr-ngun nganhi gunda-y.*
 girl-ERG3 1SG.ACC hit-PST
 ‘The girl hit me [some time ago – neutral sense].’

A somewhat different situation is reported for the Pama-Nyungan language Watjarri, where, according to Douglas (1981: 214), “[t]he *-lu* suffix, normally used on proper nouns, may be affixed as the ergative marker to common nouns when the speaker wishes to show deference or to contrast ‘personal’ with ‘impersonal’”.

Judging by the examples in (60) given by Douglas, the contrast between “personal” vs. “impersonal” boils down to the use of a common noun (‘woman’) as a kin term with unique reference (‘my wife’):

WATJARRI (Pama-Nyungan > South-West, Western Australia; Douglas 1981: 214)

- (60) a. *njarlu-ngku tjutju pinja winta-ngku*
 woman-ERG2 dog hit.PST stick-INS
 ‘The woman hit the dog with a stick.’
 b. *njarlu-lu tjutju njanganja*
 woman-ERG1 dog see.PRS
 ‘My wife is watching the dog.’

The other three languages are non-Pama-Nyungan. In Warrwa, amply described by McGregor (2006), there are three ergative markers, *-na*, *-ma* and *-nma*, of which the use of *ma* appears to be (quite intricately) phonologically determined, while *-na* and *-nma* are distributed according to the following discourse-pragmatic principle: *-nma* marks agents that are “unexpected, unpredictable or surprising in terms of their identity and agentivity” (McGregor 2006: 399), while *-na* is neutral. Thus, in Example (61b) “the big woman is both unexpected as Agent ... and potent ... By contrast, the Agent in the second sentence of [61a] is both expected and low in potency ... Sentence [61c] summarises what we have already been told, and thus represents background information” (McGregor 2006: 402).

WARRWA (Nyulnyulan, Kimberley, Australia; McGregor 2006: 402)

- (61) a. *nyinka jurrb ji-na-yina kinya wanyji kwiina iri*
 this jump say-PST-3SG.OBL this later big woman
ka-na-ngka-ndi ji-na, kinya-na wuba.
 1SG.A-TR-FUT-get say-PST this-ERG1 small
 ‘The little one jumped at her then, at the big woman, and tried to get her.’
 b. *kinya kwiina-nma iri marlu laj ji-na kinya wuba,*
 this big-ERG2 woman not throw say-PST this small
laj, marlu laj ji-na.
 throw not throw say-PST
 ‘But no, the big woman threw the little man away.’ (McGregor 2006: 402)
 c. *kaliya kujarrangal ngi-nda-na kinya-ngana, laj ji-na*
 finish twice NFUT-go-PST this-ALLAT throw say-PST
kinya-na iri kujarrangal.
 this-ERG1 woman twice
 ‘He went to her twice, but she threw him away both times.’

In Waray (Harvey 1986) the function of the ergative is optionally performed by the instrumental marker *-yi*, which is used for disambiguation, as shown in Example (62a), and “presentation of important information in a text” (Harvey 1986: 201), cf. Example (62b), while the ablative marker *-yang* is used when the A participant “may potentially be viewed as a source or origin” (Harvey 1986: 208), cf. Example (62c).

WARAY (Gunwinyguan, Northern Australia)

- (62) a. *pu-m kuruwak-yi kaking antjalmi akala-yi pu-m kuruwak*
 hit-REAL PN-ERG yesterday in.turn he-ERG hit-REAL PN
 ‘David [sic!] hit him yesterday and in return he hit David.’
 (Harvey 1986: 200)
- b. *tjatpula-yi kuntiyi-n-inj anwak mamam a-kala-wu*
 old.man-ERG play-IRR-IPF little daughter he-DAT
 ‘The old man used to play around with his young daughter.’
 (Harvey 1986: 202)
- c. *tjukung-yang nat-putj-pu-m alkala-wu*
 aunt-ABL OBJ-send-AUX-REAL she-DAT
 ‘Her aunt sent her [the clothes].’ (Harvey 1986: 210)

Finally, in Marrithiyel (Green 1989) three different cases can fulfill the role of the ergative: the instrumental *-gin*, the ablative *-nganan*, and the perlicative *-wurri*. The instrumental is used with “transitive subjects which are semantically or pragmatically marked (i.e. have a low predisposition to occupy this role)” (Green 1989: 49), cf. Example (63a). The perlicative “seems to be associated with a sense of the action being in some way transferred or moved from the A to the undergoer” (Green 1989: 52), cf. Example (63b). The ablative “appears to have the semantic effect of marking the A as acting under his/her initiative or motivation, ... suggesting the A as providing his/her internal source or cause for performing the action, rather than being externally motivated” (Green 1989: 53), cf. Example (63c).

MARRITHIYEL (Daly, Northern Australia)

- (63) a. *ngiya-gin ganbi gani-fifi-ya*
 she-INS bamboo 3SG.A.REAL-go.blow.RDP-PST
 ‘She was blowing the bamboo (i.e. playing the didgeridoo).’ – “the verb depicts an activity not normally engaged in by females” (Green 1989: 50)
- b. *wadi finthfinthi-wurri marri gimi-iwinj-ya*
 male older.RDP-PERL words 3SG.A.REAL+do-3NSG.OBL-PST
 ‘The old man spoke to them.’ (Green 1989: 53)
- c. *nanj-nganan ginil-dut-a*
 2SG-ABL 2SG.A.REAL-find-PST
 ‘You found it (i.e. went out and did it yourself).’ (Green 1989: 53)

With respect to Waray and Marrithiyel it should be said that in languages where the ergative construction has not yet fully grammaticalized, several “semantic” cases can compete for the A-marking function, and this may potentially give rise to systems with allomorphy. Consider, for instance, the case syncretism in Chukchi and Koryak, where the “higher animate” ergative is formally identical to the locative, while the “inanimate” ergative coincides with the instrumental (Spencer 2006: 6–7; Žukova 1972: 99). On the other hand, the very same Chukotko-Kamchatkan languages, as well as Nêlêmwa and possibly Kuku Yalanji suggest that the direction of development might well be the opposite, i.e. the generally rigid ergative allomorphy determined by animacy may in some more or less restricted contexts be creatively employed by the speakers for manipulating the “potency” of A participants in the actual discourse context.

Of course, the semantically/pragmatically driven alternations in ergative marking described in this section are already quite close to the involuntary agent constructions referred to in Section 2, cf. the Agul example (4) repeated here for convenience as (64).

AGUL (Nakh-Daghestanian > Daghestanian > Lezgian, Russia;
Ganenkov et al. 2008: 177)

- (64) a. *baw-a* *neĕ* *aĭuzu-ne*.
mother-ERG milk(ABS) pour.out-PST
'Mother poured out the milk.'
- b. *baw-afas* *neĕ* *aĭuzu-ne*.
mother-ADELAT milk(ABS) pour.out-PST
'Mother accidentally spilled the milk.'

This kind of construction possibly differs from the alternations discussed above for the Australian languages in at least two respects. First, the semantics associated with the involuntary agent construction clearly deviates from the prototype of transitivity, notably, much more than e.g. the meaning of “unexpected agency” associated with some of the ergative markers in Warrwa and Marrithiyel (see the discussion of the semantics of the Agul construction in Ganenkov et al. 2008: 177–178, 180–181). Second and even more importantly, in many (though perhaps not in all) languages exhibiting involuntary agent constructions, they are clearly intransitive (cf. the discussion in Fauconnier 2011; see also Haspelmath 1993: 291–293 on the parallel construction in Lezgian and Forker 2013: 499–504 on Hinuq). Thus, according to Ganenkov et al. (2008: 178–180), in Agul the construction with the adelative is available only with intransitive verbs which do not admit an ergative agent, as in Example (65), or with labile (ambitransitive) verbs not formally distinguishing between the transitive and the anticausative uses, as in Example (64) above. By

contrast, non-labile transitive verbs which cannot occur in an anticausative intransitive frame, do not admit the involuntary agent construction, cf. Example (66).

AGUL (Nakh-Daghestanian > Lezgetic, Russia;
Ganenkov et al. 2008: 178–179)

- (65) a. *kitab gulu-ne*
book(ABS) get.lost-PST
'The book got lost.'
- b. *gada-ji-fas kitab gulu-ne*
boy-OBL-ADELAT book(ABS) get.lost-PST
'The boy [accidentally] lost the book.'
- c. **gada-ji kitab gulu-ne*
boy-OBL(ERG) book(ABS) get.lost-PST
intended: 'The boy lost the book.'
- (66) a. *ruš-a k'ež lik'i-ne*
girl-OBL(ERG) letter(ABS) write-PST
'The girl wrote a letter.'
- b. **ruš-a-fas k'ež lik'i-ne*
girl-OBL-ADELAT letter(ABS) write-PST
intended: 'The girl accidentally wrote a letter.'

Moreover, at least with one verb in Agul the involuntary agent in the adelative can actually co-occur with the canonical agent in the ergative yielding an "involuntary causative construction", cf. Example (67):

AGUL (Nakh-Daghestanian > Daghestanian > Lezgetic, Russia;
Ganenkov et al. 2008: 180)

- (67) *za-fas ruš-a guni sut'u-ne*
1SG-ADELAT girl-OBL(ERG) bread(ABS) eat-PST
'I managed to feed the girl with bread.'

Thus I believe that involuntary agent constructions, at least of the type attested in the Nakh-Daghestanian languages, have been excluded from my consideration on principled grounds.

The relative rarity (pending further research) of systems of the kind discussed in this section can probably be explained by the tendency for analogical leveling of paradigms and the avoidance of (quasi-)synonymy of markers with primarily syntactic rather than semantic functions. However, the data discussed in Section 4 above suggests that languages perfectly tolerate lexically motivated inflectional synonymy.

8. Discussion and conclusion

Non-phonologically conditioned allomorphy of case-markers is fairly widespread, however, it has not been really studied from a typological point of view, and the distinction between allomorphy based on arbitrary lexical features such as declension class and allomorphy conditioned by lexical-semantic properties of nominals or morphosyntactic features is rarely made. The cross-linguistic empirical investigation of “multiple ergatives” presented in this article has demonstrated that case systems with several (sometimes more than two) ergative markers are in fact quite widespread, being attested on all continents and in at least thirty language families, and admit principled cross-linguistic generalizations.

Ergative allomorphy conditioned by the lexical-semantic class of the nominal adds an unexpected perspective to the study of the well-known and not undisputed (cf. Bickel et al. 2015) effects of the referential hierarchies on case-marking and grammatical relations, cf. also Aristar (1997). Indeed, as is now clear, the referential hierarchy can have effect not only on the presence vs. absence of ergative case, but on the choice between several distinct overt ergative markers as well, the cut-off points for both phenomena largely coinciding. In fact, in many of the languages surveyed in Section 4 (e.g. in Georgian, Kabardian, Pitjantjatjara, and Pendau) the nominals occupying the higher part of the referential hierarchy (most commonly locutor pronouns) lack ergative marking, thus the “classic” nominal alignment split being just a part of the more general pattern of hierarchically conditioned ergative allomorphy.

“Multiple ergatives” conditioned by noun-external features such as tense-aspect, negation, or person features of the object, though extremely rare, are clearly instructive for the typology of case-marking alternations and “alignment splits”, showing that the latter are merely a subtype (perhaps the more common) of a more general phenomenon of construction-driven case alternation. In addition, such systems pose non-trivial problems for the theories of syntax-morphology interface, representing clearly non-canonical behavior, cf. Corbett’s (2008: 12) statement that “[c]anonical use of morphosyntactic features and their values does not admit syntactic conditions”.

Finally, the yet few attested cases of the semantically and/or pragmatically determined variation in ergative marking potentially point towards the diachronic paths of development of systems with more rigidly determined allomorphy, as well as to the ways such allomorphy may be “refunctionalized” by speakers for expressive purposes.

To conclude, in this article I hope to have shown that allomorphy need not be the exclusive domain of “pure” or “autonomous” morphology, but can be “meaningful” in a variety of ways, and is a legitimate object of typological research capable of yielding interesting and cross-linguistically and theoretically instructive results.

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Abbreviations

1	1st person	ASSOC	associative
2	2nd person	ATR	attributive
3	3rd person	AUX	auxiliary verb
I, II, III, IV, V	noun classes	CAUS	causative
A	agent	CL	noun class
ABL	ablative	CMPL	completive
ABS	absolutive	COND	conditional
ACC	accusative	DAT	dative
ADELAT	adelative	DCL	declarative
ADV	adverbial	DEF	definite
ALLAT	allative	DEM	demonstrative
AOR	aoist	DEP	dependent
APL	applicative	DET	determiner

DIR	directional	NFUT	nonfuture
DIST	distal demonstrative	NM	nonmasculine
DU	dual	NOM	nominative
DUR	durative	NPRS	nonpresent
ENCL	enclitic	NPST	nonpast
ERG	ergative	NSG	nonsingular
EVD	evidential	OBJ	object
EXCL	exclusive	OBL	oblique
F	feminine	P	patient
FKIN	feminine kinship term	PERL	perlative
FOC	focus	PFV	perfective
FUT	future	PL	plural
GEN	genitive	PN	proper name
HAB	habitual	POSS	possessive
HYP	hypothetical	PRF	perfect
ICP	inceptive	PRS	present
INAN	inanimate	PRT	participle
INCL	inclusive	PST	past
IND	indicative	PURP	purposive
INS	instrumental	PVB	preverb
INTR	intransitive	Q	question particle
INV	inverse	RDP	reduplication
IO	indirect object	REAL	realis
IPF	imperfective	REFL	reflexive
IRR	irrealis	REM	remote past
LIG	ligature	REP	repetitive
LOC	locative	SBJ	subject
M	masculine	SG	singular
NAR	narrative	TAM	tense/aspect/mood
NEG	negation	TR	transitive
NFIN	nonfinite		

Appendix. Languages of the sample

Abbreviations used in the table

Nom	Nominal lexical class
Gram	Nominal morphosyntactic features
Clause	clausal morphosyntactic features
Fluid	semantic/pragmatic conditioning
mod	modification

Language name	ISO	Genealogical affiliation	Area	Source	Mor. type	Num. of affix.	Factor(s)
Adyghe, Bzhedug	ady	Abkhaz-Adyghe > Circassian	West Asia	Sitimova 2004: 62–70, 76–79	affix	4	Nom+Gram
Adyghe, Temirgoy	ady	Abkhaz-Adyghe > Circassian	West Asia	own fieldwork	affix	3	Nom+Gram
Alutor	alr	Chukotko-Kamchatkan	North Asia	Kibrik et al. 2000: 250–251	affix	4	Nom+Gram
Araona	aro	Pano-Iacanan	South America	Emkow 2006: 181, 250	affix	2	Nom
Avar	ava	Nakh-Daghestanian > Avar-Andic-Tsezic	West Asia	Alekseev & Ataev 1997: 42–43, 50–52	affix	> 4	Nom+Gram
Bribri	bzd	Chibchan	Mesoamerica	Pacchiarotti to appear: 1–4	word	2	Clause
Bumthang	kjz	Sino-Tibetan > Bodic	South Asia	van Driem 2015: 27–28	affix	2	Nom
Cabécar	cjp	Chibchan	Mesoamerica	Verhoeven 2013: 4	word	2	Clause
Chechen	che	Nakh-Daghestanian > Nakh	West Asia	Nichols 1994: 24	affix	4	Nom+Gram
Chukchi	ckt	Chukotko-Kamchatkan	North Asia	Dunn 1999: 100–101	affix	4	Nom+Gram
Dhuwal	duj	Pama-Nyungan > Yuulingu	Australia	Morphy 1983: 34–35, 56–60	affix	2	Nom
Dimili	diq	Indo-European > Indo-Iranian	West Asia	Todd 2008: 38–39	affix	4	Nom+Gram
Diyari	dif	Pama-Nyungan > Karnic	Australia	Austin 2013: 55	affix	2	Nom
Djabugay	dyy	Pama-Nyungan > Yimidhirr-Yalanji-Yidinic	Australia	Patz 1991: 264	affix	2	Nom
Djambarrupungu	djr	Pama-Nyungan > Yuulingu	Australia	Wilkinson 1991: 113, 131, 227	affix	2	Nom
Djingili	jig	Mirndi	Australia	Pensalfini 1997: 244, 273	affix	4	Nom
Dumi	dus	Sino-Tibetan > Himalayish	South Asia	van Driem 1993: 62	affix	2	Nom
Epéna	sja	Chocoan	South America	Harms 1994: 9–10.	affix	2	Nom
Gaahmg	tbi	Eastern Jebel	Africa	Stirtz 2014	tone, affix	2	Nom
Georgian	kat	Kartvelian	West Asia	Vogt 1971: 20, 38, 52; Harris 1981: 1	affix	3	Nom+Clause
Gumbaynggir	kgg	Pama-Nyungan > Southeastern	Australia	Eades 1979: 272–274	affix	3	Nom

Language name	ISO	Genealogical affiliation	Area	Source	Mor. type	Num. of affix.	Factor(s)
Guugu Yimidhir	kky	Pama-Nyungan > Yimidhirr-Yalanji-Yidinic	Australia	Haviland 1979: 47–51	affix	4	Fluid
Ingush	inh	Nakh-Daghestanian > Nakh	West Asia	Nichols 2011: 127	affix	> 4	Nom+Gram
Kabardian	kbd	Abkhaz-Adyghe > Circassian	West Asia	Kumakhov & Vamling 2009: 21–23	affix	2	Nom
Kala Lagaw Ya	mwp	Pama-Nyungan > Kala Lagaw Ya	Australia	Comrie 1981: 7–9; Ford & Ober 1991: 136–138	affix	2	Nom
Kalkatungu	ktg	Pama-Nyungan > Galgadungic	Australia	Blake 1979: 29–32	affix	2	Nom
Kashmiri	kas	Indo-European > Indo-Iranian	South Asia	Koul & Wali 2006: 32–33	affix	3	Nom+Gram
Kasua	khs	Bosavi	Oceania	Logan 2007: 4	affix	2	Nom+Gram
Kathmandu Newar	new	Sino-Tibetan > Himalayish	South Asia	Hargreaves 2003: 373	affix, mod	2	Gram
Kati	bsh	Indo-European > Indo-Iranian	South Asia	Grjunberg 1980: 176–177	affix	3	Nom+Gram
Khaling	klr	Sino-Tibetan > Himalayish	South Asia	Guillaume Jacques, p.c.	affix	3	Nom
Khwarshi	khv	Nakh-Daghestanian > Avar-Andic-Tsezic	West Asia	Khalilova 2009: 68, 143–145	affix	2	Nom+Gram
Kohistani Shina	plk	Indo-European > Indo-Iranian	South Asia	Schmidt & Kohistani 2008: 53, 57	affix	4	Clause+Gram+Nom
Koryak	kpy	Chukotko-Kamchatkan	North Asia	Žukova 1972: 95–103	affix	3	Nom+Gram
Kuku Yalanji	gvn	Pama-Nyungan > Yimidhirr-Yalanji-Yidinic	Australia	Patz 2002: 129	affix	2	Fluid
Lezgian	lez	Nakh-Daghestanian > Lezgitic	West Asia	Haspelmath 1993: 64–77	affix	> 4	Nom+Gram
Malayo	mbp	Chibchan	South America	Williams 1993: 30	affix	2	Nom
Marrithiyel	mfr	Daly	Australia	Green 1989: 49–53	affix	3	Fluid
Meryam Mir	ulk	Eastern Trans-Fly	Australia	Piper 1989: 31–33	affix	3	Nom+Gram
Munji	mnj	Indo-European > Indo-Iranian	South Asia	Grjunberg 1972: 405–406	affix	4	Nom+Gram
Nalca	nlc	Nuclear Trans New Guinea > Mek	Oceania	Svård 2013: 23–24, 29	word	> 4	Nom

Language name	ISO	Genealogical affiliation	Area	Source	Mor. type	Num. of affix.	Factor(s)
Nêlêmwa	nee	Austronesian > Malayo-Polynesian > Oceanic	Oceania	Bril 2002: 134–139	word	2	Nom+Fluid
Niuean	niu	Austronesian > Malayo-Polynesian > Oceanic	Oceania	Massam 1996	clitic	2	Nom
Northern Kurdish (Kurmanji)	kmr	Indo-European > Indo-Iranian	West Asia	Bedir-Khan & Lescot 1991: 94–106	affix	4	Nom+Gram
Northern Pumi	pmi	Sino-Tibetan > Burmo-Qiangic	South Asia	Daudey 2014: 220	clitic	2	Nom
Odoodee	kkc	East Strickland	Oceania	Hays & Hays 2002: 67	affix, clitic	3	Nom
Panará	kre	Nuclear-Macro-Je > Je	South America	Dourado 2001: 91	affix, mod	2	Gram
Parikatéjé	gvp	Nuclear-Macro-Je > Je	South America	Ferreira 2003: 56, 163–165	affix, clitic	2	Gram
Pashto	pus	Indo-European > Indo-Iranian	South Asia	Tegey & Robson 1996: 47–56	affix	2	Gram
Pendau	ums	Austronesian > Malayo-Polynesian > Celebic	Oceania	Quick 2001: 98	clitic	2	Nom
Phalura	phl	Indo-European > Indo-Iranian	South Asia	Liljegren 2016: 111	affix	2	Gram
Pitjantjatjara	pjt	Pama-Nyungan > South-West	Australia	Bowe 1990: 10	affix	2	Nom
Rawa	rwo	Nuclear Trans New Guinea > Finisterre-Huon	Oceania	Toland & Toland 1991: 18, 21, 24	affix	2	Nom
Rayón Zoque	zor	Mixe-Zoquean > Zoquean	Mesoamerica	Faarlund 2012: 31, 55	clitic, affix	2	Nom
Sanumá	xsu	Yanomam	South America	Borgman 1990: 119–121	affix, mod	2	Nom
Siuslaw	sis	isolate	North America	Frachtenberg 1922: 462–463, 570–576	affix, mod	3	Nom

Language name	ISO	Genealogical affiliation	Area	Source	Mor. type	Num. of affix.	Factor(s)
Tamang	taj	Sino-Tibetan > Bodic	South Asia	Mazadoun 2003: 298	affix	2	Nom
Torwali	trw	Indo-European > Indo-Iranian	South Asia	Edelman 1983: 227	affix	2	Gram
Trumai	tpy	isolate	South America	Guirardello 1999: 259–260	affix	2	Nom
Tsakhur	tkr	Nakh-Daghestanian > Lezgif	West Asia	Kilbrik & Testelefs 1999: 350	affix	2	Nom
Tsova-Tush	ttl	Nakh-Daghestanian > Nakh	West Asia	Holisky & Gagua 1994: 165, 173–175	affix	3	Nom
Ubykh	uby	Abkhaz-Adyghe > Ubykh	West Asia	Charachidze 1989: 370; Fenwick 2011: 33	affix	2	Gram
Uduk	udu	Koman	Africa	Killian 2015: 76, 78–84	word	2	Nom
Una	mtg	Nuclear Trans New Guinea > Mek	Oceania	Louwerse 1988: 107	affix	3	Nom
Wagaya	wga	Pama-Nyungan > Ngarna	Australia	Breen 1974: 74, 78	affix	3	Nom+Gram
Wagdi	wbr	Indo-European > Indo-Iranian	South Asia	Phillips 2013: 203–205	affix	3	Nom
Watjarri	wbw	Pama-Nyungan > South-West	Australia	Douglas 1981: 214–215, 223	affix	2	Nom
Wambaya	wmb	Mirndi	Australia	Nordlinger 1998: 83–84	affix	4	Nom+Gram
Waray	wrz	Gunwinyuan	Australia	Harvey 1986: 200–210	affix	2	Fluid
Warrwa	wwr	Nyulnyulan	Australia	McGregor 2006	affix	2	Fluid
Yakima	yak	Sahaptian	North America	Jansen 2010: 134, 136	affix	2	Clause
Yawa	yva	Yawa	Oceania	Jones 1986: 42	word	4	Nom+Gram
Yidiny	yii	Pama-Nyungan > Yimidhirr-Yalanji-Yidinic	Australia	Dixon 1977: 127	affix	2	Nom

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