Areal Dimensions in Case Syncretism: Ablatives and Genitives

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1. INTRODUCTION

This paper has two broad, interlocking goals.[1] First, it represents an initial attempt to survey the syncretistic relationships that markers of ablative and genitive relations enter into.[2] Second, it attempts to determine if these syncretistic relationships have an areal profile.

Our initial interest in this problem was piqued by a statement in Heine and Kuteva (2002), who noted (p35) that examples of the historical development of ablatives into genitives seem to come mostly from Indo-European languages. They suggest that "more research is required on the genetic and areal distribution of this process." This paper represents a first attempt along those lines.

2. RESEARCH PROBLEM

We first attempt to identify syncretisms involving markers of the ablative and genitive. By 'syncretism' we mean the use of the same marker — whether a case affix, clitic, or adposition — to mark more than one semantic role. The semantic roles we are considering in this paper are given in Appendix C, along with their prototype meanings.

In addition to identifying syncretisms, we attempt to determine whether any given syncretism — or set of related syncretisms — has an interesting areal distribution. By 'interesing areal distribution', we mean, ideally, a distribution among geographically contiguous languages [or, perhaps, languages that have been in contact] representing different genetic groupings and including a significant number of languages. Needless to say, this characterization provides a lot of leeway for different interpretations of the data. We will try to justify the few generalizations we allow ourselves to make.

3. OUR SAMPLE

Our sample of languages consists of 296 languages and dialects[3] drawn from the following set of primarily Eurasian languages:

- the former Soviet Union: reasonably thorough survey
- languages of the Himalayan region: reasonably thorough survey
- languages of Europe: all state languages and some others
- Mediterranean North Africa, Middle East, South Asia [apart from the Himalayan region], East Asia, and South-East Asia [except for the Austronesian languages]: all state languages and some others.

Thus, we have surveyed all of Eurasia, save for the Austronesian languages. Future work will extend the survey to include Austronesian and may continue the survey beyond Eurasia.[4]

Because we are concerned primarily with areal affects, the unevenness of our sample — all regions within our purview are not sampled equally thoroughly — is not as large a problem as it would be if we were trying to draw conclusions from numbers alone. This caveat should hold for anyone

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[1] We would like to thank Edith Moravcsik and participants at the the ALT conference in Paris, Sept. 2007, and at the University of Hamburg, May, 2008, for helpful comments on this paper.

[2] Our original plan had been to survey partitives along with ablatives and genitives. We soon discovered, however, that too few descriptions mentioned partitives for us to include partitives in our dataset.

[3] It's probably worth emphasizing that the distinction between 'language' and 'dialect' is often more reflective of sociocultural considerations than linguistic ones. Considerations like mutual intelligibility are often not considered: for example, in Nepal some of the Kham 'dialects' are not mutually intelligible, whereas some Tamangic 'languages' are.

[4] Hebrew was excluded from the survey since there may not have been sufficient time since its revival for it to have undergone the areal effects we are concerned with.

examining the raw data found in Appendix A: a large number of languages exemplifying any given syncretism is not by itself indicative of an interesting areal distribution.

Nonetheless, we believe that the size of the sample, in particular the reasonably thorough coverage of a significant portion of Eurasia, should permit the identification of any interesting areal distributions that exist within the geographical region covered by this study.

4. HOW THE SAMPLE WAS COLLECTED AND ORGANIZED

The data in our sample were drawn primarily from published materials, although some material was collected from language consultants and in a very few cases from our personal knowledge of the language sampled. The sources can be made available to anyone interested in seeing them.

In organizing our database for this paper, we determined the marker(s) used to code the prototype of a given semantic role in a language [sometimes there was more than one], and then determined what other semantic roles the given marker could express. In setting up this database, we observed the following restrictions:

1. Instances of genitives and ablatives governed by an adposition were excluded.
2. Similarly, the use of the genitive in constructions with de-nominal adpositions were excluded.
3. We did not count separately instances where adpositions govern more than one case: we were concerned with syncretisms with the adposition only.
4. In general, marginal or rare uses were excluded.
5. Zero-marked morphemes were excluded, but not zero-marked allomorphs.
6. Where singular and plural markers are found, and where the plural demonstrates significant neutralization of semantic roles, the plural forms were excluded.
7. Where the marking of a case is variable [*e.g.* where the form is dependent on factors like concord class, declension class, number, etc.], we took the whole range of case forms as representing the marker for the semantic role.

We should also note that our sources were uneven as to the amount of detail they provided about the semantic range of the forms we were considering: as a result, we do not always have the full range of syncretisms. Even so, only a subset of the full database for this study is reproduced in Appendix A.

In our sample, we distinguish between *full* and *partial* syncretisms. A full syncretism is one where there is complete indentity among the forms used to code different semantic roles. A partial syncretism means that the there is a shared morph, but also an unshared morph, among the forms used to code different roles. So, for example, for the Tamangic language Chantyal [Sino-Tibetan, Bodic, Bodish] there is full syncretism between the forms used to code ergative and instrumental: both are coded by *-sə* alone; there is a partial syncretism between ergative-instrumental *-sə* and ablative *-gəm-sə*, since they share *-sə* but not *-gəm-*, which is found only in the ablative. Both full and partial syncretisms are listed in Appendix A, but separately.

Lastly, an historical perspective on the dataset we have collected would doubtless have yielded many more instances of syncretisms than we have uncovered with our simple listing of markers. For all the obvious reasons, we have not approached these data from an historical perspective, though our discussion later in the paper will draw on a few historical considerations.

5. AREAL DISTRIBUTIONS

We will now discuss some of the more interesting instances of syncretism, focusing in particular on those exhibiting an interesting areal distribution. Needless to say, we do not intend any of the remarks about some particular syncretism being rare or common to have meaning outside the area we have surveyed: all such comments in the remaining portions of this paper should be interpreted as applying solely to the geographical area covered by our survey.

5.1: ablative-genitive syncretism: The most interesting result of our study is the determination of the areal distribution of the ablative-genitive syncretism. Heine and Kuteva's guess that this syncretism is essentially European — and indeed, Western European — is borne out. Data sets 1 and 2 in Appendix A list the languages instantiating this syncretism. The significant areal grouping here includes all the Romance languages sampled, all the Germanic languages sampled except Icelandic and Faroese, Breton [alone among the Celtic languages], Albanian, and Macedonian [alone among the Slavic languages]. The remaining languages instantiating this syncretism constitute small, dispersed sets. [Note that the Komi-Udmurt group are a close genetic grouping and use cognate forms to express this syncretism; Kashmiri and Palula are both Dardic languages.]

The basis for this syncretism is clear enough: a thing 'from' A has a relation to an object B such that B could be perceived as being 'of' A, *i.e.* being possessed by A. Nonetheless, what is striking about this syncretism is how common it is within a geographically contiguous region of Europe and how rare it is outside, at least within our surveyed area. There seems little doubt that this is a feature of the European Sprachbund. Its rarity outside seems to mean that this particular grammaticalization path is not often utilized for the creation of new genitives.

5.2: ablative-ergative/agentive-instrumental & genitive-ergative/agentive-instrumental syncretisms: Given how seldom ablatives and genitives are companions except in Europe, it's interesting that they frequently choose some of the same companions. Sets 3-10, 12, and 14 display syncretisms of ablatives with ergatives and instrumentals — as well as agentives [passive agents]; Sets 35-42 display syncretisms of the genitive with ergatives, agentives, and instrumentals.

For there to be syncretisms with an ergative requires that the language exhibit ergative constructions. Since ergative languages themselves tend to be geographically contiguous and confined to certain regions [the Himalayas, the Caucasus, etc.] syncretisms with the ergative are necessarily confined to those regions. Syncretisms of the ablative and genitive with instrumentals, however, have the potential for a more widespread distribution.

Even so, these syncretisms, *i.e.* the various subsets [*e.g* ablative-instrumental, genitive-instrumental] seem to center on the regions exhibiting ergativity, the Himalayas and the Caucasus, and radiate from there. The various Tibeto-Burman subfamilies of the Himalayan region [Bodish, Central Himalayan, Qiangic, etc.] have a strong tendency to exhibit one or the other of these ablative+ or genitive+ syncretisms: an historical perspective would probably reveal many more instances among the languages of our sample. What is interesting is that so few languages in this region exhibit an ablative-genitive syncretism as well. Whatever the historical lines of development leading to various combinations of ablative-ergative-instrumental and genitive-ergative-instrumental, they seem not to result in syncretistic relationship between ablatives and genitives, or, at least, not ones that are stable. This seems to hold even where the morphs representing the ablative+ and genitive+ syncretisms are cognates. For example, Cogtse rGyalrong *-ki*, which codes the ablative-ergative-instrumental syncretism and Jirel *-ki*, which codes the genitive-ergative-instrumental syncretism, are almost surely cognate, deriving from proto-Tibeto-Burman ***ki**. DeLancey (1984), following Thurgood (1981), suggests that ***ki** may have derived from a nominalizer[5]: for a discussion of attributives and nominalizations in Tibeto-Burman, see Noonan (1997). In any case, there is evidence, particularly from the Bodish languages, that ***ki** has undergone a number of phonological developments in these languages — ki>či>yi>i/e — in which case reflexes of this etymon are well distributed among the languages instantiating the ablative-ergative-instrumental and genitive-ergative-instrumental

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[5] But see below.

syncretisms. If so, the question then arises as to why the ablative-genitive syncretism is so rare in this group of languages? We will discuss this matter later in the paper.

The Caucasus shows a much greater affinity for genitive-ergative-instrumental and its genitive-containing subsets than for ablative-ergative-instrumental and its subsets.

Ablative-agentive [Set 10] and genitive-agentive [Set 39] syncretisms are found in Germanic, where some languages exhibit both since they instantiate the ablative-genitive syncretism. Otherwise, these are found in a random assortment of languages and do not exhibit an areal profile.

5.3: ablative-comparative syncretism: The ablative-comparative syncretism [Set 32] is quite widespread (see also Stassen 1985, Heine 1994), particularly in Siberia, Central Asia, the Caucasus, and the Indic-Iranian border region. It is only sporadically attested elsewhere, *e.g.* in Europe, the Himalayas, and the rest of South Asia. This syncretism has a reasonably clear areal profile. The ablative-instrumental-comparative syncretism [Set 11] is essentially a feature of the north of Indian subcontinent and spans three language families; it is not, however, widespread enough to be considered an areal feature.

5.4: ablative-elative syncretism: Ablative and elative senses are near semantic neighbors, so it should be no surprise that the ablative-elative syncretism [Sets 26-7] is widespread. Doubtless Appendix A would contain more instantiations of this syncretism if more of the sources we used provided the appropriate information. The full syncretism is well represented in Europe and the Caucasus; the partial syncretism takes in more of the Caucasus and the Turkic languages.

6. HOW GOOD ARE ABLATIVES AND GENITIVES AS COMPANIONS?
The evidence we have presented shows that ablatives and genitives are really not very good companions for each other. Our data find them entering into syncretistic relationships regularly only within Europe, and provide yet more evidence that European languages are, in some sense, rather exotic (Heine 1994).

However, as can readily be seen in Appendix A, ablatives and genitives both freely participate in syncretistic relations with other semantic roles in the languages of our sample. Nonetheless, it is worth mentioning that the number and variety of the full syncretistic sets and the number of languages exhibiting them are greater for the ablative than for the genitive within our sample. One reason for this, surely, is that the general direction of historical change that results in syncretisms of the sort we've been considering here is concrete-to-abstract. The ablative, as a marker of a spatial relation, is relatively more concrete than is the genitive, and therefore may be both the target and the source of grammaticalizations which result in the forms considered by our survey. The genitive, on the other hand, is in some sense the end-product of this concrete-to-abstract continuum:[6] spatial senses, being more concrete, can evolve into abstract, grammatical senses like the genitive, but the reverse would not be expected.[7] Given, then, that the genitive is only the target, never the source, of grammaticalizations resulting in markers of the semantic roles within the purview of this study, we would expect it to be present in fewer full syncretistic sets than the ablative, and indeed this is the case.

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[6] Genitives may, of course, continue along the path of grammaticalization, resulting in, for example, (pseudo-)partitives.
[7] These considerations suggest that DeLancey's and Thurgood's hypothesis concerning the origin of ***ki** in a nominalizer mentioned above is suspect since the development nominalizer>attributive>genitive would not be expected to yield the range of forms [including ablatives, instrumentals, and ergatives] associated with the reflexes of ***ki**.

This line of thinking may lead to a partial answer to the problem posed earlier as to why ablatives and genitives participate in similar sorts of syncretistic sets, but seldom together. Let us consider here just the ablative-ergative-instrumental and genitive-ergative-instrumental syncretisms. Since the genitive is likely to be a target but not a source for the roles considered here, syncretisms like genitive-ergative-instrumental must have their source in a role other than genitive. Since the ergative too is likely to be an end-product, the instrumental is likely to be the source for the other two, either directly or indirectly via the comitative.

With regard to the ablative-ergative-instrumental syncretism, either ablative or instrumental could be the source for ergatives. As noted, ablatives differ from genitives in that they are a source, not just a target, for the relations considered here. We must now consider the relation between the instrumental and the ablative in order to account for how ablative-ergative-instrumental syncretisms can arise. This is a problem that requires further research, and the data from, for example, Tibeto-Burman point to more than one path which can connect ablatives and instrumentals. As an illustration, we will consider one such path here.

A number of Tibeto-Burman languages attest a development *path-INST>ablative*. This is found, with cognate forms, in Tamangic [Chantyal, Seke, Dhankute Tamang], Kiranti [a number of languages], Dolakha Newar, and Dzongkha. The 'path' etymon is ***(g)lam**. There seem to be three lines of development: either ***(g)lam** or INST may come to code the ablative by itself, or some combined form may survive. Chantyal attests all three: *-gəm-sə, -gəm,* or *-sə* [the last is ergative-instrumental] can code the ablative, though the first two are the common markers.[8]

So, either the ablative-ergative-instrumental syncretism or the genitive-ergative-instrumental syncretism could have their origins in instrumentals. Perhaps the grammaticalization chains that these entail would be not likely to produce the degree of synonymy entailed by an ablative-genitive-ergative-instrumental syncretism; obviously, such syncretisms are not ruled out, though they are unattested in our data.

7. FREQUENCY OF SYNCRETISM
Our study focused on ablatives and genitives and the syncretistic relations they enter into, so we did not survey all possible syncretisms. Nonetheless, one striking finding is how common syncretisms are among these relational markers. Of the 296 languages surveyed, 243 of them had ablatives and/or genitives that entered into syncretistic sets with other relational markers. For the most part, these syncretisms would not be expected to produce any ambiguity: for example, instrumentals and ablatives are distinctive enough simply by virtue of the nouns likely to be so marked that ambiguity would hardly arise. However, even in cases where ambiguity could easily arise – for example in syncretistic sets containing ablatives and allatives – examples can be found in our data, though by no means as frequently as cases that would likely not involve ambiguity. No doubt one consequence of syncretism is to spur on the development of new forms or usages that can disambiguate in cases where ambiguity is possible, though obviously developments that create the potential for ambiguity are not uncommon.

8. SUMMARY
For this paper, we have surveyed the sorts of syncretisms ablatives and genitives enter into for a large portion of Eurasia. One general conclusion that can be drawn from our work is the degree to which certain sorts of syncretisms have a clear areal profile. For example, the ablative-genitive syncretism is clearly European; the ablative-ergative-instrumental syncretism and its ablative-containing subsets

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[8] See Noonan (2008) for more discussion of this development.

are Himalayan, while the genitive-ergative-instrumental syncretism and its genitive-containing sub-sets are Himalayan and Caucasian. When we compare our data with that of Blake (1977:63-7), who lists no full syncretisms of ablative-ergative or genitive-ergative among the ergative Australian languages in his survey, we find more evidence that areal factors play a major role in the evolution of syncretistic sets.

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***Appendix A:* Ablative/Genitive Syncretism: arranged by type of syncretism**

The data below are arranged in three large sets. In Group A, we list those languages that instantiate the ablative-genitive syncretism. In Group B, languages are arranged in general classes according to the specific syncretisms they instantiate with regard to the ablative role; in Group C, languages are arranged in general classes according to the specific syncretisms they instantiate with regard to the genitive role. In Group D, we find a listing of languages which exhibit no syncretism of either Ablative or Genitive. [Note: languages may be listed more than once if they instantiate more than one listed syncretism; the same syncretistic set may be listed more than once in order to highlight different combinations..] For the sake of easy reference the syncretistic sets are numbered consecutively from Group A to Group C. Eth = *Ethnologue* code.

Group A: Languages showing Ablative-Genitive syncretisms:
1. ablative-genitive syncretism

LG	Eth	Language	morpheme	Abl/Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	jda	Jad	*-na*	Abl/Gen									Com	Inst		Ines
IE	kas	Kashmiri	*-i*	Abl/Gen										Inst		
IE	phl	Palula	*dii*	Abl/Gen	Elat										Comp	
IE	bre	Breton	*eus*	Abl/Gen												
			a	Abl/Gen												
IE	cat	Catalan	*de*	Abl/Gen												
IE	fra	French	*de*	Abl/Gen												
IE	ita	Italian	*di*	Abl/Gen												
IE	por	Portuguese	*de*	Abl/Gen												
IE	roh	Romansch	*da*	Abl/Gen												
IE	ron	Rumanian	*de, de la, din*	Abl/Gen												
IE	spa	Spanish	*de*	Abl/Gen												
IE	swe	Swedish	*av*	Abl/Gen		Agen										
IE	nno	Norwegian	*av*	Abl/Gen	Elat	Agen			Loc							
IE	dan	Danish	*af*	Abl/Gen	Elat	Agen										
IE	nld	Dutch	*van*	Abl/Gen												
IE	fri	Frisian	*fan*	Abl/Gen		Agen										
IE	eng	English	*of*	Abl/Gen												
IE	deu	German	*von*	Abl/Gen		Agen										
			aus	Abl	Elat											
IE	als	Albanian	*[abl/gen/dat case]*	Abl[sg]/Gen							Dat					
IE	mkd	Macedonian	*od*	Abl/Gen		Agen										
			na	Gen					Loc	All	Dat					
Ur	koi	Komi-Permyak	*-lisʲ*	Abl/Gen												
			-lön	Gen												
Ur	kpv	Komi-Zyrian	*-lišʲ*	Abl/Gen												
			-lön	Gen												
Ur	udm	Udmurt	*-leş*	Abl/Gen												
			-len	Gen												

2. ablative-genitive syncretism [partial]

LG	Eth	Language	morpheme	Abl/Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	scp	Yohlmo	*-ki*	Gen			Erg							Inst		

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LG	Eth	Language	morpheme	Case	Loc	All	Dat	Inst	Other
			-le-ki	Abl					
ST	tsj	Tsangla	-ga	Gen	Loc		Dat		
			-ga-i	Abl					
			-nang-ga						Ines
ST	mnr	Meithei	-ki	Gen					
			-tə-gi	Abl					
			-tə		Loc	All	Dat		
ST	apt	Apatani	-kɨ	Gen					
			LOC-kɨ	Abl					
ST	adl	Galo	-kə`	Gen				Inst	
			-lo-kə`	Abl					
			-lo		Loc				
IE	sin	Sinhala	age	Gen	Loc				
			age-ŋ	Abl				Inst	
Dra	kxi	Kui	-i/-a	Gen					
			-a-ṭi	Abl					
Dra	kfa	Kodava	-ḍa	Gen					
			-ḍa-l-iñji	Abl					
			-lɨ		Loc				

Group B: Languages showing syncretisms with the Ablative [other than Ablative-Genitive]

3. ablative-ergative-instrumental

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	ths	Thakali	-se	Abl			Erg							Inst		
ST	nmm	Manangba	-tse	Abl			Erg							Inst		
ST	npa	Nar-Phu	-se	Abl			Erg							Inst		
ST	tdg	West. Tamang	-ce	Abl			Erg							Inst		
			-pherang-ce													Super
ST	taj	East. Tamang	-se	Abl			Erg							Inst		
ST	ghe	Ghale	-te	Abl			Erg							Inst		
ST	kzg	Kaike	-e	Abl			Erg							Inst		
ST	bfu	Gahri	-či	Abl			Erg							Inst		
ST	cik	Chhitkuli	-či	Abl			Erg						Com	Inst		
ST	rgk	Rangkas	-se	Abl			Erg							Inst		
ST	drd	Darma	su	Abl			Erg				Dat			Inst		
			dang-su									Ben				
ST	new	Kath. Newar	-nā	Abl			Erg							Inst		
ST	cng	Qiang, Nor.	-wu	Abl			Erg							Inst		
ST	jya	Cogtse rGyalrong	-ki	Abl			Erg							Inst		
ST	cnh	Hakha Lai	-ʔii	Abl			Erg		Loc	All				Inst		Prol
ST	lus	Mizo	-in	Abl			Erg							Inst		
ST	ahk	Akha	-nɛ	Abl			Erg							Inst		
ST	duu	Dulong	-tɛ̄	Abl			Erg							Inst		

4. ablative-ergative-instrumental [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	chx	Chantyal	-gəm-sə	Abl												
			-sə				Erg							Inst		
ST	skj	Tangbe	-ri-ŋ-se	Abl												
			-se				Erg							Inst		
			-ra-ŋ-se												Comp	
ST	tmk	Dhakute Tam.	-hen-se	Abl												
			-se				Erg							Inst		
ST	nes	Nyam-kad	-so	Abl			Erg									
			-so-na											Inst		
CNE	dar	Dargwa	-li-ʕi	Abl												
			-li				Erg							Inst		

5. ablative-agentive-instrumental

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
IE	gju	Gojri	dũ	Abl		Agen								Inst		Prol

6. ablative-instrumental

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	cnh	Hakha Lai	-ʔin	Abl										Inst	Comp	Prol,Ess
ST	clk	Mishmi	gō	Abl										Inst		
ST	adl	Galo	-lo-kə`	Abl										Inst		
			-kə`	Gen										Inst		
			-lo						Loc							
IE	mag	Magahi	se	Abl										Inst	Comp	
IE	lmn	Lambadi	-ti	Abl										Inst	Comp	
IE	sin	Sinhala	age-ŋ	Abl										Inst		
IE	oss	Ossetic	-əj, -jə	Abl										Inst	Comp	
IE	pmu	Panjabi	tõ	Abl									Com	Inst	Comp	
IE	hin	Hindi	se	Abl							Dat		Com	Inst	Comp	
AuA	kfq	Korku	ʈen	Abl										Inst		
Tun	oac	Oroch	-ʐi	Abl										Inst		
Tun	gld	Nanaj	-ʐi	Abl										Inst		
EA	ess	Siberian Yupik	-miŋ	Abl	Elat									Inst		
Dra	kan	Kannada	-inda	Abl										Inst		
Dra	kfc	Konda	-aṇḍ	Abl										Inst		
Dra	peg	Pengo	-aŋ	Abl										Inst		
Dra	nit	Naiki	-la	Abl										Inst		
Dra	kvn	Kurux	-tī	Abl										Inst	Comp	
Dra	brh	Brahui	-ān	Abl										Inst	Comp	
Dra	kxu	Kui	-ɽai	Abl										Inst		

7. ablative-instrumental [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
AuA	muw	Mundari	*a-te*	Abl												
			-te											Inst		
AuA	hoc	Ho	*e-te*													
			-te	Abl						All				Inst		
Kar	kat	Georgian	*-it*											Inst		
			-i(t)-dan	Abl												

8. ablative-ergative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	gvr	Gurung	*-d(i)*	Abl			Erg									
ST	lep	Lepcha	*-nun*	Abl			Erg									

9g. ablative-ergative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	lae	Pattani	*-iŋ-zi*	Abl												
			-zi				Erg									

10. ablative-agentive

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
IE	gju	Gojri	*dũ*	Abl		Agen								Inst		Prol
IE	cym	Welsh	*gan*	Abl		Agen		Ades					Com			
IE	dan	Danish	*af*	Abl/Gen	Elat	Agen										
IE	fri	Frisian	*fan*	Abl/Gen		Agen										
IE	swe	Swedish	*av*	Abl/Gen		Agen										
IE	nno	Norwegian	av	Abl/Gen	Elat	Agen			Loc							
IE	deu	German	*von*	Abl/Gen		Agen										
IE	bul	Bulgarian	*ot*	Abl	Elat	Agen									Comp	
IE	mkd	Macedonian	*od*	Abl/Gen		Agen										
Bas	eus	Basque	*-tik, -(r)ik*	Abl		Agen										
Tur	kaz	Kazakh	*-dan*	Abl		Agen									Comp	
Tur	krc	Karachay-Balkar	*-dan*	Abl		Agen									Comp	
Tur	kir	Kirghiz	*-dan*	Abl		Agen									Comp	
Tur	cjs	Shor	*-dan*	Abl		Agen									Comp	
Tur	bak	Bashkir	*-dan*	Abl		Agen									Comp	
Dra	tcy	Tulu	*-tti*	Abl		Agen									Comp	

11. ablative-instrumental-comparative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	cnh	Hakha Lai	*-ʔin*	Abl										Inst	Comp	Prol,Ess
IE	mag	Magahi	*se*	Abl										Inst	Comp	
IE	lmn	Lambadi	*-ti*	Abl										Inst	Comp	
IE	oss	Ossetic	*-əj, -jə*	Abl										Inst	Comp	
IE	pmu	Panjabi	*tõ*	Abl									Com	Inst	Comp	
IE	hin	Hindi	*se*	Abl							Dat		Com	Inst	Comp	

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LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
Dra	kvn	Kurux	-tī	Abl										Inst	Comp	
Dra	brh	Brahui	-ān	Abl										Inst	Comp	

12. ablative-instrumental-comitative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	bft	Balti	-na	Abl									Com	Inst		
ST	prx	Purki	-na	Abl									Com	Inst		
			-yaŋ-na		Elat											
ST	jda	Jad	-na	Abl/Gen									Com	Inst		Ines
IE	pmu	Panjabi	tõ	Abl									Com	Inst	Comp	
IE	hin	Hindi	se	Abl							Dat		Com	Inst	Comp	

13. ablative-comitative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	xhs	Kanashi	-s	Abl									Com			
IE	cym	Welsh	gan	Abl		Agen		Ades					Com			
IE	rus	Russian	s	Abl									Com			
AfA	cld	Neo-Aramaic	m-, min	Abl									Com			

14. ablative-instrumental-locative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	spt	Spiti	-na	Abl					Loc					Inst		
			-taŋ-na													Super
IE	ttt	Chali	u	Abl					Loc					Inst		Ines,Acc
AuA	pce	Palaung	-ta	Abl					Loc	All		Ben	Com	Inst		

15, ablative-instrumental-locative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	jda	Nyam-kad	-na	Abl					Loc							
			-so-na											Inst		

16. ablative-comitative-locative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	vay	Hayu	-noŋ-no	Abl												
			-noŋ						Loc				Com			

17. ablative-dative-locative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	cng	Qiang, Nor.	-ta, -la	Abl					Loc	All	Dat					

18. ablative-dative-locative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	mnr	Meithei	-tə-gi	Abl												
			-tə						Loc	All	Dat					
			-ki	Gen												

19. ablative-dative-allative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	jya	Caodeng rGyalrong	-pha	Abl						All	Dat					
CK	alr	Alutor	-n, -ənaŋ	Abl						All	Dat					Prol

20. ablative-locative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	jya	Caodeng rGyalrong	-s	Abl					Loc	All						
IE	ttt	Ebrahim-abadi	da	Abl					Loc							
			a-da	Abl	Elat				Loc							
IE	ttt	Sagz-abadi	ā	Abl	Elat											
IE	ttt	Esfarvarini	a	Abl					Loc							
PS	niv	Nivkh	-ux	Abl	Elat				Loc							Prol
Dra	pci	Pajri	-ti	Abl					Loc							
Dra	mjt	Malto	-tī	Abl					Loc							

21. ablative-locative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	lae	Pattani	-iŋ-zi	Abl												
			-iŋ						Loc							
			-tu-ŋ													Super
ST	njo	Ao	nuŋ-i	Abl												
			nuŋ						Loc							Ines
IE	ttt	Takestani	a-da	Abl												Ines
			a		Elat				Loc						Comp	
Dra	tam	Tamil	-le-rundu	Abl												
			-le						Loc							Ines
Dra	kxv	Kuvi	-taṇa-ṭi	Abl												
			-taṇa						Loc	All						
Ur	ukg	Yukagir	-ge-t	Abl	Elat										Comp	
			-ge					Ades	Loc							Ines
Ur	sel	Selkup	-qin-i, -nan-i	Abl	Elat										Comp	
			-qin, -nan						Loc							
Dra	tex	Toda	-s-n	Abl												
			-s						Loc							
Dra	kfa	Kodava	-l-inja	Abl												
			-l						Loc							
Dra	kfa	Kodagu	-alli-iñji	Abl												
			-alli						Loc							
Dra	mal	Malayalam	-il-ninnə	Abl												
			-il						Loc							
Dra	kfe	Kota	-l-tr	Abl												

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
			-l						Loc							
Dra	iru	Kasaba	-il-irda	Abl												
			-il						Loc							
Dra	iru	Irula	-il-irundu	Abl												
			-il						Loc							
Dra	tel	Telugu	-lō-ninči	Abl												
			-lō						Loc							

22. ablative-dative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	drd	Darma	su	Abl			Erg				Dat			Inst		
			dang-su									Ben				
ST	drd	Darmiya	-jo	Abl							Dat					
IE	hin	Hindi	se	Abl							Dat		Com	Inst	Comp	
IE	als	Albanian	[abl/gen/ /dat case]	Abl[sg]/Gen							Dat					
AuA	shn	Shan	-ti	Abl	Elat						Dat					Illat

23. ablative-dative (partial)

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
CNE	tkr	Tsakhur	-s-e	Abl												
			-s								Dat					
			-e													Ines
CNE	huz	Hunzib	-V:-s	Abl												
			-V:								Dat					Ines

24. ablative-allative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
IE	ita	Italian	da	Abl	Elat					All						

25. ablative-allative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	jul	Jirel	-pe-i	Abl	Elat											Prol
			-pa							All						
			-me-i	Abl	Elat											
			-ma							All						
			-ne-i	Abl	Elat											
			-ne							All						
			[note: the -i element may be <Gen -ki]													
ST	nsm	Sema	law-no	Abl												
			law							All						
			lo-no		Elat											

26. ablative-elative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other

				Abl	Elat	Agen	Loc	All	Inst	Comp	Ines	Prol
ST	jul	Jirel	-pe-i	Abl	Elat							Prol
			-pa					All				
			-me-i	Abl	Elat							
			-ma					All				
			-ne-i	Abl	Elat							
			-ne					All				
			[*note: the -i element may be <Gen -ki*]									
ST	sit	Kyirong	-lɛ	Abl	Elat					Comp		
ST	qxs	Qiang, South.	-tə	Abl	Elat							Prol
IE	phl	Palula	*díi*	Abl/Gen	Elat					Comp		
IE	ttt	Xiaraji	*a*	Abl	Elat							
IE	ttt	Ebrahim-Abadi	*da*	Abl			Loc					
			a-da	Abl	Elat		Loc					
IE	ttt	Daneshfani	*ā*	Abl	Elat						Ines	
IE	gle	Irish	*as*	Abl	Elat							
IE	gla	Scots Gaelic	*as, à*	Abl	Elat							
IE	cym	Welsh	*o*	Abl	Elat	Agen						
			oddi	Abl	Elat							
IE	ita	Italian	*da*	Abl	Elat			All				
IE	por	Portuguese	*desde*	Abl	Elat							
IE	ell	Greek	*apó*	Abl	Elat	Agen				Comp		
			ék	Abl	Elat							
IE	dan	Danish	*af*	Abl/Gen	Elat	Agen						
IE	nno	Norwegian	*av*	Abl/Gen	Elat	Agen	Loc					
IE	deu	German	*aus*	Abl	Elat							
IE	bul	Bulgarian	*ot*	Abl	Elat	Agen				Comp		
IE	slv	Slovenian	*iz*	Abl	Elat							
IE	ces	Czech	*z*	Abl	Elat							
IE	slk	Slovak	*iz*	Abl	Elat							
IE	srp	Serbian	*iz*	Abl	Elat							
IE	rus	Russian	*iz*	Abl	Elat							
IE	lav	Latvian	*no*	Abl	Elat							
IE	lit	Lithuanian	*iš*	Abl	Elat							
IE	tgk	Tajik	*az*	Abl	Elat							
Ur	hun	Hungarian	*-ból*	Abl	Elat							
Ur	sma	South Saami	*-ste*	Abl	Elat							
Ur	ykg	Yukagir	*-get*	Abl	Elat					Comp		
Ur	mns	Mansi	*-nəl*	Abl	Elat					Comp		
Ur	nio	Nganasan	*-gəta*	Abl	Elat					Comp		
Ur	sel	Selkup	*-qini, -nåni*	Abl	Elat					Comp		
Mon	bxr	Buryat	*-haa*	Abl	Elat					Comp		
EA	ess	Siberian Yupik	*-məŋ*	Abl	Elat				Inst			
Kus	kgg	Kusunda	*-əna*	Abl	Elat							
Kar	kat	Georgian	*-i-dan*	Abl	Elat							
CNE	bbl	Bats	*-rẽ*	Abl	Elat							

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LG	Eth	Language	morpheme	Abl	Elat											Comp	
CNW	ady	Adyghe	*şiş*	Abl	Elat												
CNW	kbd	Kabardian	*şiş*	Abl	Elat												
CNE	bdk	Budukh	*-Vr*	Abl	Elat											Comp	
CNE	udi	Udi	*-Vxo*	Abl	Elat											Comp	
CNE	kij	Khinalug	*-illi*	Abl	Elat											Comp	
CNE	kap	Bezhta	*-dor-so*	Abl	Elat												
CNE	huz	Hunzib	*-V:-s*	Abl	Elat												
CNE	tin	Tindi	*-o*	Abl	Elat												

27. ablative-elative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	kip	Sheshi Kham	*-ən*	Abl												
			-kə-ən		Elat											
CK	kpy	Koryak	*-ŋqo*	Abl												
			- čiko-ŋqo		Elat											
CK	itl	Itelmen	*-xʔal*	Abl												
			-č'is-xʔal		Elat											
Tur	kaz	Kazakh	*-nan*	Abl		Agen									Comp	
			ortasi-nan		Elat											
Tur	alt	Altai	*-neŋ*	Abl											Comp	
			iči-neŋ		Elat											
Tur	kjh	Khakas	*-neŋ*	Abl											Comp	
			isti-neŋ		Elat											
Tur	tyv	Tuvin	*-dan*	Abl											Comp	
			ištin-dän		Elat											
Tur	cjs	Shor	*-neŋ*	Abl		Agen									Comp	
			išti-neŋ		Elat											
Tur	tuk	Turkmen	*-dan*	Abl											Comp	
			arasin-dan		Elat											
Tur	uzn	Uzbek	*-dan*	Abl											Comp	
			ičkasi-dan		Elat											
Tur	azj	Azeri	*-dan*	Abl											Comp	
			ičin-den		Elat											
Tur	nog	Nogay	*-dan*	Abl												
			išin-dan		Elat											
Tur	dlg	Dolgan	*-ttan*	Abl											Comp	
			ihi-ttan		Elat											
Tur	sah	Yakut	*-ttan, -ten*	Abl											Comp	
			ihi-tten		Elat											
PS	ket	Ket	*-dìnalʲ*	Abl											Comp	
			-hij-dìnalʲ		Elat											
IE	oss	Ossetic	*-əj*	Abl											Inst	Comp
			midəg-əj		Elat											
CNE	che	Chechen	*-ra; -ga-ra*	Abl												
			-ga-ħa-ra		Elat											

CNE		Language	Affix	Abl	Elat	Ades	Loc	All	Comp	Prol	Ines
			-ga					All			
			-ħ				Loc				
CNE	inh	Ingush	-ra, -ga-ra	Abl							
			-ga-ħa-ra		Elat						
			-ga					All			
			-ħ				Loc				
CNE	aqc	Archi	-ra-š	Abl							
			-ra			Ades					
			-š		Elat						
CNE	lez	Lezgian	-w-aj	Abl							
			-w			Ades					
			-aj		Elat						
CNE	tab	Tabassaran	-an	Abl							
			-h-an		Elat						
			-h			Ades					
CNE	agh	Aghul	-w-as	Abl							
			-w			Ades					
			-ʔ-as		Elat						
			-ʔ								Ines
CNE	rut	Rutul	-d-a:	Abl					Comp		
			-a:		Elat						
CNE	ani	Andi	-ku	Abl							
			-Lʼi-ku		Elat						
			-Lʼi								Ines
CNE	bph	Botlikh	-ku	Abl						Prol	
			-ru	Abl						Prol	
			-ł-ru		Elat						
			-ł								Ines
CNE	kva	Bagvalal	-s	Abl							
			-χ-is		Elat						
			-χ			Ades					
CNE	gdo	Godoberi	-ru	Abl					Comp	Prol	
			-Li-ru		Elat						
			-Li								Ines
CNE	kpt	Karata	-gal	Abl					Comp	Prol	
			-Li-gal		Elat						
CNE	cji	Chamalal	-o:	Abl					Comp		
			-Lan-o:		Elat						
			-Lã								Ines
CNE	ddo	Tsez	-q-a:-j	Abl							
			-q			Ades					
			-a:-j		Elat						
			-a:								Ines
CNE	khv	Khvarshi	-žo	Abl							
			-ma-žo		Elat						

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
			-ma													Ines
CNE	lbe	Lak	-a	Abl												
			-v-a		Elat											
			-vu													Ines

28. ablative-prolative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	thf	Thangmi	-tiniŋ	Abl												Prol
ST	aph	Athpare	-lamma	Abl												Prol
ST	dus	Dumi	-kə	Abl												Prol
			-bi-kə													Comp
ST	cnh	Hakha Lai	-ʔii	Abl			Erg		Loc	All					Inst		Prol
			-ʔin	Abl											Inst	Comp	Prol,Ess
ST	qxs	Qiang, South.	-tə	Abl	Elat											Prol
IE	gju	Gojri	dũ	Abl		Agen									Inst		Prol
IE	prs	Persian	æz	Abl												Comp	Prol
CNE	kpt	Karata	-gal	Abl												Comp	Prol
CNE	gdo	Godoberi	-ru	Abl												Comp	Prol
CNE	bph	Botlikh	-ku	Abl													Prol
			-ru	Abl													Prol
Tur	kaa	Karakalpak	-dan	Abl												Comp	Prol
Tur	uzn	Uzbek	-dan	Abl												Comp	Prol
CK	ckt	Chukchi	-epi	Abl												Comp	Prol
CK	itl	Itelmen	-xʔal	Abl													Prol
CK	alr	Alutor	-jəpəŋ	Abl													Prol
Ur	ksa	Khanty	-iː; -oɣ	Abl													Prol
PS	niv	Nivkh	-x	Abl					Loc							Prol

29. ablative-prolative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	lif	Limbu	-ʔo:-lam	Abl												
			-lam													Prol
ST	klr	Khaling	-ka													
			-la-ka													Prol

30. ablative-inessive

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
IE	ttt	Chali	u	Abl					Loc					Inst		Ines,Acc
IE	ttt	Eshtehardi	da	Abl												Ines
IE	ttt	Xiaraji	ku, u	Abl												Ines
IE	ttt	Sagz-abadi	cu, ku	Abl												Ines
IE	ttt	Daneshfani	ā	Abl	Elat											Ines
IE	ttt	Takestani	a-da	Abl												Ines
			a		Elat				Loc						Comp	
IE	ttt	Xoznini	a	Abl												Ines

31. ablative-inessive [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	tsj	Tsangla	*-ga*	Gen					Loc		Dat					
			-ga-i	Abl												
			-nang-ga													Ines
ST	jda	Jad	*-na*	Abl/Gen									Com	Inst		Ines
ST	njo	Ao	*nuŋ-i*	Abl												
			nuŋ						Loc							Ines
Dra	tam	Tamil	*-le-rundu*	Abl												
			-le						Loc							Ines

32. ablative-comparative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	sit	Kyirong	*-lɛ*	Abl	Elat										Comp	
ST	cnh	Hakha Lai	*-ʔin*	Abl										Inst	Comp	Prol,Ess
ST	clk	Mishmi	*gō*	Abl										Inst		
IE	phl	Palula	*díi*	Abl/Gen	Elat										Comp	
IE	mag	Magahi	*se*	Abl										Inst	Comp	
IE	lmn	Lambadi	*-ti*	Abl										Inst	Comp	
IE	pmu	Panjabi	*tõ*	Abl									Com	Inst	Comp	
IE	hin	Hindi	*se*	Abl							Dat		Com	Inst	Comp	
IE	gju	Gojri	*dũ*	Abl		Agen								Inst		Prol
IE	prs	Persian	*æz*	Abl											Comp	Prol
IE	ell	Greek	*apó*	Abl	Elat	Agen									Comp	
			pará	Abl				Ades							Comp	
IE	bul	Bulgarian	*ot*	Abl	Elat	Agen									Comp	
IE	pol	Polish	*od*	Abl											Comp	
IE	srp	Serbian	*od*	Abl											Comp	
IE	oss	Ossetic	*-əj*	Abl										Inst	Comp	
Dra	brh	Brahui	*-ān*	Abl											Comp	
Tun	mnc	Manchu	*-ci*	Abl											Comp	
Tun	evn	Evenki	*-duk*	Abl											Comp	
Tun	eve	Even	*-duk*	Abl											Comp	
Tun	gld	Nanaj	*-duj; -ʑia*	Abl	Elat										Comp	
Tun	neg	Negidal	*-dukkoj*	Abl											Comp	
Tun	oaa	Orok	*-du, -ʑedu*	Abl											Comp	
Tun	oac	Oroch	*-duji, -ʑiʑi*	Abl											Comp	
Tun	ude	Udihe	*-digi*	Abl											Comp	
AfA	mlt	Maltese	*minn*	Abl											Comp	
Ur	myv	Mordvin	*-da, -do*	Abl											Comp	
Ur	mhr	Mari	*ɣətš, detš*	Abl											Comp	
Ur	yrk	Nenets	*-höd, -gad*	Abl											Comp	
Ur	enf	Enets	*-hVð, -goð*	Abl											Comp	
Ur	ykg	Yukagir	*-get*	Abl	Elat										Comp	

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
Ur	mns	Mansi	-nəl	Abl	Elat										Comp	
Ur	nio	Nganasan	-gəta	Abl	Elat										Comp	
Ur	sel	Selkup	-qɨnɨ, -nånɨ	Abl	Elat										Comp	
Mon	bxr	Buryat	-haa	Abl	Elat										Comp	
Mon	xal	Kalmyk	-həs	Abl											Comp	
Tur	tur	Turkish	-dAn	Abl											Comp	
Tur	uig	Uighur	-din	Abl											Comp	
Tur	kaz	Kazakh	-nan	Abl		Agen									Comp	
Tur	alt	Altai	-neŋ	Abl											Comp	
Tur	kjh	Khakas	-neŋ	Abl											Comp	
Tur	tyv	Tuvin	-dan	Abl											Comp	
Tur	cjs	Shor	-neŋ	Abl		Agen									Comp	
Tur	tuk	Turkmen	-dan	Abl											Comp	Prol
Tur	kir	Kirghiz	-dan	Abl											Comp	Prol
Tur	kum	Kumyk	-dan	Abl											Comp	Prol
Tur	azj	Azeri	-dan	Abl											Comp	
Tur	nog	Nogay	-dan	Abl											Comp	
Tur	kaa	Karakalpak	-dan	Abl											Comp	Prol
Tur	uzn	Uzbek	-dan	Abl											Comp	Prol
Tur	dlg	Dolgan	-ttan	Abl											Comp	
Tur	sah	Yakut	-ttan, -ten	Abl											Comp	
CK	ckt	Chukchi	-epi	Abl											Comp	Prol
PS	ket	Ket	-dìnalʲ	Abl											Comp	
CNE	rut	Rutul	-d-a:	Abl											Comp	
CNE	gdo	Godoberi	-ru	Abl											Comp	Prol
CNE	bdk	Budukh	-Vr	Abl	Elat										Comp	
CNE	udi	Udi	-Vxo	Abl	Elat										Comp	
CNE	kij	Khinalug	-illi	Abl	Elat										Comp	
CNE	kpt	Karata	-gal	Abl											Comp	Prol
CNE	cji	Chamalal	-o:	Abl											Comp	
Kar	lzz	Laz	-šen	Abl											Comp	
Kar	xmf	Mingrelian	-iše	Abl											Comp	
AuA	hoc	Ho	-ete	Abl											Comp	
AuA	muw	Bhumij	-tea	Abl											Comp	
AuA	khr	Kharia	-ātāi	Abl											Comp	
AuA	sat	Santali	khon	Abl											Comp	Part
AuA	pce	Palaung	-dōr	Abl											Comp	
Dra	tcy	Tulu	-ttɨ	Abl		Agen									Comp	
Dra	brh	Brahui	-ān	Abl										Inst	Comp	
Dra	kvn	Kurux	-tī	Abl										Inst	Comp	
Dra	mrr	Maria	-a:h	Abl											Comp	

33. ablative-comparative [partial]

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	skj	Tangbe	-ri-ŋ-se	Abl												

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
			-se				Erg							Inst		
			-ra-ŋ-se												Comp	
ST	dus	Dumi	*-kə*	Abl											Comp	Prol
			-bi-kə												Comp	
IE	ttt	Takestani	*a-da*	Abl											Comp	Ines
			a		Elat				Loc						Comp	
Dra	kfa	Kodava	*-l-inji*	Abl												
			-kɨ								Dat					
			-k-inji												Comp	
Dra	kfa	Kodagu	*-alli-iñji*	Abl												
			-kī								Dat					
			-k-iñji												Comp	

34. other full or partial syncretisms with ablative

LG	Eth	Language	morpheme	Abl	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	drd	Darmiya	*su*	Abl			Erg				Dat			Inst		
			dang-su									Ben				
IE	cym	Welsh	*gan*	Abl		Agen		Ades					Com			
Ur	vep	Veps	*-l, -l'*	Abl				Ades								

Group C: Languages showing syncretism with Genitive [other than Ablative-Genitive]

35. genitive-ergative-instrumental

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	dzo	Dzongkha	*-g'i*	Gen			Erg							Inst		
ST	scp	Yohlmo	*-ki*	Gen			Erg							Inst		
			-le-ki	Abl												
ST	jul	Jirel	*-ki*	Gen			Erg							Inst		
ST	lbj	Leh	*-i*	Gen			Erg							Inst		
ST	sbu	Stod	*-e*	Gen			Erg							Inst		
ST	sit	Kyirong	*-ge*	Gen			Erg							Inst		
ST	kjl	Takale Kham	*-e*	Gen			Erg							Inst		
ST	kjl	Maikot Kham	*-e*	Gen			Erg							Inst		
ST	lif	Limbu	*-le*	Gen			Erg							Inst		
ST	aph	Athpare	*-ŋa*	Gen			Erg							Inst		
CNW	ady	Adyghe	*-m*	Gen			Erg		Loc	All				Inst		
CNE	udi	Udi	*-en, -in*	Gen			Erg							Inst		
CNE	kij	Khinalug	-i, -ij	Gen			Erg							Inst		

36. genitive-ergative-instrumental [partial]

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	bod	Lhasa Tibetan	*-kyi*	Gen												
			kyi-s				Erg							Inst		
ST	prx	Sham	*-i*	Gen												
			-i-s				Erg							Inst		

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
CNE	tab	Tabassaran	-ži-n	Gen												
			-ži				Erg							Inst		
CNE	aqc	Archi	-li-n	Gen												
			-li				Erg							Inst		
CNE	ava	Avar	-ca-l	Gen												
			-ca				Erg							Inst		

37. genitive-ergative

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	xsr	Sherpa	-ki	Gen			Erg									
			-sur	Gen			Erg									
ST	lbj	Ladakhi	-i	Gen			Erg									
ST	bqh	Baima	-ji[53]	Gen			Erg									
EA	ess	Siberian Yupik	-m	Gen			Erg									
CNW	kbd	Kabardian	-m	Gen			Erg		Loc	All						
CNE	tkr	Tsakhur	-n(a)	Gen			Erg									Prol

38. genitive-ergative [partial]

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	prx	Purki	-i	Gen												
			-i-s			Erg										
CNE	agh	Aghul	-di-n	Gen												
			-di			Erg										
CNE	lez	Lezgian	-di-n	Gen												
			-di			Erg										
Kar	sva	Svan	-m-iš	Gen												
			-m			Erg										
CNE	kry	Kryts	-il	Gen												
			-il-ir			Erg										

39. genitive-agentive

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
IE	nno	Norwegian	av	Gen/Abl	Elat	Agen			Loc							
IE	isl	Icelandic	af	Gen		Agen										
IE	fao	Faroese	hjá	Gen		Agen			Loc							

40. genitive-instrumental

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
Tun	mnc	Manchu	-i	Gen										Inst		Ess
EA	ale	Aleut	-m	Gen										Inst		

41. genitive-instrumental [partial]

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	rji	Raji	-kə	Gen										Inst		
Dra	kfd	Koraga	-da	Gen												

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
			-ṇṭa											Inst		

42. genitive-instrumental-comitative

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	jda	Jad	*-na*	Abl/Gen									Com	Inst		Ines
ST	lep	Lepcha	*-śa*	Gen									Com	Inst		
Ur	sel	Selkup	*-n, -t*	Gen									Com	Inst*(SG)*		

43. genitive-dative-comitative [partial]

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	new	Kath. Newar	*-yā*	Gen												
			-yā-ta								Dat					
			-yā-ke										Com			
ST	new	Jyapu Newar	*-yā*	Gen												
			-yā-ta								Dat					
			-yā-ke										Com			

44. genitive-comitative

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
Dra	tam	Tamil	*-ooḍe*	Gen									Com			

45. genitive-comitative [partial]

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	nmm	Manangba	*-ne-'a*	Gen												
			-ne										Com			

46. genitive-locative-dative

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	tsj	Tsangla	*-ga*	Gen						Loc		Dat					
			-ga-i	Abl													
			-nang-ga													Ines
IE	kas	Kashmiri	*-as*	Gen						Loc		Dat					
IE	bul	Bulgarian	*na*	Gen						Loc	All	Dat					
IE	mkd	Macedonian	*na*	Gen						Loc	All	Dat					
IE	nno	Norwegian	*til*	Gen						Loc	All	Dat					

47. genitive-locative

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	njm	Angami	*kí*	Gen						Loc							
IE	sin	Sinhala	*age*	Gen						Loc							
IE	dan	Danish	*i*	Gen						Loc	All						
IE	nno	Norwegian	*av*	Gen/Abl	Elat	Agen			Loc							
IE	swe	Swedish	*i*	Gen						Loc	All						
			på	Gen						Loc	All						
IE	fao	Faroese	*hjá*	Gen		Agen			Loc							

48. genitive-dative

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	kfk	Kinauri	*-u*	Gen							Dat					
IE	bho	Bhojpuri	*-ke*	Gen							Dat					
IE	mag	Magahi	*ke*													
IE	bre	Breton	*da*	Gen						All	Dat	Ben				
IE	ron	Rumanian	*[gen-dat case]*	Gen							Dat					
IE	dan	Danish	*for*	Gen							Dat	Ben				
			til	Gen						All	Dat					
IE	swe	Swedish	*för*	Gen							Dat	Ben				
IE	oss	Ossetic	*-ən*	Gen							Dat					
IE	hye	Armenian	*[gen-dat case]*	Gen							Dat					

49. other full or partial syncretisms with genitive

LG	Eth	Language	morpheme	Gen	Elat	Agen	Erg	Ades	Loc	All	Dat	Ben	Com	Inst	Comp	Other
ST	lae	Pattani	*-tu*	Gen												
			-tu-ŋ													Super
ST	kgj	Gamale Kham	*-lə*	Gen												Ines
ST	kip	Sheshi Kham	*-lə*	Gen												Ines
ST	mrd	Magar	*-uŋ*	Gen												
			-t-uŋ					Ades							Comp	
IE	dan	Danish	*til*	Gen						All	Dat					
IE	vep	Veps	*-n, -n'*	Gen												Ess

Group D: Languages showing no syncretism of either Ablative or Genitive

LG	Eth	Language	LG	Eth	Language	LG	Eth	Language
ST	lbj	Nubra	ST	cdm	Chepang	ST	rab	Camling
ST	lbf	Tinani	ST	suz	Sunwar	ST	tdh	Thulung
ST	bee	Byangsi	ST	new	Dolakha Newar	ST	cdn	Chaudangsi
ST	bap	Bantawa	ST	kif	Nishi Kham	ST	byw	Belhare
ST	lhu	Lahu	IE	scl	Shina	IE	asm	Assamese
IE	ben	Bengali	IE	ori	Oriya	IE	guj	Gujarathi
IE	nep	Nepali	IE	mar	Marathi	IE	wbl	Wakhi
IE	pst	Pashto	IE	bgn	Balochi	Bur	bsk	Burushaski
Dra	kfc	Konda	Dra	kxu	Kui	AuA	khi	Khasi
Dra	tel	Telugu	Dra	kff	Koya	AuA	crw	Chrau
AuA	kpm	Koho (Sre)	TK	tha	Thai	TK	lao	Lao
TK	doc	Dong	AuA	nut	Nung	AuA	vie	Vietnamese
ST	yue	Cantonese	ST	nan	Taiwanese	ST	cmn	Mandarin Chinese
Mon	khk	Mongolian	Jap	jpn	Japanese	Ain	ain	Ainu
AfA	arb	Arabic	AfA	tzm	Tamazight	Kor	kor	Korean
CNW	abq	Abaza	CNW	abk	Abkhaz	Tun	ulc	Ulch
CK	krk	Kerek	Ur	est	Estonian	Ur	izh	Izhora
Ur	vot	Votic	Ur	liv	Livonian			

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Appendix B
Language Family Codes

AfA	Afro-Asiatic	Jap	Japonic
Ain	Ainu	Kar	Kartvelian
AuA	Austro-Asiatic	Kor	Korean
Bas	Basque	Kus	Kusunda
Bur	Burushaski	Mon	Mongolic
CK	Chukotko-Kamchatkan	PS	Paleosiberian
CNE	Northeast Caucasian	ST	Sino-tibetan
CNW	Northwest Caucasian	TK	Tai-Kadai
Dra	Dravidian	Tun	Tungusic
EA	Eskimo-Aleut	Tur	Turkic
IE	Indo-European	Ur	Uralic

Appendix C
Semantic Role Prototypes

Abbr	Name	Prototype
Abl	Ablative	she traveled <u>from Paris</u>
Acc	Accusative	*the direct object in constructions employing accusative syntax*
Ades	Adessive	he was <u>near the house</u>
Agen	Agentive	*the agent in a passive construction; used only for languages with passive constructions*
Ben	Benefactive	he made it <u>for Mary</u>
Com	Comitative	she came <u>with her friend</u>
Comp	Comparative	he is smarter <u>than George</u>
Dat	Dative	she gave the book <u>to Roger</u>; Dat marking of DOs is not indicated
Elat	Elative	it came <u>out of the box</u>
Erg	Ergative	*agent in an active transitive sentence; used only for languages with ergative constructions*
Ess	Essive	she was <u>like her mother</u>
Ines	Inessive	she was <u>in the garden</u>
Inst	Instrumental	she dug the hole <u>with a shovel</u>
Loc	Locative	neutral expression of location: she was <u>in London</u>
Prol	Prolative	he came <u>via Berlin</u>/<u>along the trail</u>
Sub	Subessive	it was <u>under the table</u>
Super	Superessive	it was <u>over the table</u>