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Evolution of case systems

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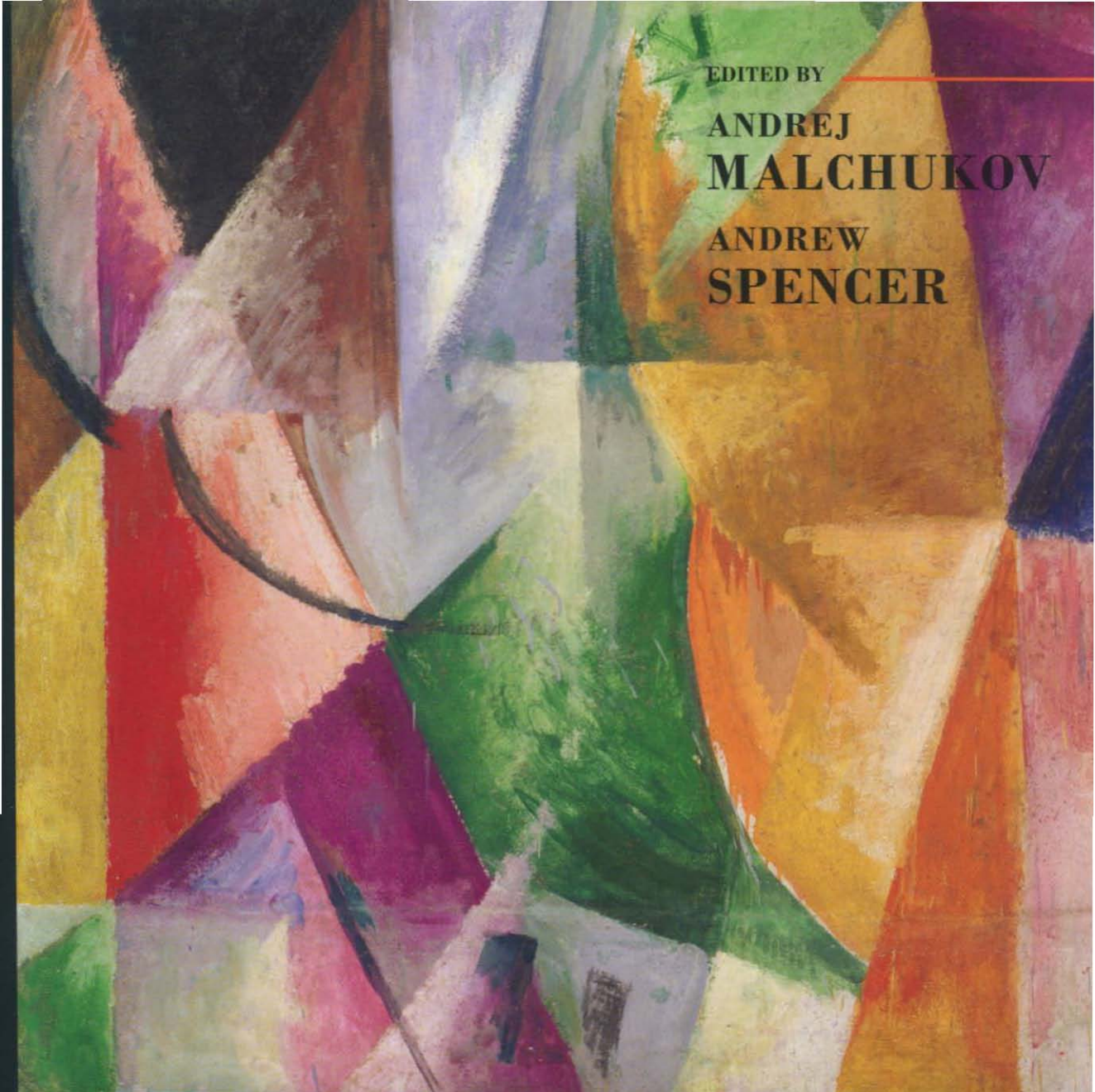
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CHAPTER 28

EVOLUTION OF CASE SYSTEMS

LEONID KULIKOV

THIS chapter (largely based on Kulikov 2006) offers a cross-linguistic survey of the main types of possible developments in case systems. Section 28.1 focuses on the main mechanisms of the rise of new cases and expansion of case systems (case-increasing). New cases may arise (i) by adding adverbs, postpositions, and (rarely) prepositions (see section 28.1.1); (ii) by adding existing case markers to other case forms, which results in ‘multilayer’ case marking (see 28.1.2); (iii) from demonstrative pronouns or articles (see 28.1.4). New case forms may also go back to (iv) denominal adjectives and adverbials incorporated into the case paradigm (see 28.1.3). An important mechanism of the rise of new case(s) is (v) splitting of one case into two by borrowing of a new case marker from a different declension type (see 28.1.5).

Section 28.2 discusses the main processes within case systems that do not lead to quantitative changes but help to resist phonetic erosion (stable case systems). The mechanisms used to avoid merger of cases include the borrowing of new inflections from other cases and adding free morphemes to old case forms.

On the basis of this diachronic typological overview, section 28.3 offers a tentative classification of the evolutionary types of languages and briefly discusses the main factors determining the evolutionary type of a language.

28.1 RISE OF CASES AND EXPANSION OF CASE SYSTEMS: SOURCES AND MECHANISMS

28.1.1 Case morphemes from adpositions

Most often, new case markers (and, accordingly, new cases) are recruited from adpositions. Particularly common are case suffixes originating from postpositions or other semi-auxiliary adverbial words with similar semantics.¹ Thus, in Harris and Campbell's (1995: 89) formulation, 'Cases develop from postpositions when the postposition is felt to be so closely connected to its attribute noun that together they are reinterpreted as one word; semantic and morphophonemic changes (e.g. vowel harmony) often take place which conceal the word boundary and change the status of elements, resulting in new case suffixes.' The origin of case prefixes from prepositions, albeit theoretically possible, seems to be extremely rare in the languages of the world (see some examples in section 28.1.1.3).² For the adpositional origin of case markers, see also Kahr 1976; Lehmann 1995: 80ff; Blake 2001: 161ff. This, the commonest scenario, can be illustrated by examples from the history of the Indo-Aryan,³ Tocharian, and Lithuanian case systems.

28.1.1.1 *New cases from postpositions and nominal compounds in Indo-Aryan and Tocharian*

By the end of the Middle Indo-Aryan (MIA) period, that is, at the turn of the second millennium AD, the Indo-Aryan languages have lost most of the cases of the original Sanskrit, or Old Indo-Aryan (OIA), system of eight cases⁴ (which, except for minor details, is nearly identical to the case system reconstructed for Proto-Indo-European). Generally, only two cases survive, Direct (resulting from the merger of nominative and accusative) and Oblique (mostly going back to the Old Indo-Aryan genitive), although in some languages isolated traces of some other oblique

¹ The adpositions, in turn, often go back to verbal forms or (especially often for expressing locative case relations) to nominal forms; see, for instance, Blake 2001: 161ff.

² This disproportion may be due to some reasons of general nature. Thus, as Reh (1986) concludes on the basis of the analysis of evidence from some African languages, prepositions may tend to become suffixes on the preceding verb rather than prefixes on the following noun. This, in turn, according to Stampe, may result from the fact that '[u]naccented elements tend to attach rather permanently to preceding accented elements, and not to following ones' (Donegan and Stampe 1983: 344; Stampe 1994).

³ Case morphemes going back to postpositions can also be found in many languages of another branch of the Indo-European language family, closely related to Indo-Aryan, in Iranian; cf. a few examples from Ossetic in section 28.1.3, fn. 9.

⁴ For a general survey and discussion of the evolution of the Indo-Aryan case system, see, in particular, Bloch 1934; Zograf 1976; Bubenik 1998: 99–101; Hewson and Bubenik 2006: 102ff; Masica 1991: 230ff.

cases, such as instrumental, locative, or ablative, can still be found, sometimes even within the declension paradigm; cf. the Sinhala instrumental case suffix *-en/-in* and Assamese ergative *-e*, both reflecting the OIA instrumental singular ending of *a*-stems *-ena*. The functions of the lost cases are largely taken over by morphemes (bound or free, i.e. postfixes or postpositions) of different origin.

These include:

- (i) primary, or 'old', postpositions, going back to Proto-Indo-European (PIE) morphemes that were used in the adpositional function already in the proto-language. An example of an old OIA postposition reflected as a case suffix in a daughter language, in Middle Indo-Aryan, is the Māhārāṣṭrī ablative suffix *-āhi* < Skt. postposition *adhi* (constructed with ablative in OIA); see Insler 1991–92; Bubeník 1998: 68f.
- Next to old postpositions, there are several markers which result from grammaticalization of some verbal and nominal forms:
- (ii) postpositions descendent from
 - (ii.a) non-finite verbal forms, in particular, converbs (traditionally called 'absolutives', or 'gerunds', cf. Skt. *ādāya* 'with', lit. 'having taken'), gerundives (participia necessitatis) and verbal adjectives (cf. (3));
 - (ii.b) case forms of some nouns (cf. (1–2));
- (iii) final members of compounds, which, again, may represent
 - (iii.a) non-finite verbal forms (cf. nominal compounds in *-sthita-* mentioned in (1a)) or
 - (iii.b) nominal case forms (cf. nominal compounds in *-artham* 'goal, purpose' in (2a)).

The markers of the first three types (i, ii.a and ii.b), representing free morphemes (words), were originally attached to (non-nominative) case forms of the noun, thus forming, after having become bound morphemes, the second layer of case forms (see below). In type (iii), the source of the new case morpheme was attached to the nominal stem, thus creating a new case within the first layer. In fact, due to the erosion of the nominal inflection by the end of the MIA period, some (oblique) case forms may eventually become indistinguishable from bare stems, and thus the border between types (ii) and (iii) cannot always be drawn with accuracy.

A number of examples of the grammaticalization of new postpositions and case suffixes can be found already in the MIA period, in particular, in Apabhraṃśa Prakrits (for details, see Bubeník 1998: 67, 80), cf. the ablative postfix *-t̥thiu* < OIA *sthita-* 'standing' (passive perfect participle of the verb *sthā* 'stand') and the locative postposition *majjhe* < Skt. *madhye* (Loc.sg. of *madhya* 'middle') in (1):

- (1) Apabhraṃśa Prakrit (Bubeník 1998: 67, 80; Hewson and Bubeník 2006: 113)
 - a. *hiaya-t̥thiu*
heart-LOC
'out of [my] heart'

- b. *gharaho majjhe*
 house.GEN in
 'in the house'

In New Indo-Aryan languages we observe a rapid increase in use of such new postpositions, which are normally added to the Oblique case form. This grammaticalization may result in the amalgamation of a postposition with the nominal stem or Oblique case and, hence, in the rise of a new case. Such is, for instance, the origin of some new case endings listed under (2):

- (2) a. Sinhala dat. *-ṭa*, Khowar dat. *-te* < Skt. *-artham* 'goal, purpose';
 b. Sinhala gen. *-ge* < Skt. *gr̥he* 'in the house'
 (Loc.sg. of *gr̥ha-* 'house')

The bulk of case markers containing *k-* and/or *r-*, which go back to nominal derivatives of the Old Indo-Aryan verbal root *kr̥-* (*kar-*) 'make, do', can be found in several New Indo-Aryan languages. These include, in particular, genitive morphemes in several New Indo-Aryan languages (see, in particular, Hewson and Bubeník 2006: 122f):

- (3) New Indo-Aryan genitive
 a. Hindi *-kā, -ke* < Apabhr. *-kera* < Skt. gerundive *kārya-* 'to be done';
 b. Awadhi, Maithili *-ker* < Skt. part.pf.pass. *kr̥ta-* 'done, made';
 c. Bhojpuri *-k* < Skt. adj. *kr̥tya-* 'to be done'.

Likewise, some dative *k-*morphemes, such as Hindi *-ko*, Oriya *-ku*, Marathi *-kē*, Romani *-ke/-ge* reveal a vestige of the same Sanskrit root *kr̥-* (*kar-*).

The initial stages of the corresponding grammaticalization processes can be dated as early as Old Indo-Aryan. Thus, the starting point of the grammaticalization path of Skt. *-artham* 'goal, purpose' towards the Sinhala dative case suffix *-ṭa* (cf. (2a)) is the adverbial usage of the accusative of the Sanskrit bahuvrīhi compounds in *-artha-* (*X-artham*), meaning 'having X as a goal, purpose' → 'for (the sake of) X': *udakārtham* 'having water as a goal' → 'for water'; *sukhārtham* 'having happiness, pleasure as a goal' → 'for happiness, for pleasure'; *tadārtham* 'having that as a goal' → 'for that, therefore'.

In New Indo-Aryan languages, the morphological status of the resulting markers may vary from bound morphemes (case suffixes), tightly connected with the nominal stem (as in Sinhala, cf. (2)), to free morphemes (postpositions). The latter type can be illustrated by the Hindi dative-accusative morpheme *-ko*, which can be shared in some constructions by several nouns (as in *rām aur mohan ko* 'to Ram and Mohan'), exemplifying a 'Gruppenflexion', which pleads for a postposition rather than for a suffix analysis.

The difference between these groups of case morphemes is often described in terms of the distinction between cases of the first, second, and third layers (Zograf 1976; Masica 1991: 230ff; Matras 1997). The first layer corresponds to the case in

the strict sense of the term and, in Hindi, is limited to the opposition between the direct and oblique cases. The third layer corresponds to clear instances of postpositional phrases, while the second one takes an intermediary position between cases proper and postpositional phrases. It is important to note that only the first layer case can trigger agreement on adjectives. Although both 'Gruppenflexion' and the lack of agreement with second layer cases appear to distinguish these morphemes from cases proper, the high degree of grammaticalization makes it appropriate to associate them with the category of case in general.

The genesis of the Tocharian case system (for a detailed survey, see, in particular, van Windekens 1979; Pinault 1989: 71ff; Hewson and Bubeník 2006: 317ff) resembles in several respects the origins of the Indo-Aryan cases. Proto-Tocharian (the proto-language of Tocharian A and B) has lost about a half of the original Proto-Indo-European system. Alongside the nominative and oblique (which continues the Proto-Indo-European accusative), we only find continuations of the genitive and vocative (only in Tocharian B) and, probably, some traces of the ablative. Nevertheless, the paradigm has even more cases than in Proto-Indo-European. Like in New Indo-Aryan languages, next to the inherited, or 'primary', cases, nominative, oblique, genitive, and vocative, there are a number of 'secondary' cases built on the oblique form. Historically, most of them go back to combinations with postpositions, although the exact sources of some endings are unclear. Thus, the locative morpheme Toch. B *-ne*, Toch. A *-am* reflects PToch. **-næ* < PIE **no*, thus being probably related to the Old Prussian locative preposition and prefix *na* (< **no*) 'on'; cf. also Slavic *na* (< **no-H*) 'on'. The perlocative⁵ morpheme (Toch. B *-ā*) must continue PToch. **-a(C)* and thus may be related to Latin *ad*. Still less clear is the origin of the allative morpheme, Toch. A *-ac*, Toch. B *-ś(c)* < PToch. **-cā*, which presumably originates from **-Te* or **-Ti* (where *T* stands for any dental), thus reflecting **-de* (cf. Greek *δε*), **-dhi* (cf. Greek *δι*), or **-te* (cf. Greek *-τε*).⁶

28.1.1.2 *New locative cases from postpositions in Old Lithuanian*

Similar mechanisms for creating new cases have been used in Old Lithuanian, resulting in a subsystem of locative cases, which is partly preserved in the modern literary language⁷ and can still be found in some archaic dialects, spoken, in particular, in Belarus (for details see e.g. Ambrazas et al. 1985: 90 [= 1997: 106]; Mathiassen 1996: 38; Zinkevičius 1996: 112f; Seržants 2004; Kortlandt 2005; Hewson and Bubeník 2006: 206ff). Most of the Lithuanian cases can be traced back to the Proto-Indo-European case system. In addition, we find three new locatives: illative,

⁵ This case takes over some functions of the instrumental.

⁶ Alternatively, Toch. B *-ś(c)* can be explained as reflecting the PIE root *st(h)eH₂* (*-sti-*) 'stand'; see Hewson and Bubeník 2006: 320.

⁷ Some isolated forms still existing in modern Lithuanian do not belong to the paradigm but function as adverbials.

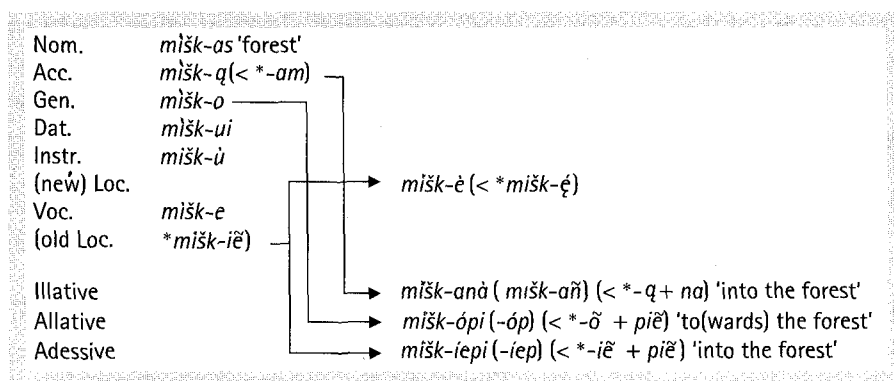


Figure 28.1. Old Lithuanian case system

adessive, and allative, made by attaching the postposition **nā* to the accusative form in *-n* (with the subsequent degemination of *-n-n-*) and the postposition **piẽ* (< Proto-Baltic **prei*) to the locative and genitive, respectively. The 'locative' of the modern literary Lithuanian case system (inessive) is a new case as well (made by adding the new postposition **en* to the old locative),⁸ replacing the old locative inherited from Proto-Indo-European (which only survives in some adverbials such as *nam-iẽ* 'at home'). The resulting case system (as attested in Old Lithuanian and in some Southern and Eastern archaic dialects) is summarized in Figure 28.1.

28.1.1.3 Case prefix from a preposition: Iranian and Nuristani languages

Rare examples of the origin of a case prefix from a preposition are found, for instance, in a few Indo-Iranian (in particular, Pamir) languages, where the accusative case prefix goes back to a preposition. Thus, in Yazgulyam (Iranian, Pamir), the prefix *š(ə)-/ž(ə)-* (going back to an ablative preposition) is attached to the nouns preceded by the ablative preposition *na* 'from' (Comrie 1981b: 169; Payne 1980: 174). In Prasuni (Prasun), a (Nuristani) language spoken in Afghanistan, the form with the locative prefix *tu-* (*ti-*, *t-*) co-exists within the case paradigm with a number of suffixal forms, cf. (4):

(4) Prasuni (Morgenstierne 1949: 220)

- a. *ɛsʔɛk tu-gʷul*
that in-country
'in that country'
- b. *t-arek*
in-house
'in(to) the house'

⁸ For the history of this case form, see Kortlandt 2005: 68.

- c. *tī-zī*
 in-door
 'at the door'

This case prefix has developed from the Common Indo-Iranian preposition *antár* 'within, inside, between' (Morgenstierne 1949: 220).

28.1.2 Multilayer case marking

New cases (usually, new locatives) can also be created by adding existing case markers to some case forms or to adverbials with case-like semantics, which results in multilayer case marking.

Such mechanism has given rise to the rich system of locative cases in Finnish, as well as in some other Finno-Ugric (FU) languages (see e.g. Hakulinen 1961: 67ff). Although the documented history of the FU languages goes back only about five hundred years and we cannot directly observe the rise of new cases (as in Indo-Aryan), most of the Finno-Ugric case markers are morphologically transparent and their sources can readily be reconstructed. Thus, the three internal locative cases, inessive, elative, and illative, have been created by adding the case markers of essive and partitive (historically going back to locative–ablative) to the forms in *-s* (which can be identified as an adverbial suffix). Likewise, the external locatives (adessive, ablative, and allative) have been made from the adverbial forms ending in *-la/-lä*, which is probably identical with the final element in a few nouns with locative semantics such as *ete-lä* 'south', *pohjo-la* 'north', *appe-la* 'home of the father-in-law' (← *appi* 'father-in-law'). The history of the Finnish declension is summarized on the basis of Hakulinen 1961 in Table 28.1.

Of course, it is sometimes nearly impossible to draw with accuracy the distinction between the two types discussed in sections 28.1.1.1–2 and 28.1.2, i.e. between 'adpositional' cases and multilayer case marking. Thus, Proto-Lithuanian **nã* used in the formation of the illative (cf. *mišk-añ* < **-am* + *na* 'into the forest') might represent an old postposition or an extinct case marker.

28.1.3 Cases from adjectives and adverbials

Adjectives and adverbials that may become incorporated into the substantive paradigm represent another important source of new cases. This grammaticalization path has thus far received much less attention in the literature on the grammaticalization of cases than postpositions.

An instructive example is provided by Ossetic, an Indo-European (Iranian) language which has lost most of the Proto-Indo-European cases but, eventually, has developed an even larger case paradigm (for details, see Cheung 2008). Next

Table 28.1. The reconstructed history of the Finnish case morphemes

	Finnish	Proto-Finnic	Proto-Volga-Finnic	Proto-FU
Nom.	-∅	<		*-∅
Acc.	-n	<		*-m
Gen.	-n	<		*-ń
Essive	-na/-nä	<		*-na
Partitive	-ta/-tä, -a/-ä	<		*-ḡa (*loc.-abl.)
Translative	-ksi	<	*-k-s-e	
Internal locative cases				
Inessive	-ssa/-ssä	<	*-s-na/-s-nä	
Elative	-sta/-stä	<	*-s-ta/-s-tä	
Illative	-hVn, -ñ, -seen	< *-señ, -zeñ		
External locative cases				
Adessive	-lla/-llä	< *-l-na/-l-nä		
Ablative	-lta/-ltä	< *-l-ta/-l-tä		
Allative	-lle(')	< *-leñ		
Abessive	-tta/-ttä	<	*-s-ta-k/-s-tä-k	
Comitative	-ine-	<	*-i-n (?)	

to two 'old' cases, nominative and genitive, directly continuing the corresponding Proto-Indo-European cases, as well as two new cases based on combinations with postpositions,⁹ a few members of the case paradigm are probably of adjectival and adverbial origin. The comitative morpheme *-imæ* (only in the Iron dialect) must reflect an adverbial morpheme, cf. Avestan *mat* 'together, jointly'. Two other case forms are likely to go back to denominal adjectives incorporated into the substantive paradigm. The inessive ending may reflect the adjectival suffix **-īja-* (cf. Vedic *pārvata-* 'mountain' – *parvatīya-* 'growing in the mountains'). The equative morpheme probably originates in the adjectival suffix *-vant-* (as in Vedic *tva-* 'you' – *tvāvant-* 'like you').

For the sake of convenience, the history of the Ossetic case paradigm is summarized in Table 28.2 (adopted from Cheung 2008: 88ff), which represents the declension of the word *sær* 'head' in the singular; in the cases where the forms attested in two main dialects, Iron and Digoron, are different, the Iron form is given first.

Another instance of a new case marker of adjectival origin is found in Armenian. The Gen./Dat./Abl.pl. ending *-c'* can be traced back to PIE **-sko-m*, where **-sko-* represents the derivational adjectival suffix (cf. Goth. *manna* 'man' – *mannisks* 'human', Old Church Slavonic *člověkъ* 'man' – *člověč-ьskъ* 'human; of the men').

⁹ The dative ending *-æn* may go back to **ana* (cf. Avestan *ana* 'upon, over, across') or **anu* (cf. Old Persian *anuv*, Avestan *anu* 'along, after, according to'). The adessive marker *-bæł* (Digoron) undoubtedly originates in **upari* 'above, upon, on' (the lack of the labial stop in the adessive ending *-yl* attested in another dialect, Iron, may be due to the adaptation to the inessive morpheme *-y*).

Table 28.2. Declension of Ossetic *sær* 'head' in the singular

Nominative	<i>sær</i>	< nom. * <i>-ah</i> and/or acc. * <i>-am</i>
Genitive	<i>sær-y/sær-i</i>	< gen. * <i>-ahja</i>
Ablative	<i>sær-æj</i>	< abl. * <i>-āt/ins.</i> * <i>-ā</i> + encl. particle * <i>i</i>
Dative	<i>sær-æn</i>	< postpos. * <i>ana</i> or * <i>anu</i>
Adessive	<i>sær-yl/sær-bæl</i>	< postpos. * <i>upari</i>
Comitative	<i>sær-imæ</i>	< adverb <i>mat</i>
Inessive	<i>sær-y/sær-i</i>	< adj. suff. * <i>-tja-</i>
Equative	<i>sær-aw</i>	< adj. suff. * <i>-vant-</i>
Allative	<i>sær-mæ</i>	< dem.pron. (loc.) * <i>ahmi</i> + dir.particle * <i>ā</i>

Apparently, Armenian has introduced the possessive adjective into the substantive paradigm, replacing the old genitive plural; later this form was expanded to the dative and ablative (see Godel 1975: 106; Kortlandt 1984: 100 [= 2003: 47]).

28.1.4 Cases from pronouns and articles (indexicals)

New case markers can also be recruited from the set of demonstrative pronouns or articles (which in turn typically go back to pronouns).

Such was probably the origin of some case endings in Kartvelian languages.¹⁰ According to A. Šanidze, the marker of the Georgian nominative case *-i* (the 'subject-object' form, approximately corresponding to the absolutive of ergative languages) may go back to the postposed demonstrative pronoun *-igi* (through the stage of the definite article), which was probably reanalysed as *ig-i* 'that-NOM' (Boeder 1979: 471, note 20; 474, note 35). Similar may be the origin of the Laz and Megrelian (Mingrelian) 'narrative' case marker *-k* (for discussion, see Klimov 1962: 17f, 36f). The Georgian ergative suffix *-ma/-m*, the marker of another case encoding the two main syntactic arguments, undoubtedly goes back to the demonstrative pronoun *man* 'that; he'; Old Georgian still preserves the more archaic form of this ending, *-man*, which is formally identical to the source morpheme (Klimov 1962: 55).

Likewise, some scholars suggest a similar origin of the ergative case marker in two North-West Caucasian (Abkhaz-Adyghe) languages, Kabardian (*-mə*) and Ubykh (*-n*). According to Kumaxov (1971: 43, 158; 1989: 31f), both case morphemes may go back to the definite article/demonstrative pronoun 'this' (Kabardian *mə*, Ubykh *jəna*).

Finally, rich evidence for the development of ergative case markers from demonstrative and pronominal forms is provided by a number of Australian languages;

¹⁰ I would like to thank V. Chirikba and Y. Testelet for having discussed with me the Caucasian data.

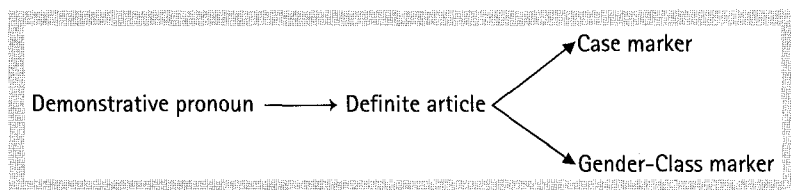


Figure 28.2. Development of demonstrative pronouns

see now the most comprehensive treatment of the issue in McGregor (2008), which offers both a detailed survey of data available from several grammars and a theoretical explanation of this grammaticalization scenario. Thus, the Nyulnyulan ergative suffix *-ni/-in/-nim* etc. may derive from Proto-Nyulnyulan **-nimV*, which 'is a plausible cognate of the ... third person pronoun *ni ~ nu*'. The Jingulu ergative markers *-(r)ni* and *-nga* probably go back to either pronouns or demonstratives **-nu* and **-ngaya* (ibid.).

In general, the possible developments of demonstrative pronouns can be represented according to the scheme in Figure 28.2. (Harris and Campbell 1995: 341f)

28.1.5 Split of one case in two

New cases can also be created by splitting one case into two. The most common scenario is the borrowing of a new case marker from a different declension type, as shown in Figure 28.3. The case *Ci* that originally has distinct endings in declensions I and II (*-x_I* and *-x_{II}*, respectively) splits, yielding two new cases, *Ci₁* with the ending *-x_I* and *Ci₂* with the ending *-x_{II}*. This process is usually accompanied by the loss of the declension type (II) that was the source of the new case marker.

Declension types	I	II	(I)
C1	...	...	C1 ...
C2	...	...	C2 ...
...		...	
Ci	-x _I	-x _{II}	→ Ci₁ -x_I → Ci₂ -x_{II}

Figure 28.3. Case-splitting

	Modern Russian			Old Russian	
	2nd declension			*-o-type	*-u-type
Nom.	<i>les-ø</i> 'forest'	<i>čaj-ø</i> 'tea'	<i>měd-ø</i> 'honey'	<i>lěs-ъ</i>	<i>med-ъ</i>
Gen.	<i>lěs-a</i>	<i>čaj-a</i>	<i>měd-a</i>	<i>lěs-a</i>	<i>med-u</i>
Gen.-2 /Part.	<i>lěs-u</i>	<i>čaj-u</i>	<i>měd-u</i>	—	—
Dat.	<i>lěs-u</i>	<i>čaj-u</i>	<i>měd-u</i>	<i>lěs-u</i>	<i>med-ovi</i>
Loc.-1	<i>(o) lěs-e</i>	<i>(o) čaj-e</i>	<i>(o) mēd-e</i>	<i>lěs-ě</i>	<i>med-u</i>
Loc.-2	<i>(v) les-ú</i>	...	<i>(v) med-ú</i>	—	—

Figure 28.4. Development of the 'second' Locative and 'second' genitive in Russian

An illustration of such development is provided by the history of the modern Russian 'second' locative and 'second' genitive (also called partitive).¹¹

These developments are summarized in Figure 28.4, which represents the relevant fragment of the modern Russian second declension (in the singular) as compared to its Old Russian predecessor (attested since the eleventh century).

Locative-2 of the second declension type (historically going back to the Proto-Indo-European declension of the *-o-stems) is marked with the accented ending *-ú* (thus being opposed to *-e* of the original locative, or Locative-1¹²) and can only be employed in constructions with the locative prepositions *v* 'in' and *na* 'on'. It is formed almost exclusively from monosyllabic nouns such as *sneg* 'snow', *les* 'forest', *sad* 'garden': *na sneg-u* / *v sneg-u*, *v les-u*, *v sad-u*. The ending *-ú* has been borrowed from the old declension of the stems in *-u- (type *synъ* < **sūn-u-s* 'son', *dom-ъ* < **dom-u-s* 'house'), where it was regular: Nom.sg. *dom-ъ* (< **dom-u-s*) – Loc.sg. *dom-u* (< **dom-ou*). Under the influence of the locatives of some nouns of this type, such as *(v) med-u* '(in) honey', *-u*-forms have penetrated into the paradigm of the old *-o-type nouns, foremost of those which denote location and thus are particularly common in the locative usage. The earliest attestations of this new case appear at the turn of the thirteenth century. Subsequently, the *-u-declension has disappeared (approximately after the fourteenth century), being ousted by the productive second (*-o-) declension.

¹¹ For the synchronic status of these two cases see, in particular, Zaliznjak 1967; Plungian 2002. For their history see e.g. Kiparsky 1967: 35ff; Ivanov 1983: 266ff; Hentschel 1991.

¹² Called in the Russian grammatical tradition *predložnyj*, i.e. 'Prepositional' case, since it can only be employed with prepositions.

The Genitive-2 (partitive) is distinct from the standard genitive (Genitive-1) only for some uncountable nouns of the second declension, such as *měd* ‘honey’, *saxar* ‘sugar’, *čaj* ‘tea’, cf. Gen.-2 *měd-u*, *saxar-u*, *čaj-u* ~ Gen.-1 *měd-a*, *saxar-a*, *čaj-a*. This form is employed in constructions such as ‘a pound (of) ____’, ‘he drunk/ate some ____’. Like in the case of Locative-2, the ending *-u* has been taken over from the old **-u-* declension, where it was regular: Nom.sg. *med-ъ* ‘honey’ – Gen.sg. *med-u* (< **medh-ou-s*); Nom.sg. *syn-ъ* ‘son’ – Gen.sg. *syn-u* (< **sūn-ou-s*, cf. Lith. Gen.sg. *sūnaūs*). Genitive-2 had been established approximately by the sixteenth century (for details, see e.g. Kiparsky 1967: 26ff).

28.1.6 Other possible sources of new cases

Sections 28.1.1–5 do not exhaust the list of possible sources of new cases. Thus, a very interesting mechanism for the rise of a new case is instantiated by the emergence of the new vocative in the modern (colloquial) Russian. The history of this form can be briefly summarized as follows.

Common (or Proto-) Slavic has inherited from Proto-Indo-European the old vocative that was distinct from the nominative. Originally, its form was equal to the bare stem or truncated stem + **-e* (vocative particle?), but already by the Proto-Slavic period the morphemic structure has been blurred in all declension types, as shown in Table 28.3. Unlike all other Slavic languages, such as Polish, Bulgarian, and Ukrainian, modern Russian has not preserved this case form, which only survives in a few idiomatic expressions, such as (*o*) *bože!* ‘Oh God!’. Instead, it has developed a new vocative form. The new vocative case is distinct from the nominative only for certain nouns of the first declension (historical **-ā*-declension), specifically for those which are particularly common in the vocative usage. These include a few kinship nouns (*mama* ‘mum(my)’, *papa* ‘dad’, *tětja* ‘aunt’) and short forms of proper names: *Maša* (short form for *Marija*), *Tanja* (~ *Tat’jana*), *Saša* (~ *Aleksandr* (m.)/*Aleksandra* (f.)), etc. The new vocative is marked with the zero ending, thus being identical with the bare stem (and with the genitive plural of this declension type): *mama* – *mam-ø*, *papa* – *pap-ø*, *tětja* – *tět’-ø*, *Maša* – *Maš-ø*,

Table 28.3. Old Russian nominative and vocative

	*-ā-declension	*-o-declension	*-u-declension
NOM.SG.	<i>žen-a</i> ‘wife’	<i>vьlk-ъ</i> ‘wolf’	<i>syn-ъ</i> ‘son’
VOC.SG.	<i>žen-o</i> (< <i>*g^wen-H₂-e</i>)	<i>vьlč-e</i> (< <i>*ul^w-e</i>)	<i>syn-u</i> (< <i>*sūn-e-u</i>)

Tanja – *Tan'-ø*, *Saša* – *Saš-ø*, etc.¹³ Most interestingly, the mechanism of such a resurrection of the vocative case, according to which the vocative form tends to be as close as possible to the bare stem (being in that respect similar to the imperative form in the verbal system), is likely to reflect a very basic (albeit of course not absolute and exceptionless) universal of the human speech.

28.2 RESISTING THE EROSION OF CASE MORPHOLOGY: STABLE CASE SYSTEMS

Section 28.1 illustrates the increase of the total number of cases, i.e. various quantitative changes in case systems; for examples of case syncretism and decrease of the total number of cases, see Chapters 14 and 30. Next to the case-increasing and case-decreasing types, we find more complex scenarios, where some developments compensate the loss of case oppositions, so that the number of case distinctions remains unchanged, but the system of forms may undergo crucial restructuring. The following section discusses some language mechanisms used for resisting potential case mergers.

28.2.1 Reinforcement of case forms

The most straightforward way to resist the erosion of the nominal inflection and, in particular, the loss of case distinctions, consists in the morphological reinforcement of case forms. The case morpheme can be reinforced by adding (redoubling) an extra case marker (of the same or another declension type), which results in a hypercharacterized case form, and/or by adding an auxiliary word (for instance, a particle).

The former mechanism (repetition of the case morpheme) can be illustrated by the reconstructed history of the genitive form in Tocharian. According to van Windekens (1979: 181) and Pinault (1989: 88f), the genitive ending *-ntse* in Tocharian B (< PToch. **-nsæ*) must represent PIE **-n-s-os*, i.e. the genitive of *n*-stems (with the ending *-s*), which was reinforced by the repetition of the same morpheme, when the form in **-ns* had become obsolete. Subsequently, this ending has been generalized for other stem types. The Tocharian genitive may thus instantiate an interesting example of the double (hypercharacterized) case marking.

¹³ For an alternative analysis of this form as nominative (rather than bare stem), which underwent deletion of a prosodic unit ('deprosodization') with subsequent resyllabification, see Yadroff (1996). For the paradigmatic and morphological status of the vocative, see Chapter 43, this volume, and especially 43.2 on the status of the new Russian vocative.

A telling example of the latter type (adding an auxiliary word) is provided by Armenian,¹⁴ which has preserved the original Proto-Indo-European system of case oppositions intact, in spite of the heavy phonetic erosion in the word-final position (auslaut), thus being even more ‘case-stable’ (see type III in section 28.3) than the phonologically more conservative Slavic and Baltic languages. Thus, the ablative singular forms (ending **-os* in most declensions of the proto-language) have fallen together with the locative singular (**-i*) after the apocope, i.e. after the loss of vowels in final syllables. For instance, both Abl. and Loc.sg. of the Proto-Indo-European word meaning ‘heart’ (**k̑rd-/k̑k̑rd(i)-*; Proto-Armenian has generalized the stem **k̑rdi-*) would yield Arm. *srti*. The removal of this syncretism has become possible by adding an enclitic particle (probably going back to PIE **eti*; reflected, for instance, in Skt. *āti* ‘over, beyond’), which yielded *-ē*, cf. *sirt* ‘heart’ – Loc.sg. *i srt-i* ‘in the heart’ ~ Abl.sg. *i srt-ē* ‘from the heart’ (Pedersen 1905: 221ff [= 1982: 83ff]; Kortlandt 1984: 103 [= 2003: 49f]).

Two examples of case morphemes reinforced by particles are provided by the history of Ossetic declension (see Table 28.2). The allative ending *-mæ* is plausibly explained by Cheung (2008: 92) as based on the locative form of the demonstrative pronoun, **ahmi*, followed by the directional particle **ā*, first established in the pronominal paradigm and then expanded to the substantive declension. In the ablative, the ending *-æj* is likely to reflect both the old ablative (Proto-Indo-Iranian **-āt*) and instrumental (Proto-Indo-Iranian **-ā*), which have merged in the Proto-Ossetic **-æ*, subsequently enlarged by the enclitic particle **i* (which is likely to have an ablative value).

28.2.2 Borrowing inflection from other cases: Genitive–accusative in Slavic

A more complex mechanism used to avoid merger of cases resulting from phonetic processes and erosion of inflection and thus to resolve possible case syncretism(s) and prevent the loss of cases¹⁵ is the borrowing of new inflection from other cases.

One of the most well-known examples is the rise of the category of animacy in the history of Slavic languages (for details, see e.g. Klenin 1980; Iordanidi and Kryśko 2000: 198ff).

Already by the time of Common Slavic, the old Indo-European nominative and accusative had merged in most declension types due to the phonetic erosion of the end of the word (in auslaut): the final consonant was dropped, and the originally

¹⁴ For a detailed discussion of all phonological changes and morphological developments which, altogether, result in a perfect preservation of the Proto-Indo-European system of case contrasts, see Meillet 1936: 64ff; Godel 1975: 99ff; Džaukjan 1982: 85ff; Hewson and Bubenik 2006: 160ff; and, especially, a short but very rich and insightful paper Kortlandt 1984.

¹⁵ Cf. Harris and Campbell’s (1995: 89) ‘preservative’ (or ‘structure-preservative’) reanalysis.

Table 28.4. Nominative, accusative, and genitive singular in Old Church Slavonic

	*-ā-type	*-o-type		*-u-type
	<i>žena</i> 'wife'	<i>rabъ</i> 'slave'	<i>rodъ</i> 'birth'	<i>synъ</i> 'son'
NOM.SG.	<i>žen-a</i> (< *-ā)	<i>rab-ъ</i> (~ PIE *-os) ^a	<i>rod-ъ</i>	<i>syn-ъ</i>
ACC.SG.	<i>žen-q</i> (< *-ām)	<i>rab-ъ</i> (~ PIE *-om)	<i>rod-ъ</i>	<i>syn-ъ</i>
GEN.SG.	<i>žen-y</i>	<i>rab-a</i>	<i>rod-a</i>	<i>syn-u</i>
...	...	...	...	...

^aThe genesis of the actually attested endings of the Nom.sg. and Acc.sg. forms of the *-o-declension represents an intricate problem on its own; for a discussion and survey of the relevant literature, see, in particular, Kortlandt 1983: 181ff; Vermeer 1991; Orr 2000: 96–113. While the development *-om > -ŭ (-ъ) in the accusative must be regular, the expected reflex of the nominative ending *-os should be **o (preserved in some isolated forms, such as the Russian proper name *Sadk-o*). Later this ending must have been replaced by -ŭ (-ъ), in analogy with the *-u-declension, where the nominative–accusative merger was phonetically regular (*-us, *-um > -ŭ (-ъ)). For a convincing substantiation of this scenario, see Vermeer 1991.

Table 28.5. Nominative, accusative, and genitive plural in Old Russian

	*-ā-type	*-o-type	(by the 15th cent.)
NOM.PL.	<i>žen-y</i> 'wife'	<i>rab-i</i> 'slave'	→ <i>rab-y</i>
ACC.PL.	<i>žen-y</i>	<i>rab-y</i>	
GEN.PL.	<i>žen-ø</i>	<i>rab-ъ</i>	
...	...	...	

distinct nominative and accusative forms fell together. The only important exception is the declension type in *-a-* (< PIE *-ā-), where the distinction was preserved. Thus, for instance, in Old Church Slavonic (around the ninth century AD), within the singular paradigm, the nominative and accusative forms are only distinguished for the *-a*-type (Table 28.4).

The Old Russian paradigm (attested since the eleventh century AD) is very similar. In the plural, after the replacement of the old nominative ending *-i* by *-y* of the accusative (approximately by the fifteenth century), the syncretism of the nominative and accusative cases has proceeded even further, since the two forms have merged not only for masculine but also for feminine nouns in *-a-* (Table 28.5).

While for the neuter nouns the syncretism of nominative and accusative was normal and even obligatory already in Proto-Indo-European, for other nouns such an innovation apparently could not be tolerated. For the resolution of the case conflict, the form of the genitive case has been taken, replacing the old accusative

Table 28.6. The category of animacy in Modern Russian

	fem.	masc.anim.	masc.inanim.
NOM.SG.	<i>žen-a</i>	<i>rab-ø</i>	<i>rod-ø</i>
ACC.SG.	<i>žen-u</i> (< *-q)	<i>rab-a</i>	<i>rod-ø</i>
GEN.SG.	<i>žen-y</i>	<i>rab-a</i>	<i>rod-a</i>
...	...	...	...
NOM.PL.	<i>žen-y</i>	<i>rab-y</i>	<i>rod-y</i>
ACC.PL.	<i>žen-ø</i>	<i>rab-ov</i>	<i>rod-y</i>
GEN.PL.	<i>žen-ø</i>	<i>rab-ov</i>	<i>rod-ov</i>
...	...	...	...

formally identical with the nominative.¹⁶ This innovation was limited to animate nouns (cf. the shaded boxes in Table 28.6), which thus have become opposed to inanimates. As a result, the Slavic languages have acquired the category of animacy.

Note that in the singular of the *-a*-type (but not in the plural), the old form of accusative has been preserved. Apparently, because of the lack of merger, it was not necessary to replace it with the genitive.

Here evidence from texts is particularly valuable: we can observe a continuous growth of the tendency and the expansion of the genitive. For instance, Old Russian attests the introduction of the gen.pl. forms in the function of the acc.pl. in the twelfth century for masculine human nouns; some Slavic languages, such as Polish, have stopped at that stage. The feminine humans and non-human animates introduce gen.pl. for acc.pl. only in the thirteenth century.

28.3 THE MAIN EVOLUTIONARY TYPES OF LANGUAGES

The analysis of possible changes in case systems presented in sections 28.1–2 can serve as a basis for classification of languages according to the general tendency

¹⁶ In fact, the use of the genitive for encoding the direct object (exemplifying a non-canonical object marking) is quite an old feature of this group of Indo-European languages, undoubtedly going back to the Common Slavic period. Already in the oldest-attested Slavic language, Old Church Slavonic (the earliest texts are dated to the ninth century AD), genitive objects were common in some types of constructions, in particular under negation and with some non-canonical transitives, such as *xotěti* 'wish'.

which determines the evolution of case systems. We can distinguish between the following three main evolutionary types of languages:

- I. **Case-increasing languages** (that is, languages which undergo case-increasing) include, for instance, Uralic, New Indo-Aryan, Tocharian;
- II. **Case-reducing languages:**¹⁷ Germanic, Italic/Romance and Celtic, Albanian, Greek;
- III. **Case-stable languages:** Armenian, Slavic, Baltic (Lithuanian), Turkic.

The border between case-reducing and case-stable languages cannot always be drawn with accuracy. Thus, as mentioned in the discussion of the history of the Lithuanian case system (section 28.1.1.2), the ablative and (old) locative have been lost by the time of the oldest attested texts. This feature, indicating *per se* the case-reducing type, was, in a sense, compensated by the rise of new locatives, and, accordingly, there are good reasons to consider (Old) Lithuanian an example of the case-stable type.

Of particular interest is the distinction between case-reducing languages, on the one hand and the case-stable/case-increasing type, on the other, which can be found within one single language family or even within a smaller genetic unit, a group of very closely related languages. Most importantly, the case-stable (or case-increasing) type by no means correlates with phonological conservatism. In other words, in the cases where two genetically related languages A and B undergo some crucial phonetic changes which, eventually, should result in the erosion of inflection, this does not yet guarantee that these processes will be equally fatal for their case systems. In reality, one of the languages may indeed be affected by heavy losses of cases or even the total collapse of case system, whereas in another one, the case system may remain essentially intact.

Thus, both Romance and Slavic languages have been subject to the erosion of case inflection, which has resulted in the merger of some case endings (see sections 30.1 and 28.2.2). However, in contrast to the Romance languages, Slavic shows a greater degree of morphological conservatism, using several compensating techniques (Harris and Campbell's 'preservative reanalysis'). As a result of one such compensating process, Slavic has developed the category of animacy, which has helped to save the nominative–accusative contrast. The only outsider within the Slavic language group is Bulgarian/Macedonian, which has lost the majority of the case distinctions, only preserving traces of the nominative ('direct'), genitive ('oblique'), and vocative forms (see e.g. Hewson and Bubenik 2006: 195–8).

Another instructive example is provided by the history of the Indo-Aryan group. Like many other Indo-European languages, the Indo-Aryan languages had lost most

¹⁷ The loss of cases and decay of case systems (case-reducing) is dealt with in Chapter 30 and therefore is not discussed here.

case distinctions by the end of the Middle Indic period. Nevertheless, in contrast to the Western Indo-European languages, in the New Indo-Aryan period we observe a strong tendency to develop new cases from postpositions, which has resulted in the restoration of case systems nearly up to the previous (Old Indo-Aryan) size in such languages as Sinhala.

It seems that one of the factors that determine the evolutionary type of a language is the areal rather than genetic relationship. Thus, Baltic and Slavic language groups form a remarkable exception within the Indo-European family, being most conservative as far as the case systems are concerned. Old Lithuanian has even extended its case system, developing four new locatives (still preserved in the most archaic dialects); likewise, Russian has expanded the original (Common Slavic) case system (from seven to nine units). Both phenomena are likely to be due to Finno-Ugric influence (see Mathiasen 1996: 38).

By contrast, the collapse of the Bulgarian case system seems to represent one of the features of the Balkan linguistic area: nearly all languages belonging to this 'Sprachbund' have considerably reduced their case systems ending up with two to four cases (cf. Albanian, Greek, and Romanian).

Another instructive example is provided by the history of the Indo-Aryan case system. Here, the emergence of new cases on the basis of the multilayer case technique may be due to the influence of the adjacent Dravidian languages. Similar mechanisms may be responsible for the agglutinative restructuring of the Tocharian case system, probably due to the influence of a language or languages of the agglutinating (Turkic?) type. Finally, the evolution of the Ossetic case paradigm may be due to the influence of Caucasian (Daghestan?) languages with their rich case systems (see e.g. Cheung 2008: 103).

It is interesting to note that the shared characteristics of two or more genetically related or geographically adjacent languages are usually not limited to the evolutionary type of language, which determines the global tendency in the development of case system (case-increasing, case-reducing, case-stable), but extend to some 'minor' features.

Thus, the affinity of Finnish, (Old) Lithuanian, and Russian is not limited to the case-increasing type (probably induced by Finno-Ugric). In addition, Baltic (Old Lithuanian) seems to have borrowed from Finnish the very *mechanism* of case expansion (multilayer case marking, rather uncommon for the Indo-European linguistic type in general) and extended the same semantic area (locative) as the adjacent Finnish. The functions of the two new Russian cases, second locative and second genitive (partitive) also seem to indicate the Finno-Ugric influence. It is a commonplace in the Russian historical grammar that the rise of the partitive case is due to the influence of the Finno-Ugric case systems (such as that of Finnish, which has a partitive case). The rich system of Finnish locative cases may also have been an indirect reason for developing a new (second) locative

case, distinct from the Old Russian locative, which bears too many non-locative functions.

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