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How the Case Hierarchy Constrains Case Syncretism Cross-Linguistically

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0. Introductory remarks.

- previous work on case syncretism (e. g., Carstairs 1984, 1987: ch. 4, Plank 1990, 1991, Stump 2001: Ch. 7, Baerman et al. 2002) has shown that it is not a fruitless task to search for valid cross-linguistic generalizations concerning this phenomenon;
- however, questions concerning the actual inventory and distribution of syncretic patterns attested in human languages still remain unanswered.

The main argument:

• there is a non-random cross-linguistic distribution of syncretic patterns.

1. Some important distinctions concerning case syncretism.

1.1. Systematic vs. non-systematic syncretism.

A pattern of case syncretism is *systematic* ('deep') if it is not possible to reduce it to the result of application of (morpho)phonological rules, or to idiosyncrasies of individual lexemes/classes of lexemes (cf. Carstairs 1987, Plank 1990).

Russian, plural nouns:

	inanimate				animate		
	'stone'	'city'	'frost'	'window'	'neighbour'	'Arab'	'piglet'
Nom	kamni	goroda	morozy	okna	sosedi	araby	porosjata
Acc	kamni	goroda	morozy	okna	sosedej	arabov	porosjat
Gen	kamnej	gorodov	morozov	okon	sosedej	arabov	porosjat

Systematic syncretisms are best captured by rules of referral (cf. Zwicky 1985)

Non-systematic ('shallow', sporadic) patterns of syncretism are reducible to (a) (morpho)phonological rules resulting in surface identity of underlying distinct exponents; or (b) behaviour of individual inflection classes (esp. minor ones)

(a) Khakass, nouns

	'ski'	'fur-coat'	'my horse'
Nom	sana	ton	adym
Abl	sanada ŋ	tonna ŋ	adymnaŋ
Ins	sanana ŋ	tonnaŋ	adymnaŋ

(b) Gothic, singular nouns

	'day'	'son'	'guest'	'city'
Nom	dags	sunus	gasts	baurgs
Acc	dag	sunu	gast	baurgs
Gen	dagis	sunaus	gastis	baurg
Dat	daga	sunau	gasta	baurg

The systematicity continuum:

Systematic	N	on-systematic
		\longrightarrow
Russian	Gothic	Khakass

1.2. Cases syncretized.

Following Baerman et al. 2002, I distinguish three types of syncretism:

- syncretism of core grammatical cases (Nom and Acc vs. Abs and Erg);
- syncretism of peripheral cases;
- syncretism of one or two core cases with one or more peripheral cases.

Hereafter I will be concerned only with the latter type.

2. The data¹.

2.1. Synchronic distribution.

A survey of about 60 languages of various genetic phyla of Eurasia shows the following distribution:

• **Pattern 1**: syncretism of a 'marked' core case (Acc or Erg) and a 'grammatical' peripheral case (Gen or Dat; other peripheral cases may also syncretize; **only systematic** instances are counted):

AccGen — *Indo-European*: Russian, Belorussian, Czech, Slovak, Upper Sorbian, Ukrainian, Slovene, Icelandic, Old Icelandic, Old Swedish, Modern Greek, Osetin; *Turkic*: Balkar; *Mongolian*: Oirat, Bao'an, Daur, Mongor, Shira Yugur; *Uralic*: Saami, Komi; *Semitic*: Arabic, Akkadian

AccDat — *Indo-European*: Middle High German, Modern High German, Icelandic, Old Icelandic, Old Swedish, Gothic, Old Irish, Hittite, Armenian, Albanian, Panjabi, Assamese; *Mongolian*: Bao'an; *Uralic*: Khanty, Saami

AccGenDat — Middle High German, Modern High German, Modern Greek, Sanskrit, Armenian

AccGenLoc — various Slavic

AccGenAbl — Osetin

AccDatGenIns — Old English

ErgGen — Indo-European: Phalura; Burushaski; Kartvelian: Georgian; North-East-Caucasian: Khinalug

• Pattern 2: syncretism of a 'marked' core case with a 'non-grammatical' peripheral case (only systematic instances are counted):

AccIns — Czech, Upper Sorbian, Polish, Slovene, Latvian

AccAbl — Latin, Osetin

AccLoc — Old Armenian

AccLocDat — Old Armenian

ErgIns — Indo-European: Waigali, Kashmiri; Chukotko-Kamchatkan: Chukchee

ErgObl — Indo-European: Kanyawali, Dameli, Phalura

ErgLoc — Chukotko-Kamchatkan: Chukchee, Alutor

ErgAbl — *Indo-European*: Torwali ErgTranslat — *Kartvelian*: Svan

ErgLocDat — Chukotko-Kamchatkan: Alutor

• Pattern 3: syncretism of an 'unmarked' core case (Nom or Abs) with one or several peripheral cases (all instances are counted, systematic ones are underlined):

NomGen — Czech, Gothic, Old Irish, Hittite, Sakan, Latvian, Latin

NomIns — Czech, Old Church Slavonic, Old Russian, Avestan

NomDat — Medieval Greek

NomDatLoc — Old Church Slavonic, Old Russian

NomGenIns — Old Church Slavonic

AbsIns — Kashmiri

AbsGen — North-East-Caucasian: Ingush

• Pattern 4: syncretism of both core cases with one or several peripheral cases (only systematic instances are counted):

NomAccGen — *Indo-European*: Czech, Middle High German, Modern High German, Icelandic, Old English, Old Swedish, Old Irish, Sakan, Osetin; *Uralic*: Mordvin

NomAccDat — Middle High German, Modern High German, Icelandic, Middle English, Old Swedish, Old Irish

NomAccLoc — Old Armenian, Romani

NomAccIns — Czech

NomAccGenDat — Middle High German

¹ The references to the sources of data are chiefly in Russian; I suppress them for the sake of space.

Summary:

- syncretisms following Pattern 1 occur frequently and are predominantly systematic;
- syncretisms following Pattern 4 are somewhat less frequent, but can be characterized by the same features as those of Pattern 1;
 - syncretisms following Pattern 3 are rare and predominantly non-systematic;
- syncretisms following Pattern 2 occupy an intermediate position, being more frequent and systematic than those of Pattern 3, but less frequent and systematic than those of Patterns 1 and 4.

2.2. Diachronic evidence.

- the instances of syncretisms following the Patterns 1 and 4 attested in various groups of Indo-European languages have all arisen independently of each other and are not inherited from their common ancestor; thus their abundance in the languages of this family cannot be regarded as a consequence of genetic relationship;
- the said instances are usually diachronically stable, i. e. having once arisen in a language, they resist phonological and morphological change, becoming an important feature of the grammar (e. g. the 'animate' AccGen syncretism in Slavonic languages, see Comrie 1978, Huntley 1980);
- on the contrary, the syncretisms following Pattern 3 are often subject to diachronic change: Old Church Slavonic < Common Slavic (Meillet 1934), plural nouns:

	hard stems 'wolves'	soft stems 'men'
Nom	vlьci < CS *vlьkoi	mąži < CS *mąd joi
Acc	vlьky < CS *vlьkons	mążę < CS * mądions
Ins	vlьky < CS *vlьkū	mąži < CS * mądjū

Modern Slavonic languages: abolition of NomIns (and AccIns) through the restructuring of Ins:

	Russian 'swords'	Polish 'countries'	Slovak 'swords'	Serbocroatian 'horses'
Nom	meči	kraje	meče	konji
Acc	meči	kraje	meče	konje
Ins	теčаті	krajami	mečmi	konjima

Czech: abolition of NomIns through the restructuring of Nom, retaining AccIns and creating NomAccIns:

	animate			inanimate			
Nom	páni	muži, mužové	předsedové	soudci, soudcové	hrady	stroje	dni, dny
Acc	pány	muže	předsedy	soudce	hrady	stroje	dny
Ins	pány	muži	předsedy	soudci	hrady	stroji	dny

2.3. Summary.

- the syncretisms following Patterns 1 and 4 (and probably 2) may be considered 'natural' in the sense of Dressler (ed.) 1987: they are typologically widespread, systematic, and diachronically stable;
- the syncretisms following Pattern 3 may be considered 'unnatural', being typologically rare, non-systematic, and viable to diachronic change;
- what is a possible explanation of these facts?

3. The Case Hierarchy Constraint on case syncretism.

- the data suggests that there must exist a universal constraint on case syncretism, which permits certain patterns of syncretism and prohibits others;
- such a constraint is, however, no more than a statistical tendency, since it has to account for an uneven distribution of already attested patterns;
- the constraint in question is formulated in terms of the Case Hierarchy (Blake 1994: 157 162):

Nom/Abs > Acc/Erg > Gen, Dat > other peripheral cases

The Case Hierarchy Constraint on Syncretism (CHC):

Only those patterns of case syncretism are typologically frequent, systematic and diachronically stable ('natural'), in which the cases syncretized are adjacent on the Case Hierarchy

- patterns predicted by the CHC to exist and be 'natural': AccGen, AccDat, NomAccGen, NomAccDat, ErgGen etc;
- patterns predicted by the CHC to be 'unnatural': NomDat, NomGen, AbsDat etc.

4. Problems and perspectives.

- relatively 'natural' patterns predicted to be 'unnatural': Pattern 2; but note that the most prominent instance of Pattern 2, viz. AccIns is attested only in Slavic and its neighbour Latvian;
- permitted but non-attested patterns: ErgDat; however, ergative languages do not have much syncretism of core and peripheral cases;
- the hypothesis needs to be tested against data of the languages outside Eurasia (if those have syncretisms in question at all);
- what is the possible explanation of CHC? I. e., is there any functional motivation for the relationship between case syncretism and Case Hierarchy at all?

Abbreviations

Abl — Ablative, Abs — Absolutive, Acc — Accusative, Dat — Dative, Erg — Ergative, Gen — Genitive, Ins — Instrumental, Loc — Locative, Nom — Nominative, Obl — Oblique, Translat — Translative

References

Baerman, Matthew, Dunstan Brown and Greville G. Corbett. (2002). Case syncretism in and out of Indo-European. // CLS 37: The Main Session. Papers from the 37th Regional Meeting of the Chicago Linguistic Society. Vol. 1. Chicago: Chicago Linguistic Society, pp. 15 — 28.

Blake, Barry J. (1994). Case. Cambridge: Cambridge University Press.

Carstairs, Andrew (1984). Outlines of a constraint on syncretism. // Folia linguistica, Vol. 18, pp. 73—85.

— (1987). *Allomorphy in inflexion*. London: Croom Helm.

Comrie, Bernard (1978). Genitive-Accusative in Slavic: The rules and their motivation. // Bernard Comrie (ed.). *Classification of Grammatical Categories*. Edmonton, pp. 27 — 42.

Dressler, Wolfgang U. (ed.) (1987). *Leitmotifs in Natural Morphology*. Amsterdam, Philadelphia: John Benjamins.

Huntley, David (1980). The evolution of genitive-accusative animate and personal nouns in Slavic dialects. // Jacek Fisiak (ed.). *Historical Morphology*. The Hague, Paris: Mouton, pp. 189 — 212.

Meillet, Antoine (1934). Le Slave Commun. 2d éd. Paris: Champion.

Plank, Frans (1990). Paradigm arrangement and inflectional homonymy: Old English case. // S. Adamson, V. A. Law, N. Vincent, S. Wright (eds.). *Papers from the 5th International Conference on English Historical Linguistics*. Amsterdam, Philadelphia: John Benjamins, pp. 379 — 406.

— (1991). Rasmus Rask's dilemma. // Frans Plank (ed.) *Paradigms: The Economy of Inflection*. Berlin, New York: Mouton de Gruyter, pp. 161 — 196.

Stump, Gregory T. (2001). *Inflectional Morphology: A Theory of Paradigm Structure*. Cambridge: Cambridge University Press.

Zwicky, Arnold M. (1985). How to describe inflection. // Proceedings of the 11th Annual Meeting of the Berkeley Linguistics Society. Berkeley: Berkeley Linguistics Society, pp. 372 — 386.