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Argument Structure in Flux

The Naples-Capri Papers

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Case variation and case alternation in Indo-European and beyond

A diachronic typological perspective*

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This paper deals with one of the aspects of the diachronic study of case, variation and competition of two or more cases in some particular function(s). The paper studies both formal parameters (markedness of case forms, interaction between declensional types) and functional features (overlapping of case semantics, semantic roles encoded, semantic specificity of cases) relevant for case competition. On the basis of evidence from languages with well-attested documented history, I outline possible approaches to the study of a tentative hierarchy of parameters that play an important role for the choice of case in the situation of competition and can be used to make plausible suggestions on the outcome of case competition.

Keywords: case; case variation; case syncretism; paradigmatic pressure; analogy; markedness; substrate; Indo-European; Identifiability; Distinguishability; Primary Argument Immunity Principle

1. Introductory remarks

The present paper offers a diachronic typological survey of case variation – a phenomenon well-known from the languages of the world, which, however, has not been the subject of detailed typological research, usually considered as a ‘minor’ syntactic issue, in contrast with more traditional topics such as case syncretism or rise and disappearance of cases. This study is written in the genre of identification and definition of problem: I will not attempt to offer an exhaustive treatment of the subject. Rather, I would like to draw attention to the importance of extensive research in this field in a diachronic typological perspective. The aim of the paper is to outline the

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most important aspects of the case variation and to survey the basic parameters for its cross-linguistic study. In Section 2, I will introduce basic terms and relevant notions. In Section 3, I will concentrate on the diachronic aspects of case variation, foremost on its sources and processes that may create favourable conditions for the emergence and development of this phenomenon. In Section 4, I will concentrate on possible paths of the development of case variation as well as on the factors that favour its changes or disappearance. Section 5 will discuss the parameters that play major role in case variation and, altogether, may cause one or another final result of the case competition. In Section 6, I will discuss the possibility of establishing a hierarchy of parameters that can be responsible for the diachronic outcomes of case variation. The concluding Section 7 will be dealing with further prospects of the study of case variation vs. case opposition in a diachronic perspective.

2. Basic theoretical concepts and definitions

2.1 Case variation and case alternation: Preliminary remarks

To begin with, I will formulate a non-strict definition. Usually, two (or more) cases (e.g. C_i and C_j) are said to be in the relation of variation in some particular usage (hereafter I will use the symbolic notation $C_i//C_j$), if they can be employed interchangeably in corresponding contexts with no difference in meaning related to case semantics properly speaking. Consider the following pairs of examples from case-marking languages:

- (1) German (see Di Meola 1998)
 - a. *Sabine spaziert entlang dem Kanal.*
 Sabine walks along the:DAT canal:DAT
 ‘Sabine walks along the canal.’
 - b. *Sabine spaziert entlang des Kanals.*
 Sabine walks along the:GEN canal:GEN
 ‘Sabine walks along the canal.’
- (2) German (see Campe 1997)
 - a. *Heute habe ich eine Freundin deiner Tochter gesehen.*
 today AUX I a friend your:GEN daughter:GEN seen
 ‘Today I saw a friend of your daughter.’
 - b. *Heute habe ich eine Freundin von deiner Tochter gesehen.*
 today AUX I a friend of your:DAT
 daughter:DAT seen
 ‘Today I saw a friend of your daughter.’

- (3) Vedic Sanskrit (see Oertel 1937: 26–35 = 1994: 887–896)
- a. (Śatapatha-Brāhmaṇa, Mādhyandina recension 2.3.1.3)
tad agnāv eva yonau garbho
 then fire:LOC PRTC womb:LOC embryo:NOM
bhūtvā pra-viśati
 become:CONV enters
 ‘Then [he] enters the womb, the fire, as an embryo.’
- b. (Śatapatha-Brāhmaṇa, Kāṇva recension 1.3.1.1)
agnim eva yonim garbho bhūtvā pra-viśati
 fire:ACC PRTC womb:ACC embryo:NOM become:CONV enters
 ‘[He] enters the womb, the fire, as an embryo.’
- (4) Russian
- a. *Ivan ne est kaši.*
 Ivan not eats porridge:GEN.SG
 ‘Ivan does not eat porridge.’
- b. *Ivan ne est kašu.*
 Ivan not eats porridge:ACC.SG
 ‘Ivan does not eat porridge.’
- (5) Lithuanian (Semėnienė 2004: 5)¹
- a. ... *kai aš dar buvau ministr-as.*
 when I still was minister:NOM
 ‘... when I still was a minister.’
- b. *Kada dar aš buvau ministr-u.*
 when still I was minister:INS
 ‘When I still was a minister.’
- (6) Korean (LaPointe 1998: 472)
- a. *Chelswu-ka paym-i mwusepta*
 Chelswu-NOM snake-NOM be.fearful
 ‘(Only) Chelswu is afraid of snakes.’
- b. *Chelswu-eykey paym-i mwusepta*
 Chelswu-DAT snake-NOM be.fearful
 ‘(Only) Chelswu is afraid of snakes.’

Note that the term ‘case’ is taken here in the broad sense of the word. Thus, this paper will also examine situations where only one of the alternants represents a (bare) case form (i.e. morphological case *sensu stricto*), while its competitor is an adpositional

1. For a detailed discussion of the similar nominative//instrumental variation in Polish, see Bogusławski 2001.

(i.e. prepositional or postpositional) phrase.² Such a terminological usage seems justifiable for the following reasons. First, since case forms are often in a sort of opposition to adpositional groups, not only to other bare cases (compare, for instance, (2a–b)), the examination of such pairs appears to be relevant for a study of the category of case in general and the phenomenon of case variation in particular. Second, for many languages it is quite difficult to draw a clear-cut border between case in the strict sense of the term (*casus sensu stricto*) and forms with “not-yet-bound” case-like morphemes. Cf., for instance, the situation in several New Indo-Aryan languages where we come across a number of postfixes preserving some features of free morphemes. Thus, the Hindi dative/accusative morpheme *-ko* (cf. 11) can be shared in some constructions by several nouns (as in *rām aur mohan ko* ‘to Ram and Mohan’), exemplifying a ‘Gruppenflexion’, which clearly pleads for the postposition rather than suffix analysis; yet, there are also good reasons to study the *ko*-group together with case forms in the narrow sense of the word.³

2.2 Case variation vs. case alternation vs. case opposition

The types of contrast illustrated by (1–6) are usually easy to distinguish from the contexts where two (or more) cases are neatly opposed in meaning (symbolically: $C_i \sim C_j$). Cf. the opposition between the accusative and dative in German constructions with two case prepositions, such as *auf* ‘on’ (cf. 7) or *in* ‘in’, or Russian verbal constructions with multiple case frames, as in (8):

- (7) German (see e.g. Di Meola 1998:205)
- a. *John läuft auf die Straße*
 John runs on the:ACC.SG street:SG
 ‘John runs onto the street.’
 - b. *John läuft auf der Straße*
 John runs on the:DAT.SG street:SG
 ‘John runs on the street.’

2. This definition does not, however, cover the alternations such as that between *John gave Mary a book* and *John gave a book to Mary*, because English lacks the category of morphological case and, hence, none of the alternates represents a morphological case in the proper sense of the concept.

3. Cf. the distinction between cases of the first, second and third layers introduced by Zograf (1976); see also 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 prepositional phrases, while the second one takes an intermediary position between cases proper and prepositional phrases.

(8) Russian

- a. *Petja požalovalsja učitelju.*
 Pete:NOM.SG complained teacher:DAT.SG
 'Pete complained to the teacher.'
- b. *Petja požalovalsja na učitelja (otcu).*
 Pete:NOM.SG complained on teacher:ACC.SG (father:DAT.SG)
 'Pete complained about the teacher (to his father).'

In Finnish, the direct object can be marked either by the accusative or by the partitive case, depending on the aspectual characteristics of the verb. Cf. (9):

(9) Finnish (Hopper & Thompson 1980:271)

- a. *Liikemies kirjoitti kirjeen valiokunnalle*
 businessman:NOM wrote letter:ACC committee:ALL
 'The businessman wrote a letter to the committee.'
- b. *Liikemies kirjoitti kirjettä valiokunnalle*
 businessman:NOM wrote letter:PART committee:ALL
 'The businessman was writing a letter to the committee.'

While in affirmative sentences both types of case marking are possible, the partitive encoding is obligatory under negation, cf. (10):

(10) Finnish (Yli-Vakkuri 1987:192, 198–200)

- a. *Metsästäjä ampui linnun*
 hunter:NOM shot bird:ACC
 'The hunter shot the bird.'
- b. *Metsästäjä ampui lintua*
 hunter:NOM shot bird:PART
 'The hunter shot / was shooting at the bird.'
- c. *Metsästäjä ei ampunut lintua*
 hunter:NOM not shot bird:PART
 'The hunter did not shoot (at) the bird.'

Such examples of case opposition are of course readily distinguishable from instances of case alternation which exhibit (nearly) free variation of alternant cases, with very minor differences in meaning (cf. 2 and 4). Yet there are also examples of case alternation where we are able to find some minor distinctions in meaning correlating with the distinction in case.⁴ Moreover, even in many situations of obvious case opposition, such as the Dative vs. Accusative opposition with two-way prepositions in German,

4. For a discussion of the (semantically non-motivated) case variation, see, in particular, an excellent collection of papers in Boeder & Hentschel (eds) 2000 as well as an important review of this book by Luraghi (2004b).

we come across several verbs that allow for variable case marking, such as *verschwinden in* ('disappear in(to)'), *landen auf* ('land on'), *einführen in* ('introduce in(to)'), and several others, noticed as early as Paul (1920); see also Smith (1995), and, especially, the most insightful discussion in Willems (2011).

Thus, as overall in language, there is a continuum of intermediary sub-classes between these two major types, the (almost) free case variation vs. non-free case opposition. For instance, as shown, in particular, by Mohanan (1994, 1995), in Hindi, the differential object marking, as illustrated in (11), correlates with the specificity (and, quite intricately, with the animacy; for details, see Mohanan 1994: 74–90) of the object. The direct ("nominative") case encodes, foremost, the indefinite object, while the accusative-dative marker encodes the specific object:

(11) Hindi (Mohanan 1994: 80)

- a. *ilaa-ne bacce-ko* / **baccaa-ø* *uṭhaayaa.*
 he:ERG child-ACC/DAT / child-DIR/NOM lift:PERF
 'Ila lifted the / a child.'
- b. *ilaa-ne haar-ø* *uṭhaayaa.*
 he:ERG necklace-DIR/NOM lift:PERF
 'Ila lifted a / the necklace.'
- c. *ilaa-ne haar-ko* *uṭhaayaa.*
 he:ERG necklace-ACC/DAT lift:PERF
 'Ila lifted the / *a necklace.'

The semantic distinctions such as between the (11b) and (11c) or between (9, 10a) and (9, 10b), i.e. specificity, individuation and aspectuality/actionality, do not belong to the domain of 'canonical' case meanings or 'proto-typical' function of case, which amounts, above all, to encoding the relationship between the verb and the nominal phrase (grammatical relations), rather than giving some information about the noun (e.g. its referential status) or the verbal meaning(s); in that sense, the latter two types of meanings are case-external. This is not to say of course that such semantic contrasts are less relevant for the language system than those concerned with case-internal functions and case meanings. Although these meanings are not infrequently rendered by case morphemes and, in the end, are firmly established within the category of case (see, for instance, recent discussions of these issues in Butt & Ahmed 2011 and Dahl 2009) It will be in order to note here, however, that there is a well-established tradition to use the term '(case) alternation/variation' to denote the 'case-external' contrasts in several linguistic traditions. Thus, for instance, Finnish linguistics describes the accusative/partitive alternation in object marking in such pairs as (9–10) in terms of case variation/alternation (see e.g. Schot-Saikku 1990). Likewise, in the Indian linguistics we come across discussions of the accusative/dative alternation in examples such as (11) (see e.g. Mohanan 1994: 82 et passim). In several

cases it is nearly impossible to draw a clear-cut distinction between case variation vs. case alternation (as defined above) and, in any case, there are good reasons to treat such phenomena together.

Likewise, in some situations it is quite difficult to strictly distinguish between case variation and case opposition and to decide whether we are dealing with an instance of the former (variation) or latter (opposition) phenomenon. Moreover, in the course of language history, case variation can transform to case opposition or *vice versa* (see e.g. Lass 1990), which complicates matters even further. Yet, I presume that for a good many examples of the usage of two (or more) cases in the same context, the distinction between case variation and case opposition is intuitively clear.

The issue of case variation was relatively rarely subjected to typological research, especially in a diachronic perspective (the few exceptions include papers like Barðdal 2011 and Dahl 2009 as well as several others papers in Barðdal & Chelliah 2009 and in Hoop & Swart 2009; Donohue & Barðdal 2011 and Heusinger & Hoop 2011). Even in studies on individual languages it is often treated as one of the ‘minor’ problems of grammar and syntax – unlike much more traditional issues related to case, such as case syncretism or emergence and loss of cases.

The present paper aims therefore at a rather modest goal: to pinpoint the most important aspects and problems of case variation and to outline the guidelines for its typological study, concentrating on cross-linguistic aspects of the phenomenon under study.

3. Sources of case variation

In this Section I will mainly concentrate on the diachronic aspects of case variation, foremost on its sources and processes that may create favourable conditions for the emergence and development of this phenomenon.

3.1 Functional (semantic) overlapping

The most natural factor that may cause the variation of cases C_i and C_j is probably the semantic affinity between the function(s)/meaning(s) of C_i and C_j . This semantic affinity essentially amounts to the fact that the contribution of the same participant to the situation can be regarded from a variety of perspectives. Within the linguistic system, the various perspectives correspond to various cases (C_i , C_j , etc.). Quite naturally, similarity in meanings creates favourable conditions for interchangeability of forms.

Thus, in ancient Indo-Iranian languages the passive agent can be encoded either by the instrumental or by the genitive. The former case marking is more common (see, e.g., Schwyzler 1943: 14–18; Hettrich 1990: 77–83, 93–97), while the genitive marking is

mostly attested with pronouns (see Andersen 1986). Cf. the following pairs of examples from Old Iranian (Avestan) and Old Indo-Aryan (Vedic Sanskrit):

(12) Avestan (Hettrich 1990: 78, 92)

- a. ...yā zī vāuuərəzōi ... *daēuuāiš-cā* *mašiiāiš-cā*
 what PRTC is done demons:INS-and men:INS-and
 ‘... what is done [...] by demons and men.’ (Y 29.4)
- b. *kahe* *nō* *iḍa* *nəma* *āyairiiāt*
 who:GEN our now name:NOM is praised
 ‘By whom our name is now praised?’ (Yt 13.50)

(13) Vedic (see, in particular, Delbrück 1888: 135, 136, 153; Oertel 1937: 114 = 1994: 975; Oertel 1939; Jamison 1979a, 1979b; Andersen 1986; Kulikov 2012)

- a. ... *yady anena kiṃcid akṣṇayā-kṛtaṃ bhavati*
 if he:INS something wrong-done becomes
tasmāt enaṃ sarvasmāt putro muñcati
 it:ABL he:ACC all:ABL son:NOM frees
 ‘... whatever wrong was done by him, his son frees him from it all.’
 (Śatapatha-Brāhmaṇa 14.4.3.26 = BĀUK 1.5.17)
- b. *daivam ha asya karma kṛtaṃ bhavati*
 divine PRTC he:GEN action:NOM done becomes
 ‘The action (rite) performed by him is divine.’ (Śatapatha-Brāhmaṇa, Mādhyandina recension 6.8.1.2)

The case variation illustrated in (12–13) is presumably due to the fact that the agent can be conceptualised either as the Manipulator, which instigates and performs the activity (typically expressed by the instrumental), or as the Possessor (typically rendered by the genitive) of the activity and its result(s), that is, the initiator and controller of a process; cf. *The house is built by John* ⇔ *The house belongs to John*.

Another typical example of case variation based on the affinity of case meanings is provided by the relationship between the accusative and locative of motion in some ancient Indo-European languages (see e.g. Kuryłowicz 1964: 190), as illustrated in (3). This variation of the accusative and locative survives, with minor semantic nuances, in Middle Indo-Aryan, in particular, in Pāli:⁵

(14) Pāli (von Hinüber 1968: 77, 274–275)

- a. *Anāthapiṇḍiko gahapati rājagahaṃ agamāsi*
 Anāthapiṇḍiko:NOM householder:NOM Rājagaha:ACC went
 ‘The householder Anāthapiṇḍiko went to Rājagaha.’ (Vin. 2.154.28)

5. As Hinüber (1986: 274) explains, the locative case puts more emphasis on the location in a certain place after the goal of motion has been achieved.

- b. *etam sappi ... padīpakaraṇe vā āsittam*
 this ghee:NOM lamp:LOC or poured
 ‘... or this ghee (oil) is poured in(to) a lamp.’ (Vin. 1.272.8)

The accusative//locative case variation can be accounted for by the fact that the goal of motion is conceptually related to and, in many cases, virtually identical with, the location of the moving subject after the motion has been completed. In other words, the goal of motion can readily be conceived both as the object (= accusative) and location (= locative) of the corresponding activity, which causes a typologically very common case variation (see, for instance, Savić 1995 and Nessel 2004 on evidence from Slavic).

The ablative//genitive variation in a number of languages may also be due to the overlapping of the functional domains of these cases: in many situations the possessor can be readily conceptualised as the source of a possessed object, and *vice versa*. Accordingly, in some contexts these cases can be interchangeable, cf. *the muffins from Smith’s bakery* ~ *the muffins of Smith’s bakery*. This semantic affinity may also be responsible for the interchangeability of genitive and ablative in usages different from their canonical functions (possessor and source, respectively). Thus, in Latin, the Gen//Abl variation is very common in the notorious *qualitatis* usage (i.e. *Ablativus qualitatis*), sometimes even within the same clause, as in (15):

- (15) Latin (see, for instance, Draeger 1874: I, 424–427; Scherer 1975: 203–207)
- a. *vir magni ingenii summa-que prudentia*
 man great:GENGEN cunning:GEN highest:ABL-and wisdom:ABL
 ‘a man of great cunning and highest wisdom’ (Cic. leg. 3,45)
- b. *hominem maximi corporis terribili-que facie*
 man:ACC biggest:GEN body:GEN
 terrible:ABL-and appearance:ABL
 ‘a man with a big body and terrible appearance’ (Nepos 14,3,1)

Cf. also next section on the ablative//genitive variation in some other Indo-European languages, such as (Proto-)Slavic, where it could be motivated by both functional and phonological reasons.

3.2 Paradigmatic pressure/analogy

Another important factor that may play a major role for case variation is paradigmatic pressure/analogy. Quite commonly, the homonymy of two cases (C_i and C_j) existing within some of the paradigmatic types (declension classes) may support – usually, together with other factors – their variation ($C_i//C_j$) which can be observed within other declension types, where C_i and C_j do not coincide in form.

An instructive example is provided by the relation between the genitive and ablative cases in the Slavic languages. Already in Proto-Indo-European, the ablative was the

paradigmatically least independent member of the case system (see Section 5.5 below). It was formally identical with the dative in the plural and with the ablative and instrumental in the dual. In the singular number, the ablative shared the form with the genitive in all declensional types except that of **o*-stems, which was one of the most productive morphological classes though. The partial syncretism of the genitive and ablative and the weak independency of the latter case, supported by their semantic overlapping (see Section 2.1 above), have dramatically weakened the position of the ablative within the case system. This could easily give rise to the Gen//Abl variation (and competition) in some dialects of Proto-Indo-European, in particular, in the dialect that was the source of the Proto-Slavic language and, eventually, to the merger of these two cases. The Gen//Abl variation parallel to the one that can be surmised for the pre-Proto-Slavic dialect is observed in many ancient Indo-European languages preserving the opposition between the genitive and the ablative, for instance, in Vedic, cf. (16):

- (16) Vedic (Oertel 1935, 1937: 114 = 1994: 975)
- a. *dvayor dhārayoḥ prātas-savane grhṇāti*
 two:GEN/LOC vessel:GEN/LOC:DU morning-pressing:LOC draws
 ‘[He] draws from two vessels at the morning (ritual) pressing ...’
 (Kāṭhaka-Saṃhitā 27.9:149.9)
- b. *dvābhyām dhārābhyām*
 two:DAT/INS/ABL vessel:DAT/INS/ABL:DU
prātaḥ-savane grhṇāti ...
 morning-pressing:LOC draws
 ‘[He] draws from two vessels at the morning (ritual) pressing ...’
 (Maitrāyaṇī Saṃhitā 4.6.4:84.8–9)

3.3 Phonological changes and (partial) case syncretism

Another important source of case variation, closely related to the one discussed in the previous section, is the partial case merger due to certain phonological changes, such as, particularly, phonetic erosion in the word-final position (in languages with case suffixes) or, much more rarely, in the word-initial position (in languages with case prefixes). In fact, such developments normally result in some crucial changes in declension paradigms which either amount to full case syncretism, entirely erasing (some) case distinctions (and, by virtue of that, case variation; see Section 4.1), or lead to the paradigmatic restructuring and analogical changes dealt with in Section 3.2 (see also Barðdal 2009 and Detges 2009).

An instructive example is provided by the evolution of the Arabic nominal inflection. In the post-Classical period, Arabic undergoes a strong reduction of case endings, resulting in the loss of the original three case system (for the case variation in Standard Arabic, see, in particular, Calbert & Panitz 2000). Phonologically, these processes essentially amounted to the weakening, merger and subsequent loss of the

final vowels (in particular, Nom.Sg. *-u*, Gen.Sg. *-i* and Acc.Sg. *-a*). This evolution is well-documented in the written tradition. Middle Arabic of the Southern Palestinian Christian texts of the 8th-10th centuries A.D. still exhibits vestiges of case distinctions, although the oppositions of the classical language appear severely deteriorated. One of the case variations found in this period is that between the genitive (which corresponds to the usage of the classical language), accusative and nominative in nominal forms preceded by prepositions (where case endings were preserved longer than in many other contexts), as illustrated in (17) (see Gruber-Miller 1990):

- (17) Southern Palestinian Christian Middle Arabic (Gruber-Miller 1990:244f.)
- a. *w-l-ʔb-ii-h*
and-to-father-GEN-his
'... and to his father'
 - b. *mʃ ʔb-aa-hmaa*
with father-ACC-their
'...with their father'
 - c. *mʃ ʔb-ii-hmaa*
with father-GEN-their
'...with their father'
 - d. *y-tklm ʃlaa ʔx-uu-h*
3MASC.SG.IMPF-speak against brother-NOM-his
'He speaks against his brother ...'

It therefore seems that in Arabic, the phonological changes (the weakening of the case vowels) have played a more straightforward role both in the rise of case variation and in the collapse of the case system than in many Germanic and Romance languages.

Yet another example of case variation motivated, *inter alia*, by phonological changes is provided by the dative//genitive variation in Old Indo-Aryan. On the one hand, Vedic texts attest a very common semantically motivated variation of the dative and genitive with nouns referring to the beneficiary of a process (*(Dativus) commodi* usage): the Beneficiary of an activity can also be conceptualized as the Possessor of its Theme, which facilitates the use of genitive in this context. Cf. (18):

- (18) Vedic (Oertel 1937:117–128 = 1994:978–989)
- a. ... *iti bahubhyaḥ pratipadam kuryāt*
thus many:DAT.PL opening:ACC should make
'... he should take this [verse] as opening for many [sacrificers]'
(Pañcaviṃśa-Brāhmaṇa 6.9.13)
 - b. ... *iti bahūnām samyajamānām pratipadam kuryāt*
thus many:GEN.PL sacrificer:GEN.PL opening:ACC should make
'... he should take this [verse] as opening for many sacrificers.'
(Jaiminīya-Brāhmaṇa 1.94)

On the other hand, within the Middle Vedic period we observe the merger of the genitive-ablative and dative forms of the *ā*-declension under certain sandhi conditions, viz. before vowels (V), as shown in (19) (for details, see Witzel 1989: 132–139; see also Oertel 1936):

- (19) Gen.-Abl.sg. $-\bar{a}s + V \rightarrow -\bar{a}y + V$
 Dat.sg. $-\bar{a}i + V \rightarrow -\bar{a}y + V$

Apparently, this phonetic process may have contributed to further development of the dative//genitive variation and, eventually, supported the total merger of the two cases in Middle Indic.

3.4 Substrate/adstrate influence

Linguistic contacts represent an important factor that should not be underestimated in the study of case variation. Specifically, a pattern of case variation typical of one of the two contacting languages can be transferred into its neighbour or have an influence on productivity of certain patterns (see, in particular, Barðdal 2009 and Barðdal & Kulikov 2009).

Such was probably one of the reasons for the emergence of the genitive of the direct object in Slavic languages. At the time of the Common Slavic (Proto-Slavic) language, the Slaves had experienced intensive contacts with the speakers of the Finno-Ugric (Uralic) languages, spoken to the North and North-East of the Slavic linguistic area. As mentioned in Section 2.2, in Finnish the direct object can be marked either by the accusative or by the partitive case, depending on the aspectual characteristics of the verb, as in (9–10).

Within the (Proto-)Slavic case system, there is no exact equivalent of the Finnish partitive, but in most of its usages, it will be rendered by the genitive, the functions and usages of which show the biggest overlapping with those of the partitive. Quite naturally, the bilingual speakers in the Finnish-Slavic contact zone, and, particularly, the Finnish native speakers learning one of the Slavic dialects as their second language, could often use both accusative and genitive (perhaps, indiscriminately in the affirmative context, but with clear preference for the genitive in negative sentences) for the encoding of the direct object, when speaking Slavic dialects, thus copying one of the syntactic features of Finnish. This peculiarity of the Slavic vernaculars of the contact zone could subsequently spread to the whole Slavic area and has found its way into the Slavic daughter-languages after the split of Proto-Slavic. This process has resulted, on the one hand, in the rise of the category of animacy and the use of the genitive case for the case marking of the animate direct object, and, on the other, in the optional (as in Russian) or obligatory

(as in Polish) use of the genitive case for the case marking of direct objects of all kinds in the negative sentences; for details of this process, see, in particular, Holvoet (1999: 99–116); see also Krasovitsky et al. (2011).

Another (and much simpler) instance of the syntactic borrowing and adstrate/superstrate influence is provided by the loss of case distinctions (in particular, the dative/accusative opposition) in the German dialects spoken in Pennsylvania, as exemplified by the a./b. variation in (20):

- (20) Pennsylvania German (Keiser 1999: 269)
- a. *Ich habbe ihne(n) gestern geholfe.*
 I have they:DAT yesterday helped
 ‘I helped them yesterday.’
 - b. *Ich habbe sie gestern geholfe.*
 I have they:ACC yesterday helped
 ‘I helped them yesterday.’

The influence of the English constructions of the type *I helped them* could be one of the reasons which triggered the use of the accusative instead of dative (which is the only possible case in this context in Standard German). Of course, it can also be based on independent developments similar to those favouring the loss of case in such Germanic languages as English and Dutch; but in the case of a German dialect existing only in small enclaves within a vast English-speaking area, the influence of the case-less English grammar is likely to play the predominant role for the deterioration of the original German case system. Apparently, in the situation of the every-day contact with the speakers of (American) English, the case distinctions, still existent in Pennsylvania German, have little chance to survive.

4. Case variation and its outcomes

Like all linguistic phenomena, case variation does not remain the same in the course of time. In this Section I will concentrate on possible paths of its development as well as on the factors that favour its changes or disappearance.

There are few logical possibilities of further development of case variation. Aside the trivial situation (lack of any change), it can either be reinforced and ‘well-settled’ within the linguistic system, becoming case opposition, or disappear. The latter path can be realized either by ousting of one of the two cases from the usage in question, or, more trivially (but more dramatically from the point of view of the evolution of the individual case system), by virtue of the merger of the two cases, that is, case syncretism.

4.1 Case syncretism

The most trivial outcome of case variation can be observed in the situations where, due to some phonetic developments, the forms of two cases which are in relation of variation fall together. This is not to say that the phonological evolution alone is responsible for the loss of case variation.⁶ There are many other forces that may cause case syncretism. Next to purely phonological reasons (phonetic ‘erosion’ of the inflection), syncretism may be due to the overlapping of case functions (cf. Section 3.1); see the seminal works by Delbrück (1907) and Wackernagel (1920) and, among the most important studies of the last decades, Meiser (1992); Luraghi (2004a); Baerman, Brown and Corbett (2005: 38ff., 204ff.) et passim.

Such a development can be exemplified, for instance, by the history of case systems in Germanic and Romance languages, most of which have eventually lost case. There is a rich literature on the developments in the syntax and the collapse of declension in Old and Middle English, Old Swedish, late Latin dialects etc., so I will not enter into a discussion of the decay of case systems in these languages. For the purposes of the present Section, it suffices to point out the following fact: whatever the types of case variation existing in these early Germanic and Romance languages (e.g. the Dat//Acc variation with some verbs in Old English, for details, see, for instance, Traugott 1992:202; the Gen//Acc//Dat variation after the preposition *tíl* ‘to’ in Old Swedish, see, in particular, Norde 1997:147–155), most of them eventually disappear after the total loss of case oppositions in the languages in question.

Note that we are dealing with this ‘trivial’ outcome only in the situations where the deteriorating effects of phonological changes are not compensated by some stabilizing developments within the declensional system.⁷ Thus, by virtue of several dramatic changes in word-final position (in auslaut), Slavic was subject to a considerable erosion of inflexion, resembling in that respect many Romance and Germanic languages. Yet, unlike, for instance, Old English and Old French, most Slavic languages have shown a much greater degree of morphological conservatism, preserving the majority of case oppositions.⁸ Particularly instructive is the history of the emergence of the category of animacy (for details, see e.g. Klenin 1980; Iordanidi & Krys’ko 2000: 198ff.), which can

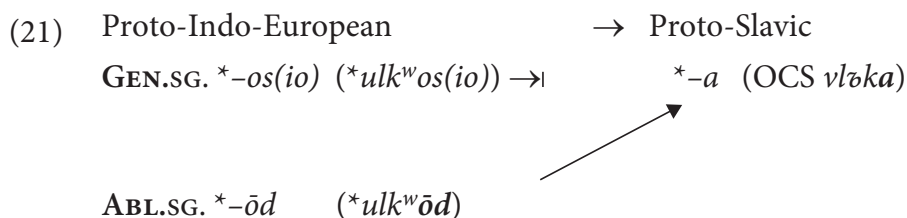
6. Note also that, before the total disappearance of these alternations, one of the alternants might well overrule another; see, for instance, Allen 1995 on the collapse of declension in Old and Middle English.

7. See, in particular, Meiser (1992:189) on developments in Latin case endings. Cf. also Harris and Campbell’s (1995:89) ‘preservative’ (or ‘structure-preservative’) reanalysis; see also Kulikov (2006) on the distinction between case-reducing (e.g. Germanic and Romance) and case-stable (e.g. Slavic and Baltic) languages.

8. This may imply that phonological erosion was a consequence, rather than cause, in this case, as convincingly demonstrated by Barðdal (2009).

be briefly summarised as follows. In Common Slavic, the old Indo-European nominative and accusative have merged in most declension types due to the phonetic erosion in word-final position, as e.g. in Old Church Slavonic Nom = Acc.sg. *vl̥k-ъ* ‘wolf’ (for details, see, for instance, Orr 2000: 96–113). In order to compensate for this development, which might threaten the nominative-accusative opposition in general, animate nouns have used the genitive case form to encode the accusative (cf. Modern Russian Nom.sg. *volk-ø* ‘wolf’ ~ Acc. = Gen.sg. *volk-a*).

It is interesting to note that even in situations where two (or more) cases ultimately fall together, this process does not amount to a straightforward (phonologically conditioned) merger of case morphemes. An instructive example is provided by the history of the genitive/ablative syncretism in Slavic (see Section 5.5 on the relationship between these two cases in some other Indo-European languages). Although, from a functional point of view, the genitive has ultimately won over the ablative (which has transferred its usage to the former), the resulting morphological picture is rather complicated. In the non-singular numbers the old genitive form has taken over the ablative function in all paradigmatic classes. In the singular, however, in the only declension class where the ablative and genitive were distinct (= Proto-Indo-European **-o*-type), it was the ablative which has furnished the marker for the ‘new’ genitive, the ending *-a* < PIE (abl.sg.) **-ōd*, while the Proto-Indo-European genitive singular ending **(o)s(io)* has disappeared from the paradigm, as shown with the ‘dead-end’ symbol $\rightarrow\downarrow$ in scheme (21) (for details of this process, see, for instance, Orr 2000: 66):



Thus, there are good reasons to claim that the genitive has ousted the ablative (rather than the other way around). Yet, albeit ousting the ablative from the paradigmatic scene, the genitive has borrowed its ending in one of the declensions.

Apparently, the languages where case variation merely disappears after the loss of case distinctions are less informative for a typological study of this phenomenon than those languages which more successfully resist the deterioration of case systems. In what follows, I will foremost concentrate on such examples where cases do not fall together, at least in some declensional types. The next two sub-sections will deal with two logical possibilities for the outcome of the case variation/competition.

4.2 Ousting

One of the two competing cases (e.g. C_i) entirely replaces the other one (C_j). This does not necessarily cause the disappearance of C_j from the system of nominal declension, although it may often lead to the weakening of the “functional weight” of C_j ; that

is, the number of syntactic contexts where C_j can be employed and is opposed to other cases decreases.

An example of such a development is provided by the history of relations between the dative case and prepositional phrase *ad* + accusative encoding the recipient of an action in late Latin. The post-classical Latin texts attest both types of encoding of the recipient or addressee (including addressee of speech) – that is, indirect object, in terms of grammatical relations, – as in (22), even within the same noun phrase (cf. (22c)):

- (22) Vulgar Latin (Tardif 1866: 55; Sas 1937: 174, 37 et passim; Coleman 1976: 54)
- a. *ego Grimulfridus et filia mea Adalvuara*
I:NOM Gr.:NOM and daughter:NOM my Ad.:NOM
donamus vobis ...
give:PRES:1PL you:DAT
‘I, Grimulfridus, and my daughter Adalvuara are giving you ...’
 - b. *episcopus dixit ad eos*
bishop:NOM said to they:ACC
‘The bishop said to them ...’
 - c. *donamus villa nostra ... ad sacrosanctam ecclesiae*
give our city to sacred:ACC church:DAT
‘We are giving our city to the sacred church.’

The examples in (22) illustrate the starting point of the process which continued in later periods. Mediaeval Latin texts exhibit the constant expansion of the *ad*+Acc encoding and, eventually, the total disappearance of the dative forms from this usage (for details of this process, see Sas 1937; Coleman 1976; Gaeng 1984; see especially the rich statistical material in Sas 1937: 506, 514 et passim).

4.3 Dividing spheres of influence

This type of development seems to be common for case variation with minor functional differences between the alternants, such as that between the a. and b. members of pairs (1–6), rather than for the Nom//Acc-Dat variation in Hindi (11) or the Acc//Part alternation in Finnish (9–10). Both alternants, C_i and C_j , can be preserved in the given usage. However, quite often, the free variation does not hold for long, and the contrast between C_i and C_j in this usage becomes secondarily associated with some additional meanings. This additional semantic distinction typically does not belong to the range of meanings traditionally expressed by cases: definite/indefinite, individual/generic, aspectual meanings, modes of action, etc. Thus, recalling the distinction briefly mentioned in Section 2.2, this type of evolution transforms a (free) case variation into a case opposition.

Thus, the above-mentioned variation between the two ways of encoding of the indirect object (recipient of the action) in Vulgar / Mediaeval Latin, viz. the dative as opposed to the preposition *ad* (→ Spanish (a) + accusative (cf. (22b–c)), expands in the western Romance dialects to the direct object marking and, in modern Spanish, ends up with two possible types of marking of the direct object, with or without the preposition *a*, depending on the specificity/individuation of its referent (see, among many others, Jungl 2004; Heusinger & Kaiser 2007).⁹ Cf. the distinction between (23a), which has the non-referential reading, and (23b), which has the referential reading.

(23) Spanish (Penny 2002: 102–103; Hopper & Thompson 1980: 256)

- a. *Celia quiere mirar un bailarín.*
Celia wants to.watch a ballet.dancer
'Celia wants to watch a ballet dancer.'
- b. *Celia quiere mirar a un bailarín.*
Celia wants to.watch PREP a ballet.dancer
'Celia wants to watch a certain ballet dancer.'

Another example of this development is provided by the above-discussed (Section 2.2) opposition between the direct ("nominative") case and dative-accusative form with the marker *-ko* in Hindi; cf. (11).

5. Parameters of case variation

In this section I will concentrate on the parameters which typically play a major role in case variation. These parameters include constraints and principles that, altogether, may cause one or another final result of the case competition, viz. either ousting of one of the cases or dividing spheres of influence between them.

5.1 Identifiability

The Identifiability constraint is based on the identifying, or indexing, function of case, which relies, in its turn, on the well-known fact that each case is associated with a number of functions or meanings (semantic/thematic roles, syntactic functions, etc.). In fact, this constraint amounts to the general tendency to use same form(s) for same function(s) and, accordingly, is intimately connected with another constraint, the distinguishability constraint, to be discussed in Section 5.3 below. It is important to

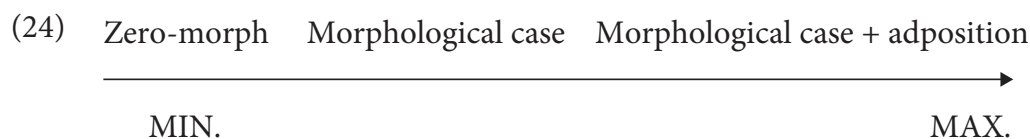
9. Although Spanish lacks the category of case and, thus, the alternation between the nouns with or without *a* is not covered by the definition of case variation given in Section 1.1, I include this example into my material as a direct continuation of the free case variation in (late) Latin.

note that this fact does not mean that the two constraints can be trivially described as reverse of each other. Rather, they reflect the co-existence and interplay of two fundamental principles of language, the tendency to treat same thing similarly, while different things are treated distinctively, in accordance with two basic needs of verbal communication: to be understood and to save efforts when speaking. Thus, the nominative is traditionally treated (and determined) as the case of the canonical subject (at least, in nominative-accusative languages), the accusative is associated with the direct object, and so on.¹⁰ Syntactically, the Identifiability constraint puts certain limits on the freedom of case variation and, in a sense, plays a conservative role in language evolution, being responsible for the preservation of the existent case patterns and resisting innovations, such as using new (alternative) case marking instead of the original one. Within the morphological system, this constraint also plays a conservative role, since it prevents the borrowing of forms from different cases (such as, for instance, the use of genitive for accusative in many Slavic languages, which eventually has resulted in the rise of the category of animacy; see Section 4.1).

The Identifiability constraint operates in close relations with other constraints and parameters, therefore evidence for and discussion of this constraint will be given in next Sections.

5.2 Formal (un)markedness

The notion of ‘markedness’, a basic concept within linguistics, is employed in a number of senses in the literature.¹¹ Here I will refer only to formal markedness, understood as the degree of salience of an expression of a linguistic value. Regarding the expression of case meanings, a continuum of formal markedness may roughly be represented as in (24):



The Markedness principle (in fact, a more appropriate term would be perhaps ‘Unmarkedness principle’) may favour the choice of the unmarked (less marked) form for the dominant, functionally more basic (‘default’), case function in the situation of case variation. This general tendency can, quite naturally, be accounted for in

10. For a concise discussion of case functions (meanings), see, in particular, Comrie (1989:71); Blake (1994:2–4, 30–47 et passim); and, in a perspective of the Identifiability constraint, Hoop & Narasimhan (2005).

11. Cf. the notion of marked vs. unmarked values of a linguistic category; see Croft (1990:64–94) for a detailed discussion.

terms of economy (see, in particular, Croft 1990; Battistella 1996). Cf., e.g. Elšík and Matras' (2006: 220ff.) comprehensive discussion of the tendency to use the unmarked ("zero-coded") form for nominative, rather than more complex accusative and (other) oblique case forms, observed in Romani; furthermore, for the accusative, we observe, again, the tendency to use less marked form (accusative proper) rather than more marked (oblique) forms.

There is also the opposite aspect of this principle: the less dominant, non-basic function can favour a situation where one of the two cases clearly outruns its competitor in the degree of formal markedness, thus gaining priority over the less marked case.¹²

The history of the case marking of the addressee in Italic and, further, Romance languages, from Latin onwards, briefly discussed in Sections 4.2–4.3, is instructive for illustrating the relevance of this parameter. Apparently, the more marked form, encoded with the preposition *ad* and accusative, which can thus be more safely distinguished from other case forms, has overruled and ousted the less marked prepositionless encoding of the addressee, the dative case (which, incidentally, have many other functions next to encoding the addressee). As a matter of fact, in this situation the Markedness principle works in the same direction as the Identifiability constraint discussed above.

5.3 Distinguishability

The Distinguishability constraint manifests a universal and very basic principle: any language tends to use different formal means for encoding different (grammatical) functions – in particular, different grammatical relations of noun phrases. See, for instance, a general discussion (in terms of 'discriminatory function of case') in Comrie (1981: 117ff.); for a recent discussion and analysis of the relevance of this principle, see Hoop & Lamers (2006). In general terms, this principle can be formulated as (25):

(25) *The two arguments of a transitive relation should be distinguishable.*

It can be shown that this parameter must be due to the general (and very basic) tendency to distinctly mark different linguistic units (see de Hoop & Lamers 2006), in particular, to ensure that formally distinct linguistic units do not merge.

An illustration of the relevance of this parameter is provided by the marking of the direct object in Hindi. Thus, as Hoop & Narasimhan (2005) argue, "those patients which are most agent-like in the sense that they are animate and/or specific are most likely to be confused with true agents, and hence receive overt accusative *ko* marking";

12. In the Optimality Theory approach, the term 'markedness' is only used in the former sense and, accordingly, the corresponding constraint might be re-named 'Unmarkedness Principle.'

cf. (11a–c) above. Cf. also a parallel situation with the dative case in German, discussed by Primus (2009).

Obviously, in many situations two constraints, the Distinguishability and Identifiability (together with the Formal markedness, if understood in the second sense of this term, as discussed and explained in Section 5.2), operate in the same direction. Thus, the Dat/Acc marker *-ko* of the direct object in Hindi both (i) shows a greater degree of formal markedness than the zero-suffix and, by virtue of that, (ii) makes the object more distinguishable from the subject that has the nominative (direct) case, which in turn (iii) ensures the identifiability of core arguments (see Malchukov 2008 for a comprehensive analysis of this mechanism). Note that the Distinguishability constraint does not amount to the tendency to use the more marked member of the opposition. Thus, in Old Russian, the genitive singular ending *-a* (in the old **o*-declension) is more distinguishable from the nominative ending *-ъ* (corresponding to PIE **-os*) than the original accusative ending *-ъ* [*-ǔ*] (< PIE **-om*), but hardly more marked; it does not become more marked before the 14th cent., when *-ъ* yields *-ø* in word-final position (thus, for instance, *vlъkъ* ‘wolf’ > *volk*).

5.4 Primary argument immunity principle (PAIP)

This constraint, which I will call here, after Malchukov (2006), Primary Argument Immunity Principle (PAIP), is only relevant for the case marking of the two main arguments of a clause, subject and direct object. In fact, this is a direct corollary of a very basic universal formulated by Greenberg in his seminal work (1966: 95; see also Koch 1995: 38–41) as follows:

“Where there is a case system the only case which ever has only zero allomorphs is the one which includes among its meanings that of the subject of the intransitive verb”.

This principle has recently become the subject of a special study by Malchukov (2006) and was applied to the description of the case syntax in Hindi by Hoop & Narasimhan (2005). According to the PAIP in Malchukov’s formulation, languages “avoid manipulation of the case-marking of the primary argument exclusively”.¹³ Note that PAIP does not merely amount to capturing economy constraints on case marking, but, rather, aims to explain correlations between case marking and voice alternations. For instance, it explicates the fact that the use of antipassive in ergative languages

13. As Malchukov (ibid.) explains, by ‘primary argument’ we understand that argument of transitive clauses which is encoded in the same way as the subject of intransitive clauses, usually, with zero case marking. Obviously, this concept corresponds to the nominative subject in case of nominative-accusative alignment and to the absolutive noun in ergative languages.

can be accounted for in terms of the same parameters as the use of differential object marking in accusative languages.¹⁴

A good example of the relevance of PAIP in the development of case systems and case syntax is provided by the history of French nominal declension (see, in particular, van Reenen & Schøsler 2000; Arkad'ev 2004; Detges 2009). Old French still preserves the opposition between two cases (the only vestige of the much richer Latin case system), Direct and Oblique, used, in particular, to encode subject and direct object, respectively. The system of two cases and two numbers is quite intricately marked in the paradigm, however. Specifically, in one of the main declensional types (masculine), the Dir.sg. and Obl.pl. forms are identical, both exhibiting the ending *-s*; furthermore, they are formally opposed to the non-marked form of Obl.sg. and Dir.pl. with the zero ending. Cf. the paradigm of the noun *mur* 'wall' (26):

(26)		Singular	Plural
	Dir.	<i>mur-s</i>	<i>mur</i>
	Obl.	<i>mur</i>	<i>mur-s</i>

According to van Reenen & Schøsler (2000), the collapse of the Old French system was due to the fact that it was "conceptually too complicated". This motivation may indeed have triggered certain changes within the system; yet, it cannot account for the general scenario of the evolution of the original system. Apparently, the constraint on complexity of the system must have operated together with some other tendencies, which appear to include PAIP. It seems very likely that the usage of the unmarked form in the subject function was due to the tendency to prevent manipulation of the encoding (case marking) of the core arguments.

Middle French attests numerous examples of the variation of the direct and oblique forms in subject function, as in (27):

- (27) Middle French (Gardner & Greene 1958: 1–5)
- a. *quant li roys Ysopes les ot prins en main*
when the king:DIR.SG Esoepus:DIR.SG them took in hand:OBL
'When the king Esoepus took them in the hand ...' (Bérinus 156, 14th cent.)
 - b. *Ly roy apela Payn Peverel ...*
the king:OBL.SG called Payn:OBL Peverel:OBL
'The king called Payn Peverel ...' (Fouke Fitz Warin 7:27, 14th cent.)

14. I am thankful to Andrej Malchukov for discussing with me several aspects of PAIP and related issues.

The unmarked form with the zero-ending has won the competition, ousting the direct case from the subject case, which, eventually, has contributed to the total loss of the case system within the Middle French period. The ending *-s* has not entirely disappeared from the morphological system, however, but was reanalyzed as plural marker.

Note that PAIP does, of course, not imply that the ‘primary argument’ (= nominative/ absolutive case) should always be unmarked. Some languages seem to be satisfied with a weaker form of this constraint: the primary argument cannot be more marked than the second argument of the transitive clause. This was the case in many declensional types of several ancient Indo-European languages, where the nominative and accusative endings (going back to Proto-Indo-European **-s* and **-m*) are equally marked; the former may actually be a vestige of the early Proto-Indo-European ergative case (a hypothesis going back to Pedersen 1907; see, also, among others, Lehmann 1958 and, most recently, with convincing argumentation, Kortlandt 2010).

5.5 Paradigmatic independence

Cases can be characterised not only in terms of their formal markedness and distinguishability but also in accordance with their position within the paradigm, which is directly dependent of the total number of declensional types in which the given case is formally distinct from all other cases. Thus, case C_i can be said to be paradigmatically more independent (= more P-independent) than case C_j if the total number of declensional types where C_i differs from other cases is higher than the corresponding number for C_j .

This feature may play an important role in the balance of cases within a system and thus sets up yet another parameter relevant for case variation and case competition, ‘paradigmatic strength’ or ‘paradigmatic independence.’ In contrast with the Identifiability, Distinguishability, and PAIP constraints, basically operating on the syntactic level, Paradigmatic independence is a morphological constraint, which, from a synchronic point of view, regulates competition of allomorphs. Obviously, the high P-independence of a given case can strongly support its systemic stability in the history of a language, and, *vice versa*, the low P-independence may be one of the reasons for the eventual loss of a case from the system. Naturally, cases of higher P-independence have a better chance to overrule other cases and survive in case variation and case competition. Let us consider a few relevant examples from the history of case systems.

The low P-independence was undoubtedly one of the main reasons for the loss of the ablative from the case systems of several Indo-European languages. As mentioned above (Section 4.1), the ablative is only distinct from all other cases in the declension of **o*-stems and only in the singular number, sharing the form either with the genitive (in other declensional types in the singular), or with the dative (in the plural), or both with the dative and instrumental (in the dual). Moreover, the semantic overlapping between the ablative and genitive, particularly in the domain of the partitive-possessive meanings (cf. ‘a part of X’ $\approx$ ‘a part (taken) from X’), could have additionally

contributed to their variation and competition in the corresponding usages. Most likely, in several dialects of Proto-Indo-European genitive and ablative could be employed interchangeably, in particular, in the partitive contexts, and the paradigmatically weaker, i.e. less independent, ablative has lost this competition in most dialects, in particular, in the source dialect of Proto-Slavic. In the attested Slavic languages, the ablative case is entirely absorbed by the genitive, its only vestige being the ending *-a* of the masculine-neuter declension (← PIE **o*-declension), which probably represents the reflex of the Proto-Indo-European ablative ending **-ōd*.

A remarkable exception to this general scenario of the development represents the evolution of the ablative in Latin. In the Indo-European dialect immediately preceding Latin, the ablative case was strongly reinforced by analogical developments in the system of case forms. In analogy with the **o*-declension (→ Latin declension II), where the ablative form in *-d* was inherited from the proto-language, *d*-endings were introduced in most other paradigmatic types (for details, see Coleman 1976; Prat 1976; Gasperini 1999), viz. in the declension of *a*-stems (= Latin declension I), *i*-stems (= part of Latin declension III) and *u*-stems (= Latin declension IV), cf. (28):

- (28) Archaic Latin (approx. before 200 B.C.)
- a. *MERETOD*
merit:ABL.SG
'deservedly, rightly'
(= Cl. Lat. *merito*, abl.sg. of *meretum* 'merit, benefit, service')
 - b. *EN URBID*
in city:ABL.SG
'in the city'
(= Cl. Lat. *in urbi*)
 - c. *DIOVIS CASTUD*
Jupiter:GEN holiday:ABL
'in the holidays of Jupiter'
(= Cl. Lat. *Iouis castu* = *Iouis feriis* 'in the holidays of Jupiter')

The paradigmatic reinforcement of the Latin ablative could have been one of the (indirect) reasons for yet another dramatic development in the (Proto-)Latin case system: the ablative has "absorbed" and, in a sense, ousted two other oblique cases, locative and instrumental. Most probably, the process of ousting was preceded by a long period of variation and competition (Abl//Loc and Abl//Ins).

5.6 Semantic specificity

Thus far I only discussed parameters of case variation which are largely based on the formal features of case forms and case paradigms, rather than on the functional properties of cases. This does not mean of course that the functions and semantics of case play no role in case variation and case competition. Quite on the contrary, we find

An instructive example of the importance of this parameter is provided by the history of the Russian locative cases. The Old Russian locative in the masculine declension (← Proto-Indo-European **o*-declension) continues the Proto-Slavic locative in *-ě* (< PIE **-ōi*). From the 13th century onwards, alongside with forms in *-ě*, such as (*vъ*) *lěsě* ‘(in) the forest’, (*vъ*) *sněgě* ‘(in) the snow’, we find new locative forms in *-ú*: (*vъ*) *lěsu* ‘(in) the forest’, (*vъ*) *sněgu* ‘(in) the snow.’ The ending *-ú* has been borrowed from the old declension of the stems in **-u-* (type *synъ* < **sūn-u-s* ‘son’, *domъ* < **dom-u-s* ‘house’), where it was regularly inherited from Proto-Indo-European, as shown in (29):¹⁵

- The emergence of a special case employed in the locative usages only may be due to the influence of the Finno-Ugric languages (in particular, older forms of Finnish) with their well-elaborated system of locative cases (for the general scenario of borrowing syntactic patterns due to the contacts between Finno-Ugric languages and Northern Slavic dialects, see Section 3.4). Under the influence of the locatives 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 locations and thus are particularly common in the locative usage. The variation of the two locatives survives until the 19th century, and both forms can be found in the Russian classical literature, even within the writings of the same author, cf. examples (30a–b), both taken from Puškin’s prose (for the history of the relationships between the two locatives, see, for instance, Kiparsky 1967: 35–39):

15. The **u*-declension disappeared (approximately) after the 14th century, being ousted by the more productive **o*- (= 2nd) declension.

Nevertheless, by the 20th century, the second locative has eventually ousted the older first locative from the usages with the prepositions *v* ‘in’ and *na* ‘on’. Unlike the older *e*-locative (Loc-1), this ending is now only reserved for the locative usage proper, not expanding to other usages of Loc-1 (thus, *o lese* ‘about the forest’, but not **o lesu*). In spite of the fact that the new locative was the weakest / least independent case in the paradigm, being distinct from other case forms only for a relatively small subclass of mostly monosyllabic substantives, it has eventually ousted the older locative from this usage.¹⁶ Since the two cases do not differ in formal markedness / distinguishability, and the PAIP-constraint could not cause the overruling of Loc-1 by Loc-2 either, the only parameter which could determine the outcome of their competition in favor of Loc-2 is its semantic specificity.

6. Competing constraints and hierarchies of parameters

In the situation where there are several parameters relevant for case variation and case competition, we may be dealing with quite a complicated state of affairs: different parameters and factors can produce quite contradictory effects. Therefore, in order to make some plausible assumptions on the outcome of case competition, we need to establish a hierarchy of parameters which is responsible for the developments attested in the language(s) under study.

Generally speaking, it is virtually impossible to settle a *universal* hierarchy of parameters that would predict the output of their interaction in every particular case; rather, we have to do with a variety of hierarchies differing from one language to another and changing in the course of history of individual languages. Nevertheless, some generalizations on universal ranking of parameters are not impossible. In particular, we have good reasons to claim that parameters listed in Section 5 undoubtedly differ in their scopes and domains of relevance. Thus, while the Identifiability, Formal (un)markedness and Distinguishability must represent quite general, fundamental constraints that will play a certain role in most situations, the more specific, ‘narrowly-targeting’ parameters such as Primary Argument Immunity Principle and Paradigmatic independence will only be applicable in some particular cases. Thus, the Paradigmatic independence will hardly play any substantial role in the situation of competition of core cases (which all are normally P-independent), such as the variation of the Subject and Object cases in Old French, and, in that sense, might be considered weaker than more fundamental constraints (Identifiability etc.). Yet, historical developments are possible when the relevance of such ‘minor’ parameters considerably increases – for instance, when the

16. In modern Russian, this class includes less than 150 substantives; for details, see, for instance, Plungian (2002).

inflexion of core (Subject and Object) cases undergoes rapid erosion, which results in the PAIP-constraint gaining of importance, overweighing ‘major parameters.’

Even more intricate is the issue of internal relationships between the parameters. It would be tempting to detect more general (macro-)parameters, under which our (elementary) parameters might be subsumed. Thus, one might argue that Frequency and Productivity are such Macro-parameters. First, it has been demonstrated by Haspelmath (2006, 2008) that Markedness can be regarded as determined by Frequency. Second, the Paradigmatic independence could, presumably, be reformulated in terms of case’s type frequency. This would make it justifiable to subsume these parameters under the concept of productivity, as convincingly argued by Barðdal (2008). Furthermore, this approach would also allow grouping here yet another parameter, equated to semantic uniformity, which is presented in Barðdal (2008) as possibly leading to an increase in productivity.

Finally, as one of the reviewers has pointed out to me, two ‘major’ parameters, Identifiability and Distinguishability, can probably be understood in terms of competing motivations of speakers and hearers, respectively, and, accordingly, analyzed within the framework of processing-based models of language, as outlined, for instance, by Hawkins (2004).

Thus, the history of case marking of the direct object in the Slavic languages (briefly discussed in Section 4.1) is essentially determined by the interplay of two parameters. On the one hand, the reduction of case endings by the Common Slavic period has resulted in the loss of distinction between nominative and accusative forms in most declensional types. The masculine nouns of the two major declensional classes going back to the Proto-Indo-European **o-* and **u-*stems end up with the same ending for both the nominative and accusative singular, *-ǫ*, which is the supershort vowel (*-ǫ̆*) (corresponding to PIE nom.sg. **-os*, **-us*, acc.sg. **-om*, **-um*), yielding the zero ending (*-∅*) in word-final position in the modern Slavic languages. As far as the nominative case is concerned, this development is quite in accordance with the general PAIP-constraint (= avoiding case marking on primary argument), supported by the economy principle. On the other hand, there was of course a strong tendency to distinguish between the two main arguments of a transitive clause, at least for active, i.e. animate or human, nouns, in accordance with the general principle of Distinguishability (see Section 5.3). Thus, as far as the encoding of the subject has been concerned, the principle of Identifiability and PAIP were operating in the same direction, whereas in the case of the encoding of the direct object there was a conflict between two constraints, Identifiability and Distinguishability. The former required keeping the case marking as it was, with the endings resulting from regular phonetic developments – thus, with the same ending *-ǫ* for both nominative and accusative forms in the masculine declension. The latter entailed a different case marking for the accusative, in order to ensure distinguishability between subjects and objects, thus supporting the genitive encoding (arisen, probably,

due to the Finno-Ugric influence; see Section 3.4). During the Common Slavic period, the Identifiability constraint was obviously stronger, preventing a reanalysis of the relevant fragments of the case system. However, for some reasons, the Distinguishability constraint (to be understood, eventually, in terms of hearers' motivations, see above) has become higher in the hierarchy of parameters than Identifiability. One possible reason may be the expansion of constructions with the genitive encoding of direct objects, perhaps under the influence of Finno-Ugric languages. This has eventually resulted in the establishing of the new accusative form (borrowed from the genitive in *-a*), which overruled the original accusative form in *-ъ* (> Modern Russian *-ø*).

Another, but rather similar, example of the interaction of parameters is provided by the history of case marking of the recipient, i.e. indirect object, in Latin. As in the case of the encoding of direct object in Slavic, the Formal Markedness Principle overruns Identifiability. As a result, the new, more marked, encoding of this argument (*ad* + Acc, cf. *ad cōnsulem*) overruns the less marked one (the bare dative, cf. *cōsulī*).

Yet, however basic the Identifiability and Distinguishability constraints might be, in some situations they could be oppressed by more specific principles, which resulted in some dramatic developments within the system of declensions, often with some crucial consequences for the category of case in general. The history of the Old French declension provides an instructive instance of the relevance of the PAIP-constraint. At some stage, several internal developments within the deteriorating case system (in particular, perhaps, its growing complexity; see Section 4.4) have increased the status of PAIP, which made possible its triumph over other relevant parameters (Identifiability and Distinguishability) and thus caused the re-ranking of constraints. This re-ranking results in reanalysis of the unmarked form (e.g. *roy*) as caseless singular, as opposed to the caseless marked plural (*roy-s*).

In sum, the hierarchy of constraints and parameters can explain a number of changes in the use of cases and thus has a fairly high explanatory force. In some cases, the factors responsible for a particular ranking of parameters are quite obvious (cf. the situation of paradigmatic complexity mentioned above), but, most often, the exact evaluation of the relative weight of several parameters may remain quite uncertain and requires special study.

7. Concluding remarks: Problems and perspectives for further studies

In this paper, I have studied the diachronic aspects of case variation, inventarising its main sources (functional overlapping, paradigmatic pressure, phonological 'erosion' and case syncretism, and contact phenomena). Investigating possible paths of the development of case variation (changing into case opposition or ending in the disappearance of case distinctions), I have discussed the parameters that play major role in these

diachronic developments, causing one or another final result of the case competition. I have also formulated several preliminary generalizations on establishing a hierarchy of parameters that can be responsible for the diachronic outcomes of case variation.

I hope to have demonstrated in this paper that case variation and case competition, albeit sometimes disregarded in grammatical descriptions, plays an important role in the linguistic system, in particular in the encoding strategies and realization of arguments. Although, quite often, the case marking is fairly rigidly dictated by syntactic rules, languages leave a certain freedom in the choice of case in several contexts and usages. In such situations, case marking is determined by a variety of constraints and parameters. The interaction between them is of a quite complex character (note that their ranking may even differ from one declensional type to another) and may produce the impression that predictions about the outcome of case variation are virtually impossible. Using a scientific metaphor, we can say that predicting the developments within a grammatical system on the basis of a set of parameters and constraints resembles, to some extent, predicting weather on the basis of quite many factors and parameters: we know that there must be some interaction between them, but the high number of the relevant parameters makes a precise forecast impossible.

However pessimistic such a viewpoint might be, it does not make our predictions senseless. As in the case with weather forecast, there is of course no 100% guarantee that the language will follow the forecasted path. Nevertheless, till now the risky meteorological business has not been abandoned, nor should the attempts to forecast linguistic developments be abandoned. There is a certain probability that the actual outcome will be close to our expectations – which makes such a forecast an important explanatory tool and, besides, stimulates further studies in the field. One of the major tasks of the present paper has been to draw attention to this, often neglected, aspect of the category of case and to outline guidelines for further research. The hierarchies of parameters, which may vary considerably from one language to another and change from one chronological stage of a language to another, can help to discover several regularities in this seeming disorder. Moreover, in many cases, they may help to make plausible assumptions about the developments within case systems and the direction of the grammatical and syntactic evolution of a language in general.

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