Syncretisms and neutralizations involving morphological case: Challenges for markedness theory

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1. Introduction[1]

It is well known that the notion of markedness has great relevance for the phenomenon of neutralization, both in phonology (Trubetzkoy 1939) and morphosyntax (Jakobson 1932, 1936; Greenberg 1966; Boeder 1976; Battistella 1990). Generally speaking, there is a tendency, quite often claimed to constitute a universal law, for neutralizations (or syncretisms) of the values of one morphosyntactic feature to occur only in the context of the marked value(s) of other features, but not in the context of the unmarked value(s).

In this chapter, I bring forth some empirical evidence from the domain of morphological case that explicitly contradicts the above-mentioned generalization, and, moreover, in some cases at least, shows systematic and diachronically stable behaviour. On the basis of these data, I claim that the relation between markedness and neutralization in morphology is much less trivial than some linguists used to believe.

The goal of this chapter is primarily empirical, i.e. to bring forward some interesting facts coming from languages both relatively well-known (e.g. Slavic) and less so (e.g. Dardic) which have not been given attention in work on syncretism (even the recent comprehensive typological study of this phenomenon, viz. Baerman, Brown, and Corbett [2005], does not discuss them); I abstain from proposing any far-reaching theoretical interpretations, let alone explanations of these facts, although I speculate on some motivations alternative to those based on the notion of markedness. However, I believe that the data to be discussed are of relevance to the typology and theory of morphological neutralization, and that theoretical principles and typological generalizations in this domain should be altered to take them into account.

The structure of the chapter is as follows. In Section 2 I review the basics of the classic markedness theory in morphology and briefly discuss its

recent critique by Haspelmath (2006). Sections 3 and 4 are entirely devoted to the presentation of the empirical data. In Section 5 I present a general discussion of the material and draw some preliminary conclusions.

2.   Markedness theory and neutralization in morphology

The notion of markedness has played one of the principal parts in the linguistic thought of the last three quarters of a century (cf. Eckman, Moravcsik and Wirth 1983; Andrews 1990; Battistella 1996). Markedness has been employed as an important explanatory notion in different fields of the science of language, ranging from phonology to semantics and pragmatics, and it cross-cuts major theoretical and methodological divisions, such as that between 'formal' vs. 'functional' theories, which both employ this notion.

Markedness has been defined in various ways (see Haspelmath 2006 for a critical survey); for the goals of this chapter a simplified version of the definition by Givón seems to be suitable:

Markedness involves

(i)   Structural complexity: The marked structure tends to be more complex (or larger) than the corresponding unmarked one.
(ii)   Frequency distribution: The marked category tends to be less frequent than the corresponding unmarked category.
(iii)   Cognitive complexity: The marked category tends to be cognitively more complex – in terms of mental effort, attention demands or processing time – than the unmarked one. (Givón 1995: 28)

Thus, the marked member of a morphological opposition (e.g. Plural) is supposed to be more complex as regards its semantics than the unmarked member (e.g. Singular), to show smaller discourse frequency, and to have a more complex (e.g. longer) formal expression. Also, the following correlates of markedness have been widely cited in the literature (cf. Haspelmath 2006): the presence of a marked value in a language presupposes the existence of the unmarked one; marked values have a distribution restricted in comparison to the unmarked value; marked categories are acquired later by children and are more likely to get lost in language change, etc. The explanatory force of the notion of markedness, as has often been stated (cf. Moravcsik and Wirth 1983: 3), is based on the assumption that different

markedness parameters are intercorrelated, i.e. that structural complexity goes hand in hand with cognitive complexity and frequency distribution, as well as with diachronic stability and skewed acquisition patterns.

Recourse to markedness as an explanatory device has been perhaps most popular in typologically oriented linguistics (see e.g. Greenberg 1966; Croft 1990; Givón 1995: Ch. 2), where universal markedness hierarchies have been proposed, such as the person/animacy hierarchy applying to case-marking (Silverstein 1976, Dixon 1979), number-marking (Smith-Stark 1974), and, more generally, to the choice of grammatical functions in the clause (Kibrik 1997, Aissen 1999).

The notion of markedness has been considered important for the phenomenon of neutralization, i.e. partial or full elimination of a certain overt morphosyntactic distinction otherwise present in the grammatical system. A simple example of neutralization comes from Russian, where in adjectives three genders are distinguished in the Singular but collapsed in the Plural (cf. *bol'šoj dom* 'a large house (masc.)', *bol'šaja kniga* 'a large book (fem.)', *bol'šoe zadanije* 'a large assignment (neut.)' vs. *bol'šie doma / knigi / zadanija* 'large houses / books / assignments'). In this example gender is the category neutralized, while number is the *dominant* category (terminology proposed in Hjelmslev 1935–1937).

The most general constraint on neutralization or *syncretism* of morphosyntactic distinctions[2] explicitly relates to the notion of markedness, in particular, to markedness hierarchies. This constraint specifies possible contexts for syncretism and is stated as follows:

> If a certain distinction is suspended in the environment of a given category *C* [the dominant category, in our terms – *P.A.*], then ... it is either neutralized only for the marked value of *C* or for both the marked and the unmarked value, but never for the unmarked value alone. (Bierwisch 1967: 254)

This principle predicts, for instance, that, assuming a relatively uncontroversial markedness hierarchy for number values, i.e. Singular < Plural,[3] neutralization may occur in the context of Plural only, or both in the Plural and in the Singular (cf. the above-mentioned examples from Russian); however, it is not possible for a category to be neutralized only in the Singular to the exclusion of the Plural. Formulated in a more succinct manner, the constraint looks like a familiar implicational universal:

Markedness constraint on neutralization in morphology:
If the values of a certain morphosyntactic feature are neutralized in the context of the unmarked value of the dominant morphosyntactic feature, then they are also neutralized in the context of the marked value(s) of the same feature.

The rationale behind this constraint is admittedly 'functional': neutralization, which otherwise only creates ambiguity and parsing difficulty for the hearer, applies 'in order to' reduce the total number of marked values in the expression (cf. Boeder 1976); compare the following recent formulation:

> When a set of forms is relatively unmarked on one featural dimension, it generally allows a broader range of contrasts along other dimensions. The presence of more marked values for one feature triggers neutralization of other features. [...] This suggests that a grammar can limit the overall degree of markedness allowed in a set of feature specifications. [...] (Béjar and Hall 1999: 4)

Thus, if a word-form is specified for a marked member of one category, e.g. [Number:+Pl], it is more 'economical' to have it underspecified for the values of some other category, e.g. gender so that the overall markedness of the word-form remains lower than if gender is specified, too. Whether this kind of reasoning is to be taken seriously does not really matter for the purposes of this chapter; however, in Section 3 I hint at how 'markedness minimization' could be operative in the material I discuss.

Taken together with the commonly assumed markedness hierarchies for various morphosyntactic features, such as that for number stated above (cf. Greenberg 1966: Ch. 3; Battistella 1990: Ch. 3; Givón 1995: Ch. 2), the constraint generates a whole family of testable predictions concerning the set of possible and impossible neutralization patterns in the languages of the world. Interestingly enough, I am not aware of any contribution where a substantial set of these predictions would have been tested against a broad cross-linguistic sample (cf. however, a typological survey of interactions between various grammatical categories in Aikhenvald and Dixon 1998).

In a recent critical paper, Haspelmath (2006) suggests (a) that the label 'markedness' in fact covers a whole set of not always directly related notions pertaining to different levels of language and different theoretical and methodological approaches, (b) that almost all particular uses of this term may be essentially reduced to more literal and 'substantial' notions such as

'phonetic difficulty', 'length of formal expression', 'frequency in texts' etc., and (c) most importantly, that the recourse to markedness as an explanatory device in linguistics should be abolished in favour of these more basic and more directly accessible and measurable notions.

In this chapter I bring forward some counterexamples that explicitly falsify the predictions of the markedness constraint on neutralization, coming from the domain of morphological case. The empirical evidence I adduce shows that the purported relation between markedness and neutralization is at best a very non-trivial one, and that Haspelmath's claim that linguistic phenomena must be explained with recourse to more concrete notions than markedness is supported in this domain, too. In Section 3 I discuss material where case serves as the neutralizing category, while the data in Section 4 show case as the dominant category. The data discussed come mainly from Indo-European languages; however, this circumstance by no means invalidates its relevance: all the phenomena in question have emerged separately in different subgroups of the Indo-European family and neither could have been inherited from the proto-language, nor could have possibly evolved under mutual influence.

3. Case as the neutralizing category

Examples where case, in accordance with the markedness constraint, is completely or partially neutralized in the context of the marked member of some other category (most often, number) are numerous. Here I give, for illustrative purposes only, two examples from non-Indo-European languages.

In Yaqui, a Uto-Aztecan language spoken in Northern Mexico, the two cases (Direct and Oblique) are distinguished in the Singular but syncretized in the Plural (Lindenfeld 1973), see Table 1.

Table 1. Case neutralization in the Plural in Yaqui

	Sg	Pl
Direct	*misi* 'cat'	*misi-m*
Oblique	*misi-ta*	*misi-m*

In Old Georgian, oblique cases in the Plural shared the same cumulative suffix *-ta*, in contrast both to the Singular where the five cases were overtly distinguished and to the Nominative and Vocative Plural (Schanidse 1982), see Table 2.

Table 2. Case syncretism in the Plural in Old Georgian

	Sg	Pl
Nom	*k'ac-i* 'man'	*k'ac-n-i*
Erg	*k'ac-man*	*k'ac-ta*
Dat	*k'ac-s*	*k'ac-ta*
Gen	*k'ac-is*	*k'ac-ta*
Ins	*k'ac-it*	*k'ac-ta*
Adv	*k'ac-ad*	*k'ac-ta*
Voc	*k'ac-o*	*k'ac-n-o*

Turning to the data that pose more or less severe problems for the markedness constraint, let us first consider material from the Slavic languages, which, though by no means 'exotic', has been somehow disregarded by the proponents of the 'classic' markedness theory. In particular, we will see that in these languages Singular tends to show fewer overt case distinctions than Plural.

In Russian, Polish (De Bray 1980a: 265), Czech (ibid.: 62), Slovene (De Bray 1980b: 339) and other Slavic languages, nouns belonging to the so called *i*-declension systematically distinguish more case forms in the Plural than in the Singular, see Table 3 (the total number of distinct word-forms is given in the last line of this and the following tables).

Table 3. Slavic *i*-declension, 'bone'

	Russian		Polish		Czech		Slovene	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Nom	*kost'*	*kosti*	*kość*	*kości*	*kost*	*kosti*	*kôst*	*kostî*
Acc	*kost'*	*kosti*	*kość*	*kości*	*kost*	*kosti*	*kôst*	*kostî*
Gen	*kosti*	*kostej*	*kości*	*kości*	*kosti*	*kostí*	*kostî*	*kostí*
Loc	*kosti*	*kostjax*	*kości*	*kościach*	*kosti*	*kostech*	*kósti*	*kostéh*
Dat	*kosti*	*kostjam*	*kości*	*kościom*	*kosti*	*kostem*	*kósti*	*kostém*
Ins	*kost'ju*	*kostjami*	*kością*	*kośćmi*	*kostí*	*kostmi*	*kostjó*	*kostmí*
Distinct	3	5	3	4	3	5	4	5

It is clear from Table 3 that the major factor leading to this type of paradigmatic organization is the syncretism of Genitive, Locative, and Dative in the Singular; by contrast, in the Plural these cases have distinct endings. This syncretism goes back to the Common Slavic period (cf. Meillet 1934) and is due to the processes of phonological reduction that have obliterated the distinctions between the formerly non-identical endings. All

three cases were syncretized only in nouns with stable stress; nouns with mobile stress had a means to differentiate these cases (Dybo 1981: 28). The relics of this archaic pattern are still operative in Slovene and Serbo-Croatian (though the actual realization of the stress-based differentiation of cases is not identical in these languages and differs from that reconstructed for Common Slavic), but have been completely abolished not only in those languages where stress became fixed (Czech and Polish), but also in Russian where stress mobility still flourishes.

In this respect data from (literary) Serbo-Croatian (De Bray 1980b: 253–254) are of special interest. In this language, Dative, Locative and Instrumental cases have been collapsed in the Plural of all declensions, thus reducing the maximal number of distinct case forms in the plural to four. In the *i*-declension with its non-distinct Nominative and Accusative, the number of case forms in the Plural is just three. Since Serbo-Croatian, much like Slovene, shows a prosodic distinction between Locative vs. Genitive and Dative in the Singular, the latter exhibits an extra case form in comparison to the Plural. This situation clearly goes against the pan-Slavic tendency to have richer case distinctions in the Plural of the *i*-declension than in the Singular. Remarkably, however, there is a tendency to use in the Instrumental Singular of this inflection class a novel form identical to that of Genitive-Dative Singular, thus 'compensating' for the extra distinction and reducing the number of case-forms in the Singular so that it does not exceed that of the Plural, see Table 4.

Table 4. Serbo-Croatian *i*-declension

	Sg	Pl
Nom	*stvâr* 'thing'	*stvâri*
Acc	*stvâr*	*stvâri*
Gen	*stvâri*	*stvárī*
Dat	*stvâri*	*stvárima*
Loc	*stvári*	*stvárima*
Ins	*stvâri* (new form), *stvârju* (old form)	*stvárima*
Distinct	3 (4)	3

The data shown above suggest that the uneven distribution of case syncretisms between number subparadigms of the *i*-declension in the Slavic languages has led to the retention of a larger number of separate case forms in the Plural than in the Singular. This important and diachronically stable

characteristic of a whole inflection class must reflect something deeper than merely a result of an accidental phonological development.

In Czech (De Bray 1980a: 65) and Polish (ibid.: 279) we may also find instances of complete neutralization of case distinctions in the Singular alongside with their retention in the Plural, see Table 5.

Table 5. Complete neutralization of cases in Czech and Polish

	Czech		Polish	
	Sg	Pl	Sg	Pl
Nom	*paní* 'lady'	*paní*	*muzeum* 'museum'	*muzea*
Acc	*paní*	*paní*	*muzeum*	*muzea*
Gen	*paní*	*paní*	*muzeum*	*muzeów*
Loc	*paní*	*paních*	*muzeum*	*muzeach*
Dat	*paní*	*paním*	*muzeum*	*muzeom*
Ins	*paní*	*paními*	*muzeum*	*muzeami*

It is necessary to note that in Table 5 two substantially different situations are shown: whereas in Czech we are dealing with the result of a regular phonetically driven process which happened to lead to complete homophony of all case endings in the Singular of certain nouns (in other inflection classes and in different phonological environments these endings are distinct from each other), Polish demonstrates a phonologically unmotivated lack of declinability in a formally homogeneous class of borrowed lexemes. These examples show that complete neutralization in the context of the unmarked value of the dominant category is indeed possible, and that such 'unlawful' neutralizations may emerge due to quite unrelated processes.

Better retention of case distinctions in the Plural in comparison to the Singular was also characteristic of the old Germanic languages. Both in Old Icelandic (Steblin-Kamenskij 1955: 50–75) and Old High German (Jolivet and Mossé 1942: 76–117), the Plural of all declension types distinguished three case forms, viz. Nominative, Genitive (with Accusative coinciding with one of the former) and Dative, whereas in the Singular, depending on the inflection class, the number of distinct forms could range from four to one, see Tables 6 and 7.

Table 6. Case syncretism in Old Icelandic

	'arm'		'chief'		'edge'		'heart'	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Nom	*armr*	*armar*	*hersir*	*hersar*	*skǫr*	*skarar*	*hjarta*	*hjǫrtu*
Acc	*arm*	*arma*	*hersi*	*hersa*	*skǫr*	*skarar*	*hjarta*	*hjǫrtu*
Gen	*arms*	*arma*	*hersis*	*hersa*	*skarar*	*skara*	*hjarta*	*hjartna*
Dat	*armi*	*ǫrmum*	*hersi*	*hersum*	*skǫr*	*skǫrum*	*hjarta*	*hjǫrtum*
Distinct	4	3	3	3	2	3	1	3

Table 7. Case syncretism in Old High German

	'day'		'knee'		'heart'		'mother'	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Nom	*tag*	*taga*	*kneo*	*kneo*	*hërza*	*hërzun*	*muoter*	*muoter*
Acc	*tag*	*taga*	*kneo*	*kneo*	*hërza*	*hërzun*	*muoter*	*muoter*
Gen	*tages*	*tago*	*knëwes*	*knëwo*	*hërzen*	*hërzōno*	*muoter*	*muotero*
Dat	*tage*	*tagum*	*knëwe*	*knëwum*	*hërzen*	*hërzōm*	*muoter*	*muoterum*
Ins	*tagu*	*tagum*	*knëwe*	*knëwum*	*hërzen*	*hërzōm*	*muoter*	*muoterum*
Distinct	4	3	3	3	2	3	1	3

It is also worth noting that the paradigms of OHG words *kneo* 'knee' and *muoter* 'mother' display yet another kind of peculiar neutralization, viz. lack of a number distinction in the context of the putatively unmarked values of the category of case. Nominative and Accusative, in contrast to the oblique cases, are identical in both numbers. Old English, to which I now turn, exhibited the same pattern, see Plank (1987) and Section 4.

In Old English (Smirnickij 1955: 213–244), where the process of disintegration of declension has gone farther than in other Germanic languages of that period, the situation was somewhat more complicated. Both number subparadigms disposed of a considerable number of case syncretism patterns (see Plank 1990), and the only form which was never homonymous with any other case form was the Dative Plural. The norm was for the Singular to exhibit no more distinct case forms than the Plural;[4] see Table 8.

Table 8. Case syncretism in Old English

	'ship'		'care'		'friend'		'sister'	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Nom	*scip*	*scipu*	*caru*	*cara, care*	*wine*	*wine, winas*	*sweostor*	*sweostor*
Acc	*scip*	*scipu*	*care*	*cara, care*	*wine*	*wine, winas*	*sweostor*	*sweostor*
Gen	*scipes*	*scipa*	*care*	*cara, carena*	*wines*	*winia, wina*	*sweostor*	*sweostra*
Dat	*scipe*	*scipum*	*care*	*carum*	*wine*	*winum*	*sweostor*	*sweostrum*
Distinct	3	3	2	2 (3)	2	3	1	3

If we try to find a common rationale for the above peculiar distribution of case syncretisms across Singular and Plural numbers in the Slavic and Germanic languages, the most obvious one seems to lie in the fact that Plural subparadigms in both groups of languages exhibit a much greater degree of morphological unification than Singular ones. This unification is reflected both in a greater similarity of desinences across different inflectional classes in the Plural than in the Singular, and in the greater mutual affinity of more abstract paradigmatic structures, such as patterns of homonymy between different cells of a paradigm.

The tendency to reduce the number of different inflection classes in the Plural has obviously resulted in the reduction of the number of possible syncretisms[5] (and thus in the retention of more overt case distinctions) in comparison to the Singular, which, at least in the languages discussed here, has been more or less successfully resisting paradigmatic unification (cf. for instance Russian, where at least three fairly different inflectional classes are distinguished in the Singular, but no such diversity is observed in the Plural). Moreover, it is tempting to speculate that the trend towards greater unification of the Plural subparadigms might be a consequence of the need to 'minimize' markedness – in so far as it is less marked for a word form to bear just values of number and case (and probably gender) than to be in addition explicitly specified for a more or less arbitrary declension class. Thus it is possible that here we are dealing with a well-behaved instance of neutralization; i.e., values of a category (here, inflection class) are partially or wholly neutralized in the context of the marked value of another category (here, number), but not in the context of the unmarked value of the same category. Indeed, none of the languages discussed shows less inflection class distinctions in the Singular than in the

Plural. Somewhat paradoxically, we must conclude that 'canonical' neutralization of the values of one morphological feature (inflection class) may lead to a rather 'non-canonical' behaviour of another morphological feature (case); such trade-offs are, however, quite widespread in the languages of the world.

Moving to Asia, we find quite a number of counterexamples to the markedness constraint on neutralization in the Iranian languages. Thus in two Pamir languages, viz. Wakhi (Paxalina 1975: 41–42) and Sarykoli (Paxalina 1966: 21), overt opposition between the Direct and Oblique cases on nouns is found only in the Plural, while in the Singular the case forms are identical, see Table 9.

Table 9. Case neutralization in the Pamir languages

	Wakhi		Sarykoli	
	Sg	Pl	Sg	Pl
Direct	*xūn* 'house'	*xūn-išt*	*wern* 'ram'	*wern-xɛyl*
Oblique	*xūn*	*xūn-əv*	*wern*	*wern-ef*

An important difference between this case and the ones found in the Slavic and Germanic languages lies in the fact that in Wakhi and Sarykoli the case syncretism in the Singular is not restricted to a particular inflection class but is shared by all nominals except pronouns. The diachronic origins of this situation are not very clear (see Molčanova 1975: 222–223); however, one should bear in mind that, according to the very same markedness theory, Singular endings tend to have less phonological material than the Plural ones, and, as a consequence, Plural forms may be more resistant to phonetic erosion than the Singular ones.

An interesting pattern involving gender in addition to number is found in Chali, a Central-Iranian dialect (Yar-Shater 1969: 75–76). In the Plural of both genders, Direct and Oblique cases are expressed by distinct suffixes; however, in the Singular the case opposition manifests itself overtly with Masculine nouns only, the Feminine ones showing case syncretism, see Table 10.

Table 10. Case syncretism in Chali

	Masculine		Feminine	
	Sg	Pl	Sg	Pl
Direct	*bar* 'door'	*bar-e*	*barra* 'spade'	*barr-e*
Oblique	*bar-e*	*bar-ō*	*barra*	*barr-ō*

Two remarks are in order here. First, the situation in Chali seems to constitute an intermediate diachronic step between a more conservative system found in a closely related Eshtehardi dialect (Yar-Shater 1969: 79), showing no case syncretism across all numbers and genders, and a more advanced system found in the Takestani dialect (ibid.: 78) with no case opposition in the Plural at all. Second, one may see that in the Plural of Chali nouns there is no overt distinction between the Masculine and Feminine genders, the respective endings being identical for both types of nouns. Thus, one might hypothesize that the lack of case neutralization in the Plural is in a sense 'compensated for' by the neutralization of genders.

An explanation involving a 'trade-off' between different types of neutralization leading to the overall reduction of markedness is hardly possible for the following data, coming from Burushaski, an isolate language of the Hindukush region (Berger 1974: 20–21; Klimov and Edelman 1970: 41–42). Nouns and pronouns in Burushaski fall into four genders (Masculine, Feminine, and two genders for inanimate nouns) and normally distinguish two cases, viz. Direct and Oblique, except for the Feminine which 'splits' the general Oblique case into distinct Ergative and Genitive, see Table 11.

Table 11. Case syncretism in Burushaski

	Masculine	Neuter	Feminine
Dir	*hiles* 'boy'	*dan* 'stone'	*gus* 'woman'
Erg	*hiles-e*	*dan-e*	*gus-e*
Gen	*hiles-e*	*dan-e*	*gus-mo*

According to the predictions of the markedness constraint on neutralization, we would expect a situation opposite to that actually found in Burushaski, viz. more case distinctions in the unmarked genders and syncretism in the marked one, rather than vice versa (that Feminine in Burushaski is a marked gender is evidenced on purely language internal grounds by the very fact that it is opposed to the other three genders taken as a whole).

4.   Case as the dominant category

Instances of case being neutralized in the context of certain values of other categories, some of which were discussed in the previous section, are far less numerous than the opposite ones, where a certain value of case triggers neutralization of another category. One of the obvious examples comes from the Indo-European languages (cf. Russian in Section 2), where in the

oblique cases the distinction between Masculine and Neuter genders is absent. Outside the Indo-European family, one finds a neutralization of numbers in the Oblique cases in Chukotko-Kamchatkan languages, see Table 12 for a partial paradigm from Koryak (Žukova 1972: 101).

Table 12. Number syncretism in Koryak

	Sg	Du	Pl
Absolutive	*kaiŋə-n* 'bear'	*kaiŋə-t*	*kaiŋ-u*
Ergative		*kaiŋ-a*	
Locative		*kaiŋə-k*	
Dative		*kaiŋə-n*	
Allative		*kaiŋə-təŋ*	
Translative		*kaiŋə-pəŋ*	
Ablative		*kaiŋə-ŋqo*	
Comitative		*ɣa-kaiŋ-a*	

Let us now go back to Old High German words for 'knee' and 'mother'; see Table 7. We have seen that the 'direct' cases (Nominative and Accusative), which are usually considered to be unmarked with respect to the 'oblique' cases (Genitive and Dative) show a pattern of number neutralization that is unexpected given the markedness constraint. Such a situation was also found in Old English (see Plank 1987; this paper also gives an overview of number neutralization in some other Indo-European languages) and marginally in Gothic (Streitberg 1920: 112–113). In Old High German and Gothic (but not in Old English, see below) such patterns are rather sporadic and clearly constitute a result of phonological change, which has obliterated the difference between the once distinct endings. However, if we go back to Central Asia, we find there quite systematic instances of neutralizations in the context of the putatively unmarked case value.

In several Indo-Iranian languages belonging to different genetic subgroups and geographical areas, e.g. Nuristanian Kati (Edelman 1983: 60–61) and Dardic Kalasha (ibid.: 204) spoken in the Hindukush region of Afghanistan and Pakistan, and West-Iranian Kurmanci spoken in Turkey and Iran (Cukerman 1986: 72), we find neutralization of number and sometimes also gender in the context of the Direct case, alongside with a stable retention of number contrast in the Oblique case; see Table 13 for Kati paradigms and Table 14 for Kalasha and Kurmanci[6] paradigms.

Table 13. Number and gender syncretism in Kati

	Sg	Pl	Sg	Pl
Direct	*ǰuk* 'girl (fem.)'		*manči* 'man (masc.)'	
Oblique	*ǰuk-a*	*ǰuk-o*	*manč-e*	*manč-o*

Table 14. Number syncretism in Kalasha and Kurmanci

	Kalasha		Kurmanci	
	Sg	Pl	Sg	Pl
Direct	*mōč* 'man'		*k'itêb* 'book'	
Oblique	*mōč-es*	*mōč-en*	*k'itêb-ê*	*k'itêb-an*

Although it is true that the only systematic examples of neutralization triggered by the unmarked case value are found in the Indo-Iranian languages, they can be explained neither by genetic nor by areal factors. Indeed, since the history of this linguistic group is relatively well documented, it is obvious that the languages in question could not have inherited this kind of syncretism from their common ancestor; on the other hand, any contact influence between Kurmanci, situated in the Western end of the Indo-Iranian area, and the languages of Hindukush is highly improbable, too. Thus the only plausible way to explain the attested patterns is to assume an independent parallel development. The process responsible for the emergence of the peculiar syncretisms discussed here, as well as for the majority of other morphological changes in the Indo-Iranian languages during the last two millennia, is certainly phonological reduction and erosion, which have led to the eventual loss of monosyllabic inflectional morphemes (see Molčanova 1975: 220–222). Since the Direct case is less 'marked' than the Oblique case, it is only natural that its endings have less phonological weight, hence being more susceptible to loss through phonetic erosion.

An example similar to the just discussed Indo-Iranian one was attested in Old French (Foulet 1928: 45; Pope 1934: 311–312), where the definite article did not distinguish number in the Direct case. Interestingly, no ambiguity usually arose since the article always combined with nouns, and most of these had paradigms which were syncretistic in other ways, so that the article and the noun jointly supplied all the information about the values of number and case of the phrase; see Table 15.

Table 15. Article and noun in Old French

	Sg	Pl
Direct	*li murs* 'the wall'	*li mur*
Oblique	*le mur*	*les murs*

Moreover, in Old French a paradigmatic type existed, where not only number values were neutralized in the context of the Direct case, but also case values were syncretized in the context of the Singular (Pope 1934: 311), cf. Table 16. Similar paradigms exist also in such Indo-Iranian languages as Dardic Tirahi (Edelman 1983: 193). Paradoxically, they conform to the predictions of markedness theory: that member of the paradigm which is the most marked 'semantically' (Oblique + Plural) is the most marked morphologically, being the only one to receive an overt ending.

Table 16. Case and number syncretism in Old French

	Sg	Pl
Direct	*pedre* 'father'	*pedre*
Oblique	*pedre*	*pedre-s*

Finally, if we look more closely at Old English, we find that in this language number neutralizations "indeed are about as frequent as case neutralizations" (Plank 1987: 187), and are attested in all cases. However, the frequency and systematic nature of number neutralization increases in the following progression (ibid.: 187–188): Genitive (only one declension type) < Dative (several declension types, including adjectives and demonstrative pronouns) < Accusative (several declension types, including nouns, adjectives and pronouns) < Nominative and Accusative as a group (a whole array of nouns and adjectives of different declension types). Though number syncretism involving just the Nominative by itself is extremely rare in Old English, it is clear that the 'unmarked' direct cases in this language are more susceptible to number neutralization than the 'more marked' oblique cases.

5. Discussion and conclusion

Though undoubtedly infrequent, the patterns of syncretism reported in this article are, in my opinion, very instructive. They clearly show that the explanations for different paradigmatic structures attested in the languages of

the world lie not in the rather abstract notions like relative 'markedness' of the values of grammatical categories but, among other things, in the nature of forces driving language change. Turning back to the Indo-Iranian case discussed in Section 4, we can draw the following 'causal chain' which may have led to the number syncretism in the Direct case; see Figure 1.

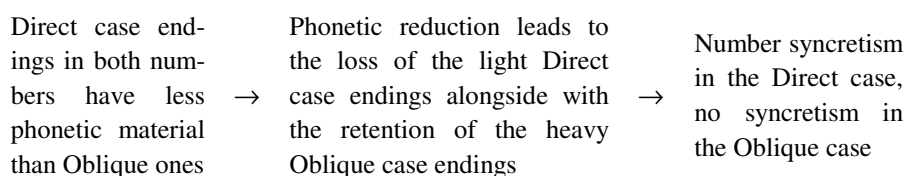| Direct case endings in both numbers have less phonetic material than Oblique ones	→	Phonetic reduction leads to the loss of the light Direct case endings alongside with the retention of the heavy Oblique case endings	→	Number syncretism in the Direct case, no syncretism in the Oblique case

Figure 1. Emergence of number syncretism in Indo-Iranian

Of course, one may, if so inclined, add a clause like 'Direct case is less marked than Oblique case' to the left of Figure 1, but it is not obvious whether such a move is at all meaningful. That in all ancient Indo-European languages the case endings of Nominative and Accusative in all numbers have been shorter than those of the oblique cases and that this distribution goes back to the proto-language is a well-known fact (see, e.g., Brugmann 1904: 373–413). But the reasons for this distribution are perhaps to be sought in the rather obscure history of the Proto-Indo-European case system rather than in general theoretical constructs.

Indeed, if we look at yet another Indo-Iranian language, Sarykoli, we see that the Direct Plural ending *-xɛyl* is much longer and heavier than the Oblique Plural ending *-ef*, which is certainly at odds with the expectation based on the relative 'markedness' of the cases in question. The explanation for this situation is, however, quite straightforward (see Molčanova 1975: 222–223): the Direct Plural ending is a relatively young morpheme stemming back to a suffix of *nomina collectiva* introduced into the paradigm probably in order to get rid of a situation when the only overtly marked value was Oblique Plural; the latter is expressed by the very old and phonetically eroded ending directly reflecting the Proto-Indo-Iranian Dative-Ablative Plural *-*Vbhyas*. Thus, in order to elucidate the motivations of this paradigm, it is necessary to look at the relative chronology rather than relative 'markedness'.

Similarly, if we try to make sense of the tendency to distinguish more cases in the Plural than in the Singular at least in some of the productive inflectional classes observed in the Slavic and Germanic languages (Section 3), we must take into account the fact that in these languages the Plural subparadigms have undergone paradigmatic unification to a much

greater extent than the Singular ones. The causes of this situation, however, are rather to be sought not in the mysterious 'markedness' of the Plural, but in the fact that the Plural paradigms in all old Indo-European languages have been more unified than the Singular ones since prehistoric times. If we consider the putative ways in which paradigmatic unification may proceed, it seems reasonable to assume that native speakers are more prone to confuse those endings that are phonologically similar, rather than those that share little or no phonological material. Thus, in the course of language change, unification more easily affects those parts of the paradigm that are already unified to some extent. The question concerning the ultimate origins of such an uneven distribution of affixes across different parts of the paradigm in Proto-Indo-European – in particular the reasons why in the Plural greater formal similarity was observed between markers with the same value for case but different values for inflection class rather than vice versa – is certainly a fascinating one, but I doubt whether answering it in terms of markedness is any better than pleading ignorance.

Moreover, the data discussed here show that even if we take the relative markedness of different morphosyntactic values wholly seriously, it turns out that even those historical developments which conform to predictions of the markedness theory (greater unification of inflectional classes in the Plural than in the Singular, greater phonetic erosion of shorter endings of 'unmarked' cases that of the longer ones of the 'marked' cases etc.) may quite often lead to structures which violate the markedness constraint on neutralization. All this suggests that looking on particular motivations of particular linguistic structures is often more instructive than trying to explain them by aprioristic global theories.

To recapitulate, I would like to stress once again that the goal of this chapter was to bring forward a collection of facts that may at first glance seem to be more or less disparate and weird but which, in my opinion, form a somewhat homogeneous picture. The data I have discussed, especially if further supported by material I am unaware of, indicates that the typological space of possible syncretisms involving morphological case (either as a neutralizing category or as a dominant category) is much broader than has been assumed by the proponents and advocates of the markedness approach to neutralization. I hope that the future typological and theoretical discussions of neutralization will not ignore the facts presented in this paper, and that non-aprioristic and non-simplistic explanations for them will be proposed.

Notes

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2. Note that syncretism is a broader term covering instances where the number of overtly distinguished values of the neutralizing category is higher than zero; cf. again Russian adjectives, where in the Nominative all three genders are distinct, while in the oblique cases Masculine and Neuter fall together to the exclusion of the Feminine: *bol'šogo doma / zadanija* 'of a large house / assignment (Genitive)' vs. *bol'šoj knigi* 'of a large book (Genitive)'.

3. Ironically, the very assumption that Singular is 'cognitively' unmarked with respect to the Plural has been seriously challenged recently in the formal semantic literature, cf. for instance Sauerland, Anderssen and Yatsushiro (2005). Similarly, the status of the Nominative as the 'unmarked' member of the category of case is far from being unproblematic (see König 2006).

4. I disregard the Instrumental case, relics of which were found in the declension of adjectives.

5. It is interesting to consider some statistical data from four Slavic languages reported in Hamilton (1974). In Czech, Polish, Russian and Serbo-Croatian, the number of case syncretisms attested in the Singular subparadigm is considerably higher than that found in the Plural. Moreover, neither of these languages has reduced the number of case syncretisms in the Singular in comparison to the Common Slavic, while in Czech and Polish this number has even increased. By contrast, in the Plural subparadigm the number of case syncretisms has been reduced in all of the languages but Czech.

6. It is necessary to note that in some other Kurdish dialects, e.g. in Suleimani and Mukri (MacKenzie 1961: 58), the number syncretism of the kind attested in Kurmanci has been ousted by means of extending the original Oblique Plural ending *-ān* to cover all Plural contexts regardless of case.

References

Aikhenvald, Alexandra, and Robert M.W. Dixon
  1998   Dependencies between grammatical systems. *Language* 74 (1): 56–80.
Aissen, Judith
  1999   Markedness and subject choice in optimality theory. *Natural Language and Linguistic Theory* 17 (4): 673–711.

Andrews, Edna
    1990   *Markedness Theory: The Union of Asymmetry and Semiosis in Language*. Durham (NC): Duke University Press.

Baerman, Matthew, Dunstan Brown, and Greville G. Corbett
    2005   *The Syntax-Morphology Interface. A Study of Syncretism*. Cambridge: Cambridge University Press.

Battistella, Edwin L.
    1990   *Markedness: The Evaluative Superstructure of Language*. New York: SUNY Press.
    1996   *Logic of Markedness*. Oxford: Oxford University Press.

Béjar, Susana, and Daniel Currie Hall
    1999   Marking markedness: The underlying order of diagonal syncretisms. In *Proceedings of the 15th Eastern States Conference on Linguistics*, 1–12. Ithaca: Cornell University Press.

Berger, Hermann
    1974   *Das Yasin-Burushaski (Werchikwar). Grammatik. Texte. Wörterbuch*. Wiesbaden: Otto Harrassowitz.

Bierwisch, Manfred
    1967   Syntactic features in morphology: General principles of so-called pronominal inflection in German. In *To Honor Roman Jakobson. Essays on the Occasion of His Seventieth Birthday*. Vol. I, 239–270. The Hague, Paris: Mouton.

Boeder, Winfried
    1976   Morphologische Kategorien. In *Grammatik. Akten des 10. Linguistischen Kolloquiums,* Kurt Braunmüller, Wilfried Kürschner (eds.). Bd. 2, 117–126. Tübingen: Max Niemeyer Verlag

Brugmann, Karl
    1904   *Kurze vergleichende Grammatik der indogermanischen Sprachen*. Strassburg: Trübner.

Croft, William C.
    1990   *Typology and Universals*. Cambridge: Cambridge University Press.

Cukerman, Isaak I.
    1986   *Xorasanskij kurmandži.* [The Kurmanci of Khorasan]. Moscow: Nauka.

De Bray, R.G.A.
    1980a   *Guide to the West Slavonic Languages.* 3rd ed. Columbus (Ohio): Slavica Publishers.
    1980b   *Guide to the South Slavonic Languages.* 3rd ed. Columbus (Ohio): Slavica Publishers.

Dixon, Robert M.W.
    1979   Ergativity. *Language* 55 (1): 59–138.

Dybo, Vladimir A.
    1981   *Slavjanskaja akcentologija*. [Slavic Accentology]. Moscow: Nauka.

Eckman, Fred R., Edith A. Moravcsik, and Jessica R. Wirth (eds.)
    1983   *Markedness*. New York; London: Plenum Press.
Edelman, Dzhoi I.
    1983   *The Dardic and Nuristani Languages*. Moscow: Nauka.
Foulet, Lucien
    1928   *Petite syntaxe de l'ancien français*. 3-ème éd. revue. Paris: Champion.
Givón, Talmy
    1995   *Functionalism and Grammar*. Amsterdam, Philadelphia: John Benjamins.
Greenberg, Joseph H.
    1966   *Language Universals*. The Hague etc.: Mouton.
Hamilton, W.S.
    1974   Deep and surface changes in four Slavic noun systems. *Linguistics* 127: 27–74.
Haspelmath, Martin
    2006   Against markedness (and what to replace it with). *Journal of Linguistics* 42 (1): 25–70.
Hjelmslev, Louis
    1935–37 *La catégorie des cas. Étude de grammaire générale*. P. I. København, 1935; P. II. København, 1937.
Jakobson, Roman
    1932   Zur Struktur der russischen Verbums. In *Charisteria Guilelmo Mathesio quinquagenario a discipulis et Circuli Linguistici Pragensis sodalibus oblata*, 74–84. Prague.
    1936   Beitrag zur allgemeinen Kasuslehre. Gesamtbedeutungen der Russischen Kasus. *Travaux du cercle linguistique de Prague* 6: 240–288.
Jolivet, Alfred, and Fernand Mossé
    1942   *Manuel de l'allemand du Moyen Âge des origines au XVIe siècle*. Aubier, Paris: Éditions Montaigne.
Kibrik, Aleksandr E.
    1997   Beyond subject and object: Toward a comprehensive relational typology. *Linguistic Typology* 1 (3): 279–346.
Klimov, Georgij A., and Dzhoj I. Edel'man
    1970   *Jazyk burušaski*. [The Burushaski Language]. Moscow: Nauka.
König, Christa
    2006   Marked nominative in Africa. *Studies in Language* 30 (4): 705–782.
Lindenfeld, Jacqueline
    1973   *Yaqui Syntax*. Berkeley: University of California Press.
MacKenzie, David Neal
    1961   *Kurdish Dialect Studies.* Vol. 1. London: Oxford University Press.

Meillet, Antoine
    1934   *Le slave commun*. 2-ème éd. Paris: Champion.
Molčanova, E.K.
    1975   Kategorija čisla [The category of number]. In *Opyt istoriko-
            tipologičeskogo issledovanija iranskix jazykov* [An Historical-
            Typological Study of the Iranian Languages], V.S. Rastorgujeva
            (ed.), Vol. 2, 200–249. Moscow: Nauka.
Moravcsik, Edith A., and Jessica R. Wirth
    1983   Markedness – An overview. In Eckman, Moravcsik, and Wirth
            (eds.), 1–12.
Paxalina, Tatiana N.
    1966   *Sarykol'skij jazyk* [The Sarykoli Language]. Moscow: Nauka.
    1975   *Vakhanskij jazyk* [The Wakhi Language]. Moscow: Nauka.
Plank, Frans
    1987   Number neutralization in Old English: Failure of functionalism? In
            Explanation and Linguistic Change, Willem Koopman, Frederike
            van der Leek, Olga Fischer, Roger Eaton (eds.), 177–238. Amster-
            dam, Philadelphia: John Benjamins.
    1990   Paradigm arrangement and inflectional homonymy: Old English case.
            In *Papers from the 5th International Conference on English Histori-
            cal Linguistics*, Sylvia M. Adamson, Vivien A. Law, Nigel Vincent,
            Susan Wright (eds.), 379–406. Amsterdam, Philadelphia: John Ben-
            jamins.
Pope, Mildred K.
    1934   *From Latin to Modern French with especial consideration of Anglo-
            Norman. Phonology and Morphology*. Manchester: Manchester Uni-
            versity Press.
Sauerland, Uli, Jan Anderssen, and Kazuko Yatsushiro
    2005   The Plural is semantically unmarked. In *Linguistic Evidence*. S. Kep-
            ser, M. Reis (eds.), 413–434. Berlin: Mouton de Gruyter.
Schanidse, Akaki
    1982   *Altgerogisches Elementarbuch. Teil I. Grammatik der Altgeor-
            gischen Sprache*. Tbilissi: Tbilisis universit'et'is gamomcemloba.
Silverstein, Michael
    1976   Hierarchy of features and ergativity. In *Grammatical Categories in
            Australian Languages*, R. M. W. Dixon (ed.), 112–171. Canberra:
            Australian Institute of Aboriginal Studies.
Smirnickij, Aleksandr I.
    1955   *Drevneanglijskij jazyk* [A Grammar of Old English]. Moscow:
            Inostrannaja literatura i jazyki.
Smith-Stark, T. Cedric
    1974   The plurality split. In *Papers from the 10th Regional Meeting of the
            Chicago Linguistics Society*, 657–671.

Steblin-Kamenskij, Mixail I.
    1955   *Drevneislandskij jazyk* [A Grammar of Old Icelandic]. Moscow: Inostrannaja literatura i jazyki.
Streitberg, Wilhelm
    1920   *Gotisches Elementarbuch*. 5. & 6. Aufl. Heidelberg: Carl Winter.
Trubetzkoy, Nikolay
    1939   *Grundzüge der Phonologie*. Travaux du Cercle Linguistique de Prague 7, Prague.
Yar-Shater, Eshan
    1969   *A Grammar of Southern Tati Dialects*. (Median Dialect Studies, 1.) The Hague, Paris: Mouton.
Žukova, Alevtina N.
    1972   *Grammatika korjakskogo jazyka*. [A Grammar of Koryak]. Leningrad: Nauka.