BRILL

Iran and the Caucasus 14 (2010) 287-322

Evolution of Case in Ossetic*

Oleg Belyaev
Moscow State University

Abstract

Ossetic sets itself apart from the other New Iranian languages by having a relatively elaborate system of nine cases. Since most of them are relatively late innovations, and only four cases (Nom., Gen, Abl., and Iness.) can be traced back to Proto-Iranian, many scholars tend to ascribe the development of the case system to Caucasian influence. The exact nature of this influence, however, has never been demonstrated. The aim of this paper is, first, to not only reconstruct the etymologies of Ossetic cases, but also to provide a chronology of how the case system developed. The second aim pursued here is to give a systematic comparison of the case system of Ossetic with those of the neighbouring languages and to determine if there is any external influence on the case system and, if so, what languages this influence came from. I conclude that Ossetic developed from a case system identical to those of Khotanese and Sogdian towards the present state under the influence of contact with Georgian and, later, with Turkic and Vaynakh languages. In the process of the discussion, I also argue that two new cases, the Directive and Regressive, are undergoing grammaticalisation in contemporary Ossetic.

Keywords

Ossetic, North-East Iranian languages, Georgian, Vaynakh Languages, Case, Internal Reconstruction, Language Contact, Areal Linguistics

§1. Introduction

Compared to other modern Eastern Iranian languages, which usually have case inventories ranging from two to four cases, Ossetic has a strikingly elaborate system of nine cases (eight in Digor). However, even

* This research is supported by the Russian Foundation for Humanities, grant No. 09-04-00168a. I thank Jost Gippert, Agnes Korn, and Shahar Shirtz for their valuable comments on some ideas contained in this paper. I am grateful also to Alice Harris for providing me with her work on Georgian case morphology, as well as to Madina Darchieva, Zalina Dzuceva, Zarina Dobaeva and other native speakers of Ossetic who were supportive during my field trips.

 DOI: 10.1163/157338410X12743419190269

though the number of cases is comparable to that of the Old Iranian languages (eight cases in Avestan and Old Persian), they do not functionally correspond to the Proto-Iranian cases, and at least the Superessive and Comitative have been uncontroversially analysed since Miller (1882) and Abaev (1949) as being derived from postpositions or adverbs. Other cases, while sometimes continuing older prototypes, have been thoroughly reanalysed both in their form and meaning, leading to a fully agglutinative nominal paradigm. Of all the Indo-European languages, a similar change has only taken place in Armenian, albeit on a much smaller scale.

This radical restructioning of the nominal inflection, unseen in any other Indo-European language, has been attracting the attention of scholars for more than a century since Miller's (1882) pioneering study. Numerous works on etymology have appeared, most of which are mutually incompatible in their interpretations both of the origins of individual case endings and of the history of Ossetic inflection in general. Many of these works derive Ossetic cases directly from PIr. prototypes, without any attempt to reconstruct the dynamic of the development of the case system. Such a reconstruction, however, is very important for determining the common innovations that Ossetic shares with other Iranian languages, the point of divergence of Ossetic in terms of its historical development and, eventually, the place of Ossetic in the Iranian group.

The striking difference of the case systems of Ossetic and other Iranian languages has also led many researchers to the conclusion that it is the result of heavy contact with neighbouring Caucasian languages. This contact hypothesis was first formulated in Abaev 1949. This influential work started a whole tradition of research where "Caucasian influence" on Ossetic has been taken for granted by most scholars, but it was never explicitly demonstrated what languages exactly influenced Ossetic, and what the extent of this influence was. I will return to this problem below.

The aim of this paper is twofold. Firstly, I propose a reconstruction of the development of the Ossetic case system mostly based on known etymologies and on internal idiosyncrasies of the case morphology of the language. This reconstruction aligns well with linguistic and historical data on the evolution of Iranian languages and helps to place Ossetic in a wider context of this language family.

My second aim is to determine whether there was any external influence on the development of case in Ossetic, and, if so, exactly what languages this influence came from, what its extent was, and which in-

novations have resulted from it. This is done by a careful comparison with North-West Caucasian, North-East Caucasian, South Caucasian, and Turkic languages, which have historically been in contact with Ossetic.

§2. Ossetic: an overview

§2.1. *General Information on Ossetic*

Ossetic is a North-East Iranian language spoken by about 500,000 people in the Republic of North Ossetia, Russia, and in the South Ossetia, in Transcaucasia. There are two main dialects: Iron, spoken in the east of North Ossetia and in South Ossetia, and Digor, spoken in the west of South Ossetia. These dialects differ considerably in terms of both phonology and morphology. Iron is the base for the literary language, while Digor is, in most cases, the more archaic of the two.

Some researchers (Axvlediani 1960: 116, Gershevitch 1998) also consider Kudar (alternatively called Tual(lag)), one of the varieties spoken in South Ossetia, to be a separate dialect, but its differences from Iron are few and are mostly restricted to morphophonology.

Modern Ossetic is descended from the language of the Alans, a Scytho-Sarmatian tribe, which migrated from Central Asia to the lands north and east of the Black Sea in the beginning of the Christian Era (Thordarson 2009b). At the end of the 4th century A.D., the Alans were split into two groups—"European" and "Caucasian"—by the invading Huns. In about the 8th century A.D., the Caucasian Alans created a kingdom in the North Caucasian lowlands, which remained a dominant power in the region, having diplomatic and cultural ties to Byzantium and Georgia, until the invasions of the Mongols and the Timurids in the 13th–14th centuries, which put an end to Alan statehood and forced the survivors into the mountain ravines (Abaev/Bailey 1985).

It is evident, therefore, that the prehistory of Ossetic is characterised by close contacts with the speakers of the languages of different groups. Originally, in Central Asia, Ossetic developed together with other North-Eastern Iranian languages. During the period of the Alan kingdom, close political and cultural contacts with Georgia are attested in historical sources. For example, the husband of Queen Tamar, David Soslan, was an Alan. After the Mongol and Timurid invasions, the Ossetians were in contact with Kabardian and the Turkic tribes in the west, and with Nakh peoples in the east. Contacts with the speakers of the South Caucasian languages also persisted, especially among South Ossetians.

As far as etymology and internal reconstruction are concerned, this paper is based on both Iron and Digor data. According to tradition, when not otherwise noted, the Iron form is given first, separated by a

slash from the Digor form. The functions of the cases, however, have only been studied in detail for Iron, and the reader should bear in mind that the situation in Digor can be considerably different. Unsourced examples are from fieldwork carried out in North Ossetia in 2009-2010.

§2.2. *Approaches to the Origin of Case in Ossetic*

Generally, approaches to the etymology of case in Ossetic can be divided into two categories:

1. Some of the cases in Ossetic are inherited from PIr., while others are innovated from postpositions and other elements. This is the view of most scholars, among them Miller (1882), Vogt (1944), Kulaev (1957), Weber (1980), Isaev (1987), and Cheung (2008).

2. During the Pre-Proto-Ossetic period, the case system was first radically reduced to a two-case opposition of Nominative and Oblique (like that of most modern Iranian languages). All other cases were then newly innovated from postpositions attached to the Oblique. The old Oblique became the modern Ossetic Genitive. This view is advocated by Testen (1996) and Kim (2003). Abaev (1949: 99, 130) also seems to have favoured this view.

There is no doubt that the Ossetic case system has developed from a somewhat reduced version of the PIr. case system, which is the viewpoint of all scholars who are proponents of the first view. But there is hardly enough evidence to support the second, radical approach. Among the primary objections are the following:

1. It is hardly possible to explain the idiosyncrasies in pronominal inflection if we take the view that Pre-Proto-Ossetic had only two cases. Note the *-m-* in the following forms: Dat. *amăn*, Abl. *amăj,* Iness. *am/amı*. Especially of note is the Ablative, which, in Kim's view, is derived from PIr. **hačā* used as postposition. Notwithstanding that this development is phonetically impossible for independent reasons (cf. Cheung 2008: 93), there is also no way to explain the occurrence of *-m-* between the stem *a-* and the case marker *-ăj* if the new case has only developed after the loss of all case distinctions (the normal epenthetic consonant in Ossetic is *j*).

2. To explain the differences in pronominal inflection, Kim (2003: 45) assumes that the pronouns maintained more cases than nouns for some time, reflecting their often conservative character. This can be compared to the situation in Modern Eastern Armenian, where the dative has merged with the genitive in nouns but remains distinct in pronouns (Dum-Tragut 2009: 83, 125). Yet, it is hardly possible that while PIr. cases in nouns were being replaced by postpositions, pro-

nouns continued to preserve the old inflection. Note again that forms, like **amăj* cannot be regularly derived from pronoun + **hača*. Finally, Kim (ibid.: 45) assumes that *-m-* is part of "a distinctive pronominal suffix *-e*" of which the vocalic part "disappears after vowels", the same suffix that is found in Digor adnumerative forms (see below). This is an unfounded assumption, since it leaves two points unexplained: 1) why there would be pronominal *-e(m)-* in Digor adnumerative forms; and 2) why would the same suffix be present (albeit underlyingly) in demonstrative pronouns. In my opinion, a far better explanation would be to provide PIr. etymologies for the forms of the demonstrative pronouns (see below), and to analyse the *-e(m)-* in adnumerative forms to be the continuation of the pronoun **a̯i-* used postpositively[1] (this pronoun is also retained in Digor *je*—cf. Thordarson 1989: 472). This explains the idiosyncrasies, since the pronoun **a̯i-* inflected in the same way as **a̯u-* and **a-*.

3. Finally, Kim's argument rests on the assumption that the stress in Proto-Ossetic operated on the basis of a Rhythmic Law almost identical to that of Sogdian (ibid.: 52 et passim). According to Cheung (2008: 87), this assumption is untenable, since it would not explain the apocope of all final vowels except **-ā(h)* and **-a̯i* and the secondary loss in Iron of the final *-ă*, which derives from **-ā(h)*. The "Rhythmic Law-like" accent in Iron, Cheung concludes, "cannot be but of secondary origin".

Therefore, Kim's account must be rejected, even though it is, to my knowledge, the only publication on Ossetic case that tries to reconstruct a relative chronology of how the system developed. Most other publications devoted to the case system derive modern Ossetic forms directly from PIr. prototypes. A partial exception is Cheung 2008, where some intermediate phases are reconstructed, and several claims are made with regard to the time of the development of the individual case markers. Cheung 2008 is also notable in that it not only reconstructs phonetically sound prototypes for Ossetic cases, but also strives to make this reconstruction semantically and typologically plausible. Nevertheless, an integral reconstruction is beyond the scope of that research, and although I will be basing most of the etymological discussion on its data, the reconstruction I provide is not based on any prior work.

[1] This is certainly an uncommon use of the demonstrative pronoun, but there seems to be no other way for pronominal endings to end up after nominal stems. On the other hand, the category of adnumerative itself is a very rare phenomenon, so the mechanisms of its grammaticalisation have not been sufficiently studied.

§2.3. *Areal Approaches to the Ossetic Case System*

The earliest works on Ossetic starting from the 19th century do not contain any claims of "areal influence" of any kind on Ossetic. The first scholar to argue for Caucasian influence on Ossetic was Vasilij Abaev. This claim was first published in Abaev 1949, where many different aspects of Ossetic grammar, including the case system, are analysed from an areal standpoint, representing influence of a "Caucasian substratum". As far as case is concerned, Abaev's work is almost entirely devoted to comparison with Georgian. In this regard, he makes the crucial point that the number of cases in contemporary Georgian is much higher than is traditionally believed, and that the Ossetic case system must be synchronically compared to this "enlarged" Georgian case system, and not with the eight-case system, which is essentially that of Old Georgian (see §3.4.1 below). Abaev himself, however, is not consistent in this approach; for example, while he finds exact morphological correspondences for the Ossetic Genitive, Dative, Inessive, and Superessive cases in modern Georgian, he compares the Ossetic Ablative with the Old Georgian Ablative-Instrumental (in modern Georgian these functions are performed by two different cases), and the Ossetic Allative with the Old Georgian Allative (which in modern Georgian is Adverbial, a semantically entirely different case). As for Ossetic Comitative and Equative, Abaev compares them to Georgian postpositions *tan* and *vit*, which are not universally considered to be case markers.[2] In addition, no systematic comparison is made to any other neighbouring language except Georgian. The author is not oblivious to some of these inconsistences; as he himself points out, while "every Ossetic case has a more or less exact typological equivalent in the declension of a number of Caucasian languages with the same semantic content and with the same syntactic function", "[the demonstrated] typological unity is of course not corroborated by the fact that some cases of Georgian and the East Caucasian languages do not have adequate correspondences in Ossetic" (ibid.: 101). However, probably no modern linguist would agree with Abaev's criteria for determining contact influence. Abaev's point of using the enlarged Georgian case system for comparison with Ossetic, however, is in my opinion worth reassessment on more systematic grounds, and I will return to this question in §3.4.1.

This contact hypothesis was afterwards accepted, most often without any critical analysis, by numerous scholars, including Vogt (1944),

[2] Significantly, they were not considered to be case markers in Šaniʒe's (1953/1973) grammar, which was one of the first works to consistently claim the existence of new cases in modern Georgian.

Cheung (2008), Stilo (2009: 712), and Kulikov (2009: 456), and today is widely believed to be true. However, it has never been systematically demonstrated which languages influenced which parts of the Ossetic nominal paradigm. Even when authors pointed at functionally similar cases or affixes in some neighbouring languages (e.g., Equative in Turkic and Vaynakh), they failed to provide evidence that these cases are a result of contact and not of sporadic internal development. At the same time, it is generally emphasised in modern research on areal linguistics that contact influence should only be stipulated when no other explanation for the grammatical change is taken to be plausible; as S. Thomason (2003: 688) puts it: "... contact between languages (or dialects) is a source of linguistic change whenever a change occurs that would have been unlikely, or at least less likely, to occur outside a specific contact situation. This definition is broad enough to include both the transfer of linguistic features from one language to another and innovations which, though not direct interference features, nevertheless have their origin in a particular contact situation".

As was stated, of all the Indo-European languages, only Ossetic and, on a smaller scale, Armenian have undergone a full change from nominal flexion to agglutination, and it is, therefore, without question that there must have been some external influence that has caused such a radical development.[3] However, the exact contact situation that has produced the contemporary Ossetic case system has never been firmly established. In general, when discussing areal influence on Ossetic, prior researchers have usually just listed the features they considered similar in geographically close languages, which is not enough to prove contact-induced grammatical change.

For example, when discussing contact-induced similarities between Ossetic and (Eastern) Armenian, Abaev (1978) names, among other things, the use of postpositions instead of prepositions as being influenced by a "common Caucasian substratum". However, both Ossetic and Armenian are SOV languages, and it is known since Greenberg 1963 that SOV languages tend to also use postpositions (although there are a few known exceptions). At the same time, SOV word order is usually reconstructed for Proto-Indo-European and is the unmarked order in most

[3] Pace Thordarson (2009a) who has concluded that there are no signs of contact influence in the Ossetic case system at all. In light of extreme rarity of examples of full transition to nominal agglutination among Indo-European languages, all of which occured in situations of heavy influence from dominant non-IE languages (I am not counting case loss or reduction to direct-oblique systems), I would rather take contact influence for granted, even if its exact form is still a matter of debate.

ancient PIE languages (Fortson 2004: 142). Therefore, the use of postpositions in Ossetic and Armenian can hardly be explained in terms of contact-induced grammatical change; even if some kind of influence did play a major role, it can never be proven.

Similarly, agglutinative nominal inflection itself may well be contact-induced, but since almost all of the languages neighbouring Ossetic have this pattern of inflection (Abaev 1949; Kulaev 1974: 312), it is impossible to prove which languages served as the model. Therefore, there is not enough evidence to speak of "Caucasian influence", at least not more than Turkic or Nakh influence.

It is, therefore, clear that the problem of external influence on Ossetic needs a revised treatment from modern theoretical positions. In this paper, I will concern myself with the case system as one of the obvious starting points.

§3. The Case System of Ossetic: Synchrony and Diachrony

Nominal inflection in Ossetic is for the most part agglutinative. Nouns are marked for number and case in a uniform way; there are no inflection classes (see Table 1). In both Iron and Digor the only productive plural suffix is *-t(:)-*. In both dialects, a few nouns (mostly kinship terms) have an irregular plural suffix *-ălt-* (e.g. *fəd-ălt-ă/fid-ăltt-ă* 'father-PL-NOM'). In Digor, a third number paradigm, which occurs with nouns used with numerals can be distinguished. Its endings correspond to those of the demonstrative pronouns and are probably etymologically related to them (via postposition of the pronoun continuing PIr. **aį̯-*).

There are nine cases in Iron: Nominative, Genitive, Dative, Allative, Ablative, Inessive-Illative, Superessive-Superlative, Equative, and Comitative. In Digor, the Comitative is absent. The Inessive in Iron is only distinguished from the Genitive in pronominal inflection. But in Digor it has a separate form in the adnumerative paradigm (Iness. *-em-i* vs. Gen. *-e-j*); therefore, for the purposes of the present study I will consider the two to be separate cases for both nouns and pronouns.

Two new cases, as I also argue (§3.3), recently derived from postpositions, can be added to the traditional paradigm in both dialects: the Directive (*-(ə)rdăm* / *-(ă)rdămă*) and the Regressive (*-(ə)rdəgăj* / *-(ă)rdıgăj*).

The full personal pronouns have suppletive Nominative and Genitive forms; all other cases are derived regularly with the genitive form taken as the oblique stem (see Table 2). The enclitic pronouns have mostly been remodeled on the full personal pronouns (Cheung 2008: 96), except for 3rd person sg./pl. Abl.-Iness. *zə/žı*, from PIr. **hači* + **aḥ̯ia* (Cheung 2008: 101). The inflection of demonstrative and interrogative pronouns

(Table 4) shows some idiosyncrasies, which shall be treated in the etymological analysis below. It should be noted that my etymologies of individual cases are understandably brief, since this question has been covered previously by ample research (the most recent being Cheung 2008).

	Singular	Plural	Adnumerative (Digor)
Nom.	*xăzar/xăzar-ă* 'house'	*xăzăr-t:-ă/xăzăr-t:-ă* 'houses'	*fonz xăzar-ɪ* 'five houses'
Gen.	*xăzar-ə/xăzar-ɪ*	*xăzăr-t:-ə/xăzăr-t:-ɪ*	*fonz xăzar-e-j*
Dat.	*xăzar-ăn/xăzar-ăn*	*xăzăr-t:-ăn/xăzăr-t:-ăn*	*fonz xăzar-em-ăn*
All.	*xăzar-mă/ xăzar-ămă*	*xăzăr-t:-ăm/ xăzăr-t:-ămă*	*fonz xăzar-e-mă*
Abl.	*xăzar-ăj/xăzar-ăj*	*xăzăr-t:-ăj/xăzăr-t:-ăj*	*fonz xăzar-em-ăj*
Iness.	*xăzar-ə/xăzar-ɪ*	*xăzăr-t:-ə/xăzăr-t:-ɪ*	*fonz xăzar-em-ɪ*
Super.	*xăzar-əl/xăzar-ăbăl*	*xăzăr-t:-əl/xăzăr-t:-ăbăl*	*fonz xăzar-e-băl*
Equ.	*xăzar-aw/xăzar-aw*	*xăzăr-t:-aw/xăzăr-t:-aw*	*fonz xăzar-ej-aw*
Comit.	*xăzar-imă/—*	*xăzăr-t:-imă/—*	—

Table 1. Ossetic Nominal Inflection

	Singular		Plural	
	1st person	2nd person	1st person	2nd person
Nom.	*ăž/ăz*	*də/dʊ*	*max*	*šəmax/sʊmax*
Gen.	*măn*	*dăw*	*max*	*šəmax/sʊmax*
Dat.	*măn-ăn*	*dăw-ăn*	*max-ăn*	*šəmax-ăn/ sʊmax-ăn*
All.	*măn-mă*	*dăw-mă*	*max-mă*	*šəmax-mă/ sʊmax-mă*
Abl.	*măn-ăj*	*dăw-ăj*	*max-ăj*	*šəmax-ăj/ sʊmax-ăj*
Iness.	—	—	—	—
Super.	*măn-əl/ măn-băl*	*dăw-əl/ dăw-băl*	*max-əl/ max-băl*	*šəmax-əl/ sʊmax-băl*
Equ.	*măn-aw*	*dăw-aw*	*max-aw*	*šəmax-aw/ sʊmax-aw*
Comit.	*măn-imă, memă/—*	*dăw-imă, demă/—*	*max-imă, nemă/—*	*šəmax-imă, wemă/—*

Table 2. Inflection of Personal Pronouns (full forms)

	Singular		
	1st person	2nd person	3rd person
Nom.	—	—	—
Gen.	*mă*	*dă*	*jă,ăj*
Dat.	*mən/mın*	*dən/dın*	*jən,ən/jın,ın*
All.	*măm/mămă*	*dăm/dămă*	*jăm,ăm/jımă,ımă*
Abl.	*mă/mı*	*dă/dı*	*zə/sı, ǯı*
Iness.	*mă/mı*	*dă/dı*	*zə/sı, ǯı*
Super.	*məl/măbăl*	*dəl/dăbăl*	*jəl, əl/jıbăl,ıbăl*
Equ.	—	—	—
Comit.	—	—	—
	Plural		
Nom.	—	—	—
Gen.	*nă*	*wă*	*să*
Dat.	*nən/nın*	*wən/wın*	*sən/sın*
All.	*năm/nămă*	*wăm/wămă*	*săm/sămă*
Abl.	*nă/nı*	*wă/wı*	*să, zə/sı, ǯı*
Iness.	*nă/nı*	*wă/wı*	*să, zə/sı, ǯı*
Super.	*nəl/năbăl*	*wəl/wăbăl*	*səl/săbăl*
Equ.	—	—	—
Comit.	—	—	—

Table 3. Inflection of Personal Pronouns (enclitic forms)

	Demonstratives		Interrogatives	
	Singular			
Nom.	*a,aj/a* 'this one'	*wəj/je* 'that one'	*či/ka* 'who'	*sə/čı* 'what'
Gen.	*aj*	*wəj/woj*	*kăj/ke*	*săj/căj*
Dat.	*amăn*	*wəmăn/womăn*	*kămăn*	*sămăn/cămăn*
All.	*amă*	*wəmă/womă*	*kămă*	*sămă/cămă*
Abl.	*amăj*	*wəmăj/womăj*	*kămăj*	*sămăj/cămăj*
Iness.	*ami/am*	*wəm/womı*	*kăm/kămı*	*săm/cămı*
Super.	*awəl/abăl*	*wəwəl/wobăl*	*kăwəl/kăbăl*	*săwəl/căbăl*
Equ.	*ajaw*	*wəjaw/wojaw*	*kăjaw/kejaw*	*săjaw/căjjaw*
Comit.	*aimă/—*	*wəimă, jemă/—*	*kăimă, čemă/—*	*săimă, čemă/—*
	Plural			
Nom.	*adon/ată*	*wədon/jetă*	*čită/kată*	*sətă/čıtă*
Gen.	*adon(ə)/anı*	*wədon/wonı*	*kăjtə/ketı*	*săjtə/căjtı*
Dat.	*adonăn/anăn*	*wədonăn/ wonăn*	*kămăntə/ kămăntı*	*sămăntə/ cămăntı*

All.	*adonmă/ anămă*	*wədonmă/ wonămă*	*kămătə/kămătı*	*sămătə/cămătı*
Abl.	*adonăj/anăj*	*wədonăj/wonăj*	*kămăjtə/ kămăjtı*	*sămăjtə/ cămăjtı*
Iness.	*adonə/anămı*	*wədonə/wonămı*	*kămtə/kămıtı*	*sămtə/cămıtı*
Super.	*adonəl/ anăbăl*	*wədonəl/ wonăbăl*	*kăwəltə/kăbăltı*	*săwəltə/căbăltı*
Equ.	*adonaw/ anıaw*	*wədonaw/ wonıaw*	*kăjawtə/ kejawtı*	*săjawtə/ căjjawtı*
Comit.	*adonimă/—*	*wədonimă/—*	*kăimătə, kemătə/—*	*săimătə, čemătə/—*

Table 4. Inflection of Demonstrative and Interrogative Pronouns

§3.1. *Morphology and Etymologies of the Cases*
In the discussion below, for the reader's convenience, Ossetic cases inherited from PIr. will be marked by an asterisk (*), while innovative ones will be marked by a plus sign (+).

§3.1.1. **Nominative*
The Nominative case is unmarked for most nouns in both dialects. In Digor, some nouns have final *-ă* in the Nominative, which is removed when other case markers are attached, and must, therefore, be treated as a Nominative case marker. Both dialects use *-ă* to mark Nominative in the plural.

The Ossetic Nominative derives from PIr. nom. m. **-ah* or acc. m./n. **-am* (Cheung 2008: 88). Final feminine **-ā* survives in Digor in the form of the Nominative ending *-ă* (ibid.).

The Nominatives of personal pronouns *ăž/ăz* '1SG', *də/dʊ* '2SG', *max* '1PL'and *šəmax/sʊmax* '2PL' derive from PIr. Nom. **azam*, **tuu̯am* and Gen. **ahmāxam, *xšmāxam*, respectively (ibid.: 96). The Nominative of the demonstrative *a, aj/a* "this" derives from a blend of **i̯a* and **ha* (ibid.: 98). The Iron distal demonstrative *wəj* is uncontroversially derived from PIr. **au̯am* (Thordarson 1989: 472). The Digor form *je, jejă* is derived from PIr. **ai̯am* by Thordarson (ibid.), but Cheung (2008: 98) considers both the Iron and the Digor forms to be derived from the same source via an intermediate stage **we* (which gives *je* in Digor due to palatalisation). The interrogative *či/ka* "who" is derived by Cheung (2008: 102) from PIr. Nom. pl. **kai* via a complex sequence of reanalyses. Finally, the interrogative *sə/čı* "what" is straightforwardly derived from PIr. **čid* (ibid.).

§3.1.2. **Genitive*

The Genitive marker in both dialects is *-ə/-ɪ* (some pronouns have suppletive forms). In Iron, this marker causes palatalisation of stem-final velar consonants (e.g. *čəžg* "girl" - *čəžž-ə* 'girl-GEN'). This is not a purely phonological process, since it does not always occur with final *-ə*, e.g. *gəgə* "little girl" (cf. Digor *gıgı*: no palatalisation in Iron) and forms of recent borrowings, such as *Gonkong-ə* 'Hong Kong-GEN' (alongside *Gonkonžə*). The superessive marker *-əl* does not cause palatalisation either (see below).

The Ossetic Genitive is derived from the PIr. Gen. sg. of thematic **a*-stems **-aḫ̯ia* (Cheung 2008: 90), which has long been thought to be rather the source of the Ablative (Kambolov 2006: 336; but cf. Cheung 2008: 90-91; 92-94).

The Genitive forms of personal pronouns *măn* '1SG.GEN' and *dăw* '2SG.GEN' continue PIr. **mana*, **taṷa* respectively (Cheung 2008: 96). The forms continuing PIr. Gen. **ahmāxam, *xšmāxam* have been generalised to both Nominative and Genitive *max* '1PL'and *šəmax/sʊmax* '2PL', respectively.

The so-called "ezafet construction", encountered in older texts (e.g. *fəd-ə žărond* 'father-GEN old' 'old father'), does not exist in modern Ossetic outside of a few fixed expressions (e.g. *mad-ə mayram* 'mother-GEN Maryam', "Virgin Mary"), and I will not discuss the etymologies suggested for this affix by those researchers who consider it distinct from the Genitive (cf., e.g., Bailey 1946: 205).

§3.1.3. *+Dative*

The Ossetic Dative is formed by *-ăn* for all lexemes (including pronouns: for the personal pronouns the genitive stem serves as the oblique stem for other cases; in demonstratives and interrogatives, an additional *-m-* is added between the stem and the dative marker). When a stem is vowel-final, *j* is used as epenthesis.

The old Dative, both nominal **-āi* and pronominal **ahmāi*, has disappeared in Ossetic (Miller 1882: 131). Cheung (2008: 91) suggests a postpositional origin from **ana/u*. This postposition governed the Accusative (Tolman 1908: 76), which explains the *-m-* in pronominal forms (**i̯a* + acc. **ahmāi* > **āma* + **(a)n(u)*[4] > *amăn*). This also means that the new Dative must have appeared after the loss of final vowels; otherwise, **ahmāi* + **anu* would have rather given **aman*, and in any case a short vowel

[4] The first and final vowels would have disappeared by this point through apheresis and apocope (cf. Cheung 2002).

could not have appeared. On the other hand, the Accusative must have continued to be distinguished at least in the pronominal system; otherwise, the *-m-* would not have been retained.

Deriving the Ossetic Dative from the pronominal instrumental ending *-(a)na* (Weber 1980: 133) is hardly possible for functional reasons, since the Ossetic Dative has no instrumental functions. Instead, the Ablative is used in these contexts, and one would either have to assume that it continues PIr. nominal Ins., and the Dative continues the pronominal one, which is implausible, or that the Abl. continues the Gen. of **a*-stems, which is even less plausible (**-ahi̯a* is rather the source of Ossetic Genitive).

§3.1.4. *+Allative*

The basic marker of the Allative in both dialects is *-mă.* In Digor, consonant-final stems (including those of nouns with *-ă* in the nominative) take the ending *-ămă.* The case affix in the plural has the form *-ăm* in Iron and *-ămă* in Digor. Inflection of pronouns is regular.

Cheung (2008: 92) proposes the following explanation for the Ossetic Allative. He derives the Allative suffix from the demonstrative Loc. **i̯a + ahmi* with an added directional particle **ā.* This gave **amă* in Pre-Ossetic, which was then reanalysed as *a-mă* 'this-ALL', from which *-mă* was generalised to the whole inflectional system. Since the affix appears to not have undergone the Iron secondary apocope, Cheung suggests that its addition to the system be relatively recent. However, final *-ă* may have been preserved in order to avoid homonymy, since the Allative of words like *lăg* "man" would have appeared as **lăgm*, which would have been simplified to *lăg*. It is important to bear in mind also that in Iron plural forms final *ă* is in fact dropped (cf. *gal-t-ăm/gal-t-ămă* 'OX-PL-ALL')—precisely for the reason that its loss does not lead to ambiguity of cases. Still, the reanalysis *amă* > *a-mă* could not have happened before the system of nominal inflection had become agglutinative, which forces us situate this change later than the emergence of the new Dative.

§3.1.5. **(+)Ablative*

The basic Ablative marker is *-ăj*. In Digor, it is attached in this form to all nominal stems, both in the singular and in the plural. After vowels, epenthetic *-j-* is inserted. In Iron, the allomorph *-jă* is used after vowel-final stems (e.g. *ăxsa-jă* 'money-ABL')—this is clearly a secondary development. In the pronominal system, all forms are regular, except those

of the demonstratives and interrogatives, where an *-m-* is inserted (cf. *amăj* 'this.ABL').

The Ossetic Ablative probably results from a contamination of PIr. Abl. of *a-stems in *-āt,* which merged with the Ins. ending in *-ā*, giving Pre-Ossetic *-ă*. The origin of the final *-j* is unclear, but Cheung (2008: 94) believes it was imported from the pronominal form *zə/ʒı* (see above). This was probably in part motivated by the need to avoid contamination with the nominatives in *-ă*. The Ablative of demonstratives and interrogatives fits this pattern: Abl. **i̯ā + ahmat > *amă + i > amăj*.

Even though the ablative is partly an innovation, it still continues the PIr. Abl. and Ins. endings, and, therefore, there was not a single period in the history of Ossetic where it was completely lost (unlike, e.g., the Dative). Hence, I treat it as an inherited case.

§3.1.6. **(+)Inessive*

In both dialects the Inessive is formally identical to Genitive *-ə/-ı*, except for pronouns and, in Digor, for the adnumerative forms of nouns (*-em-ı*). Pronominal forms are irregular. Like the Genitive, the Inessive marker also causes palatalisation of stem-final velar consonants.

The Inessive of nominals is derived from the PIr. derivational suffix **-īi̯a* (Cheung 2008: 94); pronominal forms continue the PIr. Locative: **i̯ā-ahmi > am/amı*, **au̯ami > wəm/womı*, etc. Therefore, the Ossetic Inessive is derived directly from the PIr. Locative, which was never lost, but only replaced in the nominal inflection by a derivational suffix (probably to avoid homonymy).

§3.1.7. *+Superessive*

The Superessive is marked by *-əl* in Iron and *-băl* in Digor. In Iron, the suffix does not cause palatalisation, unlike the Genitive, which also begins with *-ə*: *wəng-əl* 'street-SUPER'. The pronouns are regular, except for Iron where vowel-final pronominal stems have the Superessive ending *-wəl*, which reflects an older situation. In nominals, the epenthetic consonant is *j*.

The source for the Superessive was already determined in Miller 1882: 140 and unanimously accepted by the scholarly community. It is PIr. **upari*, an adposition with Superessive meaning. In Old Persian (*upariy*), it controlled the Accusative in this function (Tolman 1908: 76). However, unlike the Dative, which is also derived from an accusative-controlling adposition, forms of demonstratives do not have *-m-* and, thus, do not continue the old Acc. in **-māi*. Therefore, it seems plausible

that Superessive appeared after the Accusative had completely disappeared from the case system—hence, later than the new Dative.

§3.1.8. *+Equative*

The Equative marker in both dialects is *-aw*. When a stem is vowel-final, *j* is usually inserted before the affix. Pronominal inflection shows few idiosyncrasies, except for the pronouns *ată* "these", *jetă* "those" and *kată* 'who.PL' in Digor, where the Equative forms seem to be derived from the Genitive: *anı-aw* (**an-aw*), *wonı-aw* (**won-aw*), *ke-jaw* (**kă-jaw*), respectively. Also, enclitic pronouns do not have Equative forms.

The Equative continues the PIr. derivational suffix **-āu̯an-* (Cheung 2008: 95). The only problem with this derivation, overlooked by Cheung, are the Genitive-base forms of pronouns in Digor listed above. Reflexes of the suffix **-āu̯an-* in the other Iranian languages do not show any tendency to attach to the Genitive forms of nominals (cf. OAv. *mauuaṇt-* "like me"). The Ossetic situation cannot be explained away by an analogical leveling with personal pronouns (which also have the Genitive form as oblique stem). If such an analogy had occurred, it would have affected all cases, and not just an arbitrary one, like the Equative.

The only explanation I can think of is that the Equative appeared after the Genitive was reanalysed as the oblique stem in personal pronouns. This was extended to other pronominal forms—while they did not undergo analogical levelling, the Genitive was nevertheless considered to be the oblique stem in productive derivation. This leads us to the conclusion that the Equative is the newest of the Ossetic cases (except for the Comitative, see below): no other case is derived from the Genitive stem, which means that they appeared before the restructuring of personal pronouns. Another argument for the same conclusion is that there are no Equative forms of enclitic pronouns—the only other such case is the Comitative, which is doubtlessly recent (see next).

§3.1.9. *+Comitative*

The Comitative is only present in Iron. Its marker is *-imă*, which does not cause palatalisation in spite of ending in a front vowel (*adăjmag-imă* 'person-COMIT'). With vowel-final stems, *j* is epenthesised. Pronominal forms are regular, except for *memă* '1SG.COMIT', *demă* '2SG.COMIT', *jemă* '3SG.COMIT', and *semă* '3PL.COMIT', which duplicate the analogous full forms. Enclitic pronouns do not have Comitative forms.

The Comitative is hesitantly derived by Abaev (1949: 101) from the adverb/postposition *iwmă/jewmă* "together" (itself Allative of *iw/jew* "one"). This also explains the existence of duplicate forms of pronouns: the full forms continue the pattern "full pronoun + postposition" (*măn*

iwmă > *mănimă*), while the short forms continue the pattern "possessive proclitic + postposition" (*mă=iwmă* > *me=wmă* > *memă*). The Comitative has only been grammaticalised in Iron (in Digor, the postposition *xăc:ă* is used). Therefore, it is the newest of the Ossetic cases.

§3.2. *Relative Chronology of the Case System: A Reconstruction*

§3.2.1. *The Reconstruction*

The facts presented in §3.1 are sufficient for reconstructing a relative chronology of the development of the case system as shown on Figure 1.

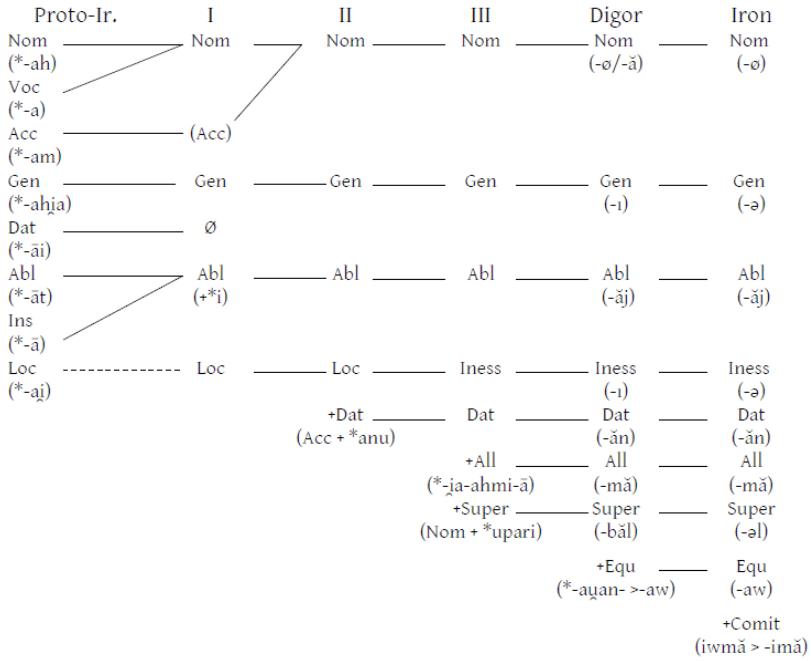

Figure 1. Evolution of the Ossetic Case System

The following is the repetition of the evidence for this scenario of evolution (for details, see the information on individual cases above):

1. When the new Dative appeared, the old Dative must have already been lost, but the Accusative must have continued to exist at least in the pronominal system; otherwise, we would not have *-m-* in pronominal forms, like *amăn* 'this.DAT'. Therefore, the Dative is the oldest of the "new" cases of Ossetic.

2. The Superessive is derived from an adposition governing the Accusative, but unlike the Dative, there are no traces of the old Accusa-

tive in demonstrative and interrogative pronouns. Therefore, the Superessive is newer than the Dative.

3. The Allative case is the result of reanalysis of pronominal forms, such as *amă* > *a-mă* 'this-ALL'. This can only happen in a system that is already agglutinative. The Allative, therefore, appeared relatively late, at the very least later than the Dative (when vestiges of the old fusional system were still in existence).

4. The Equative is the newest case apart from the Comitative for two reasons: 1) unlike other cases, in demonstratives and interrogatives it has the Genitive as the oblique stem; and 2) there are no enclitic Equative forms (the only other such case is the Comitative).

5. The Comitative is only present in Iron, and is without doubt the newest case. It shares with the Equative the trait of having no enclitic forms.[5]

6. In principle, the relative ordering of Nom. + Acc. (+ Voc.) and Abl. + Ins. cannot be determined based on the data of Ossetic.[6] However, since similar changes occurred in many, and arguably all, Iranian languages (cf. Korn, Forthcoming), the proposed chronological order is based on how the changes presumably occurred in those languages. The placement of the merger of Nom. + Voc. earlier than Nom. + Acc. is hypothetical; they may have merged in a different order or even at the same point in time.

The chronology I propose will be important for the reconstruction of areal influence on Ossetic in various periods. Language contact is a dynamic process, and the emergence of new cases must be associated with precise contact situations (or be explained by internal development).

§3.2.2. *Discussion*

The proposed reconstruction has the following important implications for the history of Ossetic and Iranian languages in general.

1. The case system presented in Stage I of Fig. 1 is identical to that of Khotanese and that of Sogdian light stems (which both had Nom.,

[5] The ordering of second-position enclitics in Ossetic (Dat.-All.-Superess.-Gen.-Iness.-Abl.) may be explained historically. The cases inherited from PIr. (Gen., Iness., and Abl.) come last, while all the new cases (except for Eq. and Comit., which do not have enclitic forms) have been gradually added to the beginning of the clitic chain. These cases are ordered exactly according to the chronology proposed herein: Dat. —› All., Super.

[6] But note my remark above (§3.1.3) that the new Dative was probably grammaticalised after the loss of final vowels. If so, Abl. and Ins. should have already merged by that point, while the Acc. must have continued to exist in order for the Dative to take the form it has in modern Ossetic.

Acc., Gen.-Dat., Ins.-Abl., Loc.[7]—Emmerick 1965; idem 1968; Gershevitch 1954). For this reason, the merger of the Abl. and Ins. and the disappearance of the old Dative (or its merger with Gen., as in Old Persian) seem to be either common innovations, or rather, parallel developments (as suggested in Korn, ibid.) triggered by intense areal contact. Either fact implies that up to the Middle Iranian period Ossetic developed in the same pattern as other Iranian languages.

2. Note also that the development of the new postpositional Dative, and the subsequent merger of Nom. and Acc., are already independent developments in Ossetic, since other late Middle EIr. languages, such as late Khotanese (Emmerick 1968: 250; Sims-Williams 1990) and Choresmian, show the second development, but not the first one.

3. Starting from Stage II, contrary to the pattern exhibited by other Iranian languages, Ossetic started to accumulate new cases; the reduction of the PIr. case system stopped. This implies that, starting from this point, the ancestors of the Ossetians (i.e. the Alans) lived in a relative isolation from the speakers of other Iranian languages.[8] Whether the subsequent developments are language-internal, or they are externally motivated remains to be seen.

I will proceed to discuss the areal connections of Ossetic after covering an important point: the emergence of two new cases in contemporary Ossetic.

§3.3. *Emergent Cases: Directive and Recessive*

There are two entities traditionally described as postpositions in Ossetic, which, as I argue in this section, are better treated as case suffixes in the contemporary language. These are *(ə)rdăm/(ă)rdămă* "to the direction of" and *(ə)rdəgăj/(ă)rdıgăj* "from the direction of", ultimately derived from the noun *ărdăg* "side". Semantically these two markers can be labeled Directive and Recessive.[9] The analysis of these markers as

[7] Saka also had a Vocative. But I omit the Vocative from the discussion, since there is no evidence that can show at what stage it merged with the Nominative.

[8] Consider again the statement in §3.1.3 that the Dative only appeared after the loss of (most) final vowels. Contrast this with the final *-E* in the word *TZHPƟE* from the Zelenchuk inscription (Zgusta 1987), which corresponds to modern Ossetic *sərt/čirt* "tombstone, grave" (PIr. **čiθrah*). If the dating of the inscription to the 10th–12th cc. A.D. is correct, then at least some of the final vowels were still intact during that period. Note that since it is not known whether this statement is universal or only applies to final **-ah*, it would be unwise to use the inscription for dating the apocope. This possibility has to be explored in more detail, however.

[9] There is considerable confusion surrounding the terminology for these cases. Some works opt for calling Lative for what I call Allative in Ossetic, and Allative for

cases has also been vaguely proposed by Weber (1980: 133), although he only treated formations, like *ardăm* "here". I support my argument that the two postpositions have been reanalysed as cases by several points.

§3.3.1. *Phonetic Erosion*

One of the key traits of full words undergoing grammaticalisation is phonetic erosion (Hopper/Traugott 2003: 154-155). This can be seen in the morphemes under discussion, and the key point is that the phonological changes are not regular; *(ə)rdăm/(ă)rdămă* is derived from *ărdăg-mă/ărdăg-ămă*[10] with the irregular loss of *-g-* (cf. *wəng-mă* 'street-ALL'), and *(ə)rdəgăj/(ă)rdıgăj* is derived from *ărdăg-ăj* with the irregular sound change ă > ə/ı.

While this is evidence that some kind of grammaticalisation is in process and that the mentioned forms have diverged considerably from the noun that they are derived from, it does not necessarily mean that they have become affixes. After all, a similar change has happened with *midăg* "inside" > *midămă* "to inside".

Another piece of evidence of a closer link between the morphemes in question and the nominal stem is the fact that (under the traditional view) the first vowel of the postposition, i.e. *ă-*, is obligatorily lost after the Genitive marker in Iron (e.g. *qăd-ə=rdăm*, **qăd-ə ărdăm*). For other postpositions, this loss is either prohibited (e.g., *ăt:e* "on": *mit-ə ăt:e* 'snow-GEN on', **mit-ə=t:e*) or optional. In Digor, there is an opposite but more striking development: the Genitive marker has disappeared completely, replaced by the initial *ă-* of the postpositional stem, yielding forms, such as *qăd-ărdıgăj* 'forest-RCS'.[11] This means that for Digor we already have enough morphological evidence for treating the morphemes under discussion as affixes. For Iron, however, additional arguments are needed.

---

what I call Directive here. I prefer to conserve the traditional names of Ossetic cases (All. and Abl.) and use for the *Directive* forms the names suggested in Mel'čuk 1998: 59.

[10] Abaev (1958: 62-63) considers *ardăm/ardămă* to be derived directly from the stem continuing PIr. **arda*, without the suffix **-aka*. I find this doubtful for two reasons: 1) the Ablative pair is *ardəgăj/ardıgăj*, not **ardăj*, and the Ablative case is older than the Allative in Ossetic, so, if anything, the opposite should be expected; and 2) the only other similar example is *midămă* "to inside" (cf. *midăg* "inside"), which can be explained by the loss of *-g-* due to the lexicalisation as postposition/adverb.

[11] This did not happen by any regular phonological change, but is instead a manifestation of what Harris/Faarlund (2006) have termed "trapped morphology": loss of inflectional morphemes when a clitic, which attaches to the host becomes an affix.

The additional arguments are the Directive/Regressive forms of Demonstratives: *ardăm/ardămă* and *wərdăm/wordămă*. There is no sign of the Genitive marker in these forms (**aj ărdăm/aj ărdămă, *wəj ărdăm/woj ărdămă*). Dictionaries consider these forms to be adverbs; nevertheless, in light of other evidence, I believe it is better to treat them as case forms, especially since they are used in exactly the same way that nouns with *(ə)rdăm/(ă)rdămă* and *(ə)rdəgăj/(ă)rdıgăj* are used. However, having a morphological means of expressing directionality with pronouns is not unheard of even in languages with no case system (cf. English *hither, thither, hence, thence*), therefore, I will provide further arguments in favour of my conclusion.

§3.3.2. *Morphophonological Evidence*

The fact that nouns modified by *(ə)rdăm/(ă)rdămă* and *(ə)rdəgăj/(ă)rdıgăj* are no longer analysed as carrying the Genitive suffix is supported by morphophonology. Specifically, the final velar of the stem does not undergo, or at least may not undergo, palatalisation in Iron (which is obligatory when attaching the Genitive, cf. *midăž-ə* 'inside-GEN/INESS', but cf. 1, below).

1) *jă=săšt=ta* ***midăg-ərdăm*** *kăš-ən-mă* *ămă* ***midăg-ərdăm***
POSS.3SG=eye=CONTR inside-DIR look-INF-ALL and inside-DIR
wən-ən-mă *fă-răvz* *ămă=ta...*
see-INF-ALL PV-ready and=CONTR
"His eyes are ready to look inside and to see inside and..."
(B. M. Gusalov, *I vozdastsya každomu*, Vladikavkaz, 2003: 287)

§3.3.3. *External Possession*

Since postpositions in Ossetic are in many ways like nouns, those that govern the Genitive can have their argument expressed by Dative in a construction of external possession (see 2, below). However, the morphemes in question can never be replaced by this kind of construction (*žawər-ərdăm* 'Zaur-DIR' > **žawər-ăn je=rdăm* 'Zaur-DAT POSS.3SG=DIR').

2) *fălă* *kăd* *xʷəsaw* ***lăg-ăn*** ***jă=midăg*** *iš...*
but when God man-DAT POSS.3SG=inside EXT
"But when God is inside a man..." (B. M. Gusalov, ibid.: 27).

§3.3.4. *Group Flexion*

In Ossetic, group flexion is not obligatory: the case marker may or may not be repeated after each of the coordinated NPs, with subtle semantic differences (see 3, below). With *ərdăm/ărdămă* and *ərdəgăj/ărdıgăj*, the Genitive can be used after the first coordinated NP in Iron (see 4, below), which means the cases are still not fully grammaticalised.

3) *žawər(-mă)* *ămă* *alan-mă*
Zaur(-ALL) and Alan-ALL
"To Zaur and Alan"

4) *qăd(-ə)* *ămă* *bədər-ərdăm/-ərdəgăj*
forest(-GEN) when field-DIR/RCS
"Towards/from the forest and the field".

§3.3.5. *Conclusion*
I believe that the arguments I have presented are sufficient for challenging the traditional view that *(ə)rdăm/(ă)rdămă* and *(ə)rdəgăj/(ă)rdıgăj* are postpositions. In Digor, there is even no trace of the Genitive ending *-ı*, and in this dialect there is actually no choice but to consider the Directive and Regressive to be cases. In Iron, even though *-ə* is still found in most contexts, it is no longer analysed as a Genitive ending, which is supported by the fact that it does not cause palatalisation and cannot be used with coordinated NPs. Furthermore, the affixes in question do not have some of the features characteristic of postpositions in Ossetic, but are instead affixes, according to most of the tests available for this language. The only postpositional property these endings have is the possibility of using the Genitive marker when attaching Directive or Regressive to coordinate constituents. The undergoing grammaticalisation of two additional cases will, therefore, be taken for granted in the rest of this paper, and it is of considerable importance for my central arguments about areal influence.[12]

§3.4. *Areal Assessment of the Case System*
The Ossetic case system will be compared with those languages that are direct neighbours of Ossetic and thus may have been in sufficient long-term contact with it to have exerted substantial influence. The history of Ossetic certainly allows for hypothesising contact with other language families, e.g. Finno-Ugric, where numerous Iranian loanwords are found, some of which bear a striking resemblance to Ossetic forms. However, since borrowing was mostly *from* (Pre-)Proto-Ossetic, there is little reason to believe that Ossetic has been influenced by these lan-

[12] Interestingly, the semi-affixal nature of *(ə)rdăm/(ă)rdămă* and *(ə)rdəgăj/(ă)rdıgăj* is even reflected in the Ossetic orthography, where they are written together with the noun: *x æ p æ* /qăd-ərdəgăj/ 'forest-RCS'. Also, if the reading of *κορθι καντα* in the Alanic fragment of Johannes Tzetzes' Theogony as *kərdıgăj dă* 'what.RCS be.PRS.2SG' (Kambolov 2006) is correct, it would mean that the grammaticalisation of these cases was already in process in the middle of the 12th century when Theogony was written.

guages in any considerable fashion. In addition, it is not known for sure exactly which languages Ossetic may have been in contact with and what the state of those languages was at that point. Therefore, any claims of contact of, e.g., Ossetic and Finno-Ugric, or Ossetic and Slavic, aside from obvious loanwords, would be purely hypothetical and unverifiable.

The languages in direct proximity to Ossetic belong to four genetic groups, three of which are autochtonous to the Caucasus: North-West Caucasian (Kabardian/Circassian), North-East Caucasian (Vaynakh: Chechen and Ingush), South Caucasian (Georgian, Svan), and Turkic (Karachay-Balkar).[13] They are shown in Figure 1.

Figure 1. Ossetic and its Neighbours
(TITUS, *http://titus.fkidg1.uni-frankfurt.de/didact/karten/kauk/kaukasm.htm*)

The case inventories of North-West Caucasian languages are relatively small and do not show any significant similarities to Ossetic: no cases in Abkhaz (Klyčev/Čadua 1998a) and Abaza (Klyčev/Čadua 1998b); Nom., Obl. and Inst. in Kabardian (Šagirov 1998); Nom., Obl., Inst., Adv. in Adyghe (Arkad'ev et al. 2009); Nom., Obl., Inessive/Illative, Interessive/Interlative, Inst. in Ubykh (Kumaxov 1998). Therefore, I omit these languages from the general comparison (I will, however, compare some of the case functions below). On the other hand, case inventories of Turkic, Vaynakh, and Kartvelian deserve comparison with Ossetic. This will be done in the following sections; for an overview of the individual systems compared, see Table 5.

[13] For obvious reasons, I do not include Russian. Close contact with Russian is a relatively recent phenomenon, and could not have influenced the case system in any significant way.

§3.4.1. *Kartvelian Languages*

The case systems of Kartvelian languages, as they are traditionally described, are the following. Georgian: Nom., Erg., Gen., Dat., Inst., Adv. (Rudenko 1940: 30); Svan: Nom., Erg., Gen., Dat., Inst., Adv. (Šaradzenidze 1998: 68); Mingrelian: Nom., Erg., Gen., Dat., Inst, Adv., All., Abl., Benefactive (Klimov 1998: 54-55); and Laz: Abs., Erg., Gen., Dat., Inst., All., Abl. (Lacroix 2009: 77). These systems bear only trivial similarities to the case system of Ossetic (e.g., All. and Abl. in Mingrelian and Laz), which cannot be interpreted as signs of language contact. However, alternative accounts exist for Georgian. There is a tradition starting with Šaniʒe's (1953/1973) grammar of considering some of the postpositions of Old Georgian to have grammaticalised into cases in the modern language. The cases that were initially claimed to have been grammaticalised are the following: postpositions *-gan* 'ABL', *-(a)mde*, 'TERM', *-ši* 'INESS/ILLAT', and *-ze* 'SUPERESS/SUPERLAT'. Arnold Čikobava (1961) made the following objections to this: 1) there cannot be two cases called Locative; and more significantly, 2) in cases of "group flexion", the postposition-case is attached to the last coordinated NP, but all the other coordinated NPs are marked by the case, which the postposition assigned in Old Georgian:

5) a. *saxl-sa* *da* *baγ-ši*
house-GEN *and* *garden-INESS*
"In the house and the garden".
b. **saxl* *da* *baγ-ši*
house *and* *garden-INESS*

In a recent conference paper by Alice Harris/Poppy Slocum (2009), the problem of Georgian "postpositional cases" has been reanalysed from a more modern perspective. According to them, items that can be analysed as cases in Georgian are the following: *-gan* 'ABL', *-ši* 'INESS/ILLAT', *-ze* 'SUPERESS/SUPERLAT', *-(a)mde* 'TERM', *-dan* 'RCS', *-tan* 'ADESS/ALL', and *-vit* 'EQU'. Creissels (2009), following Vogt (1971), also adds *-k'en* 'DIR' to the inventory of Georgian spatial cases. These items, according to Harris/Slocum (2009), are in the process of change from postpositions to affixes, but are affixes according to most of Zwicky/Pullum's (1983) criteria applicable to them. Among other things, Čikobava's criterion turns out to be not as absolute as it seemed: there is considerable variation among speakers, and factors that influence whether conjoined complements are allowed or not are the number of conjoined complements and whether the postpositive item expresses a literal or an abstract meaning. It should be noted that *-vit* 'EQU' seems to be less grammaticalised than other spatial cases. In any event, even if one does not

consider the items in question to be cases, they are clearly heading in this direction via grammaticalisation.

What is important for the analysis here is that the "enlarged" case system of Georgian (see Table 5) bears a striking similarity to the Ossetic case system. There is only one Ossetic case without correspondence in Georgian (Comit., and it is found only in Iron), and the only cases that are found in Georgian but not in Ossetic are Terminative and Adverbial. In my view, this correspondence cannot be due to chance and is clearly the result of contact influence.

§3.4.2. *Vaynakh Languages*

Vaynakh languages have a number of cases which is comparable to that of Ossetic (cf. Nichols 1994a; idem 1994b; semantics of cases are taken from Yakovlev 1960). But other than that, the systems are substantially different. For example, Vaynakh languages distinguish between the localisations in and inter, while Ossetic does not. Vaynakh languages have Instrumental-Comitative polysemy, unlike Ossetic. They have Comparative case, absent in Ossetic. The only points of correspondence are the distinction between Allative *vs.* Directive: and Ablative *vs.* Recessive, and the existence of an Equative case. The equative will be treated separately in § 4.5.

§3.4.3. *Turkic Languages*

The case system of Karachay-Balkar (Xabičev 1991) shares even less similarities with that of Ossetic. The only non-trivial correspondence between the systems is the existence of an Equative case/suffix *-ča* in Karachay-Balkar (as in most other Turkic languages); this will be treated in §4.5. Other than that, there is no apparent similarity.

§3.4.4. *Summary*

The first thing, which is apparent is that Ossetic has no trace of ergativity, which is a characteristic feature of all the autochtonous Caucasian languages. Therefore, it is only worthwhile to compare the non-core cases of the languages under discussion; this comparison is summarised in Table 5.

Ossetic	Georgian	Vaynakh	Karachay-Balkar
-əl/-băl (Superessive-Superlative)	*-ze* (Superessive-Superlative)	—	—
-ə/-ı (Inessive-Illative)	*-ši* (Inessive-Illative)	Ch. *-ga/ie-x*, Ing. *-ga/ie-ğ* (Inessive)	*-nda* (Locative)

		Ch.,Ing. *-χ* (Interessive-Interlative)	
-mă (Allative with Adessive meanings)	*-tan* (Adessive-Allative)	Ch., Ing. *-ga, -ie* (Allative)	—
-ăj (Ablative-Instrumental)	*-gan* (Ablative)	Ch., Ing. *-ga/ie-ra* (Ablative)	*-dan* (Ablative)
	-it (Instrumental)	Ch., Ing. *-ca* (Instrumental-Comitative)	—
-imă/— (Comitative)	—		*=blæ* (Comitative enclitic)
-ərdəgăj/-ărdıgăj (emergent Recessive case)	*-dan* (Recessive)	Ch. *-ga/ie-xara*, Ing. *-ga/ie-ğara* (Recessive)	—
-ərdăm/-ărdămă (emergent Directive case)	*-k'en* (Directive)	Ch. *-ga/ie-xa*, Ing. *-ga/ie-ğa* (Directive)	—
-aw (equative, "language")	*=vit* (emergent Equative case)	Ch., Ing. *-lla* (Equative)	*-ča* (Equative, "language" suffix)
	—	Ch., Ing. *-χa* (origin, "language")	
—	*-(a)d* (Adverbial/ Transformative)	—	—
—	*-mde* (terminative)	—	—
—	—	Ch., Ing. *-ga/ie-χula* (Translative)	*-(t)ɨn* (Translative)
—	—	Ch. *-ga/ie-xaχula*, Ing. *-ga/ie-ğaχula* (Transdirective/ Transrecessive)	—
—	—	Ch., Ing. *-l* (Comparative)	—

Table 5. Non-Core Cases of Ossetic, Georgian, Vaynakh, and Karachay-Balkar

It can be seen that Ossetic shares the most similarities with Georgian. The correspondence is so striking that language contact must have existed between Ossetians and Georgians for centuries. The direction of contact influence, however, cannot be clearly established, since:

1. Both languages have evolved from flexion to agglutination in their nominal system (cf. Klimov 1962 on Georgian);

2. Superessive-Superlative, Allative(-Adessive), Directive, Recessive, and Equative are innovations in both languages;

3. Iness. and Abl. are inherited in Ossetic, but are innovations in Georgian.

Directive and Recessive cases are most probably the result of external influence in both Ossetic and Georgian. Such a distinction (at least Allative *vs.* Directive) is very widespread among NE Caucasian languages, so we may safely assume it is inherited in Vaynakh. On the other hand, it is not found in any Kartvelian and Iranian languages except for Georgian and Ossetic, respectively.[14] Since Directive and Recessive are newly grammaticalised in Ossetic, and are not that new in Georgian (at the very least older than Equative), I can cautiously suggest that the existence of Directive and Recessive reflects an earlier NE Caucasian influence on Georgian, which in turn influenced Ossetic in relatively recent times.

While Iness. and Abl. are inherited in Ossetic, and innovated in Georgian, it does not necessarily suggest Ossetic influence, because: 1) there is an Abl. case in other Kartvelian languages, and Loc. in Turkic and Eastern Armenian (although in Armenian it is also new); 2) both Loc. and Abl. are extremely typologically common; and 3) the Ossetic cases are not direct continuations of PIr. prototypes, but have been "reinforced" (Kulikov 2009) at some point in time in order to be conserved (see §§3.1.5, 3.1.6). Therefore, it may well have been Kartvelian influence that prevented Ossetic from losing these case markers.

Only the Equative may be considered to be Ossetic influence on Georgian, since it is a full-blown case in Ossetic and is still not completely grammaticalised in Georgian (even less so than other "postpositional" cases). On the other hand, the functions of this case in both languages are somewhat different (see more on this below). In general, we may conclude that Georgian influence on Ossetic exceeds Ossetic influence on Georgian, although in general both languages have influenced each other, and the direction of influence is not completely clear. It must be kept in mind that this conclusion is extremely preliminary. Since the history of Georgian is available through texts, the next step would be to look at how the postpositions gradually grammaticalised into cases, and what was the order of this grammaticalisation.

[14] Reflexes of PIr. **arda* have been used to form the Dative case in some of the Pamir languages, and to form adverbs, like *ālsto* "here" in Khotanese, which prompted Weber (1980: 133) to call for an explanation of this as a common innovation. But none of these languages show a distinction of Dir. and All., like Ossetic, and even though adverbs, like *ardăm/ardămă*, may reflect an earlier process, the full grammaticalisation of these markers as cases is a relatively recent phenomenon.

§4. Some Functions of the Ossetic Cases in Areal Perspective

In §3.4, I have compared the case inventories of Ossetic and neighbouring languages as a whole. I would now like to turn to some of the more salient features of the Ossetic case system and find if any parallels to it are found in neighbouring languages and, if so, whether it can be considered to be a contact-induced similarity.

§4.1. *Nominative-Genitive Differential Object Marking*

Ossetic displays a pattern of differential object marking where direct objects of transitive verbs are marked by Genitive if they are definite/animate, and by Nominative if they are indefinite/inanimate.

6) *lăp:u* ***čəžž-ə*** *fed-t-a*
boy girl-GEN PV+see-TR-PST.3SG
"The boy saw the girl".

7) *miron* ***fəš*** *argăfšt-a*
Miron ram slaughter-PST.TR.3SG
"Miron has slaughtered a ram".

The exact rules governing the choice of Genitive *vs.* Nominative have not yet been determined. What is clear is that human referents are always Genitive-marked, while inanimate referents are always marked by Nominative. But animate non-human (i.e. animal) referents can be marked by both cases, and the choice does not seem to depend on definiteness (cf. 8, below, where there is no definite semantics at all). What features determine the case choice in such instances remains an open question.

8) *săvit:on,* *iw* *binon-t-ă* *sard-əštə* *gorătgăron.*
in.brief one family-PL-NOM live-PST.INTR.3PL in.suburbs
dard-t-oj — ***fəš-ə***
hold-TR-PST.3PL ram-GEN
"In brief, a family lived in the suburbs. They had a ram".

In the works of Soviet scholars concerning the "Caucasian substratum" in Ossetic, this feature has often been considered to be the result of this substartum's influence. Abaev (1978) has drawn parallels with Armenian, where an identical pattern exists. However, there is no language family in the Caucasus, which may have provided the necessary "substratum influence". The only language close to Ossetic, which has a similar pattern is Karachay-Balkar. In Karachay-Balkar, the Nom.-Gen. DOM is the result of phonetic change, which made the old Acc. merge

with the Gen. (Jost Gippert, p.c.). Ossetic influence on Balkar is thus ruled out.

It may be that it was Balkar that influenced Ossetic. However, the PIr. Genitive has become the oblique case serving (among other functions) as a direct object marker in most Late Middle and New Iranian languages (cf. the inflection of Sogdian "heavy stems" and the later inflection of "light stems", Sims-Williams 1982: 68-70), so external influence is not necessary to explain the pattern. The situation in Armenian may well be the result of Iranian, not Caucasian, influence, or an independent development.

§4.2. *Essive Uses of the Allative*

Both Essive cases of Ossetic (Inessive and Supressive) are polysemous with Allative. Inversely, according to my data, the Ossetic Allative case has at least two functions that are rather related to the Locative/Essive domain than to the Lative one. One of these is the so-called Locative possessor (Daniel 2001: 224, Ganenkov 2002: 21), used for expressing an area, which is in some way related to the case-marked participant; cf.:

9) *štăj* *wăd* *iw* *qăždəg* *lăg-mă* *sard-əštə* *săr-gă*
afterwards *then* *one* *rich* *man-*ALL *live-*PST.INTR.3PL *live-*PART
"And then they lived at one rich man's (home)" (spoken text).

The other Essive function, which has never been mentioned in grammars but is encountered in texts, is the Apudessive function:

10) *nă=dwar-mă* *štə,* *sədăr* *băllăx=nəl*
POSS.1PL=*door-*ALL *be.*PRS.3PL *some* *calamity=*1PL.ENCL.SUPER
ăr-səd
PV-*go*[PST.INTR.3SG]
"They are at our doors, some calamity has happened to us".

Admittedly, the Allative seems to be used much less frequently than postpositions in the purely Locative Apudessive sense. There may be a distribution according to some semantic pattern. However, what is clear is that the Ossetic Allative is not a purely Lative case, and combines Allative meaning with Apudessive. This aligns with the Georgian Adpositional case *-tan*, which also combines Adessive with Allative. If the etymology of *-mă* in Ossetic as presented here is correct, then it had no Adessive uses in the beginning. Hence, this polysemy may serve as another fact pointing to Georgian influence on Ossetic.

§4.4. *Alienable vs. Inalienable Possession in Predication*

In Ossetic, predicative possession is marked by a construction, which consists of the possessor in Dative or Allative case, the possessed in

Nominative case, and the existential predicate *iš* (in the past and future tenses its forms are the same as 3rd person singular of *wăvən* "to be"). The choice of Dative *vs.* Allative is determined by the distinction between inalienable and alienable possession, respectively (cf. below, 11a-b).

11) a. *mănmă/*mănăn* *iš* *ručkă*
*I.ALL/*I.DAT* *EXT* *pen*
"I have a pen".

b. *mă=mad-ə* *mad-ăn/*-mă* *biră* *šabi-t-ă*
POSS.1SG=mother-GEN *mother-DAT/-ALL* *many* *child-PL-NOM*
wəd-i
be-PST.INTR.3SG
"My grandmother had many children".

It is of note that the lexeme *xăzar/xăʒară* "house" can belong either to the inalienable or to the alienable classes depending on whether the house is one's own or taken for rent. However, the core opposition is still alienable *vs.* inalienable and not temporary *vs.* permanent, since other lexemes do not allow such variation (e.g. *xădtulgă* "car" can only be used with Allative).

The distinction of alienable and inalienable, or temporary and permanent (a logically different but functionally similar distinction) possession is not typical for Iranian languages (and for Indo-European languages in general) and is a peculiar feature of Ossetic[15]. Such a distinction is present in NW and NE Caucasian languages. In NW Caucasian languages, it is reflected via separate strategies of possession marking on nouns, which is not directly related to the case system. In NE Caucasian languages, on the other hand, it is very typical to distinguish alienable and inalienable, or temporary and permanent, possession in predication. For example, in Lezgian Genitive or Dative marking of the possessor expresses permanent possession, while Adessive marking expresses temporary possession (Haspelmath 1993: 318-319)—this distribution is almost identical to that of Ossetic.

Unfortunately, to my knowledge, no conclusive data exists on Chechen or Ingush. It is known that Genitive is the most widely used case for marking the possessor in predicative constructions, but other strategies are unknown. However, Batsbi, a language closely related to

[15] To my knowledge, the only other language exhibiting a temporary *vs.* permanent distinction in predicative possession is Balochi (Jahani/Korn 2009: 666-667), where Gen. or Obj. cases are used to indicate permanent ownership, and postpositions with the sense of "near" are used to indicate temporary ownership.

Chechen and Ingush, has two strategies for marking the possessor in these constructions: Gen. or All. Judging from the examples in Dešeriev (1953: 239-240), there is either a distinction of alienable *vs.* inalienable or temporary *vs.* permanent possession. Therefore, the alienable-inalienable distinction in Ossetic can safely be assumed to be a NE Caucasian, specifically Nakh, influence.

§4.5. *Functions of the Equative*

The equative, a typologically rare case, has two functions in Ossetic. The first one is comparison:

12)	*xʷəmătăžə*	*qašt-aw=nən*	*laš-ə*	*nə=ud*
	simple	*goose-*EQU*=1*PL*.*ENCL*.DAT*	*take.out-*PRS*.3*SG*	POSS*.1*PL*=soul*

"He tortures us like mere geese" (Axvlediani 1963: 100)

Another function of the Equative case in Ossetic, not directly related to comparison, is that of a "language suffix": *iron-aw* 'Ossetian-EQU' "in Ossetic", *wərəš:ag-aw/ʊrʊs:ag-aw* "Russian-EQU", "in Russian".

Among languages neighbouring Ossetic only Balkar and Vaynakh languages have an Equative case/suffix. However, in Vaynakh languages the Equative case is not used as a language suffix. Its only function is comparison. In Balkar (Kambolov 2006: 278), on the other hand, as well as in other Turkic languages (e. g., in Turkish, see Göksel/Kerslake 2005: 59-60), the suffix *-ča* is used for denoting language. This is strong evidence to consider the existence of Equative as a Turkic influence.

The adverbial case, found in NW Caucasian languages and Georgian, can also perform functions, which are similar to comparison. However, there are subtle differences in meaning; for example, the Adverbial in place of Equative in a sentence (see above, 12) would be interpreted not "like mere geese", but "being mere geese", i.e. denoting not comparison, but identity. It is not by chance that a separate Equative case *=vit*, distinct from the Adverbial, is being grammaticalised in Georgian (see §3.4.1, above). This grammaticalisation may be a result of Ossetic influence.

§5. Conclusions

Based on the reconstruction and areal analysis proposed herein, the evolution of the Ossetic case system can be divided into three periods:

1. A period of common development with other East Middle Iranian languages, like Sogdian and Khotanese. This period is characterised by the following common changes: merger of Ablative and Instrumental, loss of Dative (or its merger with Genitive).

2. A period of innovation characterised by contact with Georgian. During this period Dative, Superessive, and Allative cases appeared. The development of the latter two cases is the result of language contact. Grammaticalisation of Directive and Regressive may have already started during this period.

3. Finally, the innovation of Equative is related to Turkic influence. The innovation of Comitative is probably an internal Iron innovation.

The idea of intense contact with Georgian is certainly not new. It has already been proposed by Abaev (1949), and Georgij Axvlediani has remarked that "The complexity of language contacts of Ossetic and Georgian is peculiar in precisely that it is characterised by a lengthy mutual influence, which is beyond the limits of simple influence. I think that the relationship of Georgian (Kartvelian) and Ossetic (Alanian) languages should better be called interpenetration bordering with bilingualism instead of mutual influence... Kartvelian and Alanian tribes... have lived a mutual life since ancient times, often contacting with each other" (Axvlediani 1960: 170, apud Kulaev 1974: 310). The idea expressed by Akhvlediani is generally confirmed in this study. While the case systems of Ossetic and Georgian are almost identical and this is doubtlessly a sign of language contact, the direction of borrowing cannot be clearly determined. Most of the cases under comparison are innovations in both languages, and none of them can clearly be ascribed to Georgian or Ossetic influence.

This seems to be contrary to most modern theories of language contact, where contact-induced change, or grammatical replication (in terms of Heine/Kuteva 2005) is understood as involving a model language and a replica language. On the other hand, the history of Georgian-Ossetic language contact may well have involved several periods when only one of the languages influenced another, and "mutual influence" is simply stipulated due to the lack of data. Influence of Georgian is not limited to the case system: as shown by Tomelleri (2009), the preverbal system of Ossetic has also experienced the influence of Kartvelian languages.

Turkic influence on Ossetic, on the other hand, is more limited. This owes itself to the historical circumstances, since Ossetians only started to be influenced by Turkic tribes relatively late, when the mediaeval Alanian kingdom was crushed by Mongols and Timurids in the 13th-14th centuries A.D. (Abaev/Bailey 1985).

The conclusions related to the internal history of Ossetic nominal inflection are important as well. Firstly, it is now clear that the Ossetic case system shares a number of innovations with Middle Iranian lan-

guages, which means that it has been developing in parallel with these languages for some time, but not so far as to reduce the system to a mere direct *vs.* oblique opposition, and this aligns with the historical data that the "Caucasian" Alans have been split from the "European" Alans as early as at the turn of the 4th-5th centuries A.D., during Hunnic invasions (Abaev/Bailey 1985). Secondly, the fact that the history of Ossetic inflection reflects an early merger of Abl.-Ins. and Gen.-Dat. supports the hypothesis that these changes were common to all Iranian languages, either parallel developments due to language contact or common innovations. The merger of Nom. and Acc., on the other hand, is already an independent innovation in Ossetic, since it is preceded by the appearance of a new Dative, which is a development unique to Ossetic.

Some issues deserve further research. The most important of these would be for scholars to draw on historical facts and data on the development of the Georgian language to clarify the extent and nature of mutual influence of both languages on each other. Other areas of grammar should also be carefully investigated for signs of contact-induced change. Such research would not only clarify the prehistory of Ossetic and neighbouring languages, but contribute to our understanding of language contact in the Caucasus region (cf. Chirikba 2008 on the problem of the Caucasian *Sprachbund*) and of contact-induced change in general.

Abbreviations

Abl./ABL – ablative case; *Acc.* – Accusative case; *Adess./ADESS* – Adessive case; *Adv.* – Adverbial case; *All./ALL* – Allative case; *Comit./COMIT* – Comitative case; *CONTR* – contrastive particle; *Dat./DAT* – Dative case; *Dir./DIR* – Directive case; *DOM* – Differential Object Marking; *ENCL* – enclitic pronoun; *Eq./EQU* – Equative case; *Erg.* – Ergative case; *EXT* – existential copula; *Gen./GEN* – Genitive case; *ILLAT* – Illative case; *Iness./INESS* – Inessive case; *INF* – infinitive; *Ins.* – Instrumental case; *INTR* – intransitive verb; *Loc.* - Locative case; *m.* – masculine gender; *n.* – neuter gender; *Nom./NOM* – nominative case; *NP* – noun phrase; *OAv.* – Old Avestan; *Obl.* – Oblique case; *PART* – participle; *PIr.* – Proto-Iranian; *pl./PL* – plural number; *POSS* – possessive proclitic; *PRS* – present tense; *PST* – past tense; *PV* – preverb; *Recess./RCS* – Recessive case; *sg./SG* – singular number; *SOV* - Subject-Object-Verb; *Superess./SUPER* – Superessive case; *SUPERLAT* – Superlative case; *TERM* – Terminative case; *TR* – transitive verb; *Voc.* – Vocative case.

Bibliography

Abaev, Vasilij I. (1949) *Osetinskij yazyk i fol'klor,* Moskva-Leningrad.

——— (1958), *Istoriko-ètimologičeskij slovar' osetinskogo yazyka*, vol. 1, M.-L..

——— (1978), "Armeno-Ossetica. Tipologičeskie vstreči", *Voprosy Yazykoznaniya* 6: 45-51.

———; Bailey, H. W. (1985), "Alans", *Encyclopaedia Iranica*, vol. 1: 801-803.

Arkad'ev, Pëtr M., Yurij A. Lander, *et al.* (2009), "Vvedenie. Osnovnye svedeniya ob adygeyskom yazyke", J. G. Testelec, P. M. Arkad'ev, *et al* (eds.)., Aspekty polisintetizma: Očerki po grammatike adygeyskogo yazyka, Moskva.

Axvlediani, G. S. (1960), *Sbornik izbrannyx rabot po osetinskomu yazyku*, Tbilisi.

——— (ed.) (1963), *Grammatika osetinskogo yazyka.* tom 1, *Fonetika i morfologiya*, Ordžonikidze.

Bailey, Harold W. (1946), "Supplementary Note to Asica", *Transactions of the Philological Society*, vol. 45/1: 202-206.

Cheung, Johnny (2002), *Studies in the Historical Development of the Ossetic Vocalism*, Wiesbaden.

——— (2008), "The Ossetic Case System Revisited", Alexander Lubotsky, Jos Schaeken, Jeroen Wiedenhof (eds.), *Evidence and Counter-Evidence: Essays in Honour of Frederik Kortlandt,* Amsterdam-New York: 87-105.

Chirikba, Viacheslav (2008), "The Problem of the Caucasian Sprachbund", Pieter Muysken (ed.), *From Linguistic Areas to Areal Linguistics*, Amsterdam: 25–93.

Čikobava, Arnold (1961), "Tandebulian brunvata sak'itxisatvis kartulši", *Kartuli enis st'rukt'uris sak'itxebi II*: 197-208.

Creissels, Denis (2009), "Spatial Cases", A. Malchukov; A. Spencer (eds.), *The Oxford Handbook of Case*, Oxford: 609–625.

Daniel, Michael A. (2001), "Padež i lokalizaciya", A. E. Kibrik; K. I. Kazenin; E. A. Lyutikova; S. G. Tatevosov (eds.), *Bagvalinskij yazyk: Grammatika, teksty, slovari*, Moskva.

Dešeriev, Yunus D. (1953), *Bacbijskij yazyk*, Moskva–Leningrad.

Dum-Tragut, Jasmine (2009), *Armenian*, Amsterdam.

Emmerick, R. E. (1965), "Syntax of the Cases in Khotanese", *BSOAS*, 28/1: 24-33.

——— (1968), *Saka Grammatical Studies*, London.

Fortson, Benjamin W. (2004), *Indo-European Language and Culture*, Oxford.

Ganenkov, D. S. (2002), *Modeli polisemii prostranstvennyx pokazatelej*, MA thesis, Moscow State University.

Gershevitch, Ilya (1954), *A Grammar of Manichean Sogdian*, Oxford.

——— (1998), "Fossilized Imperatival Morphemes in Ossetic", *Studia Iranica et Alanica. Festschrift for Prof. Vasilij Ivanovich Abaev on the Occasion of His 95th Birthday*, Rome: 141—159.

Göksel, Aslı; Celia Kerslake (2005), *Turkish: A Comprehensive Grammar*, London.

Greenberg, Joseph H. (1963), "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements", Joseph H. Greenberg (ed.), *Universals of Language*, London: 73-113.

Harris, Alice C.; Jan Terje Faarlund (2006), "Trapped Morphology", *Journal of Linguistics* 42: 289-315.

———; Poppy Slocum (2009), *Affixes and Clitics in Georgian*, Ms.

Haspelmath, Martin (1993), *A Grammar of Lezgian*, Berlin.

Heine, Bernd; Tania Kuteva (2005), *Language Contact and Grammatical Change*, Cambridge.

Hopper, Paul J.; Elizabeth Closs Traugott (2003), *Grammaticalization,* Oxford.

Isaev, Magomed I. (1987), "Osetinskij yazyk", *Osnovy iranskogo yazykoznaniya,* t. IV. *Novoiranskie yazyki. Vostočnaya gruppa,* č. 2. *Yazyki severo-vostočnoj gruppy*, Moskva.

Jahani, Carina; Korn, Agnes (2009), "Balochi", Gernot Windfuhr (ed.), *The Iranian Languages*, London: 634-692.

Kambolov, T. T. (2006), *Očerk istorii osetinskogo yazyka*, Vladikavkaz.

Kim, Ronald (2003), "On the Historical Phonology of Ossetic: The Origin of the Oblique Case Suffix", *Journal of the American Oriental Society,* vol. 123/1: 43-72.

Klimov, Georgij A. (1962), *Sklonenie v kartvel'skix yazykax v sravnitel'no-istoričeskom aspekte*, Moskva.

——— (1998), "Megrel'skij yazyk", M. E. Alekseev; G. A. Klimov; S. A. Starostin; Y. G. Testelec (eds.), *Yazyki mira. Kavkazskie yazyki*, Moskva: 52-58.

Klyčev, R. N.; L. P. Čadua (1998a), "*Abxazskij yazyk*", *Idem:* 116-133.

——— (1998b), "*Abazinskij yazyk*", *Idem:* 134-148.

Korn, Agnes (forthcoming), "Evolution of Iranian", M. Fritz; Jared S. Klein (eds.), *Comparative Indo-European Linguistics*, Berlin.

Kulaev, N. X. (1957), "K voprosu o probleme padežej v osetinskom yazyke", *Izvestija SONII* 19, Ordžonikidze.

——— (1974), "O kavkazskom substrate osetinskogo yazyka", *Annual of Ibero-Caucasian Linguistics* 1974: 309-320.

Kulikov, Leonid (2009), "Evolution of Case Systems", A. Malchukov; Andrew Spencer (eds.), *The Oxford Handbook of Case*, Oxford: 439-457.

Kumaxov, M. A. (1998), "Ubyxskij yazyk", M. E. Alekseev, *et al.* (eds.), *Yazyki mira. Kavkazskie yazyki*, Moskva: 149-157.

Lacroix, René (2009), *Description du dialecte laze d'Arhavi (Caucasique du sud, Turquie). Grammaire et textes*, PhD thesis, Université Lumière Lyon 2.

Mel'čuk, Igor A. (1998), *Kurs obščej morfologii*, Moskva–Vienna.

Miller, Vsevolod F. (1882), *Osetinskie étyudy, č.2, Izslědovaniya*, Moskva.

Nichols, Johanna (1994a), "Chechen", R. Smeets (ed.), *The Indigenous Languages of the Caucasus*, vol. 4: *Northeast Caucasian Languages*: 1–77.

——— (1994b), "Ingush", *Ibid.*: 79–145.

Rudenko, B. T. (1940), *Gramatika gruzinskogo yazyka*: Moskva-Leningrad.

Šagirov, A. K. (1998), "Kabardinskij yazyk", M. E. Alekseev, *et al.* (eds.), *Yazyki mira. Kavkazskie yazyki*, Moskva: 103-115.

Šanizе, Ak'ak'i (1953/1973), *Kartuli enis gramat'ik'is sapuzvlebi*, Tbilisi.

Šaradzenidze, T. S. (1998), "Svanskij jazyk", *Idem:* 66-74.

Sims-Williams, Nicholas (1982), "The Double System of Nominal Inflexion in Sogdian", *Transactions of the Philological Society*: 67-76.

——— (1990), "Chotano-Sogdica II: Aspects of the Development of Nominal Morphology in Khotanese and Sogdian", Gherardo Gnoli, Antonio Panaino (eds.), *Proceedings of the First European Conference of Iranian Studies held in Turin, September 7th-11th, 1987 by the Societas Iranologica Europaea. Part* 1*: Old and Middle Iranian Studies*, Rome: 275-296.

Stilo, Donald (2009), "Case in Iranian: From Reduction and Loss to Innovation and Renewal", A. Malchukov; A. Spencer (eds.), *The Oxford Handbook of Case*, Oxford: 700-715.

Testen, David (1996), "On the Development of the Clitic Pronominals in Ossetian", H. I. Aronson (ed.), *NSL 8: Linguistic Studies in the Non-Slavic Languages of the Commonwealth of Independent States and the Baltic Republics*, Chicago.

Thomason, Sarah G. (2003), "Contact as a Source of Language Change", B. D. Joseph; R. D. Janda (eds.), *The Handbook of Historical Linguistics*, Oxford: 686-712.

Thordarson, Fridrik (1989), "Ossetic", Rüdiger Schmitt (ed.), *Compendium Linguarum Iranicarum*, Wiesbaden.

——— (2009a), *Ossetic Studies,* Vienna.

——— (2009b), "Ossetic", *Encyclopædia Iranica,* online: *http://iranica.com/articles/ossetic.*

Tolman, H. C. (1908), *Ancient Persian Lexicon and Texts*, New York.

Tomelleri, Vittorio (2009), "The Category of Aspect in Georgian, Ossetic and Russian. Some Areal and Typological Observations", *Faits de langues* 1.

Vogt, Hans (1944), "Le système de cas en ossète", *Acta Linguistica Hafniensia* 4: 17-41.

——— (1971), *Grammaire de la langue géorgienne*, Oslo.

Weber, Dieter (1980), "Beiträge zur historischen Grammatik des Ossetischen", *Indogermanische Forschungen* 87: 126-137.

Xabičev, M. A. (1991), *Karačaevo-balkarskoe imennoe formoobrazovanie*, Čerkessk.

Yakovlev, Nikolaj F. (1960), *Morfologiya čečenskogo yazyka*, Grozny.

Zgusta, Ladislav (1987), *The Old Ossetic Inscription from the River Zelenčuk*, Vienna.

Zwicky, Arnold M.; Geoffrey K. Pullum. (1983), "Cliticization *vs.* Inflection: English *n't*", *Language* 59: 502-513.