The Origin of the Pre-Ossetic Oblique Case Suffix and Its Implications

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1 The Problem: oblique *-i* in Ossetic and elsewhere[1]

Ossetic is a modern Iranian language spoken in the central Caucasus by approximately half a million people, who are believed to be descended from the ancient Scythian and Sarmatian and medieval Alanic nomads who dominated the steppes from the Black Sea to Central Asia during the 1st millennium BC until perhaps the 7th or 8th centuries AD. Due to its position as the sole modern representative of Northeast Iranian, as well as its isolation from other Iranian languages for well over a thousand years, the language has undergone numerous idiosyncratic developments and often preserves startling archaisms. Ossetic occurs in two major dialects, the more conservative Digor (D) and innovative Iron (I); the latter is spoken by a large majority of Ossetes and provides the basis for the modern literary language.

Among the modern Iranian languages, Ossetic is distinguished by its complex system of nominal case inflection, exemplified by the following paradigms for *bæx* 'horse':

	Digor	pl.	Iron	pl.
nominative	*bæx*	*bæx-tæ*	*bæx*	*bæx-tæ*
genitive	*bæx-i*	*bæx-t-i*	*bæx-y*	*bæx-t-y*
dative	*bæx-æn*	*bæx-t-æn*	*bæx-æn*	*bæx-t-æn*
allative	*bæx-mæ*	*bæx-tæ-mæ*	*bæx-mæ*	*bæx-tæ-m*
ablative	*bæx-æj*	*bæx-t-æj*	*bæx-aej*	*bæx-t-æj*
inessive	*bæx-i*	*bæx-t-i*	*bæx-y*	*bæx-t-y*
adessive	*bæx-bæl*	*bæx-tæ-bæl*	*bæx-yl*	*bæx-t-yl*
comitative	(*bæxi xæccæ*)	(*bæxti xæccæ*)	*bæx-imæ*	*bæx-t-imæ*
equative	*bæx-au*	*bæx-t-æu*	*bæx-au*	*bæx-t-au*

The "genitive" is also used to mark definite (direct) objects and is found in a variety of other argument and locatival roles, as a result of which it is often

[1] An earlier version of this paper was presented at the 23rd Penn Linguistics Colloquium at the University of Pennsylvania, 27-8 Feb 1999. Thanks in particular to David Testen for introducing me to the study of Ossetic. I of course remain entirely responsible for all views and errors contained herein. H.V.S.

referred to as the "oblique". The comitative, expressing accompaniment ("with a horse"), is found only in Iron; in its place the Digor dialect uses gen. *-i* followed by the postposition *xæccæ*.

Despite a century of study, the origins of several of these case markers remain the topic of continuing disagreement. Though most scholars derive adess. D *-bæl* < postposed PIran. *upari 'on, above, at' (Av. *upairi*, OP *upariy*, Skt. *upári*; further reduced to I *-yl*) and compare dat. D, I *-æn* with other modern East Iranian forms such as WaxîÌ *-en*, *-an* (Weber 1980:133), there is at present no consensus on the prehistory of gen./iness. D *-i*, I *-y* and abl. D, I *-æj*. In his pioneering historical grammar of Ossetic, Miller (1903:43-4) considers D *-i*, I *-y* < Proto-Ossetic *-i to reflect PIran. *-iya- < PIE *-iyo-, the well-attested suffix forming relational adjectives from nouns, well-attested in Indo-Iranian, Anatolian (Melchert 1990), Greek, and Italic[2]. Though phonologically plausible, it is at least somewhat peculiar than an original adjectival formation should have become *the* default oblique case and the basis for a whole new series of secondary cases. More problematically, one would have to assume a generalization from relational ('of, pertaining to X') to locatival and definite object function, among others. This is perhaps not unthinkable, but at present I prefer to pursue an alternative origin for obl. *-i without necessarily rejecting's Miller's suggestion out of hand.

More recently, Bielmeier (1982:66-7) takes the Ossetic gen./iness. from PIran. gen. sg. *-ah of consonant-stems. This, however, stands in direct contradiction to the zero-ending of most nouns in both dialects, which can hardly reflect anything other than PIran. *a*-stem nom. sg. *-ah. Thordarsson (1989:459, 470-1), on the other hand, sees in this ending an earlier conflation of PIran. gen. sg. *-ah and loc. sg. *-yaÌ of original PIran. root nouns, whereas for abl. *-æj* he assumes a phonetic merger of the reflexes of *áÌ*-stem gen./abl. *-aÌyaÌh and instr. *-ayaÌ (pp. 459, 471).

That the old PIran. root-noun or consonant-stem inflection would have ousted the inflectional systems of the rapidly expanding classes of *a*- and *áÌ*-stems in the prehistory of Ossetic is *a priori* improbable. A more serious defect of these explanations, however, is their appeal to, and selection from, the wide variety of PIran. declensions and case-endings. This methodological shortcoming is known to scholars of creole genesis as the Cafeteria Principle, i.e. the practice of attributing the origin of individual features of a given creole to superstrate influence from a random English

[2]Miller (1903:44) derives abl. *-æj* from PIran. *o*-stem gen. *-ahya, which presupposes a prehistoric merger of abl. with gen. in thematic nouns and subsequent replacement of the reflex of *-ahya by the relational adj. ending in genitival function.

dialect, or to any number of possible West African substrates (Arends et al. 1995:100, 328). Bielmeier and Thordarson fail to explain why certain case-endings of certain classes were generalized to all nouns, and additionally do not state what happened to the rest of the Old Iranian case system.

Testen (1996:370-2) rightly emphasizes that one must take into account the diachronic evolution of the morphological system of the language as a whole. In his brief discussion of the prehistory of Ossetic nominal inflection, he argues instead that the reconstructed PIE, Proto-Indo-Iranian, and PIran. inflectional system of eight cases was already vastly reduced in pre-POss. to two cases, unmarked nominative or "direct" *-Ø and oblique *-i, as in contemporary YaghnoÌbïÌ[3]. The subsequent buildup of "secondary" cases through grammaticalization of postpositions left the bare obl. *-i confined to the functions of definite direct object, genitive, and inessive (locative).

Such a scenario accounts for the primary role of the oblique-locative within the Ossetic case system and the relatively wide variety of theta- and locatival roles which it can express. In support of this view, Testen refers to the clitic personal pronouns, in which the former pre-POss. general oblique clitic survives as such in the unmarked, unsuffixed gen./abl./iness. 1sg. *mæ*, 2sg. *dæ*, 1pl. *næ*, 2pl. *wæ*, 3pl. *sæ*[4]. As for abl. *-æj* , Testen prefers a derivation from postponed PIran. *hacËa (1996:370, fn.18; cf. Miller 1903:44 with refs.), comparing the OP abl. construction *hacËáÌ-ma* 'from me' with secondary enclitic *-ma* vs. tonic Av. *matÓ*, Skt. *mát* (1996:362fn.8).

In what follows I will propose an origin for the pre-POss. obl. case ending *-i suggested by Testen by considering the prehistory of obl. case markings in the closest attested East Iranian relatives of Ossetic. Specifically, Sims-Williams's (1982) convincing analysis of the origin of obl. *-ïÌ* in Sogdian (the lingua franca of trade along the Silk Road in medieval Central Asia up to the Islamic conquest, and a vehicle for Buddhist, Manichean, and Nestorian Christian literature), provides a likely sequence of prehistoric sound changes leading up to POss. *-i (§2). This hypothesis has direct consequences for the prehistory of Ossetic stress patterns (§3) as well as the interaction of stress with the historical development of POss. vocalism

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[3]At least in nominal inflection; pronouns appear to have maintained a three-way case distinction, e.g. in POss. *a 'this', which opposes obl. *a-i —> D, I gen. *a-i*, all. *a-mæ* (or < *am-mæ?) to *am- —> iness. D *am-i* (I am 'here'), D, I dat. *am-æn*, abl. *am-æj* (Weber 1980:130-1, Thordarson 1989:472; for the forms see Miller 1903:53).

[4]As noted by Testen (1996:369), the sg. forms most likely continue PIran. dat. *may, *tay, *hay; atonic *ay > *æ* can have spread to pl. *nah, *wah, *hi(n)sË. Also possible is that *næ*, *wæ* are the regular developments of unstressed 1pl. *nah, 2 *wah. On the origin of 3sg. gen. D *æ(j)*, I *æj*, *jæ*, 3pl. gen. D, I *sæ*, and 3sg./pl. abl./iness. D Ω*i*, I Ω*y*, see Testen (1996:363-8).

(§4). Finally, the ensuing implications for the subgrouping of medieval and modern (North)East Iranian languages will be briefly considered in §5.

2 Sogdian *-ïÌ* and YaghnoÌbïÌ *-i*

As established by Tedesco 1926, our documents of Sogdian reveal the earlier operation of the "Rhythmic Law", by which stress shifts to the first long vowel or diphthong in the (phonological word), including sequences of *Vr before non-glides and *Vm (Sims-Williams 1984), and otherwise falls on the final syllable. This purely phonological change was then followed by a number of stress-conditioned alterations which profoundly affected the inflectional morphology of the language, as well as its morphosyntax. In both noun and verb, the Rhythmic Law results in the creation of two separate stem classes: "light" stems, which consist solely of light, and "heavy" stems, which contain at least one heavy syllable. The parallel declensions for two *a*-stem stems, light *βaγ-* 'god' and heavy *meÌθ* 'city', are given below[5]. Note that the Sogdian pl. is formed with the original collective suffix in *-taÌ and takes sg. fem. (*áÌ*-stem) endings.

"light"	*βaγ-* 'god' (m.)		pl.	
nom.	*βaγí*	< *bag-áh	*βaγtá*	< *bag(a)-taÌÂ
acc.	*βaγú*	< *bag-ám	*βaγtá*	< *bag(a)-taÌÂm
gen.-dat.	*βaγé*	< *bag-ahya	*βaγtyá*	< *bag(a)-tayaÌÂh
loc.	*βaγyá*	< *bag-ayaÌÂ	*βaγtyá*	< *bag(a)-tayaÌÂ
abl.-inst.	*βaγá*	< *bag-aÌÂd	*βaγtyá*	< *bag(a)-tayaÌÂ

"heavy"	*meÌθ* 'day' (m.)		pl.	
nom.	*meÌθ*	< *máiθ-ah	*meÌθ-t*	< *máiθ(a)-taÌ
acc.	*meÌθ*	< *máiθ-am	*meÌθ-t*	< *máiθ(a)-taÌm
gen.-dat.	*meÌθ*	< *máiθ-ahya	*meÌθ-tïÌ*	< *máiθ(a)-tayaÌh
loc.	*meÌθ-ïÌ*	< *máiθ-ayaÌ	*meÌθ-tïÌ*	< *máiθ(a)-tayaÌ
abl.-inst.	*meÌθ*	< *máiθ-aÌd	*meÌθ-tïÌ*	< *máiθ(a)-tayaÌ

In order to account for the contrasting reflexes of the reconstructed PIran. endings in light and heavy stems, i.e. in accented vs. unaccented position, Sims-Williams proposes the following relative chronology of pre-Sogdian vowel changes (1984:203-5, 1989b:182):

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[5]I follow Sims-Williams (1982, 1989b) in denoting light stems with a following hyphen, hence *βaγ-* vs. *meÌθ*.

1) shortening of final long vowels;
2) syncope of unstressed short vowels (posttonic only?);
3) *-ya > *-ïÌ (and presumably *-wa > *-uÌ, if any such examples exist);
4) loss of "suffixal" *k after unstressed *a, with contraction across hiatus of the resulting adjacent vowels;
5) loss of final short vowels: variable reduction of unstressed (pretonic?) short vowels and (sporadic) introduction of epenthetic vowels.

Thus the ending *-ïÌ* in heavy stems continues PIran. endings of the form *-(a)yaÌ(h) and so was originally proper to the locative sg. of masculines, the genitive-dative, locative, and ablative-instrumental sg. of feminines, and the pl. of all nouns. Phonological developments in unstressed final syllables hence produce a synchronically opaque distribution of -Ø vs. *-ïÌ*, almost fully preserved in the archaic Christian ms. C2. Most (later) Sogdian texts have, not surprisingly, simplified this to a two-case agglutinative system opposing nominative -Ø to generalized "oblique" *-ïÌ*:

	sg.	pl.
nom.	*meÌθ*	*meÌθ-t*
obl.	*meÌÂθ-ïÌ*	*meÌÂθ-tïÌ*

Although phonological developments did occasion declensional shifts from one class to the other (e.g. in S *knδth* [kam□θt] > *kθt* [kaθt] —> C *qθt'* [kaθtá] 'cities', where the loss of the postvocalic nasal resulted in a light first syllable; Sims-Williams 1989b:182), later borrowings and new creations were for the most part inflected according to the strong paradigm, including in particular words containing entirely light syllables, e.g. *kaβnak* 'little', *moγpat* 'chief magus' (Sims-Williams 1984:208, 213). By the time of our documents in Late Sogdian, we can observe a definitive trend towards generalizing the "light" nom. endings (m. *-i*, f. *-a*) and "heavy" obl. *-ïÌ*, as in the following forms of 'god' from the Christian ms. C5: *βaγí* 'god', obl. *βaγi-ïÌ*; pl. *βaγ-tá*, obl. *βaγ-ta-ïÌ* (Sims-Williams 1982:69-70, 1989b:184-5). Though this process has not yet reached completion in our latest Sogdian texts, note that obl. *-i* has been fully generalized in YaghnoÌbïÌ, the lone surviving modern descendant of Sogdian, spoken today by about 2500 people in the YaghnoÌb valley in Tajikistan: cf. *kát* 'house', obl. *kát-i*; pl. *kát-t*, obl. *kát-t-i* (Bielmeier 1989b:483).

Sims-Williams's account thus appears to explain the evolution of light vs. heavy inflection, and in particular the increasingly generalized heavy obl.

-ïÌ. Given the existence of several lexical and morphological isoglosses shared by Sogdian and Ossetic (cf. Bailey 1945, 1946 and see below), one must ask whether a accentual patterning in the prehistory of Ossetic similar to the Sogdian Rhythmic Rule could have accounted for POss. obl. *-i > gen.-iness. D *-i*, I *-y*. To address this question, we must first reconstruct the accentual system of POss. and determine its effects on other prehistoric sound changes, in particular on the treatment of stressed vs. unstressed vowels. This in turn will allow us to better understand the origins of Ossetic nominal inflection as well as draw up a tentative relative chronology of Ossetic historical phonology.

3 Reconstructing Proto-Ossetic accentuation

It has long been known that the placement of accent in both Iron and Digor is determined by a distinction between "weak" and "strong" vowels; cf. Abaev 1939; Isaev 1966; Thordarson 1989:459, 466; Testen 1997:727. The two classes of vowels for the two dialects are given below:

	weak	strong
Digor	æ i u	a e o (ïÌ[6])
Iron	æ y	a i u e o

Stress in Iron is restricted to the first two syllables of the phrase, i.e. phonological word. The first syllable is stressed if it contains one of the strong vowels; if the vowel is weak, the second syllable receives the stress (Thordarson 1989:466, Testen 1997:727-8). In the following example, the initial syllable of *kúrync* 'they ask' is stressed since its vowel is strong *u*,

[6]A distinctively long vowel phoneme /îÌ/ has been posited for Digor by Isaev (1954:230ff.), based on minimal pair oppositions such as *dîÌn* 'religion' (< Arabic) vs. *din* 'you (dat. sg. encl.)', *æxsîÌnae* 'princess' vs. opt. 1sg. *æxsinæ* 'I would shoot'. Aside from such recent borrowings, for which I have no phonetic evidence for a contrast with short *i*, *îÌ* appears only before *n*, as a result of a rule raising pre-POss. *ayn > *iyn (or *en > *iyn); cf. Testen 1996:370 (already Miller 1903:18, though he falsely states the outcome as D *i*, I *y*). Testen (1997:724-5) points out that D *îÌ* appears in environments where one would expect /iy/ on phonological and morphological grounds, e.g. in *adgîÌnag* 'sweetness' to *adgin* 'sweet' (I *adΩËinag*, *adΩËyn*, with suffix *-yaka; cf. D *bazajrag* 'bazaar (adj.)' to *bazar* 'bazaar', *x*^{w}*ærujnag* 'food' to inf. *x*^{w}*ærun* 'eat') or D *fîÌ* 'nose' < *fin^{y} < POss. *find' (I *finΩ*; parallel to D *insæj*, I *ssæΩ* 'twenty' < POss. *insæd' < *winsati). Henceforth I follow Testen in excluding /îÌ/ from the vowel phonemes of Digor; this will play no role in the POss. reconstructions assumed below.

whereas *nyr-tá-syn-aej* and *sæ-c‡y′zΩ‡-y* have a weak vowel (*y* and *æ*, respectively) in their initial syllables and so take second-syllable stress.

nyr tá syn aej | *kúrync* | *sæ cËy‰zΩË-y*
now again them-dat. 3sg. obl. they ask their daughter-obl.
'Now again they ask them for her, their daughter.'

Abaev (1939:97) provides the following striking accentual minimal pair, in which the grouping of words into phonological units for the purposes of stress determination depends on constituent structure:

bæx næ‰ | *qæwy‰* | *máx*
horse us is needed us
'We need a horse.'

bæ‰x | *næ qæ‰wy* | *máx*
horse NEG is needed us
'We don't need a horse.'

By contrast, the accentual system of Digor is not as well understood, and the principal sources do not even agree on the main rules. According to Thordarson (1989:466), stress in Digor follows the same pattern as in Iron, except that "the accent may be retracted to a syllable still farther back if the vowels of the preceding syllables are weak". This implies that, as in Iron, the accent in Digor falls on the first strong vowel of the (phonological) word. Others, however, claim that the *last* strong vowel is stressed (Isaev 1966:26-7, cited in Testen 1997:727), as in the following example:

ba-	*din-*	*æj-*	*jés-*	*Ωænæn*
prevb.	2sg. dat.	3sg. obl.	take	FUT 1sg.

'I'll take it away from you.' (Testen 1996:359;
Iron *ba-js-Ωynæn dyn æj* without 'tmesis')

Both authors agree that if all the vowels in a Digor word are weak, stress falls on the final syllable, e.g. in *næ tikís* 'our cat'[7].

Despite their differences, the accentual patterns of Iron and Digor should permit the reconstruction of a Proto-Ossetic accentual system. The restriction of the accent to the first two syllables in Iron can easily be an innovation, entailing e.g. the deactivation of the Iterative Constituent

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[7]Final (weak) *-æ* may be stressed only in words of two syllables, hence *fidæ‰* 'father' vs. *ær-min-cæ‰©dæ* 'play for me' (Testen 1997:727, quoting Isaev 1966:26-7). This complication will not be dealt with here in reconstructing the POss. accentual system.

Construction (ICC) grouping syllabic heads from left to right in the brackets-and-edges model of Idsardi 1992 and Idsardi and Halle 1995. If Thordarson's description of Digor stress is correct, we may assume that this dialect preserves the POss. situation, whereby stress falls on the first strong vowel, otherwise on the final syllable. Such a system could also have developed into the accentual pattern given by Isaev: under the Halle and Idsardi model, the ICC would alter its parameter settings for bracket construction from LLL in POss. to LLR in Digor.

If the above reconstruction is accurate, the placement of stress in POss. is exactly analogous to that which operated in the prehistory of Sogdian, the only difference being in the specification of marked syllable heads: strong vowels in POss. vs. long vowels in Sogdian[8]. As we shall see below in §4, the contrast of strong and weak in Ossetic largely, though not entirely, continues the earlier PIran. distinction between long vowels and diphthongs vs. short vowels and makes it likely that the Rhythmic Rule was an innovation shared by (most of) Sogdian and pre-POss. The following section will examine the evidence for this stress placement in prehistoric processes affecting pre-POss. vocalism, e.g. syncope and umlaut, and its consequences for the relative chronology of these and other sound changes.

4 Stress and the prehistory of Ossetic vocalism

Before considering the prehistory of Ossetic vocalism in detail, let us first summarize the principal vowel correspondences from PIran. to POss. and the two dialects. These are provided in the table below:

PIran.	POss.	D	I
*aCC	*a	*a*	*a*
*aCV	*æ	*æ*	*æ*
*aÌ	*a	*a*	*a*
*i, *ïÌ	*i	*i*	*y*
*u, *uÌ	*u	*u*	*y*
*ai	*e	*e*	*i*
*au	*o	*o*	*u*
(*aÌi, *aÌu)			

[8]The vowel alternations between *a* (or *o*) and *æ* do not directly reflect the placement of POss. accent (contra Thordarson 1990:259ff.), but are instead due to the contrast between open and closed syllables in (pre-)POss. (cf. Testen 1997:721fn.16).

Thus, the six vowel phonemes reconstructible for POss. can be projected backwards to their most common PIran. sources. When this is done, one observes that, excepting only the rare instances of PIran. *ïÌ and *uÌ and the lengthening of *a > *aÌ in closed syllables (or of *æ > *a, depending on the relative chronology; see below), the POss. "weak" vowels *æ, *i, *u descend from short PIran. *a, *i, *u, respectively, whereas "strong" POss. *a, *e, *o continue PIran. long *aÌ and the diphthongs *ai and *au. These relationships are diagrammed below:

PIran.			POss.		
i		u	i		u
ai	a	au	e	æ	o
	aÌ			a	

Such agreement between those syllables which counted as long in Sogdian (for the most part, long vowels and diphthongs) and the sources of the "strong" vowels in Ossetic, suggests that these two related East Iranian languages may have developed . In order to test this hypothesis, however, we must place the stress shift in a relative chronology of sound changes in pre-POss., much as Sims-Williams has done for Sogdian (see §2). The relevant changes here will include umlaut, syncope, and other conditioned developments, as well as the outcome of word-final sequences (*Auslautgesetze*), which as is known from many other branches of Indo-European often deviate from their normal outcome in other positions.

Before turning to comparative and internal reconstruction, we must begin with the surviving evidence for medieval (pre-)Proto-Ossetic, which, though meager in the extreme, cannot be overlooked. We begin with the one epigraphic find discovered to date, the Zelencuk inscription of the western Caucasus. This has been dated to the 10th-12 c. AD by Zgusta 1987, whose excellent and thorough discussion of all previous treatments concludes with a summary and translation (pp. 59-61). I reproduce his edition of the text here with a transliteration into Roman characters:

ΣΑΧΗΡΗ ΦΟΥΡΤ ΧΟΒΣ	*Saxiri furt Xovs,*
ΗΣΤΟΡΗ ΦΟΥΡΤ ΠΑΚΑΘΑΡ	*Istori furt Bæqætar,*
ΠΑΚΑΘΑ(Ρ)Η ΦΟΥΡΤ ΑΝΠΑΛΑΝ	*Bæqætari furt Æmbalan,*
Α(Ν)ΠΑΛΑΝΗ ΦΟΥΡΤ ΛΑΚ	*Æmbalani furt Lag;*

ANH TZHPΘE *ani cËirtæ*[9].
'X. son of S., B. son of I., Ä. son of B., L. son of Æ.; (this is) their monument.'

Though mostly composed of proper names, this inscription contains several features worth noting. The gen. sg. ending is already *-i* (-H); it occurs four times before ΦOYPT 'son' to indicate the fathers of the four men buried at the site. That POss. *i and *u have not yet fallen together is shown by the spelling of ΦOYPT (*furt*): cf. D *-i*, *furt* vs. I *-y*, *fyrt*, in which POss. *i and *u have merged as *y*. Zgusta seems to imply that the language of the inscription is thus closer to Digor (1987:61), but as Digor is here (and in many other respects) merely more archaic than Iron, preservation of the distinction between -H and ΦOYPT is hardly surprising. Most important — and unexpected — is the preservation of -E < *-ah in TZHPΘE < PIran. *cËiθra- (Avestan *cËiθra-* 'visible sign, form', Khotanese *tcira-* 'image', Persian *cËihra* 'face, figure, image') vs. mod. D, I *cyrt*. As I can imagine no other possible source for the writing of a final -E here, this spelling implies that the reflex of PIran. *-ah had not yet fallen by the time of the inscription[10].

We now turn to the other source for medieval Ossetic, two lines in the Byzantine court official Ioannis Tzetzes's Theogony (12th c.) in what he calls "Alanic". This text has been studied by several researchers, the most recent attempts being Bielmeier 1993 and Testen (1994:312-5). Below I give a transliteration of the two non-Greek lines of text in the edition of Hunger 1953, together with the reconstructed medieval (pre-P)Oss. and translation[11].

...tapagkhàs mésphili khsinà korthì kánta·...
tò phárnetz kíntzi mésphili kaìtz phouà saoûgge;

dæ ban x^{w}arz, mæ sfili, (æ)xsîÌnæ,...
du farniΩ, kinΩæ mæ-sfili, kajci fæwa sawgin?

[9]Here and below I assume that pre-POss. at this stage still possessed palato-alveolar *cË, *ΩË, *ΩË' for modern Oss. *c*, Ω, Ω' as in early 19th c. South Oss. dialects, preserved today after *n* and in geminates; Abaev 1949:496-7, Thordarson 1989:463).

[10]Another possibility is that the reflex of *-ah had fallen some time before, but -E continued to be written by orthographic convention, exactly parallel to the retention of silent final -(in Russia (up to1918) and Bulgaria (up to 1945).

[11]For syntactic objections to Bielmeier's (1993:16ff.) analysis of the second line, see Testen (1994:315fn.17).

'Good day to you (lit. 'your day be good'), my lord, lady,...
Are you ashamed, bride of my lord, who will have ('whose is to be') a priest?'

In this text, as has long been observed, the characteristic Ossetic rounding of *a to *o before *n has not yet occurred: *tapagkhàs,* corresponding to modern D *dæ bon xʷarz,* I *dæ bon xorz* 'your day be good', contains an *a* in *ban* (*pag*) 'good' vs. D, I *bon*[12]. As evidence for a "weak" or reduced value of the vowel reflecting final *-ah or *-aÌ, however, Tzetzes's text is of little value. The contrast between *khsinà* for *ëxsËijnë and *kíntzi* for *kinΩËë (D *kinΩæ*, I *cËynΩ*) is not reassuring, though the *i* of the latter may represent raising and fronting caused by the preceding palatal. Note also that the accent is not marked where it is predicted to fall in POss. — and actually attested in D *æxsïÌÂnæ, kinΩæ‰.* Considering that Tzetzes may not have had complete command of the Alanic of his time, and that his purpose is only to render two lines of sample conversation, we would be wise to dismiss this evidence as less than fully reliable.

The medieval (pre-)POss. continuants of PIran. masc. a-stem nom. sg. *-ah and fem. *áÌ*-stem *-aÌ must have been distinct, since their reflexes differ in Digor: *-ah > D, I -Ø, whereas *-aÌ > I -Ø but D *-æ,* as shown below:

PIran.	POss.	Digor	Iron
*-ah	*-æ=*[-ë]?	-Ø	-Ø
*-aÌ	*-a?	*-æ*	-Ø

The final -E of Zelencuk TZHPΘE suggests that the POss. continuation of PIran. *-ah was some sort of front vowel (though it could of course very well stand for a phonetically reduced [ë]). Below I shall assume that PIran. *-ah > POss. *-i, based on the admittedly very slim evidence of nom. pl. PIran. *pitarah > *fidari —> *fidali-taÌ > POss. *fidal-ta > D *fidæltæ*, I *fydæltæ* (see 3b below).

Putting together the results of comparative reconstruction of POss. and PIran. and the sparse relics of earlier stages of Northeast Iranian, we obtain the following relative chronology of sound changes.

1) Voicing of PIran. *p, *t, *cË, *k between vowels/sonorants

This must have preceded the suffixation of coll. *-taÌ (2).

[12]Cf. also *daban horz* in the word list from the Jász in Hungary, who were speaking a language very similar to Ossetic as late as 1422 (Bielmeier 1989a:242).

2) The generalization of originally collective *-taÌ (or *-ta < *-taÌ) as the plural suffix

If this was suffixed to the nom. sg., the preforms for masc. (*a*-stems) and fem. (*áÌ*-stems) would have been *-ita and *-ata, respectively[13].

3a) Final *-ah > *-i (?)

The only real evidence for positing high front *-i is the change of *r > *l in old r-stem relationship nouns, which appear to have added collective *-taÌ (or *-ta) to the old nom. pl. in *-ah: *pitarah > *pitari —> *pitari-ta > POss. *fidaltæ > D *fidaltæ*, I *fydaltæ* 'fathers'. Since *r otherwise becomes *l only before *i (and *ry > *l), these relic plural formations may attest to the initial development of PIran. *-ah > *-i before later weakening to *ë and eventual loss by the POss. stage. Cf. once again ZelencËuk TZHPΘE < PIran. *cËiθra, though -E here could certainly stand for phonetic [ë].

3b) Shortening of final long vowels: *-aÌ > *-a

4) *ri > *li, *ry > *l

See 3a) above for evidence that final *-ah > *-i in *r*-stem pl. *pitarah > *fidari-ta > *fitali-ta > POss. *fidël-ta > D *fidæltæ*, I *fydæltæ* 'fathers'. Similarly for D, I *madæltæ* 'mothers', *ærvadæltæ* 'brothers, relatives'. That this change had taken place already by early medieval times is confirmed by such well-known names as *Alanoí* 'Alans' < *aryaÌn- (Bielmeier 1989a:241). The shift of *r > *l before *i, and presumably also *ry > *l, must precede the syncope of unstressed *i (7).

5) Umlaut effects: *a > *u / __ C_0u, *a > *i / __ C_0i, *u > *i / __ C_0i. Examples are numerous:

*kanikaÌ > *kainicËá > POss. *kinΩá > D *kinΩæ*, I *cËynΩ* 'bride, daughter-in-law';
*madu > POss. *mud > D *mud*, I *myd* 'honey';
*musËikaÌ > *misËicËá > *misËcËá > POss. *mistá > D *mistæ*, I *myst* 'mous(i)e' (dimin. to *musË- 'mouse');
*pasu > POss. *fus > D *fus*, I *fys* 'sheep';
*pasË(m)ikaÌ > *faisË(m)icËá > *faisËcËá > POss. *festá > D *festæ*, I *fist* 'spring wool' (dimin. to *pasËman- > D *fans*, I *fasm* 'autumn wool');

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[13]It is perhaps worth considering the possibility that the ancient tribal names *Massagé-tai* and *Sarmá-tai* were plurals (with *-ta represented in Greek as *-tai*) to masc. *Masag-i and fem. *Sarm-a (or sim.), respectively.

The evidence of ‘honey’ and ‘sheep’ demonstrates that umlaut *must* have preceded the apocope of final short vowels; the other examples, in which PIran. *i causes umlaut before being lost, show that this change also must have taken place prior to the syncope of unstressed (word-internal) short vowels[14].

6) STRESS SHIFT: stress shifts to the first heavy syllable, i.e. long vowel or diphthong, in the phonological word, otherwise to the final syllable.

7) Syncope of unstressed vowels in open syllables

Cf. the examples of *i*-umlaut above in (1), e.g. *faisË(m)icËá > *faisËcËá, *kainicËá > *kinΩá, *misËicËá > *misËcËá. The same may account for masc. (*a*-stem) pl. *-ita > *-ta, although this could have been analogically remodelled after the sg. in POss.: masc. sg. *-ah > *-i > *-ë > POss. *-Ø —> pl. *-Ø-të.

Similarly, syncope provides the only plausible account of the absence of *-æ- in the pl. of originally fem. (*âÌ*-stem) nouns in *-a > POss. *-æ, which one might expect to be *-ata > POss. “*-atæ” or analogical “*-æ-tæ”. Since Digor always drops final *-æ* in the pl., e.g. in *bælasæ*, pl. *bælæs-tæ* ‘tree(s)’, *x*ʷ*æræ*, pl. *x*ʷ*ær-ttæ* ‘sister(s)’ (Miller 1903:16, 40-1), the POss. preform was most likely *-tæ.

Note, however, that examples such as *madya-ka- > *maidaka- > POss. *médæg > D *medæg*, I *midæg* ‘within’ demonstrate that at least some unstressed *æ (< PIran. *a) in medial open syllables was not lost. Further research will be required to determine the exact relationship between syncope and the placement of stress in pre-POss., in particular the exact conditions for syncope.

8) Unstressed *ya > *i. In addition to the old case endings, there are two clear examples:

i) the preposed definite article *i < *ya (PIran. *ya-), e.g. in D *færæ‰œt* ‘ax’ vs. *i fæ‰oræt* ‘the ax’, I *færæ‰œt* vs. *fæ‰oræt* < *i fæ‰oræt with synchronically morphologized stress shift;

ii) *ezÚaÌfe*-construction with *i < *ya (also from PIran. *ya-), e.g. in D *mad-i zærond*, I *mad-y zærond* ‘old mother’, lit. ‘mother-who (is) old’ (Bailey 1946:205-6).

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[14]An ordering before (2a) is extremely tenuous: if *-ah really did first develop to *-i, this probably did not feed umlaut (though any umlaut effects on the stem vowel can have been undone by analogy to unaltered forms, e.g. in other cases).

These chronological relationships can be represented in the diagram below (boldface indicates sound changes not shared with Sogdian):

voicing (1)

collective *-ta (2)

*-ah > *-i,
*-aÌ > *-a (3)

mid-1st mill. BC

STRESS SHIFT (6)

***ri > *li,**
***ry > *l** (4)

umlaut (5)

syncope (7) ~ 7th c. AD

unstressed *ya > *i (8)

The consequences of this ordered sequence of changes, of course, is that word-final *-ayaÌ(h) in the fem. (*áÌ*-stem) gen./dat., loc., and inst.-abl. and masc. (*a*-stem) loc. develops to *-C-aya˙ (3b) > *-C-ya (7) > *-C-i (8), which became generalized as a new “oblique” marked by the ending *-i[15]. Even more noteworthy is the degree to which the changes reconstructed for the prehistory of Ossetic correspond with those posited by Sims-Williams and others for Sogdian. Though the change of *ri > *li, *ry > *l is particular to Alanic/Ossetic only, all the others are manifested in the historical phonology of Sogdian, even if not always in precisely the same form (cf. pre-Sogdian *-ya > *-ïÌ, the third of Sims-Williams’s rules for unstressed syllables; or the phonetic effects of *i*-umlaut[16]). This striking and unexpected correspondence

[15]Note that the relative chronology of sound changes (6)-(8) and the development of *θy > *cc* (e.g. in I *dyccæg* ‘Tuesday’ vs. D *dukkag*, I *dykkag* ‘second’, D *ærticcæg*, I *ærtyccæg* ‘Wednesday’ vs. D *ærtikkag*, I *ærtykkag* ‘third’, and in deverbal nouns in -*ccag* < *-θyaÌka-; Weber 1991) remains indeterminate: obl. *-cc-i < *-θya < *-taya to nouns in *-të or *-ta can easily have been remodeled to *-t-i. The regular outcome of sequences of *Cy (*Ry > *RR, *Ty > TT; still productive in the modern language) is comparatively recent and almost certainly much later than the developments under consideration here.

[16]I have not yet encountered any mention of orthographic indication of *u*-umlaut in Sogdian, similar to that found in Ossetic ‘honey’ and ‘sheep’ (see above). The pre-Sogd. syncope of unstressed vowels *prior* to the Rhythmic Law (Sims-Williams 1989b:181) may have had parallels in pre-POss., but no positive evidence has yet come to my attention.

in turn has repercussions for the prehistory and subgrouping of Ossetic and its East Iranian relatives.

5 Implications for subgrouping within (North)east Iranian

As noted above, Bailey (1945, 1946) lists a number of lexical isoglosses which appear to connect the language of the "As", i.e. Ossetic, with the Middle East Iranian languages, in particular medieval Sogdian. These common vocabulary items are joined by at least one major morphological innovation: the formation of the pl. with the originally collective suffix *-taÌ, attested already in antiquity in the names of ancient Scythian and Sarmatian tribes living on the steppes to the north of Black Sea, e.g. *Massagé-tai* and *Sarmá-tai* (Bailey 1945:24-6; Sims-Williams 1989a:170).

Since we know that frequent migration was a salient characteristic of the peoples of the Eurasian steppe, the most logical framework in which to place the Northeast Iranian dialects of the 1st millennium BC and early centuries AD would be a dialect continuum, stretching from western Ukraine eastwards to what is now Chinese Turkestan. In addition to the Ossetic-Sogdian correspondences presented by Bailey, evidence for Northeast Iranian at the eastern end of the steppe comes from a set of Iranian loanwords in Tocharian which closely resemble Ossetic, e.g. TB *peret*, TA *porat* 'ax' < PT *p^{y}er^{y}etë, D, I *færæt*; TB *witsáko* < PT *w^{y}eÚt^{s}ëko, D *yedagæ*, I *widag*. These can be dated to roughly the second half of the 1st millennium BC (see R. Kim 1999, §3.1-3 and the chart in §3.4) and reveal contact between speakers of pre-Proto-Tocharian and pre-POss. in eastern Central Asia during this period. Much later, the early medieval Alans, believed to be the (linguistic) ancestors of today's Ossetes, are found back on the western steppes and in the Balkans.

Within such an enormous geographical area, certain linguistic changes would have begun in one place and diffused to neighboring regions, but only rarely (if ever) spread across the entire steppe. The continuing accumulation of locally specific changes gradually differentiated this originally more homogeneous chain of NEIran. dialects into an early form of Ossetic (pre-POss.), the various, mostly unattested or indirectly recorded dialects of Sogdian, and far to the east in Xinjiang, the Saka languages, Khotanese and Tumshuqese. This naturally explains why Ossetic has more features in common with Sogdian than Saka: the latter most likely "branched off" and became relatively isolated from the rest of the NEIran. dialect continuum at an early date, while the more western regions remained in closer contact through migration and trade.

The account of POss. *-i offered here presupposes that the pre-POss. accent shift described above, and other related early changes affecting unstressed vowels (e.g. *-ya > *-i), were shared by neighboring (westerly) dialects of Sogdian, in which the accent shift is familiar as the Rhythmic Law and likewise leads to an obl. ending *-îÌ* in heavy-stem nouns. Notably, modern YaghnoÌbïÌ, the only living descendant of Sogdian, appears to descend from a dialect which never underwent the Rhythmic Law (Bielmeier 1989b:480, fn. 1 with refs.)[17]. This means that the pre-POss. accent shift covered most, but not all of the Osseto-Sogdian dialect area. Below is a schematic representation of Northeast Iranian dialects in the early centuries AD and their diachronic development:

```
500 BC  S c y t h i a n
             |
0       S a r m a t i a n
             |           S  O  G  D  I  A  N
500 AD  A  l  a  n                                  S  a  k  a
             |                                      (Khotanese,
1000    pre-POss.        Late Sogdian               Tumshuqese)

1500

2000      Ossetic               YaghnoÌbïÌ
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The derivation of POss. obl. *-i from various Old Iranian nominal case endings in *-ayaÌ˙ as a result of an accentual generalization thus adds to the isoglosses already shared by Ossetic and Sogdian. That the ancestor of YaghnoÌbïÌ never underwent this same, typically Sogdian rule is a problem only if one adheres to a rigid *Stammbaum* model of East Iranian, or Iranian in general. The evidence listed above for a large-scale dialect continuum spanning the steppes of Eurasia underscores the inadequacy of such an approach in this case, and instead favors a wave-model approach to the innovations characterizing, and historical interrelationships among, the attested and surviving Northeast Iranian languages.

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[17] The generalization of obl. *-îÌ* to all nouns must therefore have followed a different path from that observable in Late Sogdian (see §2 above).

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