not lost their importance, even today. This is especially true for the study of ancient languages of Northern China: no one can ignore the wealth of knowledge and data that Natsuki Osada contributed to this field.

See also: Mongolic Languages; Mongolia: Language Situation; Tungusic Languages.

Bibliography


Ossetic

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Ethnography, History, and Literature
Ossetic (also ‘Ossetian’, ISO639: ‘oss’) is an Iranian language spoken by approximately 650,000 people, mainly in the Republic of North Ossetia-Alania (Russian Federation), the South Ossetic Region in Georgia, in various other parts of the Russian Federation, and in scattered settlements in Turkey. The capital of North Ossetia is Vladikavkaz (Dzaudźiqæu in Ossetic). All speakers are bilingual (with Russian, Georgian, or Turkish as a second language) (Figure 1).

Ossetic belongs to the Eastern Iranian branch of Indo-European of which the oldest historic member is Avestan. In the Middle-Iranian period, the Alanic group of languages comprised the closest relatives of the unattested predecessor of Ossetic. These quite fragmentarily attested languages were spoken from approximately 400 B.C. (earliest mention of the Sarmatians) to the 13th century A.D. in Southern Russia and on the Northern coast of the Black Sea. The first Ossetic document was a catechism printed in Moscow in 1798. Several writing systems based on the Georgian, Roman, and Cyrillic alphabets had been in use before Cyrillic was made official in 1939. In this article, we use the transliteration used by most scholars. The first grammatical description of Ossetic was Andreas Sjögren’s ‘Iron Ævzagaxur’ (St. Petersburg 1844).

The two main dialects, Iron and Digoron, show some major phonological and morphological differences. Still, we will only discuss Iron, which is the basis for the literary language.

The mythological Nart tales, traditionally told by wandering minstrels, were collected from oral sources in the early 20th century by Vsevolod Miller. They have become the national epic. Its first translation into a Western language (French) was done by Georges Dumézil in 1930. Ossetic artistic poetry developed during the 19th century and found its heyday in the works of the national poet Xetægkaty K’osta (1859–1939).

Consonants
Ossetic shows a systematic opposition of voiceless aspirated, voiced, and voiceless ejective stops and affricates. The voiceless uvular stop has no ejective nor voiced counterparts.

The alveolar affricates /ʃ z/ are realized as fricatives in Iron, except for the ejective ([ʃ z ʃ ʃ]) and when geminated ([ʃ z ʃ z]). In all positions, the dental fricatives /s z/ are realized as postalveolars [ʃ ʃ]. These changes are not reflected in the orthography. An older stage is attested in Ossetic dialects in Turkey, where /s z/ are [ʃ ʃ], but /ʃ z/ are still [ʃ ʃ] (Table 1). [ʃ], written γ, occurs in some interjections like γæj [hɔ]‘hey’.

The postalveolar affricates [ʃ banner] /ʃ/ are assimilated variants of the velars before front vowels, e.g., kark ‘hen’ and karç-y ‘of the hen’ (genitive). The few exceptions are loans, such as dzâneyr ‘non-believer’ from Circassian dzâneyr. The only regular blocking of this assimilation occurs with the superessive marker -yl: kark-yl ‘on the hen’.

Since the sequence Consonant + /ui/ + Consonant is not licensed otherwise in Ossetic, we assume
Labialized stops in words like *quyn* to be phonemic: /qʷin/ ‘hair’. Biphonemic geminated stops and affricates (which are voiceless and unaspirated) occur in lexical entries (*læppu* [læpxː] ‘boy’) or at morpheme boundaries: *dard* ‘far’ becomes *dard-dær* [darːɜːr] ‘farther’ (comparative). Initial *y*- before geminated *s* is not reflected orthographically: *sædz* [ʃːz] ‘twenty’.

**Vowels**

The Ossetic vowel system can be divided into peripheral (strong) and central (weak) vowels (Table 2).

The vowels /u/ and /i/ have nonsyllabic variants that are rendered as *u* (sometimes *y*) and *i* in the transliteration. /u/ in onsets before vowels is realized as [w]. Epenthetic [w] is inserted between /u/ and any other vowel: *læw* ‘stand’ and the infinitive marker -yn form *læwyn*. *j* is used as a glide between any vowel (except *u*) and /i/; *uda-* and -yn become *udaj-yn* ‘humidify’.

**Accent**

The word accent depends on the distribution of strong and weak vowels. If the first vowel is strong (s), it receives the accent, if it is weak (w), the second vowel is stressed. Thus, the following patterns emerge (accent is marked by an acute):

- *ss*  *ʃːs*  *wʃ*  *wʃː*

There are lexicalized exceptions to that rule (e.g., forms of the demonstrative pronoun and words like *Irón*). An emerging morphophonemic exception is the preverb *y*- ([ʃːʃ] or [ʃːf]), which retracts the accent even with speakers who no longer articulate the initial vowel: *(y)s-æ@g-an-yn* ‘to close’. Proper names are stressed on the second syllable, while retracting the accent to the initial syllable produces a pejorative note.

Retraction of the accent within a noun phrase (NP) marks the NP as definite (*zærdæ* ‘a heart’, *zærdæ* ‘the heart’).

Only scattered information is available about the phrasal accent of Ossetic. Abaev (1964) lists the noun phrase (containing adjectives or genitives, *syrx tyrysa* ‘red flag’), postpositional phrases (*bælsy byn* ‘under the tree’), and complex predicates (*rox kænyn* ‘forget’) as phonological phrases. Enclitic pronouns and particles (such as negative *næ*) are also incorporated into phonological phrases.

**Loan Word Phonology**

The ejectives were apparently introduced through Caucasian loans (Iron *zač’e*, Circassian [zaʃːe] ‘beard’), although they also correspond to plain voiceless plosives in earlier Russian loans (Iron *bulk’on*, Russian *polkovnik* ‘colonel’). While older loans from Russian follow the Iron accent pattern, recent loans often preserve the lexical Russian accent.
Also, Russian s [s] is sometimes realized as [ʃ] and sometimes as [s].

Nouns

Ossetic morphology is agglutinative with mildly inflectional elements. There are nine morphological cases which have, in part, developed from postnominal elements.

Subject and indefinite direct object are usually in the nominative (bare stem). Objects in the genitive are marked as definite. The dative marks the indirect object, but also the target or purpose of an action. The local cases express the primary local and temporal relations, but the ablative is also used to mark a tool or material used to perform an action, the superessive to mark a reason. The equative (EQU) marks the compared object with comparatives or the language in which something is written, said, etc. (Iron-au ‘in Iron’), the comitative the partner involved in an action.

Plurals are formed by adding -t- to the stem plus the same case markers as in the singular. Sometimes, infixes are added after the stem, such as -y- in many cases where the stem ends in a consonant cluster (cyxt ‘cheese’, plural cyxt-y-t-æ) (Table 3).

Uninflected nouns function as adjectives, but there are also dedicated adjectives (syʤæg ‘clean’), sometimes marked by formatives like -on (uarz-on ‘beloved’) from uarz-yn ‘love’) or -ag (xox-ag ‘mountainous’ from xox ‘mountain’). Adjectives and nouns used as adjectives take the comparative marker -dür (dür-dür ‘farther’) and stand in the superlative paraphrase with æppæty or ñuyl ‘most’ (æppæty dür ‘farthest’).

Pronouns

Pronouns inflect mostly like nouns. The personal pronouns have two stems, lack an inessive and a third person series, which is substituted from the remote demonstrative pronoun (Table 4).

The enclitic object pronouns lack a nominative and an equative to the effect that enclitically expressed direct objects have to be put in the genitive (Table 5). The genitives of the full and enclitic personal pronoun and the reflexive pronoun substitute for the missing possessive pronouns. Reflexives are formed from the object pronoun with -x- and a set of special endings. For reciprocal expressions, the noun karædzï ‘one another’, which only corresponds with plural antecedents, is used.

The demonstrative system exhibits a deictic split into remote (u(y)-) and local (a-). The true pronouns mark nominative and genitive by the same form (a-j ‘this’, uy-j ‘that’), the other cases are formed by adding dative -mæn (uy-mæn), allative -mæ, ablative -mæj (uy-mæj), locative -m, superlative -ñyl, equative -jau, and comitative -imæ. The plural forms adon, uydon inflect like nouns. In adnominal position, an adjective is formed by adding -cy (uycy don ‘that water’).

Interrogative pronouns inflect like the deictic pronouns and are split into personal (nominative či

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Table 1 Consonant phonemes of Iron (IPA and standard transliteration)

<table>
<thead>
<tr>
<th>Labial</th>
<th>Labiodental</th>
<th>Alveolar</th>
<th>Velar</th>
<th>Uvular</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p b p’/</td>
<td>/ t d t’/</td>
<td>/ k k’w g g’w k’w/</td>
<td>/ q q’w/</td>
<td></td>
</tr>
<tr>
<td>p b p’</td>
<td>t d t’</td>
<td>k ku gu g’ ku</td>
<td>q qu</td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>/ m /</td>
<td>/ n /</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>Trill</td>
<td>/ t r /</td>
<td>/ r /</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td>/ t v /</td>
<td>/ s z /</td>
<td>/ ñ ñ/</td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td>/c dz c’/</td>
<td>/ c dz c’/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>/ l l’/</td>
<td>/ l l’/</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 Vowel phonemes of Iron (IPA and standard transliteration)

<table>
<thead>
<tr>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>[i]</td>
<td>[i]</td>
</tr>
<tr>
<td></td>
<td>i</td>
<td>y</td>
</tr>
<tr>
<td>Mid</td>
<td>[e]</td>
<td>o</td>
</tr>
<tr>
<td></td>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>Low</td>
<td>[a]</td>
<td>[e]</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>æ</td>
</tr>
</tbody>
</table>

Uninflected nouns function as adjectives, but there are also dedicated adjectives (syʤæg ‘clean’), sometimes marked by formatives like -on (uarz-on ‘beloved’) from uarz-yn ‘love’) or -ag (xox-ag ‘mountainous’ from xox ‘mountain’). Adjectives and nouns used as adjectives take the comparative marker -dür (dür-dür ‘farther’) and stand in the superlative paraphrase with æppæty or ñuyl ‘most’ (æppæty dür ‘farthest’).
who’, other cases *kæ*-') and impersonal (nominative *cy* ‘what’, other cases *ce*-).

### Numerals

The numeral system is basically a mixed decimal-vigesimal system, such that (1a) and (1b) are equivalent (Table 6).

(1a) aertyn fondz
three fifteen

(1b) fynddæ s æmæ (y)ssæxdz
fifteen and twenty
‘thirty-five’

Ordinals are formed by means of a suffix *-æm* (*cyppar-æm* ‘fourth’), distributives add -gaj (*iu-gaj* ‘one by one’).

### Verbs

The Ossetic verb has a present stem and a past stem (ending in a dental stop). The former is the basis for the present and future tenses and all deverbal nouns, adjectives, and the infinitive (-yn). The latter forms the past tense and the past participle (bare stem).

The past stem shows facultative ablaut of the stem vowel and some facultative modifications of stem-final consonants, as in *lidz*-’run away’ (present) and *lyç-d-* (past). -s- or -y- are sometimes inserted before the past stem marker (*zar-yn* ‘sing’, *zar-yd-t-æn* ‘I sang’). Transitive and intransitive verbs have different sets of past tense personal endings (Table 7).

The tense system distinguishes present (habitual, narrative, continuous present, and immediate future), past, and future.

In addition, the copula *uyn* distinguishes between a momentaneous (MOM) and a habitual (HAB) present. The third person present of the copula has the forms *u*, *i*, and *is*, which vary freely (Bagaev, 1965) (Table 8, Table 9).

(2) Uycy don sydæg u.
that water clean be 3SG PRES MOM
‘That water is clean (right now).’

(3) Uycy don sydæg vajï-
y.
that water clean be 3SG PRES HAB
‘Such water is usually clean.’

Imperfective aspect is expressed lexically (*dzur-yn* ‘say’, *zar*-yn ‘tell’) or morphologically by adding one of the preverbs (generically *s*). The preverbs also give a basic temporal-spatial orientation that takes into account the speaker’s position. They also express further notions of aspect and aktionsart (Table 10).

The subjunctive expresses doubt (present), wish, possibility (present and future), and necessity, and is used to give orders (future). The past subjunctive covers all these notions.

There are several constructions involving verbal nouns, such as the passive (past participle plus *caeu-yn* ‘go’) and the causative (ininitive plus *kaen-yn* ‘do’).

(4) uarst *caeu-y*
loved (past participle) go-PRES 3SG
‘she is loved’

### Noun and Postposition Phrases

Nouns can be modified by means of a preceding noun in the genitive or an adjective. Many nouns can also function as adjectives:
A construction with an adnominal genitive noun can be paraphrased as dative with a clitic pronoun in the genitive.

(8a) Nart-æ tfyt
   Nart-GEN son
   ‘son of the nart’

(8b) Nart-æ tfyt
   Nart-DAT he.GEN son
   ‘son of the Nart’

Simple Verbal Sentences

In most cases, the arguments precede the verb (SOV order).

(9) Nart udæ tfyt
    Nart shawm table-SUP put-PAST-3PL
    ‘The Nart put the shawm on the table.’

In focused word order, the verb can precede the subject. There are no expletive subjects, thus the most simple type of a verbal sentence contains just a verb.

(10) uar-y
    rain-PRES 3SG
    ‘it is raining’

Since subjects can be dropped, intransitive verbs can also form one-word sentences.

(11) xau-y
    fall-PRES 3SG
    ‘he/she/it falls (is falling)’

Clitic objects (always attached to the first phrase of a sentence) stand in for an omitted object or an adverbial noun (12a), or they are presumptive (12b).
The *constructio ad sensum* is very common for both singular subjects with plural verbs and vice versa.

### Copular Sentences

Sentences with the copula *uyn* have the word order (a) subject, predicate noun, copula or (b) subject, copula, predicative noun.

(13) *Mæ nom u Zæhra.*

*my name be.3SG PRES MOM Zæhra*

‘My name is Zæhra.’

The copula can combine with preverbs: *s-uyn* ‘become’ and *fæ-uyyn* ‘turn out to be’.

### Syntax of Embedding

We give two sample analyses of embedding constructions. Example (14) ([Figure 2](#)) shows a relative clause with a pseudo-antecedent (agreeing in number with the main verb) nested inside the relative clause. Example (15) ([Figure 3](#)) illustrates a common construction with attributive clauses and conditionals. Such clauses usually precede the main clause. If the order is inverted, the correlative word (pronoun or conjunction) is moved to the very end of the sentence behind the dependent clause (main clauses in bold print):

(14) *Nyxxas cy temæt-y talk what subject-PL-GEN fædyl kændzystæm, uydon st-y. about do-FUT-1 PL those be-3 SG*  

(The talk about which subjects we are going to make are these.)

The subjects about which we are going to talk are these.
When it (the water) comes out from the earth's crust to the ground through a thick layer of sand, then it arrives fairly clean.

See also: Georgia: Language Situation; Indo-European Languages; Iranian Languages.

Bibliography


Osthoff, Hermann (1847–1909)

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Hermann Osthoff was born on April 18, 1847 in Billmerich, a small village in Westfalia, now part of the city of Unna, Germany. He received his initial schooling in Billmerich as well as in Unna and subsequently, from 1861 to 1865, attended the high school in Gitérsloh, which specialized in classical Greek and Latin (*Humanistisches Gymnasium*). One of his teachers there, Theodor Rumpel (b. 1815), appears to have had a determining influence on Osthoff’s future professional career, just like Karl Windischmann (1775–1839) had on Franz Bopp (see Bopp, Franz (1791–1867)).

Osthoff studied Germanic philology, Sanskrit, and comparative grammar for four years after graduation – first at the University of Bonn and subsequently in Tübingen and Berlin. All three of the academic teachers to whom he acknowledged great in debtness were eminent Sanskrit scholars: Johannes Gildemeister (1812–1890) in Bonn, Walter Rudolf von Roth (1821–1895) in Tübingen, and Albrecht Friedrich Weber (1825–1901) in Berlin.

He obtained his Ph.D. in 1869 with a thesis entitled *Quaestiones mythologicae* in which he pursued historical linguistic as well as mythological objectives. In 1870 he completed his *Staatsexamen*, required of future high school teachers. For three years he taught at the *Humanistisches Gymnasium* in Kassel until, in 1874, he moved to Leipzig, where he continued his studies in comparative philology for one more year to qualify for his *venia legendi* or *Habilitation*, a second doctorate, obligatory for university teachers in Germany. Appointed lecturer (*Privatdozent*) in 1875 at the University of Leipzig, he advanced...