



12-1-2002

Ossetian: Revisiting Inflectional Morphology

Bela G. Hettich

Follow this and additional works at: <https://commons.und.edu/theses>

 Part of the [Psychology Commons](#)

Recommended Citation

Hettich, Bela G., "Ossetian: Revisiting Inflectional Morphology" (2002). *Theses and Dissertations*. 1080.
<https://commons.und.edu/theses/1080>

This Thesis is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.

OSSETIAN: REVISITING INFLECTIONAL MORPHOLOGY

by

Bela G. Hettich

Bachelor of Arts, North Ossetian State University, 1997

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Master of Arts

Grand Forks, North Dakota


December

2002

This thesis, submitted by Bela G. Hettich in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

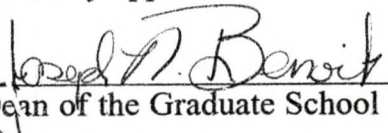


(Chairperson)

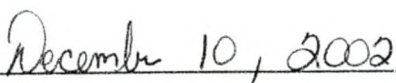




This thesis meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.



Dean of the Graduate School



Date

PERMISSION

Title Ossetian: Revisiting Inflectional Morphology
Department Linguistics
Degree Master of Arts

In presenting this thesis in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my thesis work or, in his absence, by the chairperson of the department or the dean of the Graduate School. It is understood, that any copying or other use of this thesis or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my thesis.

Signature *Bela Hetrich*

Date *December 4, 2002*

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS.....	vi
LIST OF TABLES.....	vii
ACKNOWLEDGEMENTS.....	ix
ABSTRACT.....	x
CHAPTER	
I. INTRODUCTION.....	1
II. PHONOLOGY.....	5
Vowels.....	5
Consonants.....	8
III. NOMINAL INFLECTION.....	24
Number.....	24
Case.....	32
Pronouns.....	57
IV. VERBAL INFLECTION.....	69
Infinitives.....	69
Overview of Verbal Inflection.....	72
Mood.....	75
Person/Number.....	78

Tense	83
REFERENCES	104

LIST OF ILLUSTRATIONS

Figure	Page
1. Distribution of Ossetian in the Caucasus Region	2
2. Vowels in IPA Symbols and Cyrillic Orthography	6
3. Verb Position Class Chart	74

LIST OF TABLES

Table	Page
1. Semivowels and Consonants in IPA Symbols and Cyrillic Orthography	8
2. Affricates.....	12
3. Ejectives.....	18
4. Previously Described Cases (Suffixes as analyzed by Abaev and Bagaev).....	33
5. Accusative According to Bagaev	33
6. Third Person Short Pronoun.....	39
7. The Short Pronoun [jə]	41
8. Genitive Compared to Inessive	43
9. "Equative Case" According to Abaev and Bagaev	44
10. Cases	46
11. Case and Number in Adjectives	56
12. First Person Full Personal Pronouns	58
13. Second Person Full Personal Pronouns.....	59
14. Third Person Full Personal Pronouns.....	59
15. First Person Short Pronouns.....	60
16. Second Person Short Pronouns	61

17. Third Person Short Pronouns	61
18. First Person Reflexive Pronouns	63
19. Second Person Reflexive Pronouns.....	64
20. Third Person Reflexive Pronouns.....	64
21. Verbal Inflectional Morphology.....	73
22. Person and Number in Present Indicative	78
23. Person and Number in Past Indicative Transitive.....	79
24. Person and Number in Past Indicative Intransitive.....	79
25. Person and Number in Future Indicative	80
26. Person and Number in Conditional	80
27. Person and Number in Subjunctive.....	82
28. Person and Number in Imperative.....	82

ACKNOWLEDGEMENTS

Thank you, Albert Bickford, for your expertise, high standards, and patient supervision. Thank you, John Clifton and Michael Beard, for your valuable comments. Thank you, God.

ABSTRACT

Ossetian, a language of the Northeastern group of the Indo-Iranian branch of the Indo-European stock of languages, has not received as much linguistic attention as it deserves. A few major studies on Ossetian were written in the 19th and 20th centuries, most of them in Russian. While these works are a solid foundation in the study of Ossetian, its description is not complete.

The present work, written in English, offers Ossetian to a wider international audience. Relying on new developments in linguistic theory, it reexamines phenomena in the inflectional morphology of Ossetian.

The preliminary chapter on phonology provides an overview of the phonemic inventory of Ossetian. In the chapter on nominal morphology, the variety and nature of case and number suffixes is re-analyzed and they are described as phrasal affixes. In the chapter on verbal morphology, the forms previously described as infinitives are discussed and one of them is reanalyzed as a derived noun or adjective; the majority of verbs are regarded as having one stem form; tense is analyzed as a suffix that attaches to the stem; mood, person, number and transitivity marking is analyzed as one fused suffix.

I. INTRODUCTION

Ossetian is considered to be a language of the Northeastern group of the Indo-Iranian branch of the Indo-European stock of languages (Grimes 2000):

- Indo-European
 - Germanic
 - Italic
 - Romance
 - Celtic
 - Hellenic
 - Slavic
 - Baltic
 - Armenian
 - Indo-Iranian
 - Indo-Aryan
 - Iranian
 - Western
 - Eastern
 - Southeastern
 - Northeastern
 - Yagnobi
 - Ossetian

According to the Ethnologue (Grimes 2000), Iranian languages constitute a group of about 80 languages and are spoken by about 71 million people in at least 7 countries: Afghanistan, China, Iraq, Iran, Oman, Pakistan, Russia, Syria, Tajikistan, and Turkey. Ossetian is spoken by approximately 600,000 people in the Republic of North Ossetia-Alania in the Russian Federation, and in the Republic of South Ossetia, part of Georgia. The following map illustrates the distribution of Ossetian in the Caucasus region.



Figure 1. Distribution of Ossetian in the Caucasus Region

As Katzner (1986: 10-16) indicates, historians generally agree that Indo-European civilization originated in Eastern Europe around 3000 BC and broke up around 2500 BC, when people migrated in different directions. There are two views concerning the migration of the Indo-Iranian tribes to their present location: one supposes that the tribes moved first into Central Asia and then to India and Iran; the other suggests migration of the tribes through the Caucasus. No matter which route the tribes took, the fact remains that for a significant period of time Indo-Aryan and Iranian tribes apparently migrated together and historically they represent a single cultural and linguistic community.

Russian scholars traditionally divide the historical development of the Iranian languages into three periods: old, middle and modern (Ahvelianidi 1963: 12). The oldest Iranian languages of which there are any significant records are Old Persian and Avestan. For the middle period, information about Scythian, Sarmatian,

Sogdian, Parthian, Pehlevi, Khotanese, and Bactrian comes from proper names and toponyms, archeological artifacts, as well as a number of Buddhist, Christian and Manichean texts. Although the historical evidence is limited, it is sufficient to establish a strong relation of Ossetian to Scytho-Sarmatian. One of the Scytho-Sarmatian tribes, the Alans, assimilated with Caucasian tribes; the latter adopted the language of the Alans, bringing into it the peculiarities of Caucasian languages, such as, for example, ejectives. Thus modern Ossetian is a composite of Iranian and Caucasian and in addition has considerable lexical influence from Turkic languages. In many respects, it is unlike any of the other Iranian languages.

Ossetian has three dialects: Iron, Tualag, and Digor. Iron and Tualag are significantly different from Digor phonologically, morphologically, and lexically. The differences between Iron and Tualag are mainly phonological. Iron is generally regarded as the official language of the press and television and is the subject of this work.

The few major studies on Ossetian were written in the period between the late 40s of the 19th century (Shegren and Miller) and the early 60s of 20th century (Abaev, Ahvelianidi, Bagaev), most of them in Russian. Little has been done in the second half of the 20th century. These studies laid a solid foundation in the study of Ossetian. There are, however, some areas in Ossetian grammar that deserve more consideration. The current work reexamines aspects of Ossetian inflectional morphology, such as case marking in nominal morphology and mood, person,

number, transitivity and tense marking in verbal morphology. The preliminary chapter on phonology is intended to assist in the understanding of the phonological processes that affect inflectional morphology.

II. PHONOLOGY

The phonological inventory of Ossetian includes nine vowels, two semivowels, and 28 consonants.

While most of the sounds of Ossetian are similar to those in the inventories of other Iranian languages, there are some that Ossetian borrowed from its Caucasian and Slavic neighbors.

In this chapter and others, all the language data is transcribed in IPA symbols. The transcription is based on pronunciation and is not necessarily representative of the orthographic forms. Phonetic details such as aspiration of plosives and velarization of /l/ are shown only in this chapter in the examples presented in brackets.

Vowels

The vowels of Ossetian are presented in Table 1 (p. 6). The Cyrillic orthography in this table and others in the chapter is presented in parentheses.

The front vowels, all of them unrounded, are: /ɛ/ open-mid, as in [ˈɛkɪpɑɟ] 'crew'; /e/ close-mid, as in [ˈnʲeʃʲi] 'melon'; /i/ near-close as in [fɪnz] 'nose' and /i/ close, as in [ˈmʲinəvɑɾ] 'ambassador'. The /ɛ/ was borrowed from Russian and is used only in borrowed words. The /e/ and the /i/ always induce palatalization of

the preceding consonants as may be seen in the foregoing examples. The vowel /e/ does not occur word-initially. It does, however, occur after word-initial /j/, as in [je'riʃ] 'competition'. In the orthography *e* in word-initial position represents /je/.

Figure 2. Vowels in IPA Symbols and Cyrillic Orthography

	Front	Central	Back
Close	i (и)	ɨ (ы)	u (у)
Close-mid	e (е)	ɪ (и)	o (о)
Open-mid		ə (æ)	
		ɛ (е/э)	
Open			ɑ (а)

Two of the back vowels are rounded, the close-mid /o/ as in [ʃap^hon] 'soap' and the close /u/ as in [ruχʃ] 'sun'. The orthographic *o* in word-initial position represents words that begin with [o] and [wo], for example, [omə sɪ] 'so what' and [womɪn] 'to vomit'. In word-initial position, /u/ is often pronounced as a diphthong /uʲ/, as in [uʲf] 'wife' and [uʲd] 'soul'; the /ʲ/ is not reflected in the orthography. The vowel /ɑ/ is open back unrounded, as in [ʲɑfon] 'span of time'.

There is little agreement in existing works on Ossetian as to the exact quality of the vowel transcribed here as /ə/. Its centrality as opposed to frontness and openness as opposed to closeness are disputed. This vowel is very susceptible to environmental influence. For example, in [bəχ] it is followed by a uvular fricative and it sounds more central than in [bər'zond] 'tall', where it appears before an

alveolar. Its degree of openness vs. closeness is limited to the range from open-mid to close-mid and the degree of frontness vs. centrality is limited to the range from near-front to central. In word-initial positions this vowel is often replaced with /ɪ/, as in [əm'bal] 'enemy', which is often pronounced [ɪm'bal]. My choice of /ə/ as a transcription assumes that it is underlyingly mid-central unrounded, but because of the great allophonic variation, this choice is somewhat arbitrary.

Like /ɛ/, the close central unrounded vowel /ɨ/ was borrowed from Russian. Even in newly borrowed words native speakers pronounce it more like /ɪ/ and it is not clear that the two vowels are distinct.

Abaev (p. 5) makes a useful distinction between strong and weak vowels. Considering only the native Ossetian vowels (ignoring /ɛ/ and /ɨ/, since they are borrowed from Russian), he classifies /a e i o u/ as strong vowels and /ə ɪ/ as weak vowels. The notion of 'weakness' does not refer primarily to prominence in pronunciation (although the weak vowels are more central than the strong vowels), but rather to the tendency of the weak vowels to be more susceptible to phonological change in various environments. Specifically, the weak vowels are prone to reduction, contraction, and disappearance. Also, whenever a weak vowel is in the first syllable of the word, the stress occurs on the second syllable, while many words with the strong vowel in the first syllable have the stress on the first syllable.¹

¹ There is a significant amount of data to suggest a hypothesis that stress in Ossetian is influenced by the information structure. In many words, even in proper names, the

Plosives

The bilabial plosives /b/ and /p/ occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. The /b/ occurs word-finally only in borrowed words. The cluster /pp/ is very common.

- | | |
|--|--|
| (1) [bɪl ^Y] 'lip' | (2) [p ^h ɪl ^Y] 'elephant' |
| (3) [m ⁱ 'kroʊb] 'microbe' | (4) [təp ^h] 'thud' |
| (5) ['k'ɑbɑ] 'dress' | (6) [p ^h ɑ'p ^h ɑ] 'Daddy' |
| (7) ['zɑbr ⁱ] 'watering can' | (8) [t ^h ɑp ^h 'k ^h ɑ] 'shelf' |
| (9) [ə'm'baʃt] 'connection' | (10) [ʃp ^h ɑd] 'sit' |
| | (11) [t ^h ɪ'ppɪr] 'fat' |

The dental plosives are /d t/. They occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. The cluster /tt/ occurs frequently.

- | | |
|------------------------------------|---|
| (12) [dɑv] 'steal' | (13) [t ^h əʃ] 'fly' |
| (14) [ʃp ^h ɑd] 'sit' | (15) [fə'rət ^h] 'axe' |
| (16) [br'dɪr] 'forest' | (17) [wə't ^h ɔr] 'herd of sheep' |
| (18) [wəd'mə] 'till' | (19) ['rɑtsən] 'will give' |
| (20) [k ^h ər'do] 'pear' | (21) [ɔr't ^h ə] 'three' |

(22) [tʰə'bərtt kʰənɪn] 'to gallop'

The velar plosives /g k/ occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. They rarely occur before front vowels. The /k/ occurs after a vowel before a consonant only in borrowed words. The cluster /kk/ is possible. The /k/ also occurs in a three-consonant cluster, as in (33).

(23) [ˈgogɪʒ] 'turkey'

(24) [kʰə'ʃag] 'fish'

(25) [rəʃ'tʰəg] 'time'

(26) [kʰarkʰ] 'chicken'

(27) [bəɾəg'bon] 'holiday'

(28) [tʰa'makʰo] 'tobacco'

(29) [ʃəɾ'gəʃ] 'shepherd'

(30) [bəkʰ'tʰerʲi] 'bacteria'

(31) [wəɾ'kʰo] 'lamb'

(32) [tʰəkkʰə] 'right into'

(33) [əjkʰ'zəg] 'ovary'

The uvular plosive /q/ occurs word-initially, word-finally, intervocalically, and after a consonant before a vowel. The cluster /qq/ is possible.

(34) [ˈqambʲes] 'buffalo'

(35) [ʃaj'daq] 'quiver'

(36) [ʃaqa'dax] 'island'

(37) [ʃq'iʃ] 'splint'

(38) ['qɑqqən] 'keep safe'

One of the prominent phonetic properties in plosives is aspiration. The plosives /p t k/ are usually aspirated.

(39) ['p^hɑjdɑ] 'profit'

(40) [t^hə'ræg] 'driver'

(41) [k^hənk^h] 'dandruff'

An exception takes place when they appear after the fricatives /f, ʃ, χ/ within the same morpheme.

(42) [ʃport^h] 'sport'

(43) [ʃtæg] 'bone'

(44) [ʃkə'ræftsæg] 'animal with a white line on the neck'

(45) ['rbat^həχtam] 'flew in'

(46) [k^hɑft] 'dance'

Aspiration, however, occurs if the fricative /ʃ/ is a prefix (/f χ/ do not occur as prefixes):

(47) ['ʃ-t^həχɪn]
Dir-fly
'fly up'

(48) ['ʃ-k^həʃɪn]
Dir-look
'look up'

The glottal stop /ʔ/ has not been described in previous phonological inventories of Ossetian. However, it is present in many words in isolation, even in words borrowed from Russian, which originally had vowels in word-initial positions. The following are examples, including a borrowed word in (50).

(49) [ʔo] 'yes'

(50) [ʔak^he'an] 'ocean'

The glottal stop occurs word-initially.² There are no words that always begin with the glottal stop; they show variation. Some words are always vowel-initial. In words that show variation, it is possible that the glottal stop is sometimes inserted word-initially because prosodic-unit-initial vowels are impossible in Ossetian. Consider the following example of variation.

(51) ʔo jin 'ʒaβ-t^h-a
 yes 3SgDatSh tell-Past-3SgIndTrans
 "'Yes", he/she/it told him/her/it.'

(52) 'ʒaβ-t^h-a jin o
 tell-Past-3SgIndTrans 3SgDatSh yes
 'He/she/it told him/her/it "yes".'

Affricates

There are four affricates in Ossetian.

² With only one exception in [naʔ] 'no' where it occurs word-finally. I am not aware of examples of its occurrence word-medially.

Table 2. Affricates

	Alveolar	Palato-alveolar
vd.	dz (дз)	dʒ (дж)
vl.	ts (ц)	tʃ (ч)

The voiced alveolar affricate /dz/ is not pronounced by the majority of speakers in Iron. Perhaps it was included in previous descriptions because it is present in Digor and Tualag. All of the instances of orthographic *дз* in Iron are pronounced /z/.

(53) *пырындз* [p^hɪnɪz] 'rice'

(54) *дзаг* [zɑg] 'full'

(55) *хæзар* [χə'zɑr] 'house'

(56) *дзагъырцзæшт* [zɑ'βɪrɪzəʃt] 'with wide open eyes'

The voiceless alveolar affricate /ts/ occurs word-finally. The cluster /tsts/ is possible. The /ts/ also occurs in a three-consonant cluster in compound words, as in (60). It occurs word-initially in borrowed words.

(57) [qɪ^hents] 'proud'

(58) [nɪ'tstsɑvd] 'attack'

(59) [qərts'quʃ] 'alert'

(60) [tsɪ'tat^hə] 'citation'

The palato-alveolar affricates /dʒ tʃ/ occur word-initially, intervocalically, and after a consonant before a vowel. They are always followed by a front vowel,

except in newly borrowed words. This is perhaps because in native Ossetian words they are virtually allophones of the velar /g k/. Evidence of contrast between /g k/ and /dʒ tʃ/ occurring before central and back vowels exists only in borrowings from Russian and some exceptional words like [gogɪʒ] 'turkey'.

- | | |
|---|-----------------------------|
| (61) [ˈdʒʲɪgʲulʲ] 'search' | (62) [tʃɪˈlʲawɪ] 'plum' |
| (63) [ˈrɑdʒʲi] 'early' | (64) [ˈʒɑtʃʲe] 'moustache' |
| (65) [lʲəgʲdʒʲɪn] 'a family with a man' | (66) [tʰɪχʲtʃʲɪn] 'strong' |
| (67) [dʒutʰ] 'jute' | (68) [tʃuˈmɑdɑn] 'suitcase' |

According to Bagaev, the palatal affricates are new to Ossetian and developed recently in Iron when velars /g k/ followed by front vowels /e i ɪ/ changed into /dʒ tʃ/. He cites Digor pronunciation, which is more conservative, in contrast to Iron, in words like Digor [ˈkɪzɡə] vs. Iron [tʃɪdʒg] 'girl' (p. 23). This process is also apparent synchronically in contemporary Iron when /dʒ tʃ/ and the ejective /tʃʰ/, which will be discussed later, arise from underlying /g k kʰ/ followed by /e i ɪ/.

- | | | |
|------|--------------------------|---------------------------------|
| (69) | qug
cow-Nom | ˈqudʒ-i
cow-Gen |
| (70) | kʰarkʰ
chicken-Sg-Nom | ˈkʰərtʃ-ɪtʰ-ə
chicken-Pl-Nom |
| (71) | χumkʰ
hole-Sg-Nom | ˈχuntʃʰ-ɪtʰ-ə
hole-Pl-Nom |

The affricates /dz ts dʒ tʃ/ as well as the sibilants /z s ʒ ʃ/ are subject to great dialectal variation in Ossetian:

		Iron	Digor	Tualag
(72)	'bread'	zul	zol	dzul
(73)	'short'	si'bir	tʃi'bir	tsi'bir
(74)	'chest'	tʃi'rɪn	ki'rɪn	tʃi'rɪn
(75)	'hell'	ʒin'don	z'in'dona	zin'don

Fricatives

Fricatives include voiced and voiceless labio-dental /v f/; sibilants: alveolar /z s/ and palato-alveolar /ʒ ʃ/; and uvular /ʁ χ/.

The labio-dentals occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. The /v/ in word-initial position generally occurs only in borrowed words, with one exception:

[vəj] 'happen, occur'. The /f/ may be long.

- | | | | |
|------|---|------|----------------------------|
| (76) | [vəg'zəlʲ] 'train station' | (77) | [fən'dɪr] 'accordion' |
| (78) | [arv] 'sky' | (79) | [χə'lʲaf] 'pants' |
| (80) | [ʲruvəf] 'fox' | (81) | [ʲkəfɪn] 'to dance' |
| (82) | [si'vʒɪ] 'pepper' | (83) | [kʰəft] 'dance' |
| (84) | [ər'vad] 'person with the same last name' | (85) | [ʲfəl'dəχ kənɪn] 'to fold' |

(86) [uˈnɑfə] 'advice'

The alveolar sibilants occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel.

(87) [zʊl] 'bread'

(88) [sɪˈmɪn] 'to drink'

(89) [χuˈlɪz] 'wet'

(90) [quˈmɑs] 'fabric'

(91) [kərəˈzɪ] 'each other'

(92) [qəˈsəl] 'stick'

(93) [ˈfɪnzɪtʰə] 'noses'

(94) [pʰɪχˈsɪl] 'disheveled'

(95) [sɪbrɪˈzəft] 'nearsighted'

(96) [ˈdʊsgə] 'milking'

The palato-alveolar sibilants occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. Both /ʒ/ and /ʃ/ may be a part of a three-consonant cluster, as in (104) and (105). The /ʃ/ may be long.

(97) [ˈʒɑtʃe] 'moustache'

(98) [ˈʃɑrɑ] 'shed'

(99) [ˈgɔgɪʒ] 'turkey'

(100) [bəˈlɪʃ] 'tree'

(101) [ˈwɑʒəl] 'cold'

(102) [ˈɑʃɑft] 'broke'

(103) [rʒɑd] 'was born'

(104) [χʃɑd] 'washed'

(105) [əʒˈgə] 'rust'

(106) [ɑʃt] 'eight'

(107) [lɪˈʒɪʒˈgənəʒ] 'polisher'

(108) [rəʃtˈtʒɪnɑd] 'truth'

(109) [ʃʃɑd] 'flour'

The uvulars occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. The /ɤ/ and the /χ/ may be long.

- | | |
|--|---------------------------------------|
| (110) [kopp ^h] 'all together!' | (111) [χə'ræg] 'donkey' |
| (112) [məl'ɤ] 'bitterness' | (113) [ʃɪrχ] 'red' |
| (114) [qɑ'l'ɤkʊr] 'guard' | (115) ['bɑχər] 'eat' |
| (116) [mɑɤʒ] 'brains' | (117) [ɑχʃt] 'caught' |
| (118) [tʃ'ɪr'kəd] 'beehive' | (119) [t ^h ər'χæg] 'shelf' |
| (120) [p'ə'ɤkəʃt] 'splash' | (121) [gə'χχət ^h] 'paper' |

The existence of a pharyngeal allophone of /ɤ/ is newly proposed in this paper. There are no references to pharyngeal sounds in previous phonological descriptions of Ossetian. In fact, no clear differentiation in the description of velar, uvular, and pharyngeal sounds is made at all; all of them are referred to as "guttural". Only Issaev, in his contribution to "Grammar of Ossetian Language" (Ahvelianidi 1963), as he describes places of articulation involved in the pronunciation of Ossetian consonants, mentions that the pharynx wall is the passive articulator in the pronunciation of *χɤ*. However, the examples that he later provides do not demonstrate pharyngeals. At least in the dialect that is described in this paper, they are, in fact, examples of uvular stops, as in *χɤOM* 'cattle', which in IPA should be transcribed as [qom]. Clearly, orthographic *χɤ* represents a uvular stop. The

orthographic *гъ*, however, which traditionally stands for a uvular fricative, may be in free variation with a pharyngeal. Examples:

(122) *гъæйтт кæн* [ʕəjtʰ kʰən] 'run'

(123) *æгъгъæд* [ə'ʕʕəd] 'enough'

In such words, it is pronounced farther back than a uvular and is more accurately described as pharyngeal.

Ejectives

There are five ejectives in Ossetian. They are presented in Table 3.

Table 3. Ejectives

			Bilabial	Dental	Alveolar	Palato-Alveolar	Velar
Ejectives	Plosives	vl.	p' (пъ)	t' (тъ)			k' (къ)
	Affricates	vl.			ts' (цъ)	tʃ' (чъ)	

In analyzing ejectives, Bagaev (p. 21) states that they are used mainly in four categories of words:

(124) borrowings from Caucasian languages

a. 'k'aba 'dress'

b. 'b'it'ina 'mint'

(125) old borrowings from Russian

a. 'ʃk'ola 'school'

b. k'ɑ'buʃka 'cabbage'

(126) action word associated with intense physical effort

a. 'ʃk'ərɪn 'to rush'

b. 'ʃk'əfɪn 'to snatch'

(127) onomatopoetic words

a. t'əpp 'thud'

b. tʃ'ɪrtʰ 'spit'

Some originally Iranian words also acquired ejectives:

(128) k'ʊʃ 'bowl'.

The /p'/ occurs word-initially, intervocalically, and after a consonant before a vowel.

(129) ['p'ovɪr] 'cook'

(130) [ɑ'p'əʃʌʃt kʰənɪn] 'to splash'

(131) [ʃp'jɪrtʰ] 'spirit'

The /t'/ occurs word-initially, intervocalically, and after a consonant before a vowel.

(132) [t'əppʰ] 'thud'

(133) ['ɑt'əŋg kʰənɪn] 'to stretch'

(134) [ʃt'əlʲf] 'dot'

The /ts'/ occurs word-initially, word-finally, intervocalically, and after a consonant before a vowel.

(135) [ts'arm] 'skin'

(136) [əɾəlʷχɪnts' kʰənɪn] 'tie in a knot'

(137) [ʼats'əχ kʰənɪn] 'to become green or blue' (Ossetian does not distinguish between green and blue)

(138) [ʼʃtsʰirin] 'to suck out'

The /tʃʰ/ occurs word-initially, intervocalically, and after a consonant before a vowel.

(139) [ʼtʃʰirʲi] 'pizza-like stuffed bread'

(140) [sɪʼtʃʰi] 'chamois'

(141) [ʃtʃʰil] 'fold'

The /kʰ/ occurs word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel.

(142) [kʰəʼʃər] 'threshold'

(143) [χuʼnkʰ] 'hole'

(144) [sɪʼkʰɑ] 'horn'

(145) [ɑkʰʼrʲidʲi] 'locust'

(146) [ʼpɪʃkʰulʷ] 'rag'

Nasals

The nasals /m n/ occur word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel.

(147) [mɑ:d] 'dead'

(148) [nɑ:d] 'fat'

(149) [sɪm] 'drink'

(150) [bɪm] 'bottom'

(151) [sɪ'mɪn] 'to drink'

(152) [t^hə'næg] 'thin'(153) [ɪ'fæl^yməsɪn] 'to get tired'(154) [t^həvd'n'i:z] 'typhoid'

(155) [dɪmd] 'smoked'

(156) [t^hən'zərdə] 'kind-hearted'Trill

The voiced alveolar trill /r/ is in free variation with the alveolar flap /r/. For example, [rɑ:t^h] 'straight' may also be pronounced as [rɑ:t^h]; ['dɑ:rn] 'to wear' may be pronounced as [dɑ:rn]. In this paper, it will always be transcribed as [r].

The trill occurs word-initially, word-finally, intervocalically, after a vowel before a consonant and after a consonant before a vowel.

(157) [rɑ:f^uɛd] 'beautiful'

(158) [sɪ'br] 'short'

(159) [fə'rɑ:zɪn] 'to tolerate'

(160) [k'u'rm] 'blind'

(161) [sræʃ] 'light'

Lateral Approximant

The voiced alveolar lateral approximant occurs word-initially, word-finally, intervocalically, after a vowel before a consonant, and after a consonant before a vowel. The /l/ may be long. It is palatalized before /i e/. It is slightly velarized in syllables with /ɪ/ and with central vowels and is velarized in syllables with back vowels.

(162) [lʲiz] 'flee'

(163) [bʲel] 'shovel'

(164) [bə'lʲɑʃ] 'tree'

(165) [məlʲzɪg] 'ant'

(166) [ʃlʲɪg] 'cut'

(167) [lʲenkʰ] 'swim'

(168) [pɪlʲ] 'elephant'

(169) [lʲəg] 'man'

(170) [kʲulʲ] 'wall'

(171) [ʃtʲolʲ] 'table'

(172) [balʲ] 'cherry'

(173) [fə'llʲad] 'tired'

Approximants

Ossetian has two approximants which function as semivowels: voiced palatal /j/ and voiced labial-velar /w/. The /w/ is represented by a vowel combination *уы* in the practical orthography. The /j/ occurs word-initially, word-finally, intervocalically, and after a vowel before a consonant. The /j/ may be long. The /w/ occurs word-initially, word-finally, intervocalically, and after a consonant before a vowel. The /w/ may be long as well.

(174) [jə'χ'i] 'his/her/its own'

(175) ['wɑzəg] 'guest'

(176) [fə'lloj] 'labor'

(177) ['ɑftəw] 'lower back'

(178) ['ɑjɑj] 'this much'

(179) ['ɑwɑj] 'go away'

(180) [baj'rag] 'colt'

(181) [ʃwəj k^hənɪn] 'to sell'

(182) ['bajjɑf] 'catch'

(183) [ə'wwənk^h] 'trust'

Palatalization of Consonants

All consonants, except for /g k/, are palatalized if they are followed by the vowels /e i/.

(184) [p^hjes] 'oven'

(185) [t^hiu] 'husband's brother'

(186) [n^heʃ'i] 'melon'

III. NOMINAL INFLECTION

Nominal structures in Ossetian are marked for number and case. Plural is marked by a suffix on the nouns; pronouns have distinct stems for singular and plural. Case is marked by phrasal suffixes that attach to the whole noun phrase. This chapter describes the plural forms in nouns; the number of cases and the forms and function of the case markers as phrasal suffixes; and the forms and use of pronouns, namely, personal full and short, reflexive, substantival, and possessive.

Number

Most nouns in Ossetian, with only a few exceptions, have both singular and plural forms. In general, plural is formed by means of the suffix /-t/, which occurs immediately following the stem, before the case suffix.

- (1) 'bɪn-t-ə
root-Pl-Nom
'roots'

In the following sections I have attempted to condense significantly the long lists of irregularities in the plural forms described by Abaev and Bagaev. I explain most of these irregularities by general morphophonemic rules. However, some exceptions still remain.

Lexically-Conditioned Irregularities

There are irregularities in the plural forms of some nouns that are lexically-conditioned. In many nouns, strong vowels in the final syllable become weak before the plural suffix:

- | | | |
|-----|-------------|---------------|
| (2) | ən'dax-ø | ən'dax-t-ə |
| | threads-Nom | thread-Pl-Nom |
| | 'thread' | 'threads' |

In some words, such as [mɑd] 'mother', [fid] 'father', and [ər'vad] 'person with the same last name', the plural suffix is /-əlt/.

- | | |
|-----|---------------------------------------|
| (3) | 'mɑd-əlt-ə |
| ♦♦ | mother-Pl-Nom |
| | 'mothers' |
| (4) | 'fid-əlt-ə |
| | father-Pl-Nom |
| | 'fathers' |
| (5) | ər'vad-əlt-ə |
| | person with the same last name-Pl-Nom |
| | 'people with the same last name' |

Morphophonemic Changes

A number of morphophonemic changes occur when the plural suffix is added.

On stems ending with sonorants /r l m n j w/ the plural suffix usually becomes long /-tt/.

- | | | | |
|-----|------------------------------------|-----|---|
| (6) | am'gər-ø
friend-Nom
'friend' | (7) | am'gər-tt-ə
friend-Pl-Nom
'friends' |
| (8) | moj-ø
husband-Nom
'husband' | (9) | 'məj-tt-ə
husband-Pl-Nom
'husbands' |

There are, however, some lexically-governed exceptions, such as the following:

- | | | | |
|------|-------------------------------|------|--------------------------------------|
| (10) | fɪr-ø
sheep-Nom
'sheep' | (11) | 'fɪr-ɪt-ə
sheep-Pl-Nom
'sheep' |
|------|-------------------------------|------|--------------------------------------|

Stem-final /n/ usually disappears before the long plural suffix /-tt/:

- | | | | |
|------|-------------------------------|------|--------------------------------------|
| (12) | dɔn-ø
water-Nom
'water' | (13) | 'dɔ-tt-ə
water-Pl-Nom
'waters' |
|------|-------------------------------|------|--------------------------------------|

This too has some lexical exceptions:

- | | | | |
|------|------------------------------------|------|---|
| (14) | əf'ʃɔn-ø
reason-Nom
'reason' | (15) | əf'ʃɔn-tt-ə
reason-Pl-Nom
'reasons' |
|------|------------------------------------|------|---|

Another nasal, stem-final /m/, also disappears before /-tt/ if it is a part of a consonant cluster /lm/ or /rm/:

- | | |
|-------------------------------------|--|
| (16) ts'arm-ø
skin-Nom
'skin' | (17) 'ts'ər-tt-ə
skin-Pl-Nom
'skins' |
| (18) kalm-ø
worm-Nom
'worm' | (19) 'kəl-tt-ə
worm-Pl-Nom
'worms' |

Morphophonemic Changes: Insertion of /ɪ/

Insertion of /ɪ/ is a widespread phenomenon in Ossetian. The following are the contexts in which it takes place when the plural is formed.

It is inserted before the plural suffix after several different types of consonant clusters.

This happens after a voiceless consonant of a consonant cluster, a long consonant, or a long semivowel.

- | | |
|---|---|
| (20) mɪft-ø
mouse-Nom
'mouse' | (21) 'mɪft-ɪt-ə
mouse-Pl-Nom
'mice' |
| (22) guɪpp-ø
thud-Nom
'thud' | (23) 'guɪpp-ɪt-ə
thud-Pl-Nom
'thuds' |
| (24) nəww-ø
virgin land-Nom
'virgin land' | (25) 'nəww-ɪt-ə
virgin land-Pl-Nom
'virgin lands' |

The /ɪ/ is inserted on monosyllabic stems with vowels /ə ɪ u/ and a stem-

final consonant cluster which includes a voiced final consonant.

(26) təlm-ø
stripe-Nom
'stripe'

(27) təlm-ɪt-ə
stripe-Pl-Nom
'stripes'

(28) tʃɪnz-ø
bride-Nom
'bride'

(29) 'tʃɪnz-ɪt-ə
bride-Pl-Nom
'bride'

(30) tʃɪʒ-ø
girl-Nom
'girl'

(31) 'tʃɪʒ-ɪt-ə
girl-Pl-Nom
'girls'

(32) sɪrv-ø
yeast-Nom
'yeast'

(33) 'sɪrv-ɪt-ə
yeast-Pl-Nom
'yeast'

(34) kuɪrm-ø
blind-Nom
'blind'

(35) 'kuɪrm-ɪt-ə
blind-Pl-Nom
'blind'

Exceptions are:

(36) fɪnz-ø
nose-Nom
'nose'

(37) 'fɪnz-t-ə
nose-Pl-Nom
'noses'

(38) rɪnz-ø
projection-Nom
'projection'

(39) 'rɪnz-t-ə
projection-Pl-Nom
'projection'

It is also inserted after the back consonants /k k' kk q/.

(40) zɪq-ø
pit-Nom
'pit'

(41) 'zɪq-ɪt-ə
pit-Pl-Nom
'pits'

As a result of the insertion of /i/, the velars /k k' kk/ become /tʃ tʃ' tʃtʃ/ respectively.

- | | |
|--------------------------------------|---|
| (42) kark-ø
hen-Nom
'hen' | (43) 'kərtʃ-it-ə
hen-Pl-Nom
'hens' |
| (44) χunk'-ø
hole-Nom
'hole' | (45) 'χuntʃ-it-ə
hole-Pl-Nom
'holes' |
| (46) wə'rikk-ø
lamb-Nom
'lamb' | (47) wə'ritʃtʃ-it-ə
lamb-Pl-Nom
'lambs' |

In the plural on stems that end with a derivational suffix /əg/, the /ə/ is generally not present. The suffix /-əg/ is used to derive nouns from other grammatical forms. The /ə/ in this suffix seems to be present underlyingly, as all of the derived nouns have it; it doesn't seem to be affected by the phonological environment in the process of derivation. For example: [fəj'nəg] 'log', ['kafəg] 'dancer', [χəf'təg] 'relative'. It is possible that the transformations take place in the following order: 'wafəg → 'wafəg-tə → 'wafəg-itə → 'wafədʒ-itə → 'wafdʒ-it-ə. The /i/ is inserted probably because the cluster /gt/ is generally not allowed. The insertion of /i/ causes /g/ to become /dʒ/. It is unclear why the /ə/ disappears.¹

¹ It is also possible that the /ə/ in the nominalizer /-əg/ is not underlying and is inserted to satisfy syllable structure constraints in singular (again, perhaps /g/ is generally not allowed in a consonant cluster). It is not inserted when the plural is formed because after the insertion of /i/, /g/ changes into /dʒ/ and no unallowable clusters are formed.

- | | |
|---|--|
| (48) 'wafəg-ø
rooster-Nom
'rooster' | (49) 'wafdʒ-it-ə
rooster-Pl-Nom
'roosters' |
| (50) 'χərəg-ø
donkey-Nom
'rooster' | (51) 'χərədʒ-it-ə
donkey-Pl-Nom
'roosters' |
| (52) 'zərəg-ø
song-Nom
'song' | (53) 'zardʒ-it-ə
song-Pl-Nom
'songs' |

If /əg/ is preceded by a consonant cluster, long consonant, or a combination of semivowel and a consonant, /ə/ does not disappear (or is inserted to prevent /g/ from joining a consonant cluster), /ɪ/ is inserted before the plural suffix and /g/ becomes /dʒ/:

- | | |
|--|--|
| (54) χəf'təg-ø
relative-Nom
'relative' | (55) χəf'tədʒ-it-ə
relative-Pl-Nom
'relatives' |
| (56) 'qufʃəg-ø
ear-ring-Nom
'ear-ring' | (57) 'qufʃədʒ-it-ə
ear-ring-Pl-Nom
'ear-rings' |
| (58) fəj'nəg-ø
board-Nom
'board' | (59) fəj'nədʒ-it-ə
board-Pl-Nom
'boards' |

The following is a lexical exception in several respects:

- | | |
|-----------------------------------|---|
| (60) fʈəg-ø
bone-Nom
'bone' | (61) ɪf'tʃ-it-ə
bone-Pl-Nom
'bones' |
|-----------------------------------|---|

There are several lexical exceptions to the preceding, when none of the described changes take place and the plural suffix is added according to the regular pattern.

- | | |
|---|---|
| (62) ʒɪ'məg-ø
winter-Nom
'winter' | (63) ʒɪ'məg-t-ə
winter-Pl-Nom
'winters' |
| (64) tʃɪ'rəg-ø
cage-Nom
'cage' | (65) tʃɪ'rəg-t-ə
cage-Pl-Nom
'cages' |
| (66) fə'təg-ø
leader-Nom
'leader' | (67) fə'təg-t-ə
leader-Pl-Nom
'leaders' |

When plural is formed in words with /ɪg/ stem-finally, /ɪ/ disappears and /u/ is inserted before the plural suffix:

- | | |
|---------------------------------------|--|
| (68) 'tʃ'ɪnɪg-ø
book-Nom
'book' | (69) 'tʃ'ɪng-u't-ə
book-Pl-Nom
'books' |
|---------------------------------------|--|

If /ɪg/ is preceded by a consonant cluster, the stem remains intact; /ɪ/ is inserted before the plural suffix and /g/ becomes /dʒ/:

- | | |
|------------------------------------|--|
| (70) məl'zɪg-ø
ant-Nom
'ant' | (71) məl'zɪdʒ-ɪt-ə
ant-Pl-Nom
'ants' |
|------------------------------------|--|

Exceptions to the above rules often involve words that appeared in Ossetian in the 20th century. In them, the plural suffix is added according to the regular pattern.

- | | |
|---|---|
| (72) dəft'əlfig
colon-Nom
'colon' | (73) dəft'əlfig-t-ə
colon-Pl-Nom
'colons' |
| (74) qədzig
comma-Nom
'comma' | (75) qədzig-t-ə
comma-Pl-Nom
'commas' |

Case

How Many Cases are there in Ossetian?

There are nine cases in Ossetian, according to Abaev, but in a later work Bagaev suggests that there are ten. These previously described cases are presented in Table 4 (p. 33).

Abaev and Bagaev use different labels for comitative/conjunctive; Bagaev uses "sojuzniy", instead of Abaev's "sovместniy", but this is just a difference in terminology. The main substantive difference between the two authors is that Bagaev adds accusative to the list that Abaev proposes.

"Accusative" Case: Bagaev's Analysis

In his proposal, Bagaev differentiates between definite and indefinite direct objects. He notes that the direct objects have two types of case marking. The indefinite direct objects are marked by /-ə/ in singular and /-ə/ in plural (as in nominative) and the definite direct objects are marked by /-t/-jɪ/ in singular and plural (as in genitive). He proposes to bring the direct objects together under accusative case. The suffixes that he suggests are demonstrated in Table 5.

Table 4. Previously Described Cases (suffixes as analyzed by Abaev and Bagaev)

Suffix				Abaev's	Bagaev's	Transliterated
after C/SV		after V				
sg.	pl.	sg.	pl.			
-ø	-ə	-ø	-ə	Nominative	Nominative	Imenitel'niy
-ɪ	-ɪ	-jɪ	-jɪ	Genitive	Genitive	Roditel'niy
-ən	-ən	-jən	-jən	Dative	Dative	Datel'niy
-ɪ	-ɪ	-jɪ	-ɪ		Accusative	Vinitel'niy
-əj	-əj	-jə	-əj	Ablative	Ablative	Otlojitel'niy
-mə	-əm	-mə	-əm	Allative	Allative	Napravitel'niy
-ɪl	-ɪl	-jɪl	-ɪl	Adessive	Adessive	Mestniy vneshniy
-ɪ	-ɪ	-jɪ	-ɪ	Inessive	Inessive	Mestniy vnutrenniy
-imə	-imə	-imə	-imə	Comitative	Conjunctional	Sovmestniy
-au	-au	-jau	-au	Equative	Equative	Upodobitel'niy

Table 5. Accusative According to Bagaev

	After consonant/semivowel		After vowel	
	Singular	Plural	Singular	Plural
Definite	-ɪ	-ɪ	-jɪ	-ɪ
Indefinite	unmarked	-ə	unmarked	-ə

The following examples demonstrate Bagaev's accusative case, with the distinction he draws between definite vs. indefinite direct objects:

a. Indefinite:

- (76) χə'don ʃ-'ʃar-t-on
 shirt-AccIndef Compl-find-Past-1SgIndTrans
 'I found a shirt.'

b. Definite:

- (77) əm'bal-ɪ ʃ-'ʃar-t-on
 friend-AccDef Compl-find-Past-1SgIndTrans
 'I found a friend.'

(Even though an indefinite article is used in the translation of what Bagaev calls a definite noun, the noun, [əm'bal] 'friend', in Ossetian would be clearly definite. The friend is most likely present when the utterance is made.)

It should be noted right away that a simplification could be proposed in this analysis. The /j/ in the Accusative suffix is probably present underlyingly. The /j/ gets deleted after a stem-final consonant.

- (78) 'χo-ji
 sister-AccSg

- (79) fə'rət-ɪ
 axe-AccSg

It is also not present in the vowel-final stems in accusative plural, because there the accusative suffix is always preceded by a consonant in the plural suffix /-t/, as in 'sister':

(80) 'χo-t-i
sister-AccPl

I am not aware of examples in Ossetian where the /j/ occurs after a consonant.

Perhaps this is because consonants are not allowed to be followed by /j/. If so, the /j/ in the suffix always gets deleted after a stem-final consonant or semi-vowel. When this process is recognized, it is not necessary to distinguish the phonological environment. Also, there is no separate accusative singular and accusative plural; the number is marked by a separate plural suffix. Therefore, if there were a need to posit an accusative case, there would be simply one underlying form of the accusative definite suffix: /-ji/.

Positing a separate accusative case, however, needlessly complicates the description of the case system. Since some direct objects are marked with suffixes identical to genitive case and other direct objects are marked with suffixes identical to nominative case, it is better to simply specify that nominative and genitive case are used to mark direct objects. This is what Abaev does (although his specification of the conditions under which each case is used requires some clarification, as discussed in the following section).

Abaev does not refer to accusative at all; instead, he states that a direct object is marked by nominative for indefinite and impersonal things and by genitive for definite and personal things. Under Bagaev's proposal, the similarity in form

between accusative and nominative is accidental; under Abaev's proposal the generalization is stated explicitly.

The assumption behind the line of analysis presented here is that the number of cases posited for a language should be determined by distinct morphological forms, not by distinct grammatical functions. Thus, since all direct objects are accounted for as instance of either nominative or genitive, there is no need to posit a separate accusative case.

"Accusative" Case: the Distinction between the Direct Objects

Ossetian does indeed distinguish between two types of direct objects; however, the distinction seems to be somewhat different from what either Abaev or Bagaev state. It is between personal vs. impersonal direct objects. Abaev's system, for example, does not allow for things that are definite and impersonal or indefinite and personal. Bagaev's distinction between definite vs. indefinite is also incorrect. For example, in a situation where reference is made to a definite shirt, an example such as (81) is ungrammatical. Instead, (82) is used.

(81)	*'asi	χə'don-i	ʃ-'ʃar-t-on
	this	shirt-Gen	Compl-find-Past-1SgIndTrans
	'I found this shirt.'		

(82)	'asi	χə'don	ʃ-'ʃar-t-on
	this	shirt	Compl-find-Past-1SgIndTrans
	'I found this shirt.'		

The object in (82) has a zero suffix as in nominative, the form that Bagaev would consider accusative indefinite. The definite direct object in this example is not

marked with /-ɪ/, as his proposal predicts. In fact, this is a general pattern in contemporary Ossetian: direct objects are not suffixed with /-jɪ/ when they are definite:

(83) 'asi χə'zar 'ba-lχə-tt-on
 this house Compl-buy-Past-1SgIndTrans
 'I bought this house.'

(84) 'mə χorɜ zə'bug 'fɛ-tt-on
 1SgGenSh good hammer see-Past-1SgIndTrans
 'I saw my good hammer.'

(85) mə χo mə χə'laf əmə mə
 1SgGenSh sister 1SgGenSh pants and 1SgGenSh

χə'don 'ba-mbəχɟ-t-a. mə
 shirt Compl-hide-Past-1SgIndTrans. 1SgGenSh

'χədon ɟ-'ɟar-t-on mə χə'laf
 shirt Compl-find-Past-1SgIndTrans 1SgGenSh pants

ta na?
 but Neg.

'My sister hid my pants and my shirt. I found my shirt, but not my pants.'

Only personal direct objects are marked by the suffix /-jɪ/ in singular and plural as in genitive; the impersonal direct objects are unmarked in the singular and in the plural they have the suffix /-ə/; both of these suffixes are identical to the suffixes in nominative case. This is illustrated in the following examples (with glossing as in the current analysis).

- (86) fə'tima-ji 'fɛ-tt-on
 Fatima-GenSg see-Past-1SgIndTrans
 'I saw Fatima.'
- (87) *fə'tima 'fɛ-tt-on
 Fatima-Nom see-Past-1SgIndTrans
- (88) 'ləppu-t-i 'ba-ʒi-tt-a
 boy-Pl-Gen Compl-recognize-Past-3SgIndTrans
 'He/she/it recognized the boys.'
- (89) *'ləppu-t-ə 'ba-ʒi-tt-a
 boy-Pl-Nom ComplDir-recognize-Past-3SgIndTrans
- (90) qə'dur 'warʃ-t-a
 beans-Nom love-Past-3SgIndTrans
 'He/she/it loved cooked beans.'
- (91) *qə'dur-i 'warʃ-t-a
 beans-GenSg love-Past-3SgIndTrans
- (92) 'χsa-t-ə 'ba-mbəχʃ-t-on
 money-Pl-Nom Compl-love-Past-1SgIndTrans
 'I hid the money.'
- (93) *'χsa-t-i 'ba-mbəχʃ-t-on
 money-Pl-Gen Compl-love-Past-1SgIndTrans

Bagaev's Argument for Accusative Case from the Pronoun [jə]

Bagaev's proposal of a distinct accusative case is mainly based on the existence of the third person singular short pronoun [əj], which is used for direct objects, personal and impersonal.

In comitative the deletion is not possible as /e/ does not occur word-initially (see discussion on p. 6).

Returning to the discussion of the direct object form [əj], it can be regarded as an instance of the genitive /jə/ with optional deletion of initial /j/ followed by insertion of word-final /j/. This latter insertion is required because no word in Ossetian can consist of a single vowel.

Underlying	'ʃ-ʃar-t-on Compl-find-Past-1SgIndTrans	jə
After optional deletion of /j/	'ʃ-ʃar-t-on Compl-find-Past-1SgIndTrans	ə
After insertion of final /j/	'ʃ-ʃar-t-on Compl-find-Past-1SgIndTrans	əj
Surface	'ʃ-ʃar-t-on Compl-find-Past-1SgIndTrans	əj

"Inessive" Case

Following the approach to analysis used above in the discussion of accusative (that the existence of distinct cases needs to be justified by distinct morphological forms), certain other cases proposed by Abaev and Bagaev can also be eliminated from the analysis.

Inessive, which indicates location inside an object, also has a suffix that is identical to genitive.

Table 8. Genitive Compared to Inessive

Case	After consonant/semivowel		After vowel	
	Singular	Plural	Singular	Plural
Genitive	'χur-ɪ sun-Gen	'χur-t-ɪ sun-Pl-Gen	'χo-ɟɪ sister-Gen	'χo-t-ɪ sister-Gen
Inessive	'χur-ɪ sun-Ines	'χur-t-ɪ sun-Pl-Ines	'χo-ɟɪ sister-Ines	'χo-t-ɪ sister-Ines

For example,

- (99) 'ʃkɔla-ɟɪ nə 'u-dʲ-ɪ
 school-Ines Neg be-Past-3SgIndIntrans
 'He/she/it wasn't at school.'

There is no need to propose a separate inessive case. It would be better to simply state that 'location inside an object' is one of the uses of genitive, rather than positing a distinct case that just happens to be identical in form to genitive.

Bagaev notes that for some nouns that semantically express place and time, the inessive suffix is omitted (p. 143):

- (100) 'asɪ bon də 'mbar-ɪn
 this day you understand
 'Today I understand you.'

Again, it would be simpler to say that this is one of the uses of the nominative, as nominative is usually unmarked in singular. And, in fact, such nouns can be plural, and if so, they take a suffix that is identical to nominative plural.

- (101) 'asɪ bon-t-ə də 'mbar-ɪn
 this day-Pl-Nom you understand
 'Today I understand you.'

So, it seems better to describe "location inside" as an additional function of nominative case rather than to say that the inessive (genitive) suffix is sometimes omitted. Thus, the notion of "location inside" may be expressed by either genitive or nominative.

"Equative" Case

Abaev and Bagaev also propose "upodobitel'niy" case which could be called equative case in English. They state that nouns in equative case often answer questions like "like what?" and "like who?"; it is marked by the suffix /-au/ and after the vowels /a ə o u e/, the semivowel /j/ is inserted before the suffix.

Table 9. "Equative Case" According to Abaev and Bagaev

After vowels /a ə o u e/		Elsewhere	
Singular	Plural	Singular	Plural
'k'o3o-jau	'k'o3o-t-au	'ləg-au	'ləg-t-au
mushroom-Eq	mushroom-Pl-Eq	man-Eq	man-Pl-Eq

At least two observations provide arguments against the analysis of these forms as a distinct case. One, this suffix has limited productivity, and two, the contexts in which it may be used are restricted. Consider the following examples:

- (102) 'χur-au 'ra-kaf-t'i
 sun-Eq Dir-look-Past-3SgIndIntrans
 'He/she/it looked out like a sun (smiling, kindly).'

- (103) 'dur-au nı-'qəbər-jif
 stone-Eq Dir-hard-3SgIndIntrans
 'He/she/it became hard like a rock.'

Words with this suffix cannot be modified, except by a degree word, suggesting that they are not nouns at all, but adverbs. Even modification by a degree word is sometimes questionable.

- (104) *rə'ffuxd 'dur-au
 beautiful stone-Eq

- (105) *fonz 'dur-au
 five stone-Eq

- (106) tıng 'dur-au
 very stone-Eq
 'very hard like a stone'

- (107) *tıng 'χur-au
 very sun-Eq

Thus, the phenomenon previously described as equative case is better analyzed as an instance of derivation of adverbs from nouns.

Remaining Cases in Ossetian

The foregoing discussion leaves us with only seven cases to consider. They are presented in Table 11 with their forms. In two cases, there are separate singular and plural forms. In several cases the suffix-initial /j/ is deleted after a stem-final consonant or semivowel (as I mentioned earlier, the cluster /Cj/ does not occur in Ossetian).

Table 10. Cases

Case	Suffix
Nominative	-ø (singular)
	-ə (plural)
Genitive	-ji (-i after a consonant)
Dative	-jən (-ən after a consonant)
Ablative	-jə (-əj after a consonant)
Allative	-mə (singular)
	-əm (plural)
Adessive	-jil (-il after a consonant)
Comitative	-imə

The form and use of each of these are discussed in the following sections.

Nominative

Nominative is not marked in singular and has a suffix /-ə/ in plural:

- (108) k'ul-ø (109) 'k'ul-t-ə
 wall-Nom wall-Pl-NomPl

Nominative is one of the two cases (the other being allative) in which the singular differs from plural. Following the above discussion, nominative is used for subjects, impersonal direct objects, some noun phrases that semantically indicate location and

time, and with the preposition [əd] 'with'. The use of this preposition is no longer common in colloquial speech.

- (110) χur 'ra-kaʃ-tʰ-iʃ
 sun-Nom Dir-look-Past-3SgInd
 'The sun came out.'
- (111) χur nə 'fɛ-tt-on
 sun-Nom Neg see-Past-1SgInd
 'I didn't see the sun.'
- (112) diʃon də nə 'ba-ʒit-t-on
 yesterday-Nom 2SgGenSh Neg Compl-know-Past-1SgIndTrans
 'I didn't recognize you yesterday.'
- (113) lə'ppu əd fə'rət 'qəd-mə 'ɑ-sɪ-dʲ-i
 boy with axe-Nom forest-All ComplDir-go-Past-3SgIndIntrans
 'The boy went to the forest with an axe.'

Genitive

Genitive is marked by the suffix /-jɪ/; when this suffix follows a consonant or semivowel, the suffix-initial /j/ is deleted:

- (114) bə'lɑʃ-ɪ
 tree-Gen
- (115) kɑr'do-jɪ
 pear-Gen

Genitive is used for possessors, personal direct objects, to indicate location and time, and with what are sometimes called postpositions.

- (116) ma'r'ina-ji 'ba-farʃ-t-on
Marina-Gen Compl-ask-Past-1SgInd
'I asked Marina.'
- (117) ma'r'ina-ji 'tʃiʒ-ɪ 'ba-farʃ-t-on
Marina-Gen daughter-Gen Compl-ask-Past-1SgIndTrans
'I asked Marina's daughter.'
- (118) ma'r'ina-ji fə'ʃtə 'ba-sɪ-tt-on
Marina-Gen after Compl-go-Past-1SgIndTrans
'I went in after Marina.'
- (119) ta'marə 'ʃkola-ji 'kuʃ-ø-ɪ
Tamara school-Gen work-Pres-3SgInd
'Tamara works at school.'
- (120) əχ'ʃəvɪ m'it 'ra-war-dʲ-ɪ
Tamara snow-Gen Dir-rain-Past-3SgIntrans
'It snowed last night.'

"Postpositions" in Ossetian are better considered possessed nouns and their "objects" regarded as their possessors. Doing so explains why the "object" of a postposition is always in genitive case. In addition, "postpositions" have a number of characteristics that are different from Ossetian prepositions and the same as nouns.

- (121) bə'lɑʃ-ɪ bɪn-ø ʃ-'pat-t-ən
tree-Gen under-Nom Compl-sit-Past-1SgIndIntrans
'I sat under the tree.', lit. '(in) the tree's bottom'

These possessed nouns may be marked for plural and case.

- (122) bə'lɑʃ-ɪ 'bɪn-t-ɪ ʃ-'pat-t-ən
tree-Gen under-Pl-Gen Compl-sit-Past-1SgIndIntrans
'I sat under the tree.' lit. '(in) the tree's bottoms'

- (123) rus'lɔn-ɪ fə'd-ɪl 'ɑ-sɪt-t-ən
 Ruslan-Gen after-Ades Compl-go-Past-1SgIndIntrans
 'I went after Ruslan.'
- (124) rus'lɔn-ɪ 'fəd-t-ɪ 'ɑ-sɪt-t-ən
 Ruslan-Gen after-Pl-Gen Compl-go-Past-1SgIndIntrans
 'I went after Ruslan.'

Most postpositions, in fact, can function independently as nouns.

Lexeme	Nominal meaning	Postpositional meaning
sər	'head'	'on', 'upon'
bɪn	'bottom'	'under'
fərʃ	'side'	'beside', 'near'

Abaev (p. 34) suggests that some postpositions originate from adverbs. Most such "adverbs", however, are not morphologically distinct from nouns. They may be marked for case and number and they have the same distribution as possessed nouns, so they are probably best considered nouns despite their apparent adverbial meaning.

Lexeme	"Adverbial" meaning	Postpositional meaning
'm'ɪdəg	'inside'	'in'
fə'ftə	'behind'	'after'
'fələ	'on the other side'	'across'

Abaev notes that a small group of words can be used only as postpositions.

sur	'near'
ong	'up to'
uəl'quʃ	'by'
'fərʃɪ	'thanks to'
'rɪwədʒɪ	'for the sake of'

They may be still considered nouns, however, as they may be marked for case and number and they may even be nouns etymologically; for example, [ʼuəlquʃ] 'by', originally meant 'over the ear of'. What is unique about these nouns is that they are restricted in their distribution, occurring only in adjunct phrases. This distribution, in turn, may be explained by the meaning being incompatible with uses such as the subject or direct object of a clause.

Dative

Dative is marked by the suffix /-jən/. The suffix-initial /j/ is deleted after a stem-final consonant or semivowel. Dative is used for indirect objects and for noun phrases indicating purpose.

- (125) mɑʼrʲinə-jən ʼtʲinɪg ʼra-t-t-on
 Marina-Dat book-Nom Dir-give-Past-1SgIndTrans
 'I gave a book to Marina.'

- (126) asɪ zʲiʼzɑ ʼχər-ɪn-ən nə ʼbə33-ø-ɪ
 this meat-Nom eat-Inf-Dat not good-Pres-3SgInd
 'This meat is not good for eating.'

Ablative

Ablative is marked by the suffix /-jə/.

- (127) kɑʼdɔ-jə
 pear-Abl

The suffix-initial /j/ is deleted after a stem-final semivowel /j/.

- (128) domʼbɑj-ə
 lion-Abl

If the suffix is preceded by a stem-final consonant or the semivowel /w/, the suffix is /-əj/.

(129) 'qul-əj
wall-Abl

(130) 'nəw-əj
ship-Abl

This change in the form of the suffix is very similar to the change in the genitive form of the pronoun [jə] (see "Bagaev's Argument for Accusative Case from the Pronoun [jə]").

Ablative case is used for source, instrument, cause, and with the preposition [ənə] 'without'.

(131) χə'zar-əj 'ra-si-tt-ən
house-Abl Dir-go-Past-1SgIndIntrans
'I came out of the house.'

(132) 'usi gə'χət 'quχ-əj ni-'fiʃ-t-a
that paper-Nom hand-Abl Dir-write-Past-3SgIndTrans
'He/she/it wrote that document with his hand.'

(133) 'usi 'χabar 't'elɛv'izər-əj 'f'e-quʃ-t-a
that news-Nom television-Abl Dir-hear-Past-3SgIndTrans
'He/she/it heard that news from the television broadcast.'

(134) 'ruvɑʃ 'm'it-əj χə'zar 'ʃ-araz-t-a
fox-Nom snow-Abl house-Nom Dir-make-Past-3SgIndTrans
'The fox made its house out of snow.'

(135) 'χudəg-əj ni-'qəsəl-ji
laughter-Abl Dir-stick-3SgIndIntrans
'He/she/it stiffened from laughter.'

- (136) 'ənə qə'tsul-əj 'wəzəl u
 without blanket-Abl cold is
 'It is cold without a blanket.'

Allative

Allative is marked by /-mə/ in singular and /-əm/ in plural:

- (137) bə'laf-mə
 tree-AllSg

- (138) bə'laf-t-əm
 tree-Pl-AllPl

It is used for duration, duration until a certain time, path, goal, and location.

- (139) qu'ri-mə jə nə 'f'e-tt-on
 week-All 3SgGenSh Neg see-Past-1SgIndTrans
 'I have not seen them for one week.'

- (140) i'zər-mə 'war-dʲ-i
 evening-All rain-Past-3SgIndIntrans
 'It rained till evening.'

- (141) jə 'χo-mə 'ba-zır-tt-a
 3SgGenSh sister-All Compl-call-Past-3SgIndTrans
 'He/she/it called his/her sister'.

- (142) χə'zar-mə 'ba-sı-dʲ-i
 house-All Compl-go-Past-3SgIndIntrans
 'He/she/it went into the house'.

- (143) 'χfır-mə 'ba-sı-dʲ-i
 milk-All Compl-go-Past-3SgIndIntrans
 'He/she/it went in to get milk.'

- (144) 'sima-mə 'bɑ-sar-d^j-i
 Sima-All Compl-live-Past-3SgIndIntrans
 'He/she/it started living at Sima's.'

Adessive

Adessive is marked by /-jɪl/. Again, the suffix-initial /j/ disappears after the stem-final consonant or semivowel.

Adessive often indicates location on the exterior of an object, time, and value.

- (145) jə 'ʃər-ɪl ʃ-'pat-t^j-i
 3SgGenSh head-Ades Dir-sit-Past-3SgIndIntrans
 'He/she/it sat on his/her/its head.'
- (146) fonz ʃɑ'χat-ɪl r-'bɑ-sɪ-d^j-i
 five clock-Ades Dir-Compl-go-Past-3SgIndIntrans
 'He/she/it came at five o'clock.'
- (147) fonz 'm^jin-ɪl jə 'rɑ-d-t-ɑ
 five thousand-Ades 3SgShGen Compl-give-Past-3SgIndTrans
 'He/she/it gave it for five thousand.'

Comitative

Comitative is marked with the suffix /-imə/. As is normal, the /i/ induces palatalization of the stem-final consonant. Comitative marks accompaniment.

- (148) ɑ'lan je 'mbəl-tt^j-imə r-'bɑ-sɪ-d^j-i
 Alan-Nom 3SgGenSh friend-Pl-Comit Dir-Com-go-Past-3SgIndIntran
 'Alan came with his friends.'

Paraphrase of Cases by Prepositions and Possessed Nouns

Several of the cases can be paraphrased by prepositions and by what previously have been called postpositions, but which are analyzed here as possessed nouns.

Accompaniment may be expressed either by comitative case or by the preposition [əd] 'with', which requires nominative case on its object:

(149) 'læppu 'tʃɪʒg-ʃimə kərə'z'i-ji 'bawarʒtoj
 boy-Nom girl-Comit each other-Gen Com-love-Past-3PITrans
 'The boy and girl fell in love with each other.'

(150) 'læppu əd tʃɪʒg kərə'z'i-ji 'bawarʒtoj
 boy-Nom and girl-Nom each other-Gen Com-love-Past-3PITrans
 'The boy and girl fell in love with each other.'

Adessive can be paraphrased by the possessed nouns [wə'lə] 'on', [ʰoχɪl] 'for', and [tɪ'χəj] 'for', which take genitive on their possessors. For example:

(151) 'χərinag 'p'es-ɪl u
 food stove-Ades is
 'The food is on the stove.'

may be paraphrased as:

(152) 'χərinag 'p'es-ɪ wə'lə u
 food stove-Gen on is
 'The food is on the stove.'

Case-marking as Phrasal Suffixes

Case in Ossetian is marked with what appear to be ordinary suffixes and that is how they have been discussed so far. However, while normally these suffixes occur on nouns, they may also occur on other word classes if there is no overt noun

in the noun phrase. Therefore they are better described as phrasal suffixes, that is, suffixes that attach to the whole noun phrase, rather than to the head noun. For example, consider the following phrase in ablative case:

- (153) *si'ppar* *trɣ'tʃ'in* *lə'ppu-t-əj* *fə'tarstən*
 four strong boy-Pl-Abl Compl-fear-Past-1SgIndIntrans
 'I became afraid of the four strong young men.'

If the head noun is omitted, then the case is marked on the last overt constituent of the noun phrase. For adjectives number is also marked.

- (154) *si'ppar* *trɣ'tʃ'in-t-əj* *fə'tarstən*
 four strong-Pl-Abl Compl-fear-Past-1SgIndIntrans
 'I became afraid of the four strong young (ones).'

If the last constituent in the noun phrase is a numeral, however, only the case marker appears.

- (155) *si'ppar-əj* *fə'tarstən*
 four-Abl Compl-fear-Past-1SgIndIntrans
 'I became afraid of the four (ones).'

It is possible that in Ossetian nouns may be derived from adjectives, and when they are, they do not get any derivational marking; in their form they are exactly like the adjectives. This would explain what happens in example (154): [*trɣ'tʃ'in*] 'strong' is no longer an adjective, but a noun and that is why it is marked for number as well as case. Nouns, however, cannot be derived from numerals. In example (155) the numeral is still a numeral and the only overt constituent of the noun phrase. It is not marked for number, but it is marked for case.

Therefore, it is reasonable to conclude that the number suffix is a true suffix that attaches only to nouns, but the case suffixes are phrasal suffixes.

Case and Number in Adjectives

This analysis differs from what has been assumed previously. Previous analyses suggest that adjectives in Ossetian are marked for case and number in the same pattern as nouns. This is shown in Table 11.

Table 11. Case and Number in Adjectives

Case	Suffix			
	after consonant/semivowel		after vowel	
	Singular	Plural	Singular	Plural
Nominative	bur 'yellow'	bur-t-ə	dusgə 'milking'	dusgə-t-ə
Genitive	bur-ɪ	bur-t-ɪ	dusgə-jɪ	dusgə-t-ɪ
Dative	bur-ən	bur-t-ən	dusgə-jən	dusgə-t-ən
Ablative	bur-əj	bur-t-əj	dusgə-jə	dusgə-t-əj
Allative	bur-mə	bur-t-əm	dusgə-mə	dusgə-t-əm
Adessive	bur-ɪl	bur-t-ɪl	dusgə-jɪl	dusgə-t-ɪl
Comitative	bur ^ɨ -imə	bur-t ^ɨ -imə	dusgə-imə	dusgə-t-imə

Adjectives, however, are inflected for number and case only under one circumstance: when they are the last word in what appears to be a noun phrase with an omitted head noun.

(156) ts'əχ fət'qu-t-ə 'ba-lχət-t-on
 green apple-Pl-Nom Compl-buy-Past-1SgIndTrans
 'I bought green aples.'

(157) 'ts'əχ-t-ə 'ba-lχət-t-on
 green-Pl-Nom Compl-buy-Past-1SgIndTrans
 'I bought the green.'

As argued in the preceding section, examples like (154) and (157) are better analyzed as containing nouns derived from adjectives, hence the noun-like suffixation pattern.

Pronouns

Abaev and Bagaev describe Ossetian pronouns in detail. However, some of the pronouns deserve further consideration, in particular, personal (full and short), reflexive, substantival, and possessive.

All pronouns are marked for case; case suffixes are, for the most part, the same as those found on nouns. The suffix-initial /j/ is, again, most likely present underlyingly; however the issue of its presence is irrelevant in the discussion of pronouns, as all of them that are regular end with stem-final consonants. All pronouns have distinct stems in singular and plural.

Personal pronouns

Personal pronouns in Ossetian have full and short forms. The differences between them are described in the following sections.

Full pronouns

The following table shows the forms of the first person full pronoun in all cases.

Table 12. First Person Full Personal Pronouns

	Singular	Plural
Nominative	əʒ	maχ
Genitive	mən	maχ
Dative	mə'n-ən	'maχ-ən
Ablative	mə'n-əj	'maχ-əj
Allative	mə'm-mə	'maχ-mə
Adessive	mə'n-il	'maχ-il
Comitative	'm ^l e-mə	'maχ ^l -imə

There are certain irregularities in the forms of the full pronouns. The stem of the first person singular nominative form is different from the stem of this pronoun in other cases. This is true of the second person as well, as may be seen in the Table 14. Genitive has a zero suffix in singular and plural, which is characteristic of all persons (with one exception in third person plural; see Table 15). In first person singular allative stem-final /n/ assimilates to /m/: [mən^lmə] becomes [məmmə]; this is a special case of nasal assimilation and is not characteristic of the language generally. In first person singular comitative the form of the pronoun is irregular, [m^le^lmə], rather than the expected [mən] + [imə].

Table 13. Second Person Full Personal Pronouns

	Singular	Plural
Nominative	dɪ	ʃɪ'mɑχ
Genitive	dəw	ʃɪ'mɑχ
Dative	də'w-ən	ʃɪ'mɑχ-ən
Ablative	də'w-əj	ʃɪ'mɑχ-əj
Allative	də'w-mə	ʃɪ'mɑχ-mə
Adessive	də'w-ɪl	ʃɪ'mɑχ-ɪl
Comitative	'dʲe-mə	ʃɪ'mɑχ ^ʲ -imə

Full pronouns in the second person do not exhibit any irregularities not seen in the first person.

Table 14. Third Person Full Personal Pronouns

	Singular	Plural
Nominative	uɪj	uɪ'don
Genitive	uɪj	uɪ'don-ɪ
Dative	'uim-ən	uɪ'don-ən
Ablative	'uim-əj	uɪ'don-əj
Allative	'uim-mə	uɪ'dom-mə
Adessive	'uɪ-ɪl	uɪ'don-ɪl
Comitative	'uɪj-imə	uɪ'don ^ʲ -imə

In third person plural genitive has a suffix /-ɪ/ not found in other persons. In singular dative, ablative, and allative, stem-final /j/ becomes /m/ while in adessive it simply disappears. In plural allative stem-final /n/ becomes /m/.

Abaev observes that third person singular and plural pronouns are also used as demonstratives (p. 26). They are distal demonstrative pronouns and are never used as modifiers.

(158) 'kəsi 'tʃiŋiɡ də qə'w-i
 which book 2SgShDat want-3SgInd
 'What book do you want?'

(159) uij mɪn rat-ø
 Dem 1SgShDat give-2SgImp
 'Give me that one.'

Short pronouns

Short pronouns may be used in place of the full pronouns. Abaev describes them as "enclitic" pronouns (p. 23); however, it is unclear what exactly makes him consider them clitics. Short pronouns do not have nominative (only genitive is used for direct objects) and ablative forms. As in full pronouns, the case suffixes are added to a pronoun stem that is suppletive for number. The third person plural stem is slightly irregular.

Table 15. First Person Short Pronouns

	Singular	Plural
Genitive	mə	nə
Dative	mɪ-n	nɪ-n
Allative	m-əɪ	n-əɪ
Adessive	m-ɪl	n-ɪl
Comitative	'm ^j -emə	'n ^j -emə

Genitive is unmarked. The dative suffix is reduced from /-ən/ to /-n/. In singular, comitative coincides with comitative singular full pronoun. The same observations are true for the second and the third person (Tables 16 and 17).

- (165) kə'm-ən 'zək-t-aj?
 who-Dat say-Past-2SgInd Trans
 'Who did you tell?'

'uimən/*jin 'zək-t-on
 3SgFDat/3SgShDat say-Past-1SgIndTrans
 'TO HIM/HER/IT I said it.'

The short pronouns cannot be focal.

Full and short pronouns may be used in the same sentence, with the full pronoun appearing in a tag at the end of the sentence.

- (166) əʒ səm 'bɑ-sɪt-t-ən 'uɪdonmə
 1SgFNom 3PIShAll Compl-go-Past-1IndIntrans 3PIFAll
 'I did visit them.'

Reflexive pronouns

The stem of reflexive pronouns is similar to the genitive of the short form of the personal pronoun. It is followed by what might be a reflexive suffix, and, finally, by a case marker. There is some irregularity in the case marking.

Table 18. First Person Reflexive Pronouns

	Singular	Plural
Nominative	mə-χə'dəg-ø	nə-χə'dəg-ø
Genitive	mə-χ'i-ɪ	nə-χ'i-ɪ
Dative	mə-χ'is-ən	nə-χ'is-ən
Ablative	mə-χ'is-əj	nə-χ'is-əj
Allative	mə-χ'i-mə	nə-χ'i-mə
Adessive	mə-χ'iu-ɪl	nə-χ'iu-ɪl
Comitative	mə-χ'i-imə	nə-χ'i-imə

Table 19. Second Person Reflexive Pronouns

	Singular	Plural
Nominative	də-χə'dəg-ø	wə-χə'dəg-ø
Genitive	də-χ ^j -ɪ	wə-χ ^j -ɪ
Dative	də-χ ^j is-ən	wə-χ ^j is-ən
Ablative	də-χ ^j is-əj	wə-χ ^j is-əj
Allative	də-χ ^j i-mə	wə-χ ^j i-mə
Adessive	də-χ ^j iu-ɪl	wə-χ ^j iu-ɪl
Comitative	mə-χ ^j i-imə	wə-χ ^j -imə

Table 20. Third Person Reflexive Pronouns

	Singular	Plural
Nominative	jə-χə'dəg-ø	ʃə-χə'dəg-ø
Genitive	jə-χ ^j -ɪ	ʃə-χ ^j -ɪ
Dative	jə-χ ^j is-ən	ʃə-χ ^j is-ən
Ablative	jə-χ ^j is-əj	ʃə-χ ^j is-əj
Allative	jə-χ ^j i-mə	ʃə-χ ^j i-mə
Adessive	jə-χ ^j iu-ɪl	ʃə-χ ^j iu-ɪl
Comitative	jə-χ ^j i-imə	ʃə-χ ^j -imə

Reflexive pronouns are used for contrastive focus and coreference to the subject. They may be used in combination with the full personal pronouns.

Following are some examples of the use of reflexive pronouns.

- (167) jə-χ^jis-ən 'qaba-ø 'ba-lχə-tt-a
 3RefSg-Ref-Dat dress-Nom Compl-buy-Past-1SgIndTrans
 'He/she/it bought a dress for him/her/itself.'

- (168) jə-χə'dəg-ø jə-χ'is-ən 'qaba-ø 'ba-lχə-tt-a
 3RefSg-Ref-Nom 3-Ref-Dat dress-Nom Compl-buy-Past-1SgIndTrans
 'He/she/it him/her/itself bought a dress for him/her/itself.'
- (169) nə-χ'i-mə 'ba-sar-dʲ-ɨʃ
 1RefPl-Ref-All Compl-live-Past-3SgIndIntrans
 'He/she/it started to live at our place.'
- (170) ʃə-χ'iu-ɨl əv'zəgəj 'zur-ø-ɨ
 3RefPl-Ref-Ades language-Abl speak-Pres-3SgInd
 'He/she/it speaks their own language.'
- (171) də'χədəg 'n'isi-ø 'zɔn-ø-ɨʃ
 2SgRef nothing-Nom know-Pres-2SgInd
 'You know nothing yourself.'
- (172) dɨ-ø dəχə'dəg 'n'isi-ø 'zɔn-ø-ɨʃ
 2SgFNom 2SgRef nothing-Nom know-Pres-2SgInd
 'You know nothing yourself.' (Emphatic)

This analysis differs from Bagaev's (pp. 240-245), which treats these as two distinct groups of pronouns. In his analysis, he calls the nominative form an "Intensifying Personal" pronoun and the other case forms the "Reflexive" pronouns. He claims the "Intensifying Personal" pronouns are not marked for case, but this is not surprising since nominative case is normally unmarked. His "reflexive" pronouns, on the other hand, lack nominative case forms. They are used for intensifying "not the actor, but other persons or objects" (p. 242). Bagaev's own description suggests that the two groups could be combined, as has been done above.

Substantival pronouns

There is another group of words that Abaev calls "substantival pronouns" (p. 25). They are formed by means of adding the segment /on/ to a stem that is similar to the genitive form of full personal and reflexive pronouns, resulting in the following forms:

on the stem of the full personal pronouns

	Sg.	Pl.
1 st	mə'nɔn	'mɑχɔn
2 nd	də'uɔn	ʃɪ'mɑχɔn
3 rd	u'jɔn	'udɔnɔn

on the stem of the reflexive pronouns

	Sg.	Pl.
1 st	mə'χʲɪɔn	nə'χʲɪɔn
2 nd	də'χʲɪɔn	wə'χʲɪɔn
3 rd	jə'χʲɪɔn	ʃə'χʲɪɔn

These words usually modify a noun and their meaning expresses reflexive possession. They are not required when a possessor is coreferential to the subject, but are optionally used to make the coreference explicit. They cannot be marked for case, unless they are constituents of noun phrases without an overt noun.

- (173) də'χʲɪɔn-ø qə'tsul-əj də'χʲi 'bɑ-mbərʒ-ø
 2SgSubs-Nom blanket-Abl 2SgFefGen Compl-cover-2SgImp
 'Cover yourself with your own blanket.'

- | | | | |
|-------|---------------------------------|---------------------|--------------------|
| (174) | də'χ ^l ion-əj | də'χ ^l i | 'ba-mbərɜ-ø |
| | 2SgSubs-Abl | 2SgRefGen | Compl-cover-2SgImp |
| | 'Cover yourself with your own.' | | |

Distribution of these words suggests that they are adjectives derived from pronouns.

The segment /on/ recurring on all of these words is a derivational suffix that is also used to form adjectives from nouns and verbs:

- | | | |
|-------|------------------------|----------------------|
| (175) | ir | iron |
| | 'Ossetia' | 'Ossetian' |
| (176) | χəft | χəf ^l ton |
| | 'war' | 'military' |
| (177) | warɜ | 'warɜon |
| | 'love' | 'loved one' |
| (178) | əv'dəl | əv'dəlɜn |
| | 'be free', 'have time' | 'free' |

It is unnecessary to posit another group of pronouns if these words can be handled by derivational rules.

Existence of Possessive Pronouns

Abaev distinguishes possessive pronouns from personal pronouns. He notices that all of his possessive pronouns coincide with the genitive form of the personal pronouns. He argues, however, that since possession is not the sole function of the genitive case (it also marks direct objects), the separation of the possessive pronouns is necessary (pp. 25-26). This, however, is an unnecessary complication of the description and is inconsistent with his analysis of genitive in nouns. If it is

acceptable for the genitive case of a noun to be used for both direct objects and possessors, the same should be true for pronouns.

IV. VERBAL INFLECTION

Among the inflectional categories that characterize Ossetian verbs are subject agreement in person and number, tense, mood, transitivity, aspect, and directionals. This chapter first describes the verb forms that are not inflected for these categories and then covers mood, person, number, transitivity, and tense.¹

Infinitives

The infinitives are the verb forms that lack the usual inflectional morphology associated with verbs. Abaev and Bagaev suggest that two types of infinitives may be formed from the same verb stems in Ossetian. One type is formed by means of the suffix /-in/, as in:

- (1) 'χud-in
'to laugh'
- (2) 'bad-in
'to sit'
- (3) fi's-in
'to write'

The second type is formed by means of the suffix /-ən/, as in:

¹The aspect and directional prefixes have not been described previously in enough detail. I am not attempting to describe them either, since their nature is complex and my interaction with native speakers of Ossetian is limited at this time.

- (4) 'χud-ən
'to laugh'
- (5) 'bəd-ən
'to sit'
- (6) fi'f-ən
'to write'

The first type of infinitives is used more often than the second. These infinitives are marked for case depending on their syntactic function, for example:

- (7) 'kaf-m 'rajdit-t-am
dance-Inf-Nom begin-Past-1PlIndTrans
'We began to dance.'
- (8) 'kaf-m-mə 'asi-d¹-i
dance-Inf-Allative go-Past-3SgIndIntrans
'He/she went to dance.'

When semantically possible, they may be marked for number:

- (9) 'kaf-m-t-ə 'rajdit-t-am
dance-Inf-Pl-Nom begin-Past-1PlIndTrans
'We began the dances.'

In their phonological form, they are identical to verbs in first person singular, present tense, indicative mood, although their morphological structure is different.

- (10) ə3 'kaf-ə-m
1SgFNom dance-Pres-1SgInd
'I dance.'

The use of the second type of infinitive is very restricted. It is used only as a complement of the verb [u'] 'be' and expresses possibility.

- (11) 'χud-ən jɪl nə 'u-dʲ-i
 laugh-Inf 3SgShAdess Neg be-Past-3SgIndIntrans
 'One couldn't laugh at him/her/it.'
- (12) 'bəd-ən jɪl nə 'u-dʲ-i
 sit-Inf 3SgShAdess Neg be-Past-3SgIndIntrans
 'One couldn't sit on it.'
- (13) asɪ gə'χχət-il fiʃ-ən u-'dʲ-i
 this paper-Adess write-Inf be-Past-3SgIndIntrans
 'One could write on this paper.'

Bagaev notes the form of the second type of infinitive is identical to "nouns and adjectives derived from verbs" (pp. 274-275). Consider the following examples he gives:

- (14) χə'zar-ən nə 'u-dʲ-i əm'bərʒ-ən
 house-Dat Neg be-Past-3SgIndIntrans cover-Inf
 'It was not possible to cover the house.'
- (15) 'ruzindʒɪ əm'bərʒən-ø 'rɑ-xɑu-dʲ-iʃ
 window-Gen cover-Nom Dir-fall-Past-3SgIndIntrans
 'The window cover fell off.'
- (16) kəl'χoz r'-bɑ-lɑʃ-t-ɑ əm'bərʒən dur-ø
 collective farm Dir-Compl-bring-Past-3SgIndTrans cover stone-Nom
 'The members of the collective farm brought in tiles.'

Bagaev notes that unlike the infinitives of the first type, the infinitives of the second are normally uninflected for case. Very rarely, however, they may be marked for number and, if they are, they are also marked for case.

- (17) 'kuʃən-t-ə mə bon-ø ku u-d-aid
 work-Pl-Nom 1SgShGen strength-Nom if be-Past-3SgCond

wod 'kuʃ-ɪn
 then work

'If I had the strength for the works, then I would work.'

This description and examination of the given examples suggest that perhaps the second type of infinitives is, in fact, either a noun or an adjective derived from a verb. Whenever these derived forms (the supposed second type of infinitives) are unmarked, it is because they are used in nominative singular. The most common use of such derived forms is in the position of the complement of the verb [u'] 'be', where one would expect nominative singular. All relevant facts can be explained by this alternative analysis.

Thus, there is only one type of infinitive in Ossetian, that marked by /-ɪn/.

Overview of Verbal Inflection

The following table demonstrates the inflectional suffix patterns. It is intended for identification purposes and for illustration of similarities between the different endings (p. 74).

This table states that all verbs may be marked for mood, person, number, transitivity, and tense. Tense is actually a separate suffix attached directly to the verb stem. In present, it is unmarked; in past, it is /-t/ in all moods except for conditional,

in which it is /-ta/; and in future, it is /-z/. The fused person/number/transitivity suffix follows the tense suffix. Transitivity is distinguished only in past indicative.

Table 21. Verbal Inflectional Morphology

Person	Singular	Plural	Tense/Mood/Transitivity
1 st	-in	-əm	Present Indicative
2 nd	-iʃ	-ut	
3 rd	-i	-ints	
1 st	-ton	-tam	Past Indicative Transitive
2 nd	-taj	-tat	
3 rd	-ta	-toj	
1 st	-tən	-tɪʃtəm	Past Indicative Intransitive
2 nd	-tə	-tɪʃtut	
3 rd	-iʃ	-tɪʃtɪ	
1 st	-znən	-zɪʃtəm	Future Indicative
2 nd	-znə	-zɪʃtut	
3 rd	-zən	-zɪʃtɪ	
1 st	-in	-ikkam	Present Conditional
2 nd	-iʃ	-ikkat	
3 rd	-id	-ikkoj	
1 st	-tain	-taikkam	Past Conditional
2 nd	-taiʃ	-taikkat	
3 rd	-taid	-taikkoj	
2 nd	-ø	-ut	Imperative
3 rd	-əd	-ənt	
1 st	-on	-əm	Subjunctive
2 nd	-aj	-at	
3 rd	-a	-oj	

The forms of the person/number/transitivity suffix appear to be rather regular, and yet, not regular enough for general rules to be formed. There is remarkable similarity between past indicative intransitive and future indicative and past indicative

transitive and subjunctive; the conditionals are identical. Figure 3 shows a more refined analysis, including the order in which the suffixes are attached.

Figure 3. Verb Position Class Chart

Verb 0	Tense + 1	Person/Number/Mood/Transitivity + 2			
		Person	Sg.	Pl.	
	-∅ Present	1 st	-in	-əm	Indicative
		2 nd	-iʃ	-ut	
		3 rd	-i	-ints	
		1 st	-in	-ikkam	Conditional
		2 nd	-iʃ	-ikkat	
		3 rd	-id	-ikkoj	
	-t Past	1 st	-on	-am	Indicative Transitive
		2 nd	-aj	-at	
		3 rd	-a	-oj	
		1 st	-ən	-iʃtəm	Indicative Intransitive
		2 nd	-ə	-iʃtut	
		3 rd	-iʃ	-iʃtri	
	-ta Past (with Conditional)	1 st	-in	-ikkam	Conditional
		2 nd	-iʃ	-ikkat	
		3 rd	-id	-ikkoj	
	-z Future	1 st	-nən	-iʃtəm	Indicative
		2 nd	-nə	-iʃtut	
		3 rd	-ən	-iʃtri	
	None	2 nd	-∅	-ut	Imperative ²
		3 rd	-əd	-ənt	
	None	1 st	-on	-əm	Subjunctive
		2 nd	-aj	-at	
		3 rd	-a	-oj	

² There is no first person plural imperative. The meaning of the English phrase "let's do..." is expressed by first person plural subjunctive (see the next section).

The following sections present this system in more detail, starting with the uses of the different moods, then the form of the person/tense suffixes in each tense/mood combination, and finally, the usage of the three tenses and the form of their suffixes.

Mood

Ossetian distinguishes between four moods that may be called indicative, conditional, subjunctive, and imperative. Mood is expressed as a part of the fused person/number suffix.

The indicative mood is mostly used to refer to actions that take place in the real present, past, or future.

- (18) ba'nən-t-ə 'warʒ-ø-m
 banana-Pl-Nom love-Pres-1SgInd
 'I love bananas.'
- (19) ba'nən-t-ə 'warʒ-t-on
 banana-Pl-Nom love-Past-1SgTransInd
 'I loved bananas.'
- (20) ba'nən-t-ə 'warʒ-z-nən
 banana-Pl-Nom love-Fut-1SgInd
 'I will love bananas.'

The conditional mood is used for contrafactual conditions. It occurs only with present and past tense. Past conditional is used in subordinate clauses (the contrafactual condition) and present and past conditional is used in main clauses (the situation that would result if the condition were true).

- (21) k'i'no-mə kə'ʃi-ø-in t'ele'vʒizər-ø məm
 movie-All look-Pres-1SgCond TV set-Nom 1ShAll

ku 'u-d-aid
 if be-Past-3SgCond

'I would watch a movie if I had a TV set.'

- (22) k'i'no-mə 'kəʃ-t-am t'ele'vʒizər-ø məm
 movie-All look-Past-1SgCond TV set-Nom 1ShAll

ku 'u-d-aid
 if be-Past-3SgCond

'I would have watched a movie if I had had a TV set.'

The subjunctive mood is used for permission or encouragement, wishing, possibility and hypothetical conditions. It is not marked for tense.

- (23) ɣorʒ sə'r-əj
 well live-2SgSubj
 'May you live well!'

In subordinate clauses, it co-occurs with verbs in the main clause that are in any tense or imperative mood.

- (24) waz-ø ə'mə k'i'no-mə kə'ʃ-a
 let-2SgImp and movie-All look-3SgSubj
 'Let him/her/it watch a movie.'

- (25) t'ele'vʒizər-ø sɪn 'bəlɣ-ən əmə k'i'no-mə
 TV set-Nom 3PlShDat buy-2SgImp and movie-All

kə'ʃ-əj
 look-3PlSubj

'Buy them a TV set so that they could watch movies.'

(26) χsa jin rat-ø. χə'zar-ø 'ba-lχən-a
 money 3SgShDat give-2SgImp house-Nom Compl-buy-3SgSubj
 'Give him money. Let him buy a house.'

(27) 'fɛn-in wə mə bon-ø ku
 see-Inf 2PlShGen 1SgShGen possibility-Nom if
 nə 'ba-u-a 'u'm-əj tər'f-ø-in
 Neg Compl-be-3SgSubj that-Abl fear-ø-1SgInd
 'I am afraid I won't be able to see you.'

(28) 'fɛn-in wə mə bon-ø ku
 see-Inf 2PlShGen 1SgShGen possibility-Nom if
 nə 'ba-u-a 'u'm-əj 'fə-tər'f-t-ən
 Neg Compl-be-3SgSubj that-Abl Compl-fear-Past-1SgInd
 'I became afraid I wouldn't be able to see you.'

(29) χsa-ø məm kəd u-a
 money-Nom 1SgShAll if be-Fut-3SgInd
 ba'nən-t-ə 'ba-lχən-z-nən
 banana-Pl-Nom Compl-buy-Fut-1SgInd
 'When I have money, I will buy bananas.'

The imperative mood is used for orders, requests, and advice. It is not marked for tense. Second person imperative is used in commands; third person imperatives are interpreted as hortatives or expressions of obligation.

(30) 'tʃinɪdʒ-i kəf-ø
 book-Gen read-2SgIMP
 'Read the book.'

(31) 'tʃinɪg mə mɪn rat-ø
 book-Nom Request/Polite 1SgShDat give-2SgImp
 'Give me the book please.'

- (32) χοψ-ø 'ba-nua3-ənt
 medicine-Nom Compl-drink-3PlImp
 'They have to take the medicine.'

Person/Number

All verbs are marked with person/number suffixes. In the past tense there is a further distinction between transitive vs. intransitive. The following tables and examples demonstrate the person/number suffixes.

Table 22. Person and Number in Present Indicative

Person	Singular	Plural
1 st	-in	-əm
2 nd	-ɪʃ	-ut
3 rd	-ɪ	-ints

- (33) [χər] 'eat'

Singular	Plural
χə'r-in	χə'r-əm
χə'r-ɪʃ	χə'r-ut
χə'r-ɪ	χə'r-ints

- (34) [kaf] 'dance'

Singular	Plural
'kaf-in	'kaf-əm
'kaf-ɪʃ	'kaf-ut
'kaf-ɪ	'kaf-ints

Table 23. Person and Number in Past Indicative Transitive

Person	Singular	Plural
1 st	-on	-am
2 nd	-aj	-at
3 rd	-a	-oj

(35) [χər] 'eat'

Singular	Plural
'χor-t-on	'χor-t-am
'χor-t-aj	'χor-t-at
'χor-t-a	'χor-t-oj

(The stem vowel in (35) changes arbitrarily in the past tense. See also (41). Such changes are discussed later in the chapter.)

Table 24. Person and Number in Past Indicative Intransitive

Person	Singular	Plural
1 st	-ən	-ɪstəm
2 nd	-ə	-ɪstut
3 rd	-ɪʃ	-ɪstɪ

(36) [kaf] 'dance'

Singular	Plural
'kaf-t-ən	'kaf-t-ɪstəm
'kaf-t-ə	'kaf-t-ɪstut
'kaf-t-ɪʃ	'kaf-t-ɪstɪ

Table 25. Person and Number in Future Indicative

Person	Singular	Plural
1 st	-nən	-ɪstəm
2 nd	-nə	-ɪstut
3 rd	-ən	-ɪstɪ

The forms of the person and number suffix in future indicative are very similar to the forms of the person and number suffix in past indicative intransitive. The main difference is that the future indicative adds an /n/ in singular forms.

(37) [χər] 'eat'

Singular	Plural
χər-z-'nən	χər-'z-ɪstəm
χər-z-'nə	χər-'z-ɪstut
χər-'z-ən	χər-'z-ɪstɪ

(38) [kaf] 'dance'

Singular	Plural
'kaf-z-nən	'kaf-z-ɪstəm
'kaf-z-nə	'kaf-z-ɪstut
'kaf-z-ən	'kaf-z-ɪstɪ

Table 26. Person and Number in Conditional

Person	Singular	Plural
1 st	-in	-ikkam
2 nd	-iʃ	-ikkat
3 rd	-id	-ikkoj

(39) [χər] 'eat'

Singular	Plural
'χor-ta-in	'χor-ta-ikkam
'χor-ta-iʃ	'χor-ta-ikkat
'χor-ta-id	'χor-ta-ikkok

(40) [kaf] 'dance'

Singular	Plural
'kaf-ta-in	'kaf-ta-ikkam
'kaf-ta-iʃ	'kaf-ta-ikkat
'kaf-ta-id	'kaf-ta-ikkok

(41) [xər] 'eat'

Singular	Plural
χə ^h r ^h -in	χə ^h r ^h -ikkam
χə ^h r ^h -iʃ	χə ^h r ^h -ikkat
χə ^h r ^h -id	χə ^h r ^h -ikkok

(42) [kaf] 'dance'

Singular	Plural
'kaf ^h -in	'kaf ^h -ikkam
'kaf ^h -iʃ	'kaf ^h -ikkat
'kaf ^h -id	'kaf ^h -ikkok

The past tense suffix used with the conditional mood is /-ta/ rather than /-t/; analyzing the /a/ as part of this suffix is preferable to including the /a/ as part of the person/number suffixes, which would require positing separate sets of suffixes for present and past conditional.

Table 27. Person and Number in Subjunctive

Person	Singular	Plural
1 st	-on	-əm
2 nd	-ai	-at
3 rd	-a	-oj

(43) [χər] 'eat'

Singular	Plural
χə'r-on	χə'r-əm
χə'r-ai	χə'r-at
χə'r-a	χə'r-oj

(44) [kaf] 'dance'

Singular	Plural
'kaf-on	'kaf-əm
'kaf-ai	'kaf-at
'kaf-a	'kaf-oj

Table 28. Person and Number in Imperative

Person	Singular	Plural
2 nd	-ø	-ut
3 rd	-əd	-ənt

(45) [χər] 'eat'

Singular	Plural
χər-ø	χə'r-ut
χə'r-əd	χə'r-ənt

(47) [kaf] 'dance'

Singular	Plural
kaf-ø	'kaf-ut
'kaf-əd	'kaf-ənt

Tense

There are three tenses in Ossetian: present, past, and future. Both Abaev and Bagaev state that Ossetian verbs have different stems for present and past. While verbs, however, do demonstrate many irregularities, general rules can explain the difference in the stem form for most of the verbs. I propose that there is only one stem for most verbs in Ossetian and that past tense is indicated by a suffix that can be separated from the stem once various morphophonemic processes and lexically-conditioned exceptions are recognized. The future tense is also indicated by a suffix. Abaev and Bagaev state that the future tense suffix is fused with the person/number suffix; however, it is possible to distinguish it as separate.

Present Tense

The present tense is usually unmarked and the person/number suffix is attached directly to the stem. Besides referring to situations in the present, the present tense is also used to refer to the immediate future.

(48)	χ'ʃir-ø	nə	'war3-ø-in
	milk-Nom	Neg	like-Pres-1SgInd
	'I don't like milk.'		

- (49) χ'ʃəv-ɪ 'wɑʒʒ'i-tt-ə dəm sə'w-ə-ɪnts
 evening-Gen guest-Pl-Nom 2SgShAll go-Pres-3PlInd
 'Guests are coming to you this evening.'

Past Tense

Regular Past Tense Suffix

For most verbs the past tense is formed by means of the suffix /-t/ (or /-ta/ in conditional mood). It occurs after a variety of stem final vowels and consonants. Consider the following examples. (All of the examples in this section are in past indicative, however, the same rules discussed affect conditional as well.)

- (50) [ʒəʋ] 'say' (transitive)

Singular	Plural
'ʒəʋ-t-on	'ʒəʋ-t-am
'ʒəʋ-t-aj	'ʒəʋ-t-at
'ʒəʋ-t-a	'ʒəʋ-t-øj

- (51) [lɑʃ] 'drag' (transitive)

Singular	Plural
'lɑʃ-t-on	'lɑʃ-t-am
'lɑʃ-t-aj	'lɑʃ-t-at
'lɑʃ-t-a	'lɑʃ-t-øj

(52) [sɪm] 'sip' (transitive)

Singular	Plural
'sɪm-t-on	'sɪm-t-am
'sɪm-t-aj	'sɪm-t-at
'sɪm-t-a	'sɪm-t-oj

(53) [təχ] 'fly' (intransitive)

Singular	Plural
'təχ-t-ən	'təχ-t-ɪftəm
'təχ-t-ə	'təχ-t-ɪftut
'təχ-tʰ-i	'təχ-t-ɪftɪ

(54) ['ɪrvɑɜ] 'save' (intransitive)

Singular	Plural
'ɪrvɑɜ-t-ən	'ɪrvɑɜ-t-ɪftəm
'ɪrvɑɜ-t-ə	'ɪrvɑɜ-t-ɪftut
'ɪrvɑɜ-tʰ-i	'ɪrvɑɜ-t-ɪftɪ

In the past tense forms, voice assimilation results in devoicing of the final consonant of the stem.

(55) [arɑɜ] 'make' (transitive)

Singular	Plural
'arɑɜ-t-on	'arɑɜ-t-am
'arɑɜ-t-aj	'arɑɜ-t-at
'arɑɜ-t-a	'arɑɜ-t-oj

(56) [dʌv] 'steal' (transitive)

Singular	Plural
'dʌf-t-on	'dʌf-t-am
'dʌf-t-əj	'dʌf-t-ət
'dʌf-t-a	'dʌf-t-ɔj

(57) [bʌd] 'sit' (intransitive)

Singular	Plural
'bʌt-t-ən	'bʌt-t-ɪftəm
'bʌt-t-ə	'bʌt-t-ɪftut
'bʌt-t-ɪ	'bʌt-t-ɪftɪ

In stems that end with /vʒ/, devoicing affects the whole cluster; this is not typical of other stem-final consonant clusters.

(58) [ən'qəvʒ] 'rinse' (transitive)

Singular	Plural
ən'qəfʃ-t-on	ən'qəfʃ-t-am
ən'qəfʃ-t-əj	ən'qəfʃ-t-ət
ən'qəfʃ-t-a	ən'qəfʃ-t-ɔj

When the past suffix /-t/ occurs after stem-final sonorants /w j r l n m/, it becomes voiced when followed by a close or near-close front vowel in the person/number suffix. (This occurs only in intransitive verbs, which, as discussed earlier, have a separate set of person/number suffixes from transitives in the past tense.)

(59) [χaw] 'fall' (intransitive)

Singular	Plural
'χaw-t-ən	'χaw-d-ɪftəm
'χaw-t-ə	'χaw-d-ɪftut
'χaw-d ^ɪ -i	'χaw-d-ɪftɪ

(60) [rəj] 'bark' (intransitive)

Singular	Plural
'rəj-t-ən	'rəj-d-ɪftəm
'rəj-t-ə	'rəj-d-ɪftut
'rəj-d ^ɪ -i	'rəj-d-ɪftɪ

(61) [mar] 'die' (intransitive)

Singular	Plural
'mar-t-ən	'mar-d-ɪftəm
'mar-t-ə	'mar-d-ɪftut
'mar-d ^ɪ -i	'mar-d-ɪftɪ

(62) [ʒ^ɪil] 'turn' (intransitive)

Singular	Plural
'ʒ ^ɪ il-t-ən	'ʒ ^ɪ il-d-ɪftəm
'ʒ ^ɪ il-t-ə	'ʒ ^ɪ il-d-ɪftut
'ʒ ^ɪ il-d ^ɪ -i	'ʒ ^ɪ i-d-ɪftɪ

(63) [ʃim] 'dance' (intransitive)

Singular	Plural
'ʃim-t-ən	'ʃim-d-ɪftəm
'ʃim-t-ə	'ʃim-d-ɪftut
'ʃim-d ^ɪ -i	'ʃim-d-ɪftɪ

(64) [ʒɪn] 'appear' (intransitive, with a completive prefix /fə-/)

Singular	Plural
fə-ʒɪn-t-ən	fə-ʒɪn-d-ɪftəm
fə-ʒɪn-t-ə	fə-ʒɪn-d-ɪftut
fə-ʒɪn-d ^ɪ -i	fə-ʒɪn-d-ɪftɪ

The voicing does not occur after other consonants.

(65) 'get stuck' (intransitive, with a directional/completive prefix)

Singular	Plural
nɪ-ʃəɛ-t-ən	nɪ-ʃəɛ-t-ɪftəm
nɪ-ʃəɛ-t-ə	nɪ-ʃəɛ-t-ɪftut
nɪ-ʃəɛ-t ^ɪ -i	nɪ-ʃəɛ-t-ɪftɪ

(66) 'turn' (intransitive, with a directional/completive prefix)

Singular	Plural
nɪ-ʒdɪɣ-t-ən	nɪ-ʒdɪɣ-t-ɪftəm
nɪ-ʒdɪɣ-t-ə	nɪ-ʒdɪɣ-t-ɪftut
nɪ-ʒdɪɣ-t ^ɪ -i	nɪ-ʒdɪɣ-t-ɪftɪ

Neither does it occur in front of other vowels, for example, in (58) – (63) in first and second person singular, and in the entire past indicative transitive paradigm.

(67) [mar] 'die/kill' (transitive)

Singular	Plural
'mar-t-on	'mar-t-am
'mar-t-aj	'mar-t-at
'mar-t-a	'mar-t-oj

(68) [ʒʲil] 'turn' (transitive)

Singular	Plural
'ʒʲil-t-on	'ʒʲil-t-am
'ʒʲil-t-aj	'ʒʲil-t-at
'ʒʲil-t-a	'ʒʲil-t-oj

Some stem-final consonants change in the past tense. In some contexts stem-final /d/ and /t/ become /ʃ/:

	Gloss	Present stem	3rd Singular Indicative Past
(69)	'cut'	kərd	'kəʃ-t-a
(70)	'send'	ər'vʲit	ər'vʲʃ-t-a
(71)	'stir'	'ʒmənt	'ʒməʃ-t-a
(72)	'tie'	bətt	bəʃ-t-a

Such a change takes place in the majority of verbs that have /d t/ stem-finally. I am aware of only one verb that ends with /tt/ that seems to form the past tense according to a different pattern (with a deletion of a stem-final /t/).

(73)	'give'	ratt	rat-t-a
------	--------	------	---------

Also, stem-final /s/ and /z/ become /χ/ (or /ʁ/ due to voicing of the whole cluster if the past suffix is followed by a front vowel):

	Gloss	Present stem	3rd Singular Indicative Past
(74)	'boil'	fis	'fɪχ-t-a
(75)	'milk'	dus	'dɪχ-t-a

	Gloss	Present stem	3rd Singular Indicative Past
(76)	'run away'	ʔiz	'lɪɪk-dʲ-i
(77)	'burn'	ʃuz	'ʃɪɪk-dʲ-i

The following counterexample for /s/ is the only example I am aware of.

(78)	'fight'	χəs	'χəs-ɪdʲ-i
------	---------	-----	------------

I was unable to find examples with a stem-final /z/ that form past tense according to the regular pattern.

Lexically-Conditioned Exceptions

Several verbs have lexically-conditioned irregularities in their past tense forms.

A few verbs form past tense by means of a suffix that appears to have the underlying form /-ɪt/, although its surface forms are /-ɪtt/, /-ɪd/, and /-ɪdʲ/.

In (78) - (82) the presence of the second /t/ in first and second singular is unexplained by any rules that have been discussed so far. The other changes are due to phonological rules that have already been discussed.

(79) [rəʒ] 'grow' (intransitive)

Singular	Plural
rəʒ-ɪtt-ən	rəʒ-ɪd-ɪʃtəm
rəʒ-ɪtt-ə	rəʒ-ɪd-ɪʃtut
rəʒ-ɪdʲ-i	rəʒ-ɪd-ɪʃtɪ

(80) [ʒməl] 'move' (intransitive)

Singular	Plural
ʒməl-itt-ən	ʒməl-ɪd-ɪstəm
ʒməl-itt-ə	ʒməl-ɪd-ɪstut
ʒməl-ɪd ^ɪ -i	ʒməl-ɪd-ɪstɪ

(81) [ʒɑr] 'sing' (intransitive)

Singular	Plural
ʒɑr-itt-ən	ʒɑr-ɪd-ɪstəm
ʒɑr-itt-ə	ʒɑr-ɪd-ɪstut
ʒɑr-ɪd ^ɪ -i	ʒɑr-ɪd-ɪstɪ

(82) [qərʒ] 'moan' (intransitive)

Singular	Plural
qər ^ɪ ʒ-itt-ən	qər ^ɪ ʒ-ɪd-ɪstəm
qər ^ɪ ʒ-itt-ə	qər ^ɪ ʒ-ɪd-ɪstut
qər ^ɪ ʒ-ɪd ^ɪ -i	qər ^ɪ ʒ-ɪd-ɪstɪ

(83) [ləw] 'stand' (intransitive)

Singular	Plural
lə ^ɪ w-itt-ən	lə ^ɪ w-ɪd-ɪstəm
lə ^ɪ w-itt-ə	lə ^ɪ w-ɪd-ɪstut
lə ^ɪ w-ɪd ^ɪ -i	lə ^ɪ w-ɪd-ɪstɪ

The /ɪ/ in the above examples is not an inserted weak vowel as happens rather often in Ossetian. Compare to the following examples that have similar syllable structures and yet the /ɪ/ is not inserted.

(84) [bɪr] 'crawl' (intransitive)

Singular	Plural
bɪr- ¹ t-ən	bɪr- ¹ d-ɪftəm
bɪr- ¹ t-ə	bɪr- ¹ d-ɪftut
bɪr- ¹ d ^j -i	bɪr- ¹ d-ɪftɪ

(85) [ˈχəl] 'spoil' (intransitive)

Singular	Plural
ˈχəl-t-ən	ˈχəl-d-ɪftəm
ˈχəl-t-ə	ˈχəl-d-ɪftut
ˈχəl-d ^j -i	ˈχəl-d-ɪftɪ

(86) [ˈfɪdaw] 'spoil' (intransitive)

Singular	Plural
ˈfɪdaw-t-ən	ˈfɪdaw-d-ɪftəm
ˈfɪdaw-t-ə	ˈfɪdaw-d-ɪftut
ˈfɪdaw-d ^j -i	ˈfɪdaw-d-ɪftɪ

A very few verbs, which all have /r/ or /j/ stem-finally, form the past tense

by means of the suffix /-ft/. Before /-ft/, /j/ disappears.

(87) [əˈppər] 'throw' (transitive)

Singular	Plural
əˈppər-ft-on	əˈppər-ft-am
əˈppər-ft-aj	əˈppər-ft-at
əˈppər-ft-a	əˈppər-ft-oj

(88) ['aχor] 'paint' (transitive)

Singular	Plural
'aχur-ft-on	'aχur-ft-am
'aχur-ft-aj	'aχur-ft-at
'aχur-ft-a	'aχur-ft-oj

(89) [ə'vʒar] 'choose' (transitive)

Singular	Plural
ə'vʒər-ft-on	ə'vʒər-ft-am
ə'vʒər-ft-aj	ə'vʒər-ft-at
ə'vʒər-ft-a	ə'vʒər-ft-oj

(90) ['χoj] 'knock' (transitive)

Singular	Plural
'χo-ft-on	'χo-ft-am
'χo-ft-aj	'χo-ft-at
'χo-ft-a	'χo-ft-oj

Compare this suffixation pattern to the regular suffixation pattern on other verbs that end with /r/ and /j/.

(91) [ar] 'find' (transitive)

Singular	Plural
'ar-t-on	'ar-t-am
'ar-t-aj	'ar-t-at
'ar-t-a	'ar-t-oj

(92) ['arχaj] 'be busy' (transitive)

Singular	Plural
'arχaj-t-on	'arχaj-t-am
'arχaj-t-aj	'arχaj-t-at
'arχaj-t-a	'arχaj-t-oj

A very few verbs, which have /χʃ ʃʃ/ stem-finally, form past tense by means of the suffix /-att/. The same happens with the verb [ɪʃt] 'stand', which is irregular in other ways too. I am not aware of other verbs that have /ʃt/ stem-finally.

(93) [ɪʃt] 'stand' (transitive; with a Completive prefix /ʃ-/)

Singular	Plural
ʃ-ɪʃt-att-ən	ʃ-ɪʃt-att-əm
ʃ-ɪʃt-att-ə	ʃ-ɪʃt-att-tut
ʃ-ɪʃt-att ^ɪ -i	ʃ-ɪʃt-att-toj

(94) [əχʃ] 'wash' (transitive)

Singular	Plural
əχʃ-att-on	əχʃ-att-am
əχʃ-att-aj	əχʃ-att-at
əχʃ-att-a	əχʃ-att-oj

(95) [ʃʃ] 'grind' (transitive)

Singular	Plural
'ʃʃ-att-on	'ʃʃ-att-am
'ʃʃ-att-aj	'ʃʃ-att-at
'ʃʃ-att-a	'ʃʃ-att-oj

(96) [rəχʃ] 'repair clothes' (transitive)

Singular	Plural
rəχʃ-att-on	rəχʃ-att-am
rəχʃ-att-aj	rəχʃ-att-at
rəχʃ-att-a	rəχʃ-att-øj

Compare these verbs to the regular verbs with the same final consonants:

(97) [χəʃʃ] 'carry' (transitive)

Singular	Plural
'χəʃʃ-t-on	'χəʃʃ-t-am
'χəʃʃ-t-aj	'χəʃʃ-t-at
'χəʃʃ-t-a	'χəʃʃ-t-øj

(98) [ɑχʃ] 'catch' (transitive)

Singular	Plural
'ɑχʃ-t-on	'ɑχʃ-t-am
'ɑχʃ-t-aj	'ɑχʃ-t-at
'ɑχʃ-t-a	'ɑχʃ-t-øj

In some verbs with /n w j m/ stem-finally, the stem-final consonants arbitrarily become /t/:

	Gloss	Present stem	3rd Singular Indicative Past
(99)	'know'	ʒon	ʒɪ't-t-a
(100)	'reconcile'	'fɪdaw	'fɪdɪt-t-a
(101)	'begin'	'rajɔaj	'rajɔɪt-t-a
(102)	'stop'	'urom	'urət-t-a

Compare to the following regular forms.

	Gloss	Present stem	3rd Singular Indicative Past
(103)	'vomit'	wom	'wəm-t-a
(104)	'agree'	kom	ku'm-'t-a

In many words, addition of the past tense suffix is accompanied by lexically-conditioned mutation of the vowel in the final syllable. Consider the following examples, as well as several of the examples above.

/i u o au aj/ become /ɪ/

	Gloss	Present stem	3rd Singular Indicative Past
(105)	'shine'	ər'tt'iv	ər'ttɪv-d ^j -i
(106)	'leak'	m ^j iʒ	'mɪʒ-t-a
(107)	'roll'	tul	'tɪl-d ^j -i
(108)	'turn'	ʒduχ	'ʒdɪχ-t-a
(109)	'know'	ʒon	ʒɪ't-t-a
(110)	'pull'	ton	tɪ't-t-a
(111)	'sow'	taw	tɪ't-t-a
(112)	'reconcile'	'fɪdaw	'fɪdɪt-t-a
(113)	'begin'	'rajdaj	'rajdɪt-t-a

/a o/ become /ə/

	Gloss	Present stem	3rd Singular Indicative Past
(114)	'build'	a'raʒ	'arəʒ-t-a
(115)	'stop'	'urom	'urət-t-a
(116)	'vomit'	wom	'wəm-t-a

/ə/ becomes /o/ or /a/

	Gloss	Present stem	3rd Singular Indicative Past
(117)	'do'	kən	'kot-t-a
(118)	'eat'	χər	'χor-t-a
(119)	'tie'	bətt	'baʃ-t-a
(120)	'sweep'	məʒ	'marʒ-t-a

/u/ after velar consonants and /o au əu/ become /u'/

	Gloss	Present stem	3rd Singular Indicative Past
(121)	'work'	kuʃ	'ku'ʃ-t-a
(122)	'hear'	quʃ	'qu'ʃ-t-a
(123)	'paint'	'aχor	'aχu'ʃ-t-a
(124)	'agree'	kom	ku'm'-t-a
(125)	'pray'	arɤaw	'arɤu't-t-a

	Gloss	Present stem	3rd Singular Indicative Past
(126)	'spend'	qaw	qu''t-t-a
(127)	'cry'	kəw	ku''t-t-a
(128)	'need'	qəw	qu''t-t-a

All of the preceding stem vowel changes are limited to the past (Indicative and Conditional). They cannot be explained by general rules. Compare:

	Gloss	Present stem	3rd Singular Indicative Past
(129)	'dance'	kaf	'kaf-t-a
(130)	'fight'	χəs	χə's-id ^j -i

In some verbs, the stem vowel changes to distinguish between their transitive and intransitive form.

	Gloss	3 rd Sing. Ind. Past Trans.	3 rd Sing. Ind. Past Intrans.
(131)	'spoil'	'ʃaf-t-a	'ʃəf-t ^j -i
(132)	'crumble'	ʒ'kəl-t-a	ʒ'kəl-d ^j -i
(133)	'plant, stick'	ʃak-t-a	ʃək-t ^j -i
(134)	'turn'	ʒdaχ-t-a	ʒdɪχ-t ^j -i

The changes that happen in examples (105) – (128), however, are not of the same nature.

Future Tense

Future tense in indicative mood is formed by means of the suffix /-z/, which is followed by the person/number suffixes presented in Table 25.

(135) [χoj] 'knock'

Singular	Plural
'χoj-z-nən	'χoj-z-ɪftəm
'χoj-z-nə	'χoj-z-ɪftut
χoj-z-ən	'χoj-z-ɪftɪ

(136) [rts^ʲiv] 'shine'

Singular	Plural
'rts ^ʲ iv-z-nən	'rts ^ʲ iv-z-ɪftəm
'rts ^ʲ iv-z-nə	'rts ^ʲ iv-z-ɪftut
'rts ^ʲ iv-z-ən	'rts ^ʲ iv-z-ɪftɪ

(137) [səw] 'go'

Singular	Plural
səw-z-'nən	səw-'z-ɪftəm
səw-z-'nə	səw-'z-ɪftut
səw-'z-ən	səw-'z-ɪftɪ

The analysis presented above is somewhat simpler than the ones presented by Abaev and Bagaev.

Describing the future tense, Abaev says "Future tense forms consist of the present stem plus the element -dzɪn- (or) -dzi- plus a present tense form of the auxiliary verb: səw-dzɪn-ən." The following is an example of his paradigms.

(138) [səw] 'go'

Singular	Plural
səw-dzɪn-ən	səw-dzɪ-stəm
səw-dzɪn-ə	səw-dzɪ-stut
səw-dzən-(is)	səw-dzɪ-stɪ

His analysis is based on the orthography, hence the difference in his /dz/ vs. /z/ and /s/ vs. /ʃ/; compare (136). The /-ɪ/ in the first and second singular is very hard to hear and may be disappearing for some speakers. By the "auxiliary verb" he means that the person/number suffixes are very similar to the forms of the irregular verb [u¹] 'be'. Compare the preceding examples to Abaev's paradigm of this verb.

(139) [u¹] 'be' (Abaev)

Singular	Plural
dən	ʃtəm
də	ʃtut
iʃ	ʃtɪ

Abaev's paradigm is slightly different from the one that is most commonly used today.

(140) [u¹] 'be' (modern forms)

Singular	Plural
dən	ɪʃtəm
də	ɪʃtut
u ¹	ɪʃtɪ

The verb 'be' is irregular in many Indo-European languages and Ossetian is not an exception. In Ossetian, it is unusual because it is the shortest word in the

language: the stem consists of one vowel and the glide is not always clear. The following are past and future tense paradigms of this verb in indicative mood; present and past tense in conditional mood; imperative and subjunctive. This verb doesn't occur in the present tense of the conditional mood.

(141) Past Indicative Intransitive

Singular	Plural
u-tt-ən	u-d-ɪstəm
u-tt-ə	u-d-ɪstut
u-d ^h -ɪʃ	u-d-ɪstɪ

(142) Future Indicative

Singular	Plural
u-z-nən	u-z-ɪstəm
u-z-nə	u-z-ɪstut
u-z-ən	u-z-ɪstɪ

(143) Past Conditional

Singular	Plural
u-d-ain	u-d-aikkam
u-d-aɪʃ	u-d-aikkat
u-d-aid	u-d-aikkøj

(144) Subjunctive

Singular	Plural
u-on	u-əm
u-ai	u-at
u-a	u-oj

(145) Imperative

Singular	Plural
u-ø	u-t or ø-ut
u-əd	u-ənt

The presence of [u] in the majority of these paradigms suggests that the stem of the verb gets deleted in present indicative. If so, it is not necessary to treat the verb [u¹] 'be' as an auxiliary that is used to form the future tense; rather the future suffixes occur on all verbs, [u¹] 'be' included.

Bagaev states that the form of the future tense suffix is "a combination of a marker-suffix of future tense that changes phonetically in singular and plural and endings that coincide with the past tense of intransitive verbs". He does not separate, however, these segments into independent suffixes. By "phonetically changing marker-suffix" he means the difference in the form of /dzɪn/ to /dzən/ and /dzɪ/ (like Abaev's, his analysis is based on the orthography). The following is an example of Bagaev's paradigms.

(146) [səw] 'go'

Singular	Plural
səw-dzɪnən	səw-dzɪstəm
səw-dzɪnə	səw-dzɪstut
səw-dzən (i)(ɪf)	səw-dzɪstɪ

The orthographic /dz/ ([z] in my analysis) is recurrent in all forms of the paradigm. As was mentioned earlier, the /ɪ/ is not longer pronounced. It is the /z/ that consistently distinguishes the future tense paradigm from the past tense

indicative intransitive paradigm; the presence of /n/ in first and second singular and the final /n/ in third singular is another distinguishing element, but it doesn't occur in the plural. This is the reason for analyzing /z/ as a future tense suffix and the rest a person/number suffix.

REFERENCES

- Abaev, V.I. 1964. A grammatical sketch of Ossetic. *International journal of American linguistics*. Publication Thirty-Five, Volume 30, Number 4.
- Ahvelianidi, G.S. (ed.). 1963. *Grammatica osetinskogo iazika*. Ordjonikidze: Nauchno-issledovatel'skiy Institut pri Sovete ministrov Severo-Osetinskoy ASSR.
- Bagaev, N.K. 1965. *Sovremenniy osetinskiy iazik*. Ordjonikidze: Severo-Osetinskoie knijnoie izdatel'stvo.
- Grimes, Barbara F. (ed.) 2000. *Ethnologue: languages of the world*. (14th ed.) Dallas, Texas: Summer Institute of Linguistics Inc. [also available on-line <http://www.ethnologue.com>.]
- Guriev, T.A. 1999. *Kratkiy russko-osetinskiy slovar'*. Vladikavkaz: Izdatel'stvo Severo-Osetinskogo universiteta.
- Kasaev, A.M. (ed.). 1993. *Osetinsko-russkiy slovar'*. (4th ed.). Vladikavkaz: Severo-Osetinskiy institut gummanitarnih issledovaniy.
- Katzner, Kenneth. 1986. *The languages of the world*. London: Routledge and Kegan Paul.