There are approximately 3000 speakers of Tsova-Tush. Our earliest knowledge places them in five villages on Mt. Tsovata in Tusheti, a mountainous region in northeastern Georgia. They began to move down from the mountains in the early part of the 19th century. Currently they live in the village of Zemo Alvani on the Alazani River (Akhmeta Rayon) in Kakheti, in eastern Georgia.

Tsova-Tush belongs to the Nakh subgroup of the Northeast Caucasian language family. It has survived centuries as a language isolate within Georgia. Its speakers, who are culturally Georgian, are all bilingual in Georgian and use Georgian as a literary language. As a result of this long history of language contact, the Tsova-Tush language has been greatly influenced by Georgian, especially in vocabulary.

Tsova-Tush is now being rapidly replaced by Georgian. It is no longer spoken by the children in Zemo Alvani, a circumstance which points to a probable language death early in the next century.

Tsova-Tush, the designation preferred by its speakers, is also known as Bats or Batsbi. The Tsova-Tush call their own language bacbur mot: (lit. ‘Batsbur language’). (The suffix -ur is borrowed from Georgian.) Their self-name is (male singular) Batsav, (male plural) Batsbi. The term Tsova-Tush identifies them as a clan of the Tush (tribe), the other Tush clans being native speakers of Georgian.

Tsova-Tush has the distinction of being one of the first languages of the Caucasus for which a grammar was published (SCHIEFNER 1859), but it has been relatively neglected by researchers in this century. As a result, there is much which remains unclear about its linguistic system and there will be corresponding gaps in this description.1

1. PHONOLOGY

1.1. Phonemic System
1.1.1. The consonant phonemes of Tsova-Tush are given below.2

The voiceless stops and affricates are aspirated. The intensive consonants /l:/, /s:/, etc, are restricted to non-initial position and do not occur in monomorphemic clusters with other consonants. The intensive /l:/ in perfective verb roots is replaced by /l/ in corresponding imperfectives, which have historical infix b (Dil:ar ‘put’, imperfective Deblar).
### Consonant Chart

<table>
<thead>
<tr>
<th>Obstruents</th>
<th>Resonants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noncontinuants</td>
<td>Continuants</td>
</tr>
<tr>
<td>VI</td>
<td>Vd</td>
</tr>
<tr>
<td>Labio-labial</td>
<td>p</td>
</tr>
<tr>
<td>Labio-dental</td>
<td></td>
</tr>
<tr>
<td>Dental/ alveolar</td>
<td>t t:</td>
</tr>
<tr>
<td>Stops</td>
<td>c</td>
</tr>
<tr>
<td>Affricates</td>
<td></td>
</tr>
<tr>
<td>Laminal-post-alveolar</td>
<td>č</td>
</tr>
<tr>
<td>Palatal</td>
<td></td>
</tr>
<tr>
<td>Dorso-velar</td>
<td>k</td>
</tr>
<tr>
<td>Dorso-uvular</td>
<td>q q:</td>
</tr>
<tr>
<td>Radico-pharyngeal</td>
<td></td>
</tr>
<tr>
<td>Glottal</td>
<td>?</td>
</tr>
</tbody>
</table>

Intensive consonants do occur in clusters which arise across morpheme boundaries, though sometimes they are replaced by corresponding non-intensives.

(1) eq:ar ‘jump’ eq:-Dar ‘make (someone) jump’
lat:ar ‘stand’ lat:-Dar ‘stop something’
Daq:o’ ‘big’ but Daq-Dar ‘raise someone’

Although the intensive consonants of Tsova-Tush are called geminants by some authors, according to Gagua they differ acoustically from clusters which arise at morpheme boundaries. For example, the two /s/’s in oqus-sa’ ‘like him’, are distinct from /s:/, as in is: ‘nine’.

In addition to the seven intensive consonants included in the chart, there is an eighth, /š:/, which is found only in one word (eš:inô ‘crazy’).

Tsova-Tush /r/ is similar to Georgian /r/, a single tap. It becomes voiceless when followed by the voiceless lateral fricative /l/ (vorô ‘seven’, marô ‘nose’). The voiceless lateral does not occur in initial position. Occasionally it is replaced by /l/ in clusters (Doţar ‘squeeze inside’, imperfective Deplar). Word-final /v/ is realized as a glide [w]. The two pharyngeal fricatives contrast only in word-intial position. The voiceless /h/ occurs medially and finally, /ʃ/ does not. (For pharyngeals in clusters see 1.2.2.)
The pharyngeal fricatives can be followed by any of the five simple vowels (see 1.1.2), though after /h/, the vowel /a/ is most frequent. They cause pharyngealization of the vowel. Though /h/ is clearly perceptible as a separate segment, /\$/ is not. It is perhaps more accurately characterized phonetically as pharyngealization of the following vowel (or phonemically as a pharyngealized vowel).

All words begin with a consonant and those written with a vowel have an initial non-phonemic glottal stop. It seems that a non-phonemic (phonyngalized) glottal stop also appears before /\$/ (= a pharyngealized vowel) when it is in initial position, as in (2). Phonemic glottal stop occurs medially and finally.

The sound /h/ is very rare and seems to be restricted to word initial position, followed by a vowel.

1.1.2. The five simple vowel phonemes of Tsova-Tush are presented in the chart below.

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The vowels /i/, /u/, and /o/ are tense vowels, while /e/ is lax, similar to Georgian /e/ or the vowel in English *met*.

In addition to these simple vowels, Tsova-Tush has the falling diphthongs given in (3). The first element is syllabic, the second non-syllabic. In most words, (3)

<table>
<thead>
<tr>
<th>Diphthongs:</th>
<th>Front Closing</th>
<th>Back Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ui</td>
<td>ou</td>
<td></td>
</tr>
<tr>
<td>oi</td>
<td>au</td>
<td></td>
</tr>
<tr>
<td>ei</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ai</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

the diphthongs can be analyzed as the result of productive morphophonemic processes (see 1.4.2) and we would not treat them as phonemic. In some words, however, there doesn’t seem to be any internal synchronic evidence for an underlying form without the diphthong and it may be necessary to posit some underlying diphthongs.
Tsova-Tush also has the following long vowels:

(4) Long Vowels:  
iː  oː  
eː  aː  

The phonemic status of long vowels is unclear. Some may be analyzed as the result of compensatory lengthening (1.4.1) and/or simplification of diphthongs (1.4.4), but for others, particularly the frequently occurring [aː], such an analysis seems unmotivated for the present-day language (see pairs in (5)). Since vowel length has not been marked consistently in either texts or the available dictionary (KADAGIDZE and KADAGIDZE), an analysis of vowel length at this point is not possible. (KADAGIDZE and KADAGIDZE contains numerous words with [aː], but few with other long vowels.)

(5) Long Vowel Pairs

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>at’ar</td>
<td>‘spread it out’</td>
<td>a:t’ar</td>
<td>‘become quiet’</td>
</tr>
<tr>
<td>max</td>
<td>‘price’</td>
<td>ma:x</td>
<td>‘needle’</td>
</tr>
<tr>
<td>mot:</td>
<td>‘bed’</td>
<td>mo:t:</td>
<td>‘it seems to him’</td>
</tr>
<tr>
<td>jetx</td>
<td>‘six’</td>
<td>Je:tx</td>
<td>‘cry! (imperative)’</td>
</tr>
</tbody>
</table>

The five simple vowels and the diphthongs have nasalized variants (indicated with raised ‘n’) and the simple vowels, except for /a/, have reduced variants in word-final position (indicated with a capital letter). Both the nasalized and reduced variants are the output of specific processes (1.4.5, 1.4.1). It is not possible to distinguish reduced /i/ from reduced /e/ or reduced /u/ from /o/. The reduced front vowels cause a weak palatalization in the preceding consonant and the reduced back vowels, a weak labialization. One may also hear a fleeting, non-syllabic, voiceless vowel following the consonant. In the speech of young people, the final reduced vowels are frequently inaudible.

1.2. Phonotactics

1.2.1. Consonant clusters. Tsova-Tush admits a large number of two-consonant clusters in word initial and non-initial position. A few are illustrated in (6). Though some of this variety is due to extensive borrowing of Georgian words (with their many clusters), some of it occurs in inherited Nakh words or is created in borrowed words by syncope (1.4.1).

(6)  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bža”</td>
<td>‘livestock’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>st’ak’</td>
<td>‘man’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sk’ivr</td>
<td>‘trunk’</td>
<td>(Geo. sk’ivr)</td>
<td></td>
</tr>
<tr>
<td>t’q’a</td>
<td>‘twenty’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>čxot’</td>
<td>‘waterfall’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q’d’a</td>
<td>‘binding (of book)’</td>
<td>(Geo. q’d’a)</td>
<td></td>
</tr>
<tr>
<td>abžont’</td>
<td>‘stirrup’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dabc’ar</td>
<td>‘know, be acquainted with (a person)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>atxō</td>
<td>‘we-ERG’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bat’r</td>
<td>‘lip’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There are a few clusters of three-consonants, *t’k’mel* ‘dust’, *pst’u* ‘wife’, *yobst’* ‘earth’, most occurring in words borrowed from Georgian, as in (7).

(7) grdeml  <--- Georgian  grdemli  ‘anvil’
txril      txrili     ‘ditch’
t’q’ve     t’q’ve     ‘prisoner’
targmnad-Dar targmna     ‘translate’
ak’vn-i    ak’vani    ‘cradle-PL’
čxrik’(v)  čxrik’vi   ‘jay’
vepx(v)    vepxvi     ‘tiger’

There seems to be a tendency to simplify Georgian clusters of more than two consonants through deletion, as in the last example of (7) where the /v/ is optional, or in Tsova-Tsush *t’k’or* from Georgian *mt’k’vari* ‘Kura (a river)’, *brʒaneba* from Georgian *brʒaneba* ‘order’.

1.2.2. Clusters with pharyngeals. The distinction between the pharyngeal fricatives is neutralized in word-initial clusters. The voiceless pharyngeal occurs with the voiceless noncontinuants (except for /q/), while the voiced pharyngeal co-occurs with the voiced and ejective noncontinuants (except for /ʒ/, /ʒ/, /g/ and /q/) and with /v/, /j/, and the nasals.

(8) Voiceless       Voiced or Ejective
    phe            bʃa      ‘village’
    that:          pʃaⁿ       ‘paw’
    čhog          t’ʃak      ‘a cheese’
    khekiⁿ         c’ʃop      ‘ready’
    vʃalaʔ        mʃal      ‘(not) at all’

1.2.3. Preferred syllable structure. The preferred syllable structure in Tsova-Tush is C* V (C*), where C* stands for a single consonant or a cluster of two or (more rarely) three consonants. Though open syllables occur at the morphophonemic level, there is a definite preference for closed syllables at the phonetic level. The phonological processes of vowel reduction and deletion (1.4.1) have the effect of eliminating open syllables; Nasalization (1.4.5) and Pharyngeal Deletion (1.4.6) create them, however.

Native Nakh roots, particularly verbal and adjectival ones, are mostly one-syllable, though numerous suffixes produce a preponderance of polysyllabic words.

1.3. Suprasegmentals

Tsova-Tush is characterized by a weak, dynamic stress, which usually falls on the first syllable of a word. Occasionally, it is on the second syllable and sometimes it shifts from a root vowel to a suffix. In such cases, location of stress takes on a secondary,
morphological function. In nominal paradigms, for example, shift of stress from root to suffix indicates plurality.

(9) Singular       Plural
čák’ox         čak’óx      ‘chair-CON’
žágnó         žagnó      ‘book-GEN’

1.4. Morphophonemics
1.4.1. Vowel Reduction and Deletion. Tsova-Tush is characterized by very general processes of vowel reduction and deletion, which apply in native Nakh words as well as borrowings from Georgian and Russian. We will discuss separately the effects on word-final and on medial vowels.

Word-final Reduction/Deletion. In word-final position in words of more than one syllable, /a/ is deleted and the other four vowels are reduced. Reduced vowels are non-syllabic and often voiceless. The reduced front vowels cause palatalization in the preceding consonant; the reduced back vowels cause labialization. It does not seem to be possible to hear the difference between the two front vowels or the two back ones.

When the high vowels /i/ and /u/ are reduced, there is usually compensatory diphthongization in the preceding syllable (see 1.4.2). Gagua has observed that deletion of word-final /a/ and reduction of /o/ and /e/ often cause a slight lengthening of the previous vowel (not marked in this description). (This observation needs to be confirmed by a more thorough analysis of Tsova-Tush vowel length in general.)

(10) Word-final Vowel Reduction and Deletion
a  lel-e-ra  --->  leler   ‘s/he was walking’
sia  si:  ‘list’  (Georgian sia)
e  lel-e  lelē  ‘s/he walks’
t’q’uhe  t’q’uih(e)  ‘behind’
o  div-o  divō  ‘it is planted’
baq’o  baq’ō  ‘colt’
i  lac’-i  laic’i  ‘it hurts’
lev-i  leivī  ‘s/he says’
u  gagu  gaugū  ‘knee’
Vot’-u  Voit’ū  ‘he was going’

This process fails to apply to certain morphemes, including the plural suffix i, question particle i, a designating abstract nouns, a designating place names, and others.

Medial Deletion. In medial position in words of more than two syllables, all five vowels may undergo deletion. Deletion of the high vowels /i/ and /u/ usually causes compensatory diphthongization in the preceding syllable (1.4.2), while the deletion of
mid vowels sometimes causes diphthongization. Deletion of medial /a/ seems to have no effect on the preceding syllable.

Word-final vowel deletion takes precedence over medial deletion, so that in three-syllable words with word-final vowels, the final vowel undergoes reduction or deletion and not the medial one (see lelera above). In words of more than three syllables, both processes may apply.

(11) Medial Vowel Deletion

\[
\begin{array}{ll}
cok’al-en \rightarrow cok’le^n & ‘fox-GEN’ \\
Dos:-en-as & dui:nas ‘I (child) climbed down’ \\
Dos:-i-ra-atx & dui:xratx ‘we would climb down’ \\
Dex-i-ra-as & dixras ‘I requested it’ \\
doxt’ur-an & duixt’ra^n ‘doctor-GEN/PL’ \\
Vot’-u-ra-lo & Vuit’ralō ‘he was apparently going’ \\
\end{array}
\]

According to Gagua, medial vowel deletion may be blocked if impermissible consonant clusters would result, though it is unclear what constitutes an impermissible cluster.

1.4.2. Diphthongization. As a result of the reduction or deletion of high vowels (and sometimes mid vowels), the preceding vowel (unless it is /i/) may become a diphthong. The possibilities are given in (12). (Note that these diphthongs may (and in some cases must) undergo assimilation (see 1.4.3.).)

(12) Compensatory Diphthongization

<table>
<thead>
<tr>
<th>Preceding Vowel</th>
<th>Reduced/Deleted /i/</th>
<th>Reduced/Deleted /u/</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>(no changes to /i/)</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>ei</td>
<td></td>
</tr>
<tr>
<td>(?</td>
<td>ei</td>
<td></td>
</tr>
<tr>
<td>u</td>
<td>ui</td>
<td></td>
</tr>
<tr>
<td>u, ui</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>oi</td>
<td></td>
</tr>
<tr>
<td>ou, oi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>ai</td>
<td></td>
</tr>
<tr>
<td>au, ai</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the reduced/deleted vowel is a front one, a front closing diphthong is created ((13)(a)). If the reduced/deleted vowel is a back vowel, a back closing diphthong is created (as in (13)(b)), unless an intervening consonant is a coronal, in which case a front closing diphthong results ((13)(c)). (The combination /e/ followed by /u/ is rare and I have no examples in which there aren’t intervening coronals, except for the one in (13)(d).) There are occasional exceptions involving an intervening labial ((13)(d)).

(13)(a) \[ seni \rightarrow seinî ‘blue’ \]
\[ ukme \rightarrow uikmî ‘holiday’ \]
\[ osi \rightarrow oisî ‘there DIRN’ \]
\[ Dos:-en-as \rightarrow Dois:nas ‘I climbed down’ \]
\[ maqi \rightarrow maiqî ‘bread’ \]
1.4.3. Resolution of hiatus. In Tsova-Tush sequences of two full vowels are rare. When such sequences occur across morpheme boundaries, they are usually resolved by deletion of one member or by diphthongization. Deletion of a high vowel usually causes compensatory diphthongization in the preceding syllable when the vowel is a verbal morpheme, but not when it is a nominal one. A complete analysis cannot be given here, but these principles obtain in most cases, applying in the order given:

1. two identical vowels resolve to a single (?)lengthened) one
2. if the first vowel is [+high, +front] it is usually deleted
3. if the second vowel is [+high] a diphthong is created
4. if the first vowel is [+high, +back], it is deleted
5. if the second vowel is [+low] it is deleted

Sequences of two full vowels in words borrowed from Georgian undergo the processes just mentioned or remain two full vowels; occasionally there is insertion of [j]. There are some sequences of two full vowels in inherited Nakh words, notably in numerals and verbal nouns.

(14) (a) **Deletion**

\[
\begin{align*}
\text{xi-in} & \quad \rightarrow \quad \text{xi}^n \quad \text{‘water-GEN’} \\
\text{nek’-i-an} & \quad \rightarrow \quad \text{nek’a}^n \quad \text{‘knife-GEN/PL’} \\
\text{Jat’u-as} & \quad \rightarrow \quad \text{Jait’as} \quad \text{‘I will burst open’} \\
\text{Jeps-i-as} & \quad \rightarrow \quad \text{Jeipsas} \quad \text{‘I’m climbing down’} \\
\text{teps-o-as} & \quad \rightarrow \quad \text{tepsos} \quad \text{‘I’m hitting it’} \\
\text{lat’-e-as} & \quad \rightarrow \quad \text{lat’es} \quad \text{‘I help’}
\end{align*}
\]

(b) **Diphthongization**

\[
\begin{align*}
\text{čak’o-in} & \quad \rightarrow \quad \text{čak’oi}^n \quad \text{‘chair-GEN’} \\
\text{phe-iš} & \quad \rightarrow \quad \text{pheiš} \quad \text{‘village-PL’} \\
\text{Geo keip-ex} & \quad \rightarrow \quad \text{keipex} \quad \text{‘party-CON’}
\end{align*}
\]

(c) **Insertion**

\[
\begin{align*}
\text{di-en} & \quad \rightarrow \quad \text{dije}^n \quad \text{‘s/he did it’} \\
\text{Geo ianvari} & \quad \rightarrow \quad \text{ijanvar} \quad \text{‘January’}
\end{align*}
\]
(d) Two full vowels remain

<table>
<thead>
<tr>
<th>Geo</th>
<th>šairi</th>
<th>šajir</th>
<th>‘shairi (kind of verse)’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geo</td>
<td>saat-i</td>
<td>saat</td>
<td>‘hour, clock’</td>
</tr>
<tr>
<td>Geo</td>
<td>meurme</td>
<td>meurmē</td>
<td>‘oxcart driver’</td>
</tr>
<tr>
<td>Geo</td>
<td>rveuli</td>
<td>rveul</td>
<td>‘notebook’</td>
</tr>
</tbody>
</table>

Vowel sequences with the conjunctive particle *e* are usually unreduced.

1.4.4. Assimilation and coalescence in diphthongs. Diphthongs in Tsova-Tush (whether arising from rules in 1.4.2 or 1.4.3) exhibit varying degrees of assimilation and coalescence. The low and mid vowels are raised under the influence of a following high vowel, while the low vowel is also fronted under the influence of a following front vowel. These processes, illustrated in (15), are to a certain extent optional, and vary from speaker to speaker, so that any of the variants on a given line may be heard. (The variants which seem to be the least common are in parentheses.) According to Gagua, these rules are less likely to be applied in the speech of older speakers (e.g., [ai] is more common in the speech of the oldest and [i:] in the speech of the youngest speakers).

(15) Front Closing

- (ei) ---> i:
- (ai) ---> (æi) ---> ei ---> i:
- (oi) ---> ui ---> (u)

Back Closing

- ou ---> u:
- (au) ---> ou

The four rules discussed above generally account for the forms of words borrowed from Georgian, as illustrated in (16). (Note that the Georgian nominative case ending *i* is not taken into Tsova-Tush.)

(16) Georgian --> Tsova-Tush

<table>
<thead>
<tr>
<th>Georgian</th>
<th>Tsova-Tush</th>
</tr>
</thead>
<tbody>
<tr>
<td>sasaxle</td>
<td>sasaxlē</td>
</tr>
<tr>
<td>c’abl-i</td>
<td>c’aiblī</td>
</tr>
<tr>
<td>angariš-i</td>
<td>angrīš</td>
</tr>
<tr>
<td>imedian-i</td>
<td>imdeⁿ</td>
</tr>
<tr>
<td>p’ensia</td>
<td>p’einca</td>
</tr>
<tr>
<td>p’ap’iros-i</td>
<td>p’aip’roz</td>
</tr>
<tr>
<td>ubeidroba</td>
<td>ubeidroba</td>
</tr>
<tr>
<td>gozinaq’-i</td>
<td>guiznaq’</td>
</tr>
</tbody>
</table>
1.4.5. Nasalization. In word-final position (occasionally syllable finally) the nasal /n/ causes nasalization of the preceeding vowel (simple vowel or diphthong) and is deleted. This rule must be viewed as applying to the output of the rule in 1.4.1 in so far as vowels which precede word-final nasals do not undergo word-final Reduction or Deletion.

(17) gagan  -->  gagaⁿ  ‘egg’
     k’nat-en  k’nateⁿ  ‘boy-GEN’
     at’-in    at’iⁿ    ‘became quiet’

This rule does not usually apply to the dative case ending n.

1.4.6. Pharyngeal deletion. In words of more than one syllable, word-final /h/ is deleted. This rule must also be ordered after the rules of 1.4.1, since vowels which precede word-final /h/ do not undergo Reduction or Deletion.

(18) teps-o-a  -->  tepso  ‘you are hitting it’
     lat’e-ah  lat’a  ‘you help’
     kalk-i-h  kalki  ‘in the city’

1.4.7. Miscellaneous processes. We see assimilation for phonation type in clusters containing the historical infix b found in imperfective verb roots (deblar ‘put in’, lap’c’ar ‘play’, tepxar ‘hit’). Sporadically, there is other assimilation as well (e.g., gon-liⁿ --> golliⁿ ‘intelligent’). There is sporadic metathesis:

(19) hun-lo  -->  hluno  ‘in the forest’
     isbi     ibsi    ‘these’
     šelgbad-Dar šeglbadDar ‘put in order’
     (cf. Geo da=lag-eb-)

Tsova-Tush seems to have developed a rule for progressive dissimilation of /r/, no doubt due to the influence of a Georgian phonotactic constraint against two consecutive /r/’s without an intervening /l/. This can be most clearly seen in variant forms of the postposition reⁿ.

(20) sk’ol-e-reⁿ  ‘from school’
     bazr-e-leⁿ  ‘from the market’

1.6. Ablaut

There is nonproductive vowel ablaut in both nominal and verbal inflection. Nominal types are shown in (21), where vowel ablaut differentiates the nominative singular from all other forms in the archaic declension pattern found with some nouns.

(21) Nominative  Genitive  Plural  Gloss
    (a) o : a  mot’:  mat’:iⁿ  mat’:iš  word
         bos    basiⁿ    basiš  color
         moxk’  maxk’iⁿ  --  earth
    (b) u : a  but:  bat:iⁿ  bat:iš  moon
         buc    baciⁿ    baciš  grass
In the declension of some verbs, vowel ablaut differentiates perfective roots from imperfective.

(22) | **Perfective** | **Imperfective** | **Gloss** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) a : e</td>
<td>xat:ar</td>
<td>xet:ar</td>
</tr>
<tr>
<td></td>
<td>ma¶ar</td>
<td>me¶ar</td>
</tr>
<tr>
<td>(b) o : e</td>
<td>Dot:ar</td>
<td>Det:ar</td>
</tr>
<tr>
<td></td>
<td>Dol:ar</td>
<td>Deblar</td>
</tr>
<tr>
<td></td>
<td>toxar</td>
<td>tepxar</td>
</tr>
<tr>
<td>(c) i : e</td>
<td>tit’ar</td>
<td>tet’ar</td>
</tr>
<tr>
<td></td>
<td>xit’ar</td>
<td>xet’ar</td>
</tr>
</tbody>
</table>

2. MORPHOLOGY

2.1. Nouns

2.1.1. Gender. Most nouns in Tsova-Tush belong to a lexically determined gender class. For nouns which denote humans, class membership is predictable; for most other nouns, it is not. Borrowings from Georgian appear in all classes.

Class membership is formally marked by the appearance of a special consonant in those words which show class agreement. Agreeing words include many verbs, a handful of adjectives, one numeral, one pronoun, and one preverb. The agreement markers are j, v, b, or d, which are word-initial prefixes, except in the case of verbs formed with suffixes Dar or Dalar. In such verbs, which are very numerous, the agreement marker appears word-internally (see 2.5.4. and 2.5.5.). The gender classes and their markers are given below.

(23) | **Class Markers** | **Comments, Examples** |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SG PL</td>
<td></td>
</tr>
<tr>
<td>M v b</td>
<td>nouns denoting male humans</td>
</tr>
<tr>
<td></td>
<td><em>dad</em> ‘father’, <em>mar</em> ‘husband’, <em>fuv</em> ‘shepherd’, <em>voh</em> ‘son’</td>
</tr>
<tr>
<td>F j d</td>
<td>nouns denoting female humans</td>
</tr>
<tr>
<td></td>
<td><em>nan</em> ‘mother’, <em>pst’u</em> ‘wife’, <em>ag</em> ‘grandmother’, <em>još</em> ‘daughter’</td>
</tr>
<tr>
<td>D d d</td>
<td>the largest class</td>
</tr>
<tr>
<td></td>
<td><em>bader</em> ‘child’, <em>k’uit</em> ‘cat’, <em>dok</em> ‘heart’, <em>ditx</em> ‘meat’, <em>nek</em> ‘knife’</td>
</tr>
<tr>
<td>J j j</td>
<td>the second largest class</td>
</tr>
<tr>
<td></td>
<td><em>cark</em> ‘tooth’, <em>maiq</em> ‘bread’, <em>q’ar</em> ‘rain’, <em>goe</em> ‘stick’</td>
</tr>
<tr>
<td>Bd b d</td>
<td>the third largest class</td>
</tr>
<tr>
<td></td>
<td><em>plhu</em> ‘dog’, <em>ça</em> ‘bear’, <em>kortō</em> ‘head’, <em>matx</em> ‘sun’, <em>lap</em> ‘stairs’</td>
</tr>
</tbody>
</table>
There are approximately twenty-two nouns which don’t fall into one of these gender classes. Rather then set up three additional classes with very limited membership, it is proposed to treat these nouns as belonging to one gender class in the singular and a different gender class in the plural and to mark this exceptional behavior in the lexicon. These nouns are given in (24).

(24) Singular Plural Comments
Class Bd Class J 15 nouns, all denoting body parts
  *bak* ‘fist’, *bšark* ‘eye’, *kok* ‘leg’, *č’q’emp* ‘throat’
Class D Class J 4 nouns, all denoting body parts
  *bat’r* ‘lip’, *lark* ‘ear’, *t’ot* ‘hand’, *č’amağ* ‘cheek’
Class Bd Class B 3 nouns: *borag* ‘knit slipper’, *čekam* ‘boot’, *kakam* ‘wool cut in fall’

Some nouns which denote humans do not belong to a specific gender class, but show variable gender agreement, depending on the sex of the referent. These include *naq’bist* ‘friend’, *mastxov* ‘enemy’, *mezobel* ‘neighbor’, *učit’el* ‘teacher’, etc. Examples showing an agreeing copula are given in (25).

(25)(a) učit’el Ja ‘She is a teacher.’
    učit’el Va ‘He is a teacher.’
    učit’li Da / Ba ‘They are teachers (female / male).’

Verbal nouns are in Class D, which is the unmarked class. Class D markers are also used when the gender class of the noun is unknown, as in interrogatives, or to resolve gender conflicts, which arise when members of different gender classes are conjoined.

(26) (a) vux Da?
    what is ‘What is it?’
(b) kok’a-č borga-č Da
    leg-& slipper-& is ‘It is a leg and a slipper’

2.1.2. Number. Most nouns distinguish singular and plural forms and the vast majority of nouns, including verbal nouns and borrowings from Georgian, form the plural with the suffix *i*, which is added to the noun stem. Other suffixes are found as well, including *iš*, *ši*, and *bi*. (The word-final vowels of these suffixes do not undergo reduction (1.4.1).) Each of these suffixes is used with a small number of nouns, which often show irregular stem alternations as well. A few nouns follow an even more irregular pattern, taking *ar* as thematic extension, to which the plural ending *i* or *iš* is added (ar-*i* --> [airi] --> [er] and ar-*iš* --> [arč] or [airč] --> [erč]). For a few nouns *ar* alone marks the plural. Some nouns have both an *i* plural and one with another suffix as well. Suppletion is also found. Examples are listed in (27).
Some nouns don’t have plural forms; these include proper names, mass nouns, and collectives (e.g., *tuix* ‘salt’, *že* ‘sheep (collective)’, *žabô* ‘cattle’).

2.1.3. Case. There are eight basic cases, nine for those nouns which formally distinguish the ergative and instrumental. There are three additional cases, which occur with a limited number of nouns. In general, the same case endings are used with all nominals (including proper names, pronouns, substantivized adjectives) in the singular and the plural. Note that *n* in the genitive and the commitive undergoes Nasalization (1.4.5), but *n* in the dative usually does not.³ (Functions of the cases are treated in 3.1.1.)

(28) Case Endings: Singular Plural

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>-</td>
<td>i, iš, bi, arš ...</td>
</tr>
<tr>
<td>Genitive</td>
<td>n</td>
<td>a(-n)</td>
</tr>
<tr>
<td>Dative</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>Ergative</td>
<td>s</td>
<td>v</td>
</tr>
<tr>
<td>(Instrumental)</td>
<td>v</td>
<td></td>
</tr>
<tr>
<td>Contact</td>
<td>x</td>
<td>a(-x)</td>
</tr>
<tr>
<td>Allative</td>
<td>go</td>
<td></td>
</tr>
<tr>
<td>Adverbal</td>
<td>ġ</td>
<td></td>
</tr>
<tr>
<td>Commitive</td>
<td>ciⁿ</td>
<td></td>
</tr>
</tbody>
</table>

In the singular, case endings are added to an oblique stem consisting of the noun stem (the nominative singular) plus a thematic vowel, -e- (with consonant-stemmed nouns and nouns ending in /e/) or -i- (with remaining vowel-stemmed nouns). In the plural, the case endings are generally added to the plural suffix, with an intervening -a- between the plural suffix and the case marker in the genitive and contact (and in all cases...
of some paradigms (see (30)). (Many of the apparent differences between paradigms of different nouns are due to rules discussed in 1.4.)

As for the distribution of the two ergative suffixes, \textit{s} is only used in the singular, with nouns which denote human beings. It is also found occasionally with animals, when they are being personified, and systematically with nouns which end in /o/ or /u/ (see (31)). The ergative suffix \textit{v} is used with all other nouns in the singular and all nouns in the plural. Note that for nouns with an \textit{s} ergative, the ergative and instrumental cases are differentiated in the singular, but for the others, a single form (with \textit{v}) is used in both these functions.

The declension with thematic vowel \textit{e}, illustrated in (29), is both typical and regular. It is gradually spreading and replacing other less typical, irregular patterns.

(29) Stems with thematic \textit{e}

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM</td>
<td>nek’ knife</td>
<td>nek’i</td>
<td>cok’al fox</td>
<td>cok’li</td>
</tr>
<tr>
<td>GEN</td>
<td>nek’e\textsuperscript{n}</td>
<td>nek’a\textsuperscript{n}</td>
<td>cok’le\textsuperscript{n}</td>
<td>cok’la\textsuperscript{n}</td>
</tr>
<tr>
<td>DAT</td>
<td>nek’en</td>
<td>nek’in</td>
<td>cok’len</td>
<td>cok’lin</td>
</tr>
<tr>
<td>ERG/INSTR</td>
<td>nek’ev</td>
<td>nek’iv</td>
<td>cok’lev</td>
<td>cok’liv</td>
</tr>
<tr>
<td>CON</td>
<td>nek’ex</td>
<td>nek’ax</td>
<td>cok’lex</td>
<td>cok’lax</td>
</tr>
<tr>
<td>ALL</td>
<td>nek’eg\textsuperscript{ö}</td>
<td>nek’ig\textsuperscript{ö}</td>
<td>cok’leg\textsuperscript{ö}</td>
<td>cok’lig\textsuperscript{ö}</td>
</tr>
<tr>
<td>ADV</td>
<td>nek’eg</td>
<td>nek’ig</td>
<td>cok’leg</td>
<td>cok’lig</td>
</tr>
<tr>
<td>COM</td>
<td>nek’eci\textsuperscript{n}, nek’ici\textsuperscript{n}</td>
<td>cok’lec\textsuperscript{n}</td>
<td>cok’lic\textsuperscript{n}</td>
<td></td>
</tr>
</tbody>
</table>

Declension with thematic vowel \textit{i} is illustrated in (30) and of nouns endings in /o/ or /u/ in (31). Many nouns ending in /o/ or /u/ may optionally occur with the ergative suffix \textit{s}, whether they have a human or personified referent or not. In addition, in some forms of the singular there is [o] instead of an expected [oi] (--> [ui]). This leads to loss of the distinction between singular and plural and stress is used to distinguish them. (The declension of adjectives follows this subpattern.)

(30) Stems with thematic \textit{i}

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM</td>
<td>ča bear</td>
<td>čarč</td>
<td>xi water</td>
<td>xiš</td>
</tr>
<tr>
<td>GEN</td>
<td>čai\textsuperscript{n}</td>
<td>čarč\textsuperscript{a}, čarč\textsuperscript{i}</td>
<td>xi\textsuperscript{n}</td>
<td>xiš\textsuperscript{a}</td>
</tr>
<tr>
<td>DAT</td>
<td>čain</td>
<td>čarčan, čarčn</td>
<td>xin</td>
<td>xišn</td>
</tr>
<tr>
<td>ERG/INSTR</td>
<td>čaiv</td>
<td>čarčav, čarčv</td>
<td>xiv</td>
<td>xišv</td>
</tr>
<tr>
<td>CON</td>
<td>čaix</td>
<td>čarčax</td>
<td>xix</td>
<td>xišax</td>
</tr>
<tr>
<td>ALL</td>
<td>čaig\textsuperscript{ö}</td>
<td>čarč(a)g\textsuperscript{ö}</td>
<td>xig\textsuperscript{ö}</td>
<td>xišg\textsuperscript{ö}</td>
</tr>
<tr>
<td>ADV</td>
<td>čaig</td>
<td>čarč(a)g</td>
<td>xig</td>
<td>xišg</td>
</tr>
<tr>
<td>COM</td>
<td>čaici\textsuperscript{n}</td>
<td>čarčci\textsuperscript{n}</td>
<td>xici\textsuperscript{n}</td>
<td>xišci\textsuperscript{n}</td>
</tr>
</tbody>
</table>
In addition to these patterns, we find numerous irregularities in older or mixed declensions. Types of irregularities include: addition of ergative and contact endings in the singular to the noun stem (with a word-final /a/, which is lost in the other cases), preservation of final vowel (/o/ or /u/) in all forms, appearance of n (or vowel u or other segment) in non-nominative forms of the singular and sometimes also in all forms of the plural, vowel ablaut (1.6) and others.

In addition to the basic cases just presented, there are three other basic cases in Tsova-Tush, which occur with a restricted number of nouns. They have adverbial functions. There are also numerous complex case forms.
The allative II is found instead of the allative (in its directional function) with nouns which denote masses, collectives, or liquids, such as ‘fire’, ‘forest’, ‘water’. It is formed with the suffix lo, which is added to the oblique stem.

(33) ninō xi-lō eq’-iⁿ.
    nino water-ALLII jump-AOR ‘Nino jumped into the water.’

The directional and locative cases are found with a limited number of nouns, usually nouns denoting location. Though they have been considered to be cases, because of irregularities in their formation and restrictions on their use, it may be more accurate to treat nouns in these cases as lexicalized adverbs.

The directional case is usually formed with the suffix i, which is added to the noun stem. Occasionally the i is infixed. The locative case is usually formed with the suffix ʰ, which is added to the oblique stem (noun stem plus thematic vowel). Since word-final ʰ is nearly always deleted, the preceding thematic vowel is unreduced and comes to serve itself as an indicator of the locative case. The directional suffix i does not generally undergo Vowel Reduction unless there is also an i in the locative form. In such cases the directional i, if not infixed, undergoes reduction, preserving the distinction between the two forms.

(34)  

<table>
<thead>
<tr>
<th>Nominative</th>
<th>Locative</th>
<th>Directional</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>indurta</td>
<td>indurte(ʰ)</td>
<td>indurti</td>
<td>(a Tush village)</td>
</tr>
<tr>
<td>otax</td>
<td>otxe(ʰ)</td>
<td>otxi</td>
<td>room</td>
</tr>
<tr>
<td>kalika</td>
<td>kalki(ʰ)</td>
<td>kalik / kalik</td>
<td>city, Tbilisi</td>
</tr>
<tr>
<td>aluina</td>
<td>alni(ʰ)</td>
<td>aluinǐ / alvin</td>
<td>Alvani</td>
</tr>
</tbody>
</table>

There are, in addition, numerous complex case forms, formed by combining two or more of these endings, or these endings and postpositions and/or preverb-adverbs. The most frequent are locatives formed by adding the locative suffix ʰ to the allative or the allative II forms.

(35)  

(a) lah dažri-lo-ʰ Ba
    snake grass-ALLII-LOC is ‘The snake is in the grass.’

(b) lah dažri-lo-reʰ Bipl-i
    snake grass-ALLII-PREP crawl-PRES
    ‘The snake is coming out of the grass.’

The formation and meaning of complex adverbials is in need of further study. Attested complex forms include: go-reʰ, go-reʰ-daň, lo-reʰ, lo-x-daň, mak-daň, t’q’uiň-ren-daň, k’ik’el-daň-reʰ.

2.2. Postpositions

There are a number of postpositions in Tsova-Tush. Most are cognate to adverbs, while some are related to preverbs or nouns. Many postpositions govern a noun in the dative case, though there are some exceptions to this generalization, as indicated below.
In addition to their use as simple postpositions, ren and mak, among others, occur quite commonly as part of complex adverbials.

(36) Tsowa-Tush Postpositions

mak  ‘on’  t’iv-en mak Va
bridge-DAT on is ‘he is on the bridge’
(preverb and adverb)

k’ik’el ‘under’  t’iv-en k’ik’el Jaix-n-as
bridge-DAT under go-AOR-1SG/ERG
‘I walked under the bridge’
(also an adverb)

ḥatx(e) ‘in front of’  c’en-in ḥatxē
house-DAT in/front/of
‘in front of the house’
(adverb; rare as preverb)

t’q’uih(e) ‘behind, after’  št’ol-en t’q’uihē
after’ table-DAT behind ‘behind the table’
(adverb; rare as preverb)

juq’e ‘between’  b’yark’-i-n juq’e mar 4 Ba
eye-PL-DAT between nose is
‘the nose is between the eyes’
(also an adverb)

re’n ‘from’  sk’ol-e-re’n ‘from school’
(postposition only, but frequently part of complex adverb;
added to oblique stem; if plural, use xin)

xi’n ‘from’  sk’ol-a-xi’n ‘from schools’
(postposition only, added to oblique stem)

guihē ‘towards’  o kox(e)-guihē Vax-e’n
3Sg hut-towards go-AOR
‘he went towards the hut’
(postposition only, added to the oblique stem)

ču(h) ‘to, at’  mezobl-a-ču ‘to the neighbors’
mezobl-a-čuh ‘at the neighbor’s’
(restricted to nouns which name people, most often in plural;
added to oblique stem) (preverb and adverb with meaning ‘in, into’)

pex ‘next to’  nan-en pex
mother-DAT next/to
‘next to mother’ (postposition only)
penix 'next to' c’en-in penix
house-DAT next/to
‘next to the house’ (also an adverb)
doli^n ‘after’ chain gepsu-doli^n
‘after one week’ (?case of noun)
(also an adverb)
mcï^n ‘up to, until’ hun cere-go-mcï^n
woods edge-ALL-until
‘up to the edge of the woods’
(postposition only, usually governs allative or allative II)
mple^n ‘as much as,’ se badr-e-mple^n
the size of’ 1SG/GEN child-OBL-size
‘my child’s size’
(postposition only, governs dative or oblique stem)
dal:a ‘because of, for x’s sake’ 1SG-DAT-because/of do-AOR
‘he did it because of me’
ainō ‘for’ tagdi-e^n so-n-ainō
do-AOR 1SG-DAT-for
‘he did it for me’
bede^n ‘but, besides, except for’ 1SG-CON but no/one/CON talk-AOR
‘he talked about no one but me, he talked only about me’
(negative contexts only; governs whatever case the noun
would otherwise be in, here the contact)
sa^n ‘like’ as sa^n tagdi-e^n oqus
1SG/ERG like do-AOR 3SG/ERG
‘he did it like me (= like I did it)’
(governs whatever case the noun would otherwise be in, here
the ergative)

A few postpositions are related to nouns: gogex ‘around’ and cer / cere ‘at the edge of’.

2.3. Adjectives

The majority of adjectives in Tsova-Tush end with n. Attributive adjectives make
a single case distinction of nominative versus oblique. In the oblique form, word-final n
is lost, and the vowel i and the thematic extension čo are added  (NOM zorda^n ‘brave’,
OBLIQ zora-i-čo-; NOM k’ac’k’o^n ‘little’, OBLIQ k’ac’k’o-i-čo- --> k’ac’k’uičo-).
Certain adjectives, including some borrowed from Georgian, lack the thematic extension.
Partial paradigms are given in (37).
Attributive Adjectives

NOM mos:i bader bad child ґaze k’nat good boy
GEN mos:ičo badre ґaze-i-ćo --> ґazičo k’nate
DAT mos:ičo badren ґazičo k’naten
ERG mos:ičo badrev ґazičo k’natev
CON mos:ičo badrex ґazičo k’natex

Plural

NOM mos:i badri bad children ґaze k’nati good boys
GEN mos:ičo badra ґazičo k’nata
DAT mos:ičo badrin ґazičo k’natin, etc.

Attributive adjectives do not show agreement for number, except indirectly through class agreement (see below). Two exceptions to this generalization are the adjectives Daq:on ‘big’ and k’ac’k’on ‘little’, which have the vowel o in the singular and a in the plural, illustrated in (38).

(38) Singular  Plural

NOM Vaq:o k’nat Baq:a k’nati big boy(s)
   k’ac’k’o bader k’ack’a badri small child(ren)
ERG Vaq:uičo k’natev Baq:aičo k’nati
   k’ac’k’uičo bader k’ac’k’aičo badri

Substantivized adjectives, those appearing without a head noun, decline just like nouns, but with the oblique form described above serving as stem in the non-nominative cases. In the plural they take the suffix i in the nominative case and the suffix iš in the non-nominative cases, except for the genitive and contact cases, where the case ending is added directly to the thematic extension. In the genitive and contact cases the plural is distinguished from the singular (only) by shift of stress to the suffix.

(39) Substantivized Adjectives

NOM Vaq:o big one mos:i bad one zora brave one
GEN Vaq:uičo múis:čo zóraičo
ERG Vaq:uičov múis:čov zoraičov
DAT Vaq:uičon múis:čon zoraičon

Plural

big ones bad ones brave ones
NOM Baq:ani múis:ni zorani
GEN Baq:aičo múis:čo zoraičo
ERG Baq:aičuišv múis:čuišv zoraičuišv

The comparative is formed with the suffix -xu, -ux, or -vx, which is added to the nominative singular, minus the final nasal.

(40) Neutral Comparative
Daq:on big Daq:ux
k’ac’k’on little k’ac’k’ux
zoran brave zorauxū
mos:i’n bad mos:ivx

There is no inflected superlative.

In addition to many basic adjectives, adjectives can be derived from verbs (with suffixes inō, enō, inī) or nouns (with suffixes reō, riō, ruō, ĝeō, and cīō, the last used to form privatives). Nouns in the genitive case may also become adjectives through a shift in stress from the nominal root to the suffix. The suffix ur, from Georgian, is found in both native and borrowed adjectives.

(41) kalika city ---> kalki-rēō urban
gogō circle gog-riō round
k’ōk’ hole k’ōk’-ruō deep
bader child badre-ĝeō childlike
badre-c’i’n childless
dal God dal-ur holy
Geo lamazi beautiful lamz-ur beautiful

2.4. Pronouns
2.4.1. Personal pronouns. The personal pronouns show all the case distinctions that nouns do and, except for the ergative case, use the same case endings. All pronouns but the inclusive have two stems. Paradigms for the first and second person pronouns are given in (42) and for the inclusive pronoun in (43). The inclusive pronoun, in addition to having an invariant stem, doesn’t distinguish between nominative and ergative case forms. The third person pronouns are presented with the demonstrative pronouns (2.4.3).

(42) 1 Singular 2 Singular 1 Plural Excl 2 Plural
ERG as aḥ, ahō atx, atxō aiš, aišū
GEN seō heō txeō šuō
NOM so ho txo šu
DAT so-n ho-n txo-n šu-n
CON so-x ho-x txo-x šu-x
ALL so-gō ho-gō txo-gō šu-gō
ADV so-ĝ ho-ĝ txo-ĝ šu-ĝ
The genitive of the personal pronoun serves as a possessive pronoun. When prenominal, the possessive is undeclined, except that it looses the final nasal in non-nominative cases (NOM seⁿ bader ‘my child’, ERG se badrev). When a possessive occurs without a head noun (as English mine), it is declined as a noun, but with loss of the final nasal and addition of the adjectival thematic extension čo in non-nominative cases (seⁿ ‘mine’, ERG sečov, DAT sečon; txeⁿ ‘ours’, ERG txečov, DAT txečon, etc.).

2.4.2. Reflexive pronouns. Every personal pronoun has a corresponding reflexive pronoun. Partial paradigms for the first and second persons are given in (44) and for the third person reflexive in (45). The third person reflexives are related to the third person pronouns by suppletion and do not distinguish between nominative and ergative case forms.

(44) 1 Singular 2 Singular 1 Plural 2 Plural
ERG aisoⁿ aihoⁿ aitxuiš aišuiš
GEN saiⁿ haiⁿ txaiⁿ šuiⁿ
NOM suivaⁿ huivaⁿ txuivaⁿ šuivaⁿ
DAT suin huin txuin šuin

(45) 3 Singular 3 Plural
NOM/ERG šeivravⁿ / šajrvavⁿ / šarovⁿ šuivš
GEN šariⁿ šuivš
DAT šaruiš Šuin

There is also a reciprocal pronoun vašbaⁿ ‘each other’. This form is used in the nominative, ergative, and genitive; the rest of its declension is regular.

2.4.3. Demonstrative pronouns. Demonstrative pronouns are said to form a three-way system of deixis: e / i ‘this one’ (by speaker), is ‘this one’ (by addressee), o / (h)as ‘that one’. The pronoun (h)as is relatively rare, while o is wide-spread, functioning as a deictically neutral third person pronoun (corresponding to English ‘s/he, it, they’). The demonstratives have two stems and take the suffix bi in the plural. Partial paradigms for o and is are given in (46). (The pronouns e and i are declined exactly like o (GEN equiⁿ, iquiⁿ, PL ebi,ibi, etc.), while the pronoun (h)as is declined like is (GEN (h)acxuiⁿ, PL (h)asbi / (h)absi).)
In addition to the demonstrative pronouns, many other deictic forms show the alternation e or i for proximal and o for distal:

(47)  Proximal  Distal
‘this/that kind of a’   išt’u"   ošt’u"  
‘in this/that way’   išt’   oišt’ --> uišt’
‘here/there’ (location) ese, isi, is   osi --&gt; uis
‘here/there’ (direction) esev   osiv, uisë
‘a place like that here/there’ išna   uisna

2.4.4. Interrogative pronouns. Like other pronouns, the interrogative pronouns have two stems. Partial paradigms are given in (48).

(48)  ‘who?’   ‘what?’
NOM SG   me"   vux
NOM PL   meniš   vuxuš
ERG ha"   st’ënav / st’ënv
GEN haini   st’ëni" --&gt; st’ëni
INSTR hanav   (same as ERG)
DAT hann   st’ën

Other interrogatives:
‘which one?’   menux
‘what kind of?’   molu"
‘how many?’   me±
‘where?’ (location) miče(h)
‘where?’ (direction) mičë, mič
‘when?’   maca"
‘why?’   vu"
‘how?’   moh

Relative pronouns are formed from the interrogatives by suffixation of the particle e ‘and, too’, a calque on Georgian relative pronouns:
(49) Relative Pronouns
‘who’ NOM mena / menæ / mene ERG hanaæ / hane
‘what’ NOM vuxe ERG st’evaæ / st’eva
‘which’ NOM menxu(ê)
‘why’ vune, etc.

2.4.5. Delimiting pronouns and quantifiers:
‘all, everyone’ Dani? (stem ham- used in non-nominative cases)
‘all, everything’ vuma? (identical to pronoun above in non-nominative forms)
‘every’ q’ovel
‘much, many’ duq
‘several’ me+mi, me+tax
‘some’ me
‘another (one)’ qena?

2.4.6. Indefinite pronouns. The indefinite pronouns are formed from interrogatives.
‘someone’ menax Oblique stem han-
‘something’ vunax st’en-
‘something’ vum st’em-

2.4.7. Negative pronouns. Negative pronouns are formed with the negative particles co
‘not’ or ma ‘don’t’ (used in imperatives).
‘no one’ comena Oblique stem cohan-
‘no one’ mamena mahan-
‘nothing’ com co-st’en-
‘nothing’ mam

2.5. Verbs
2.5.1. Inflection. Finite verbs show variation in form according to the gender class of the
nominative argument, the person of the subject, number, aspect, tense, and mood.
Non-finite forms show variation in gender and aspect. There is also a developing system
of preverbs; they usually preceed the verb but are not completely fused to it. The gender
markers are prefixes, but all other verbal affixes are suffixes.
2.5.1.1. Gender. Some verb roots agree in gender with a nominative argument (the
intransitive subject or the transitive direct object). The gender markers (v, j, b, or d) are
verb-initial, except in the case of verbs derived by means of suffixes containing an
agreement marker (2.5.5). (Gender markers in verb forms are in upper case.)
(50) (a) Intransitive verb -- agreement with subject:
vašō Vaxeⁿ ‘Brother (V-class) left.’
jašō Jaxeⁿ ‘Sister (J-class) left.’
bader Daxeⁿ ‘The child (D-class) left.’
phu Baxeⁿ ‘The dog (Bd-Class) left.’
(b) Transitive verb - agreement with direct object:

\[
\begin{align*}
\text{nanas vašō Vik’e} & \text{‘Mother took brother (V).’} \\
\text{nanas jašō Jik’e} & \text{‘Mother took sister (J).’} \\
\text{nanas bader Dik’e} & \text{‘Mother took the child (D).’} \\
\text{nanas phu Bik’e} & \text{‘Mother took the dog (Bd).’}
\end{align*}
\]

2.5.1.2. Person. Verbs usually show agreement with a first or second person subject; this agreement is marked by a suffix which corresponds to a personal pronoun. The suffixed personal pronoun will be in the same case as the subject (nominative, ergative, or (rarely) dative.) The first person inclusive pronoun does not occur as a personal suffix, nor do the third person pronouns. The special properties of verb forms with first person inclusive subjects are discussed in 2.5.1.3.

(51) (a) 1SG-NOM Da-sō ‘I am’
1PL-NOM Da-txō ‘we are’
3SG/PL Da ‘he/she/it is, they are’

(b) 1SG-ERG teše-as \(\rightarrow\) tešes ‘I believe it’
1PL-ERG teše-atx tešetx ‘we’
2PL-ERG teše-aiši tešiši ‘you all’
3SG/PL tešē ‘he/she/it/they’

2.5.1.3. Number. The number of the subject or object is usually marked in verb forms indirectly, if at all, through gender or person markers which indicate number as well as gender or person. There are three circumstances where plurality is marked directly.

First, in positive and negative imperatives the suffix \(t\) marks a plural second person subject (two or more).

(52) (a) To one person: oqu-x ma dak’livī, Daq’
3SG-CON don’t think eat
‘Don’t think about it, eat!’

(b) To more than one: oqux ma dak’levi-t, Daq’a-t

Second, with the first person inclusive pronoun \(vai\), if it follows the verb, the suffix \(t\) marks plurality (here: more than two). This agreement marker is not used if the pronoun precedes the verb.

(53) (a) First person and one other: qikī vai
\begin{align*}
\text{call} & \text{1PL/INC} \\
& \text{‘We are calling him.’}
\end{align*}

(b) First person and two or more: qeki-t vai

(c) First person and any number: vai qikī

(d) First person and two or more as dative object: dos tet’o-t vainī
\begin{align*}
& \text{‘He will cut wood for us.’}
\end{align*}
Note that the pronoun *vai*, though postposed, is not considered a personal suffix. It is phonetically separate and is perceived by native speakers as a separate word.

Third, with about 25 verbs, one root is used if the intransitive subject or transitive object is singular and a second root if it is plural.

<table>
<thead>
<tr>
<th>Verb Type</th>
<th>Singular</th>
<th>Plural</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intransitive</td>
<td>Daʔar</td>
<td>Daxk’ar</td>
<td>‘come’</td>
</tr>
<tr>
<td></td>
<td>xaʔar</td>
<td>xabżar</td>
<td>‘sit’</td>
</tr>
<tr>
<td>Transitive</td>
<td>Dil:ar</td>
<td>Dixk’ar</td>
<td>‘put’</td>
</tr>
<tr>
<td></td>
<td>Dol:ar</td>
<td>Doxk’ar</td>
<td>‘put down’</td>
</tr>
<tr>
<td></td>
<td>qoc’Dar</td>
<td>qoxk’Dar</td>
<td>‘hang something’</td>
</tr>
</tbody>
</table>

2.5.1.4. Aspect. Most non-stative verbs distinguish perfective and imperfective aspect forms. For some verbs, mainly inherited Nakh ones, vowel ablaut differentiates perfective (with vowels *a*, *o*, or *i*) from imperfective (with *e*) (examples are given in (22)). For other verbs, there is a non-productive relationship between the perfective and imperfective roots, though often the perfective has a gender marker, while the imperfective lacks one. Examples are given in (55)(a). For still other verbs, most borrowed from Georgian, the difference between perfective and imperfective is carried by the presence versus absence of a preverb (55)(b). Often, in addition to the preverb borrowed from Georgian (set off by ‘=’), a Tsova-Tush preverb is used as well.

<table>
<thead>
<tr>
<th>(55) (a)</th>
<th>Perfective</th>
<th>Imperfective</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dek’ar</td>
<td>ak’ar</td>
<td>‘fall’</td>
<td></td>
</tr>
<tr>
<td>Dagar</td>
<td>guar</td>
<td>‘see (something)’</td>
<td></td>
</tr>
<tr>
<td>DVoгар</td>
<td>q’egar</td>
<td>‘break (something)’</td>
<td></td>
</tr>
<tr>
<td>ecar</td>
<td>evDar</td>
<td>‘buy, take (something)’</td>
<td></td>
</tr>
</tbody>
</table>

| (b) | (halo) da=xat’odDar | ‘paint (something)’ |
|     | (ču) da=c’eradDar  | ‘write (something)’ |
|     | (halo) mo=c’onadDalar | ‘like (someone)’ |

Perfective aspect forms denote single completed actions, while imperfective aspect forms are not perfective. They generally indicate ongoing, incomplete, or multiple actions. Use of the aspect forms in the various tenses is discussed in the next section.

2.5.1.5. Tenses. In terms of formation, the simple tenses in Tsova-Tush are divided into three groups, the Present, Future and Aorist. If the verb is one which differentiates aspect, the imperfective form is used in the Present and usually the perfective form is used in the Future and the Aorist. However, if a verb in a tense of the Future or Aorist group is used to denote multiple actions (and not a single action), the imperfective aspect form is used instead. If a verb does not distinguish imperfective and perfective aspect, the Present and Future groups of tenses will not be differentiated.
(a) Present Group Future Group Formants

Present Future o/u/i/e
Imperfect Future Past o/u/i/e + ra
Imperfect Reported Future Reported o/u/i/e + ra + lo

(b) Aorist Group Formants

Aorist en / in
Aorist Past e / i + ra
Aorist Reported en / in + no
Aorist Reported Past en / in + no + ra

Transitive verbs take the suffix o in the present, but beyond this, it is not possible to predict which formant a particular verb will occur with. Within each tense group, though, the same formant is used throughout: If a verb takes i in the Present and en in the Aorist, it will have i in all tenses of the Present group and en in all tenses of the Aorist. Most verbs have the same vowel in the Present and the Future groups and in the perfective and imperfective Aorist. The underlying forms (before the application of phonological processes) of the verb ‘cut’ in the third person are illustrated in (57).

(57) IMPERFECTIVE PERFECTIVE

Present Group Future Group
Present tet’-o tit’-o
Imperfect tet’-o-ra tit’-o-ra
Imperfect Reported [tet’ralo] [tit’ralo]
Aorist Group Aorist Group
(multiple action) (single action)
Aorist tet’-in tit’-en
Aorist Past tet’-i-r tit’-e-r
(Puperfect)
Aorist Reported tet’-i-no tit’-e-no
Aorist Reported Past tet’-i-no-ra --> tit’-e-no-ra -->
Past [tit’nor] [tit’nor]

In addition to the simple tenses, there are also four periphrastic tenses, which are made with forms of the verb ‘to be’. They have reported meaning and are much less common than the simple tenses with reported meaning.

(58) Periphrastic Reported Tenses

Main Verb Form of ‘To Be’ Example
I. Present/future Aorist reported tet’-o-Dano
II. " " Aorist reported past tet’-o-Dano-ra
III. Past Participle Present tit’eno-Da
IV. " " Imperfect tit’eno-Da-ra
Periphrastic tenses I. and II. would both be translated, ‘s/he was cutting it apparently,’ similar in meaning to the Imperfect Reported. Periphrastic tenses III. and IV. occur in negative contexts and would be translated ‘he apparently did(n’t) cut it’, similar in meaning to the Aorist Reported or Aorist Reported Past.

2.5.1.6. Mood. There are three categories marked by verbal inflections which we will consider modal (or irrealis): imperatives and related forms, subjunctives, and conditionals.

Imperatives are formed by addition of the suffix $a$ to a verb root (perfective or imperfective). (Note that Word-final Vowel Deletion will apply.) The suffix $le$ forms a polite imperative or request (probably best translated with ‘please’). The plural suffix $t$ (discussed in 2.5.1.3.) can be added to either of these forms.

(59) Imperative Request

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>tit’</td>
<td>tit’at</td>
<td>tit’alë</td>
<td>tit’let</td>
</tr>
<tr>
<td>xat’</td>
<td>xat’:at</td>
<td>xat’:alë</td>
<td>xat’:let</td>
</tr>
<tr>
<td>qal:</td>
<td>qal:at</td>
<td>qal:alë</td>
<td>qal:let</td>
</tr>
</tbody>
</table>

Suggestions (corresponding to English ‘let’s’) are expressed by a present or future verb form with a postposed vai, the first person plural inclusive pronoun ($qal:ô vai$ ‘let’s eat (you and me’)”). If more than two persons are intended, the suffix $t$ is used ($qal:oi vai$).

Wishes, blessings, toasts, and curses are expressed by addition of the suffix $l$ to the imperative ($qal:al ‘may s/he eat it up’) (with stress on the second vowel). Person markers may follow, as in (60)(b) below. Plurality of the subject may not be marked, but the marker $t$ is attested in these forms, marking the plurality of an object (60)(c).

(60) (a) matx ma gib-a-l oqui-n
sun don’t see-IMP-l 3SG-DAT ‘May she not see the sun.’

(b) ġaziš xiš-a-l-ahô-e duqxane Jax-a-l-ah
well be-IMP-l-2SG-& long/time live-IMP-l-2SG ‘May you (a female) be well and live a long time.’

(c) [ ... ] lat’a-l-a-t vainî
help-IMP-l-?-PL 1PL/INC/DAT ‘May [the Mother of God] help us.’ (more than two)

Negative imperatives are expressed by the particle $ma$ ‘don’t’ which appears preverbally. It occurs with the imperative form just discussed (60)(a) and with verbs in the present or future tenses. The subject is usually second person, but the person suffixes are not used ($e ma qal:ô ‘don’t eat this’). A plural subject (more than one) is marked with the suffix $t$.

Subjunctive verb forms contain the suffix $lo$ (glossed SUBJ), which can be added to all tenses but the Aorist. It follows the tense formants, but precedes the person
suffixes. Subjunctives occur in main clauses which contain the particle (a)k’ (2.7.) (as in (61)(a)) and in subordinate clauses which express possibility, probability, etc.

(61)  
(a)  
vux-k’ Dino-lo-s! mič-ak’ go-lo-s  
whatever do/AOR/RPT-SUBJ-1SG where-ever go-SUBJ-1SG  
‘Whatever have I done?’  
‘Wherever should I go?’

(b)  
[ ... ] me oqui-go t’ateb deh-ra-lo-tx  
COMP 3SG-ALL/LOC money steal-PAST-SUBJ-1PL  
‘[We waited for night] so that we could steal his money.’

(c)  
nan-en lelë me badr-ev maiq’ o-lo-lë  
mom-DAT wants COMP child-ERG bread eat-PRES-SUBJ  
‘Mother wants the child to eat.’

Conditionals are expressed by the suffix he ‘if’. It follows some tense formants but precedes the past formant ra and person suffixes. The particle occurs with different tenses (in (62)(a), the Present), but if counterfactual meaning is intended, the verb will be in the Aorist Reported Past (62)(b).

(62)  
(a)  
Jel-i-hë  
laugh-PRES-COND  
= ‘if she is laughing’

(b)  
q’ar xi̱ no-he-r  
rain be-COND-PAST  
= ‘if it had rained’ (it didn’t)

2.5.2. Non-finite verb forms. Tsova-Tush has a number of different non-finite verb forms. Use of the forms is discussed in 3.5.

Verbal nouns are formed by adding the suffix ar to the verb root, perfective or imperfective (tet’-ar ‘cutting’, lēl-ar ‘walking’. They are declined like other nouns, take the regular plural suffix i, and belong to gender class D.

Infinitives are formed by adding the suffix a” to the verb root, perfective or imperfective (tet’-a” ‘to cut’, x̱it’-a” ‘to read’).

There are three participles. Present and future participles are formed by adding ni to the Present and Future tenses and past participles are formed by adding no to the Aorist tense (with loss of final nasal). Participles follow the declension pattern of adjectives (see 2.3.). In non-nominative cases they take the thematic extension čo (with loss of the participial suffix) and the plural suffix ĺi. In (63) are given participial forms which would be used prenominally.

(63)  
<table>
<thead>
<tr>
<th>Present</th>
<th>Future</th>
<th>Aorist</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM Dot’uini</td>
<td>ġuini</td>
<td>Daxenō ‘go’</td>
</tr>
<tr>
<td>OBLIQ Dot’učo</td>
<td>ġočo</td>
<td>Daxečo</td>
</tr>
<tr>
<td>NOM Duini</td>
<td>Dijenō</td>
<td>‘make’</td>
</tr>
<tr>
<td>OBLIQ Dočo</td>
<td>Dijenčo</td>
<td></td>
</tr>
</tbody>
</table>

Present absolutes are formed by adding the suffix š to the Present or Future tenses. Past absolutes are formed with the suffix če, added to the Aorist tense (minus
final nasal). The past absolutives should perhaps be considered finite forms, since they do occur sometimes with person suffixes (64(c)).

(64) (a) vor† st’ak’ cu kek’B-o-š Bauxk’ù seven man cu mix-PRES-ABSOL sit  
‘Seven men are sitting and mixing cu (shepherds’ food).’

(b) p’et’u-in so Jaig-če suin Jait’-n-as Peter-DAT 1SG see/AOR-ABSOL 1SG/REFL run-AOR-1SG/ERG  
‘Peter saw me and I ran off.’

(c) kalik Kiil-če-as, šukia gu-as Tbilisi go/AOR-ABSOL-1SG Shukia see-1SG  
‘If I go to Tbilisi, I will see Shukia.’

2.5.3. Preverbs. There are eight basic preverbs in Tsova-Tush. Their primary meanings are spacial, though in combination with particular verbs, it is possible for them to have other senses or to take on primarily aspectual meaning. The most common preverb, da, is often a spacially neutral preverb (corresponding to Georgian da), as is halo, the second most common one.

(65) Directional Locative
‘up’ halō halo(h)
‘down’ aho aho(h)
‘in’ āu āu(h)
‘out’ nāa?i nāa?i(h)
‘on’ mak mak
‘back’ Dux
‘toward speaker’ so
‘away from speaker’ dah

The preverb Dux agrees in gender class with the nominative argument of the verb (Jux Je?e” ‘she went back’). All the preverbs (but so and Dux) function also as adverbs. As shown in (65), most of these occur in both directional and locative senses; for four of these, the form used in the locative is derived from the directional by means of the locative suffix h.

(66) (a) me” so Juit’-ū, me” dah Juit’-ū.  
some PVB go-PRES some PVB go-PRES  
‘Some are going here, some are going there ...’

(b) o aho Va-x-e” o aho Va.  
3SG down go-AOR 3SG down-LOC is  
‘He went down.’ ‘He is down.’

The preverbs mak and āu occur also as postpositions (see 2.2.). In addition to the preverbs in (65), which occur with a fairly large number of verbs, the adverb/prepositions
hat(e) ‘in front of’ and t’q uih(e) ‘behind’ each occur as preverbs with a handful of verbs, as do the complex preverb/adverbs soda(h) ‘back and forth’ and kalahō ‘up and down’.

The influence of Georgian can be seen in the developing use of preverbs to express perfective aspect (see 2.5.1.4.). Sometimes a verb plus preverb will form an idiomatic combination: Dar means ‘make, do’, but sani so Dar ‘open the door’, sani dah Dar ‘close the door’.

2.5.4. Analytic verbs. Many verbs in Tsova-Tush are made up of a verb root which is an unchanging, bound morpheme and a suffix which is inflected. Verbs with the suffix Dar (etymologically ‘make, do’) are transitive, while those with Dalar (a formant which only occurs in analytic verbs) are intransitive. This pattern is not only found in native words, it is found in most verbs borrowed from Georgian; the verb root is generally the Georgian verbal noun in the Georgian adverbial case.

(67) (a) Transitive Verbs
- da=c’erad-Dar ‘to write’
- da=xat’od-Dar ‘to paint, draw’

(b) Intransitive Verbs
- mo=c’onad-Dalar ‘to like’
- ʒulbad-Dalar ‘to hate’

In a less common pattern, we find a small number of native verbs with the suffix xetar (etymologically ‘to find’) (q’a-xetar ‘pity someone’, bek’-xetar ‘be surprised’, etc.)

2.5.5. Verbal derivations. There are extremely productive derivational suffixes which can be added to existing words (mostly verbs, but also adjectives and nouns) to create new verbs. The suffix Dalar creates intransitives from transitives. When added to intransitives, a new intransitive is created which has the added nuance of unintentional action on the part of the subject. The suffixes Dar and itar create causatives, adding an ergative argument to an existing verb and mak’ar creates a verb meaning ‘can’, changing the case of the subject to dative. In their regularity and predictability, these derivations are comparable to inflection. (Examples are given in 3.2.5.)

2.6. Adverbs

Manner adverbs are formed from adjectives by means of the suffix iš. The final nasal of the adjective is lost:

(68) Adjective Adverb
- ɣaze’a ‘good’ ɣazeiš ‘well’
- at’:a’ ‘easy’ at’:aiš ‘easily’
- mac’ri’a ‘sweet’ mac’riš ‘sweetly’

Manner adverbs have either organic comparatives, formed with suffix x or periphrastic ones, formed with upro ‘more’ (cf. Georgian upro).
Some deictic place adverbs are listed with deictics in (47), while other place adverbs are discussed with preverbs in (2.5.3) and postpositions in (36). Other place adverbs include čaq ‘far’, garg ‘close, near’ (directional), and garge ‘close’ (location). Some time adverbs:

c’q’e  ‘once, at one time’  qen  ‘then, next, later’
inc  ‘now’  ehatē  ‘then, at that time’
tax  ‘today’  psare(h)  ‘yesterday’
qa”  ‘tomorrow’
lamō  ‘day after tomorrow’
ulō  ‘day after day after tomorrow’
p’alō  ‘day after day after day after tomorrow’

Interrogative forms for adverbs are given in 2.4.4.

2.7. Particles

There are numerous particles in Tsova-Tush. The negatives co ‘not’ and ma ‘don’t’ generally appear in preverbal position (3.8). The particle ge is most often restricted to negative sentences and means ‘(no) longer’. It occurs only in verb forms and follows the vowels marking the present and future tenses and the aorist endings, but precedes the past tense marker r and/or a personal suffix.

(70)  co Jeli-gē  ‘she no longer laughs’
co Jil-ge-r  ‘she was no longer laughing’
co aṭin-gē  ‘he no longer said it’
co aṭin-ge-s (←− ge-as)  ‘I no longer said it’

The reported speech particle ainō can be suffixed to any part of speech: st’ak’-ainō  ‘the man, he said’, lamnax-ainō  ‘in the mountains, he said’, co-ainō  ‘no, he said’.

The particle c’ can be suffixed to adjectives, preverbs, adverbs, and nouns; it functions as an intensifier (mos:in-c’ ‘very, very bad’, maka-c’ ‘on the very top’, ehatate-c’ ‘exactly at that moment’, so-c’ yasō ‘it is exactly/precisely me’). The particle k’a? occurs with adjectives, preverbs, and adverbs and means ‘a little’ (mos:in-k’a? ‘a little bad’, sok’a? ‘a little in this direction’, kast’ en-k’a? ‘a little quickly’).

The particle (e)’ corresponds to Georgian ve: šik’-e? ‘both’ (Geo ori-ve), ḳat-e? ‘right away’ (Geo mašin-ve). The particle e corresponds to Georgian c ‘too’. It is used to coordinate virtually any type of constituent jašo, vašo ‘sister and brother’ (see 3.4.).
The particle *ci / icī* is an affirmative particle which attaches to verbs; it is sometimes translated ‘really’ or ‘indeed’. The particle *(a)k’* when suffixed to nominals often can be translated with ‘only’ (*cha-k’ bader* ‘only one child’). When suffixed to interrogatives, *(a)k’* requires a subjunctive verb form (suffix *lo*) and expresses ‘if only’ or ‘-ever’ (whoever, whereever, etc.) (cf. Georgian *net’avi*). We also find it suffixed to the intensifier (*č’ek’*) or as a free morpheme *k’i*.

(71)  
(a) hac’uk’ mič-ak’ Dax-n-olō 
bird where-ever go-AOR-CONJ 
‘Wherever did the bird go??’

(b) vux-k’ Dino-lo-s 
what-ever do-CONJ-1SG ‘What(ever) have I done?’

Yes-no questions are formed with an interrogative particle *i*, which can be added to nearly every part of speech, or with the particles *xum* or *tur* (see 3.7.).

### 2.8. Numerals

The forms used for counting in the abstract:

|   | cha | 11   | chajt’:
|---|-----|------|----------
| 2 | ši  | 12   | šiit’:
| 3 | qo  | 13   | qoit’:
| 4 | Dšiv? | 14   | Dševajt’:
| 5 | pxi | 15   | pxiit’:
| 6 | jetx | 16   | jetxajt’:
| 7 | vor? | 17   | vor?ajt’:
| 8 | bar? | 18   | bar?ajt’:
| 9 | is: | 19   | t’q’exc’
|10 | it’: | 20   | t’q’a

The numbers from eleven to eighteen are based on ten: ‘eleven’ = one-ten, ‘twelve’ = two-ten, and so on. The two vowels in these numbers are usually pronounced as two separate vowels, often separated by a glottal stop or palatal glide. (Parallel forms with a diphthong have developed, but are relatively rare.) The numbers from 19 on are based on 20: 30 = 20 + 10, 40 = 2 x 20, 100 = 5 x 20, and so on.

|   | 21   | 70   | qouzt’q’ai’t’: (60+10)
|---|------|------|---------------------------
| 22 | t’q’aš | 80   | Dš(e(v)uzt’q’ (4x20)
| 30 | t’q’ai’t’: | 90   | Dš(e(v)uzt’q’ai’t’: (80+10)
| 31 | t’q’achait’: | 100  | pxauzt’q’ (5x20)
| 32 | t’q’ašiit’: | 120  | jexc’at’q’ <- jexc’at’q’
| 40 | šauzt’q’ (2 x 20) | 160  | bar?c’at’q’
| 50 | šauzt’q’ai’t’: (40+10) | 200  | ic’at’q’ (it’c’at’q’)
| 60 | qouzt’q’ (3x20) | 1000 | atas (from Georgian)
The initial consonant of the numeral ‘four’ is a gender marker, so ‘four’ and all numbers which contain it (e.g. 14, 24, 80, etc.) will show gender agreement with the entity which is being counted, whether or not it is expressed (Vívžev ‘four (males)’). When counting in the abstract, the neutral gender marker D is used.

When numbers are used together with a head noun, they precede the noun, which stands in the singular. The prenominal numbers show no agreement with the case of the head noun, except that the first three numbers have a special stem used in non-nominative cases.

<table>
<thead>
<tr>
<th>one boy</th>
<th>two boys</th>
<th>three boys</th>
<th>five boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM cha k’nat</td>
<td>ši k’nat</td>
<td>qa k’nat</td>
<td>pxi k’nat</td>
</tr>
<tr>
<td>ERG chainī k’natev</td>
<td>šin k’natev</td>
<td>qa k’natev</td>
<td>pxi k’natev</td>
</tr>
<tr>
<td>DAT chainī k’naten</td>
<td>šin k’naten</td>
<td>qa k’naten</td>
<td>pxi k’naten</td>
</tr>
</tbody>
</table>

When used alone, the numbers are declined in the same way as other nominals. As just noted, the first three numbers have a slightly different stem in the non-nominative cases.

<table>
<thead>
<tr>
<th>one</th>
<th>two</th>
<th>three</th>
<th>five</th>
<th>ten</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM cha ši</td>
<td>qo pxi</td>
<td>it’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEN chan-iš</td>
<td>šin-iš</td>
<td>qa-eš</td>
<td>pxi-eš</td>
<td>it’-eš</td>
</tr>
<tr>
<td>ERG chan-av šin-av</td>
<td>qa-ev</td>
<td>pxi-ev</td>
<td>it’-ev</td>
<td></td>
</tr>
</tbody>
</table>

Ordinal numbers are formed by adding the suffix ígeš to the cardinals: šilgéš ‘second’, qalgéš ‘third’, pxilgéš ‘fifth’, and so on. The ordinal ‘first’ is suppletive: duihréš.

Other derivatives from numerals:
- ‘times’ suffix c’ šac’ ‘two times’
  qoc’ ‘three times’
  it’-c’ ‘ten times’
- ‘up to, about’ suffix go qaeğó ‘up to 3, about 3’
  pxieğó ‘up to 5, about 5’

Distributives are formed via partial reduplication:
- cha-c ‘one to each’
- ši-š ‘two to each’
- qo-q ‘three to each’
- Dfi-Dfiḥ ‘four to each’
- pxi-px ‘five to each’
3. SYNTAX

3.1. Noun Phrases
3.1.1. Structure of noun phrases. Noun phrases are headed by nouns, pronouns, or substantivized adjectives, participles, or numerals. Within the noun phrase, the head may be preceded by a demonstrative, quantifier, relative clause, numeral, (one or more) adjective(s), or an adnominal genitive. Only certain relative clauses (which are calques from Georgian (3.5.3.)) and quantified nouns (in the genitive) (72)(g) may follow.

\[(72) \begin{align*}
(a) & \quad \text{DEM several gold-GEN box} & \text{‘those several gold boxes’} \\
(b) & \quad \text{3SG-GEN little neighbor} & \text{‘his little neighbor’} \\
(c) & \quad \text{DEM 1SG/GEN father} & \text{‘this my father’} \\
(d) & \quad \text{1SG/GEN two big black cat} & \text{‘my two large black cats’} \\
(e) & \quad \text{DEM man-GEN daughter} & \text{‘daughter of this man’} \\
(f) & \quad \text{DEM 1SG-DAT like-PRESPART man} & \text{‘this man who I like’} \\
(g) & \quad \text{several bucket wine-GEN} & \text{‘several buckets of wine’}
\end{align*}\]

There is little agreement of modifiers with a head noun. A handful of adjectives and one numeral show gender agreement, two adjectives show number agreement, while all adjectives and participles (as heads of modifying relative clauses) show rudimentary case agreement: When the head noun is in any case other than the nominative, adjectives and participles take the ending \(čo\) (for details see 2.3. and (63)). The head nouns in (72) are in the nominative; two examples with oblique heads are given in (73). Agreement of numbers is discussed in 2.8.

\[(73) \begin{align*}
(a) & \quad \text{3PL play-IMPF big-PL-OBL good-OBL boy-PL-COM} & \text{‘They played with the big (i.e., older), good boys’} \\
(b) & \quad \text{brother not be-PASTPART/OBL girl-ERG} & \text{‘a girl who doesn’t have a brother’}
\end{align*}\]

The plural form of a noun is used when its referent is plural, unless it is quantified by a number or other quantity expression, in which case it is in the singular ((72)(a), (d),
(g)). Formal agreement is with the head noun, so that in construction with verbs which show gender agreement, these NPs require singular agreement (ši k 'nat Ve ʔe"a "two boy(s) came"). In noun phrases like (72)(g), the noun which names the quantity or measure is considered the head because it determines gender and number agreement.

A noun phrase may also consist of conjoined nouns. The conjunctive particle e is suffixed to each noun and the noun phrase requires gender agreement with D class, the default class (see (26)), unless humans are involved: two or more nouns denoting males will take the plural marker for gender class M (b), two or more females, the plural marker for gender class F (d) (or perhaps this should be considered default agreement with D class).

(74)  mit’o-ē  p’et’o-ē  he"a  važar-i  Ba?
Mito-&  Peto-&  2SG/GEN brothers-Q is
‘Are Mito and Peto your brothers?’

3.1.2. Functions of the cases. The nominative case, when governed by a verb, may be a subject or direct object, depending on the verb (see 3.2.1.). Ungoverned, it is used for naming and for predicate nominals (examples in (74), (80)). The ergative case marks the subject of certain verbs and has no ungoverned functions.

The genitive case occurs with a small number of verbs (3.2.1.). Most frequently it functions as a nominal modifier, expressing possession (72)(e), part-whole relationships, material (72)(a), and so on. It is used to express the quantified entity in partitives (72)(g) and may occur in predicate position in copular sentences (o k ’nat nat’ui"a  Va ‘that boy is Nato’s’).

The governed dative case may be an oblique object, a subject, or the object of a postposition (2.2.). An ungoverned dative may occur as an adjunct with benefactive meaning. The instrumental case is not governed. Nouns in the instrumental function as adverbial adjuncts expressing instruments (dik’ev ‘with an axe’), means of transportation (donev ‘on horseback’), and others. (The instrumental ending v appears also in many adverbs with directional meaning (e.g., osiv ‘there’, sivh(e) ‘in this direction’).)

A number of verbs govern oblique objects in the contact or allative cases (see 3.2.1.), but these cases are also used for adverbial adjuncts. As an adverbial, the contact has many meanings which are difficult to generalize; often it names a specific location which involves direct contact (75)(a). It is also used for the object of comparison (see 3.5.4.) and with verbal nouns to express reason clauses (91)(c). As adverbials, the allative and allative II express direction toward something (33). The allative, but not the allative II, is also used to express purpose (75)(b) and in lexically-derived causatives of transitives to express the "demoted" subject (75)(c).

The locative of the allative case, in addition to its adverbial meaning (see (35)), is used in combination with the verb ‘to be’ is used to express possession (75)(d).
The adverbial case is governed by a very small number of verbs (e.g., *xene-ˇDerc’ar* ‘to turn into a tree’, (75)(f)). Usually it is an adverbial adjunct expressing how something is to be taken or considered (75)(e), often translated by English ‘as’. The commitive functions only as an adjunct and has two main meanings. It is used to express the person(s) with whom the subject performs the action (as in (73)(a) or (88)(a)) or someone’s house/place (like French *chez*(socii* ‘at my place’).

(75) (a) oqus Jet: xen-ex Bexk’-i
3SG/ERG cow tree-CON tie-AOR
‘He tied the cow to the tree.’

(b) dad dasa-gô Vax-eª
father firewood-ALL go-AOR ‘Father went for firewood.’

(c) oqus k’nate-gô xeª tit’-iti-j-eª
3SG/ERG boy-ALL tree cut-CAUS-AOR
‘He made the boy cut the firewood.’

(d) so-go-(h) nan Ja
1SG-ALL-LOC mother is ‘I have a mother.’

(e) ... Ja-h ov Dex-ô ... k’nat-ex jaš-aig lac-a-so-ainô
girl-ERG ask-PRES boy-CON sister-ADV take-INF-1SG-QUOT
‘A girl asks a boy to take her as sister.’

(f) oqus aª-inô dašn-i sadgʒelo-i-g dis-eª.
3SG/ERG say-PASTP word-PL toast-PL-ADV remain-AOR
‘The words said by him remained toasts.’

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3.2. Clause Structure

3.2.1. Verbs and their arguments. The number and cases of the core arguments in a clause are determined by the verb. A verb usually governs only one valence pattern and the major ones are exemplified below. (If the verb shows gender agreement, the agreement is with the case of the nominative, unless otherwise noted.)

3.2.1.1. One-place intransitives: Nominative. This class includes many states and change of state. (See also (74) and (80).)

(76) (a) surat ese(h) qaie-ů
picture here hang-PRES ‘The picture hangs here.’

3.2.1.2. Two-place intransitives: Nominative + one oblique case. This large group includes verbs with an oblique object in the contact (the largest number), dative, or allative. It also includes verbs of location or motion which require a locational or directional argument, but do not govern a particular case or postposition (33) and (35).

(76) (b) psare e k’nat-i vašba-x lat-i-r
yesterday DEM boy-PL RECIP-CON fight-AOR-PAST
‘Yesterday these boys were fighting with each other.’
One other two-place pattern is: Dative + nominative. This small group of verbs includes verbs of emotion, perception, ability, etc. (See also (81)(i), (86)(b), (88)(a) and (d), (103)(a.).)
contact, or locative of allative + nominative. The last type is the most important, since in combination with the verb ‘be’ it is used to express ‘have’ (75)(d).

3.2.2. Auxiliary verbs. There are five auxiliary verbs, verbs which combine with infinitive verb phrases. The auxiliaries are defective in that they lack nonfinite forms and none occurs in the full range of tense-aspect forms found in the language. They contribute either aspectual or modal meaning to the verb.

(77) Auxiliary Verbs

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>late</td>
<td>‘regularly, repeatedly’</td>
</tr>
<tr>
<td>latíª</td>
<td>‘begin to do regularly, repeatedly’</td>
</tr>
<tr>
<td>Dali</td>
<td>‘be about to, on the verge of’</td>
</tr>
<tr>
<td>Dec’e</td>
<td>‘should, must’</td>
</tr>
<tr>
<td>Dolo</td>
<td>‘probably, possibly’</td>
</tr>
</tbody>
</table>

(78) (a) bacba“ pst’-i vašbi-gō lev-a“ late-r

Bats/PL/GEN woman-PL reciprocal-ALL say-INF AUX-IMPF

‘Bats women used to say to each other ...’

(b) phara-v Jail-ra-sō qah-an-e, šarn Jait’-n-as
dog-ERG AUX-IMPF-1SG bite-INF-& REFL run-AOR-1SG

‘The dog was about to bite me and I ran away.’

(c) moh-e tamde-s aḥu-icì, uist’ Dec’e xi-t-a“

how-REL tamada-ERG say/AFF thus AUX be-INF

‘Just as the tamada says, that’s how it should be.’

Other examples are given in (95)(a), (b), and (c).

3.2.3. Adjuncts. A variety of constituent types may serve as adjuncts, non-governed dependents of the verb phrase or clause: noun phrases (in all cases but nominative, ergative, and genitive), adverb phrases, postpositional phrases, infinitive phrases, and clauses headed by the locative forms of the participials, present absolutes, and past absolutes. In addition, finite clauses introduced by subordinating conjunctions also function as adjuncts.

Examples of oblique noun phrases as adjuncts were given in 3.1.2. and of postpositional phrases in 2.2. Clausal adjuncts, both finite and non-finite are discussed in 3.5.3. Adverb adjuncts are given in (79) (see also (76)(a) and (82)(c)).

(79) (a) xi-x jųhal Dačo-gō ē“yağoš Dec’e Dek-a“ ...

water-CON other/side be/PRES/PRT-ALL strongly should yell-INF

‘One should yell strongly (i.e., loudly) to someone on the other side of the river.’

(b) as esivh-ē go-s, ah ma osivh-ē

1SG here-& go-1SG 2SG but there-&

‘I’ll go this way, but you go that way ...’
3.2.4. Predicate Nominals. Predicate nouns and adjectives in construction with the copula are in the nominative case. If the subject is plural, the predicate nominal is also in the plural.

(80) (a) šukia ǧazea učit’el Ja.
    Shukia good teacher is ‘Shukia is a good teacher.’

(b) sea k’nat važk’ac xi4-ea
    1SG/GEN boy brave (?macho) become-AOR
    ‘My boy became a (real) man.’

(c) e gazan-i Ba? versus ebi gazar-i Da?
    3SG goat-Q is 3PL goat/PL-Q is
    ‘Is this a goat?’ ‘Are these goats?’

Other predicate nominals occur in other cases, eg., *Derc’ar* in the meaning ‘turn into’ governs a predicate noun in the adverbial case; *tagDalar* ‘turn into’, a noun in the contact case, etc. (See also (75)(f)).

3.2.5. Valence Changes. Tsova-Tush does not have a passive and does not (with one exception) have *labile* verbs, those which occur both transitively and intransitively without a change in form (see "Chechen", this volume). Valence changes are effected by the derivational rules discussed in 2.5.5. Examples illustrating the four valence-changing suffixes are given below.

Intransitive. Addition of the intransitive suffix *Dalar* to a transitive eliminates the ergative argument. The former ergative can in some cases be expressed in the locative of the allative (81)(a). It is translated as a passive, an intransitive, or a transitive with the nuance that the subject acts non-agentively. Addition of this suffix to a verb which is already intransitive (an activity verb) often results in a verb meaning that the subject acts unintentionally or unwillingly (81)(c). That subject, if a first or second person subject which was formerly expressed in the ergative, must be in the nominative (note case change from (81)(b) to (81)(c)).

(81) (a) kainzi halô Jaq’-Jal-i (oqui-go)
    grape/PL PVB eat-INTR-AOR 3SG-ALL/LOC
    ‘The grapes were eaten (by him).’ OR
    ‘He ate the grapes unconsciously.’

(b) ču Jiš-n-as
    PVB go/to/bed-AOR-1SG/ERG ‘I went to bed.’

(c) ču Jiš-Jal-i-sò
    PVB go/to/bed-INTR-AOR-1SG/NOM
    ‘I went to bed (unconsciously, without realizing it).’

Transitive. The transitive suffix *Dar* is added to intransitives and forms a corresponding transitive, often with causative meaning. It adds an ergative argument to the valence pattern.
(81) (d) o halô laps-ìⁿ
3SG/NOM PVB dry-AOR ‘It dried’.
(e) oqus o halô laps-Dij-eⁿ
3SG/ERG 3SG/NOM PVB dry-TRANS-AOR ‘He dried it.’

Causative. When itar is suffixed to intransitives, it adds an ergative argument and usually means ‘ergative allows nominative to verb’, as in (f). When added to transitives, the former ergative subject is expressed by the allative case and a new argument in the ergative is added, a causer. The input verb for (f) is (d) above and for (g), is (e).

(81) (f) oqus o halô co laps-it-eⁿ
3SG/ERG 3SG PVB not dry-CAUS-AOR ‘He didn’t let it dry.’
(g) oqus oqui-gô o halô laps-D-it-eⁿ
3SG/ERG 3SG-ALL 3SG PVB dry-TRANS-CAUS-AOR ‘He caused him (ALL) to dry it.’

Ability, possibility. When the ability suffix mak’ar is added to a transitive verb, the ergative argument becomes dative and the nominative argument remains unchanged; gender agreement is with the nominative. (See (99)(a).) When it is added to an intransitive, as in (81), the single nominative argument becomes dative. If the verb is one which shows gender agreement, this agreement will be with the dative (‘undress’ in (81)(i) shows gender agreement with ‘grandmother’, which is dative).

(81) (h) ag Japx-Jal-iⁿ
grandmother undress-INTR-AOR ‘Grandmother undressed.’
(i) ag-en co Japx-Jal-mak’-e-r
grandmother-DAT not undress-INTR-CAN-PRES-PAST ‘Grandmother couldn’t undress.’

3.3. Word Order
3.3.1. Word order in phrases. Adjectives, dependent genitives, and numerals must precede the head noun (see 3.1.). Headless relative clauses usually precede the head, but headed ones follow (3.5.3). Postpositions are preceded by their objects (2.2.) and auxiliary verbs follow the main verb slightly more often than not.

3.3.2. Word order in clauses. The neutral word order in clauses is SOV or in copular clauses, S predicate nominal V. Oblique objects most often precede direct objects or follow the verb. There is a strong tendency, however, to postpose obliques which are pronominal. Time and place adjuncts tend to be clause-intitial, with a strong preference for time before place.

(82) (a) st’ak’o-v jaĥo-n qor Baγ-iⁿ
man-ERG girl-DAT apple give-AOR ‘The man gave the girl an apple.’
Neutral word order is disrupted when some constituent of the clause is in focus, in which case it must appear in preverbal position. Focussed constituents include the questioned constituent in yes-no questions, the interrogative in content questions (3.7.2.), the answer to a content question, and any other constituent the speaker chooses to focus. When any of these elements is focused in a negative sentence, the focused constituent will precede the negative particle (co), which is always immediately before the verb (83)(c).

(83) (a) st’ak’o-v jaĥo-n Baĥ-i” qor (vaĥo-n-ak’ co)
man-ERG girl-DAT give-AOR apple (boy-DAT-PRT not)
‘The man gave THE GIRL an apple (not the boy).’
(b) so-n VehVal-i’ k’nat
1SG-DAT sneak/up/on-AOR boy
‘The boy snuck up on ME.’
(c) oqus moq ĉ’aĝoš co Bo-r, k’at’k’oš Bo-r
3SG/ERG song loudly not make-PAST softly make-PAST
‘He didn’t sing LOUDLY; he sang softly.’

In (83)(a) and (b) not only do the constituents in focus occur in preverbal position, but other constituents, normally before the verb, follow it: In (a) the direct object and in (b), the subject are postposed. These illustrate a second principle which disrupts neutral word order. There is a strong tendency for given information (or constituents which are otherwise de-focussed) to be shifted to postverbal position. This accounts for the fact, noted above, that oblique pronouns are often postverbal (82)(b).

This tendency to shift less important information to the right seems to be used as a strategy for putting the verb or the direct object in focus. Contrast the neutral word order in (82)(a) and (b) with the sentences below. Since in neutral word order ‘apple’ is in preverbal position, one way to achieve a focus on ‘apple’ is to downplay the other constituents through postposing, as in (84)(a). In (84)(b) a preverb is postposed, resulting in a focus on the subject. In (84)(c) this strategy is used to focus on the verb itself.

(84) (a) st’ak’o-v qor Baĥ-i” jaĥo-n
man-ERG apple give-AOR girl-DAT
‘the man gave the girl AN APPLE.’
(b) kisti qeta makeup txo-n
Kisti attack-AOR PVB 1PL-DAT
‘The KISTI attacked us.’
(c) ja-suka gace uchetel
is-Q Shukia good teacher? ‘IS Shukia a good teacher?’

In addition to being preverbal, the questioned constituent in a content question tends to be clause initial (or close to clause initial) and the remaining constituents of the clause are postverbal. Rather than characterizing this as a leftward movement, however, it seems more plausible to see it as a result of the rightward movement of given information, due to the principles just discussed.

3.4. Coordination
3.4.1. Phrasal coordination. Coordination of phrases is marked by the suffix e ‘and’ on each conjunct. Conjoined adverbs are given in (85)(a) and adjectives in (85)(b).

(Examples of conjoined noun phrases are given in (26)(b) and in (74).)

(85) (a) cu-a nvaia-ec’aniš ja-r
inside-& outside-& clean is-PAST
‘It was clean inside and out.’
(b) e st’ak’ vacun-(a) varsteno-(e) va
DEM man short-& fat-& is
‘This man is short and fat.’

Coordination of phrases may also be marked by le ‘or’ in initial position of each conjunct.

(85) (c) le nat’o-s le oqui jaša-s jahoi-t xaur šur
or Nato-ERG or 3SG/GEN sister-ERG bring 1PL-DAT today milk
‘Either Nato or her sister will bring us milk today.’

3.4.2. Clause Coordination. Coordination of clauses may be signaled in one of two ways. The particle e may be suffixed to the verb of each clause, except for the last one, where it is suffixed to the element which precedes the verb.

(86) (a) p’et’e-s vunax a4-in-čo-gō šarm-a vax-e
Pete-ERG something say-AOR-& 1SG-ALL REFL-& go-AOR
‘Peter said something to me and left.’
(b) nan-en badr-e n datxari xac’en-ču-a jax-e
mom-DAT child-GEN crying hear-AOR-& in-& go-AOR
‘Mother heard the child’s crying and went in.’

Tsowa-Tush also has a number of coordinating conjunctions, including je (or ne) ‘and’ (derived from the particle e), le ‘or’, and ma/magram ‘however’. (See also (79)(b) where ma and the particle e co-occur.)
3.5. Subordination

Subordinate clauses will be discussed in three sections: clauses which function as subjects and complements, clauses which function as adverbial adjuncts, and relative clauses. Although finite subordinate clauses are possible in Tsova-Tush and are usually given freely in elicitation, at times they seem to be artificial or are calques from Georgian, particularly when functioning as subjects or complements. They occur much less often in texts than nonfinite clauses, which contain verbal nouns, infinitives, or participles. (See 2.5.2. for a description of nonfinite verb forms.)

3.5.1. Subject and complement clauses. Clauses as complements of verbs may be finite or nonfinite, depending on the verb. Some verbs allow both types, with the nonfinite form sometimes preferred in general and required if the two clauses have the same subject (compare (61)(c) to (88)(e)).

Finite clause complements, usually introduced by the complementizer me ‘that’, are governed by verbs such as ‘say’, ‘know’, ‘think’, ‘decide’, ‘prefer’, ‘try’, ‘want’, ‘wish’, ‘make sure’, etc. Some verbs require that the verb in the complement clause be subjunctive (2.5.1.6.) (88)(c). Gagua considers constructions of this type to be Georgian calques.

(88) (a) co xe-ra-lō oqar-n ... [me obi űbi ųik’e
not know-PAST-RPT 3PL-DAT COMP 3PL both
 Dem woman-OBL-COM go-PRES-PAST
‘They didn’t know apparently that they both were going with that woman.’
(b) gadac’q’vet’aD-in-atx [me bader čuh Dis-tū]
decide-AOR-1PL COMP child home stay-PRES
‘We decided that the child is staying home.’
(c) so’ le7e [me he’ oţxax ųam tre-ê, bedniera-ê xiř-u-lō]
1SG wish COMP 2SG family happy-& & be-PRES-SUBJ
‘I wish that your family be happy and healthy.’
In (88)(b), the verb in the complement clause would be subjunctive if a modal meaning is intended (Dis-ra-lə ‘that the child should stay home’). Indirect questions are also possible.

(88) (d) vā válaʔ co xaʔ-i" txo-n
       completely not know-AOR 1PL-DAT
       [stʔev Dxeʔ-i" o k’ot’-i" bader]
       what kill-AOR DEM cat-GEN child
       ‘We didn’t know at all what killed that kitten.’

Some verbs take complement clauses with infinitive verb forms. These include ‘dare’, ‘want’, ‘try’, ‘begin’, ‘forget’, etc. The subject of the infinitive is unexpressed and understood to be co-referential with the subject of the main clause (as in (88)(e) and (f).

Other verbs (‘wait’, ‘teach’, ‘ask’, ‘be possible’, ‘be necessary’, etc.) occur with complement clauses with verbal nouns (88)(g).

(88) (e) nan-en [maiq Jaq’-a"] leʔ-ē
       mother-DAT bread eat-INF want-PRES
       ‘Mother wants to eat.’

(f) joh [bader DopxD-a"] JolJal-i"
       girl child undress-INF begin-AOR
       ‘The girl began to undress the child.’

(g) as [maršal ču Vaʔ-ar] st’ex-o-s
       1SG/ERG Marshall PVB come-VN wait/for-PRES-1SG
       ‘I’m waiting for Marshall to come home.’
       (‘I’m waiting for Marshall’s coming home.’)

Usually only nonfinite clauses function as subject; the verb is a verbal noun (89).

(89) [o xet-ar] co xi-
       3SG find-VN not be-AOR
       ‘They didn’t find him.’ (‘Finding of him wasn’t.’)

3.5.2. Adverbial Clauses. Clauses which function as adverbials, expressing time, place, reason, condition, etc. may also be finite or nonfinite. Finite clauses expressing time are frequently introduced by macne ‘when’ and those expressing location, by midhe ‘where’. Finite clauses which are introduced by me and contain a subjunctive can be used like English adverbial clauses introduced by ‘so that’ (61)(b).

(90) (a) [macn-e kalki Da-ra-txɔ], as vunaxi evD-a” Jaix-n-as
       when-REL city is-PAST-1PL 1SG things buy-INF go-AOR-1SG
       ‘When we were in Tbilisi, I went shopping.’

(b) [macne čuh co Ja-sə] dağonbadJailnə Ja-sə
       when home not be-1SG sad is-1SG
       ‘When I’m not at home, I’m sad.’
(c) [miče xī k'ok'ru" Da] osi̍h kot'i" t'iv lepčė
‘Where the water is deep, a narrow bridge stands there.’

Several types of non-finite clauses function as adverbials. A clause with a verb in the infinitive is the most common way to express purpose (91)(a), a clause with an oblique form of a participle expresses reason (91)(b), a clause with a verbal noun in the contact case also expresses reason (‘because of’) (91)(c). Participles in the locative case (2.1.3) express place (91)(d).

(91) (a) [c'ig eca-] Vǐev-i" se" dad
blood take-INF kill-AOR 1SG/GEN father
‘They killed my father in order to take blood.’
(b) [uči' Jaču] n'a?i co labc'-mak'-e vai-n
dark being/OBL outside not play-CAN-PRES 1PL-DAT
‘Because it is dark, we can’t play outside.’
(c) [do' co xiš-r-ex] kuitad Ve?-n-as
horse not be-VN-CON on/foot come-AOR-1SG
‘Because of not having a horse, I came on foot.’
(d) madel mo? ba-raľō ... [o lel-in-čo-(h)] lel-ana
grateful be-PAST DEM walk-PP-OBLIQ-LOC walk-INF
‘How grateful I would be to walk where he walked.’

Nonfinite clauses expressing time include those with gaseesⁿ ‘after’, which governs a past absolutive verb and with lomciⁿ ‘before’, which attaches to the verb root.

(92) (a) ḡaziš dah tiv-če doliⁿ
well PVB rest-PAST/ABSOL after ‘After resting well ...’
(b) matx ču Buc'-lomciⁿ ...
sun PVB set-before ‘Before the sun set ...’

Adverbial clauses which express actions or states co-temporaneous with the main clause are expressed with present absolutives (2.5.2.)(see also (64)).

(93) (a) [ĉuh co Ja-ş] dağonbadJailnō Ja-sō
home not is-PRES/ABSOL sad is-1SG
‘When I’m not at home, I’m sad.’
(b) ag let’-e soⁿ [šukia gagJo-ş]
grandmother help-PRES 1SG-DAT Shukia take/care/of-PRES/ABSOL
‘Grandmother helps me take care of Shukia.’

Past absolutives indicate an action which is, was, or will be prior to the action of the main clause. In (94)(a) both clauses have future time reference.

(94) (a) kalki Jaix-čeň-as šukia gu-as
Tbilisi go-PAST/ABSOL-1SG Shukia see-1SG
‘If I go to Tbilisi, I will see Shukia.’
3.5.3. Relative Clauses. Tsowa-Tush shows three different strategies for forming relative clauses. In the first strategy, the relative clause precedes the head noun, the relativized nominal is deleted, and the verb is a participle which shows case agreement (nominative versus oblique) with the head noun in the main clause and gender agreement with the nominative argument in the relative clause.

In (95)(a) and (c) the participle is nominative because the head noun is nominative; in (95)(b) and (d) it is oblique because the head is dative. (The case the deleted nominal would bear if it was overt is given in brackets.)

(a) [0 chainí nana-s Dienô] jašo-vašo-sa Dec’ê xi’â’a’
   ‘They should be like siblings who one mother bore.’

(b) [0 muiš ñamdo-čö] moc’ape-n lat’ar Dec’ê
   ‘The pupil who studies badly wants/needs help.’

(c) lex-a’ lat-i’ [0 c’er-k’îtxv qetinî] xalx ...
   ‘They began to look for people who know how to read and write.’

(d) [0 vašo co Va-čö] jaho-v Dex-ô ...
   ‘A girl who doesn’t have a brother asks ... ‘

The relativized nominal may be in the nominative, ergative, dative, or oblique case; it may be subject, direct object, oblique object, or adjunct. (We have no examples of a relativized nominal in the genitive, but don’t know whether this is an accidental or systematic gap.)

Quite frequently one encounters relative clauses of this type without a head noun.

(e) [0 pex Daxen-čö-n] mak’oč’ Jet:-o-r
   ‘She would beat with a stick (the ones) who came near.’

In the second strategy, the relative clause follows the head noun. The relativized nominal is expressed by a relative pronoun (2.4.4.) and the verb is finite. These seem to be direct calques from Georgian.

(a) me’ [menxu ņamrtel Da] ...
   ‘Some who are healthy, ... ‘
In the third strategy, less common than the first two, the relativized nominal is deleted, the verb is finite, and the relative clause contains an invariant particle me. This type also seems to be a calque from Georgian.

(96) (c) hainī pst’i: Da [o isi me Dağ-o-r]
whose women is 3SG here COMP come-PRES-PAST
‘Whose women are they who were coming here?’

3.5.4. Comparative Clauses. In comparatives formed with comparative adjectives or adverbs, the object of comparison is in the contact case.

(97) (a) nana-s ǧaziš-x tagDij-n ᵇair jaša-x
mother-ERG well-COMP do-AOR 3SG/REFL sister-CON
‘Mother did that better than her sister.’

Constructions similar to English ‘the more ... the more’ are expressed with the pair vune saubū ... ogumple".

(97) (b) vun-e saubū Vil-ï, oqu-mple" muiši Va-sō
what-REL more laugh-PRES 3SG/as/much badly is-1SG
‘The more he laughs, the worse I feel.’

The postposition mple" is frequently used in comparisons.

(97) (c) ho-go(−h) me ǧoč’ ya, icxu-mple" Ja sen-aē
2SG-ALL-LOC COMP stick is 3SG-as/much is 1SG/GEN-&
‘The stick that you have is the same size as mine.’

3.6. Reflexives and Reciprocals

Reflexives and reciprocals in Tsova-Tush have not been the object of special study and the following statements must be taken as tentative. The distribution of the reflexive and reciprocal pronouns, both independent actants and genitives, seems to be most often controlled by the subject, regardless of case or linear order. In the examples below, the controller is ergative in (a) and (c), locative of the allative in (b), and dative in (d) and (e). In (b) the controller follows the reflexive.

(98) (a) as sui-n-ainō kekD-in-as mat’r
1SG 1SG/REFL-DAT-for prepare-AOR-1SG dinner
‘I prepared dinner for myself.’

(b) šari" t’ateb Da oq-go(h)
3SG/REL/GEN money is 3SG-ALL-LOC
‘He has his own money.’
Object control of reflexives is also possible: In (98)(c) the antecedent of the reflexive could either be the subject ‘boy’ or direct object ‘Gia’.

A reflexive direct object is expressed by kortō ‘head’, a calque from Georgian (cf. tavi), which may be preceded by a reflexive genitive.

Reflexive pronouns in Tsova-Tush are also are used for emphasis, just as in English: sox suix xat’:i” ‘they asked me myself” (see also (87)(b)).

3.7. Question Formation
3.7.1. Yes-no questions. Yes-no questions are formed with the particle i, suffixed to the constituent which is the focus of questioning. In verb forms it precedes the person suffix (99)(b).

(a) qal:-mak’-in-i cok’l-en kotam?
   eat-can-AOR-Q fox-DAT hen
   ‘Was the fox able to eat the hen?’
(b) Vağ-o-i-a(h) so-ci” hun-lō?
   come-PRES-Q-2SG 1SG-COM forest-ALLII
   ‘Are you coming with me to the forest?’
(c) Focus on ‘away a little’ or ‘a little’:
   dah-k’a7-i oc’Val-i”
   PVB-a/little-Q move/away-AOR ‘Did he move away a little?’
(d) Neutral or with focus on ‘Shota’:
   šota-s-i a4-i” se nan-egō?
   Shota-ERG-Q tell-AOR 1SG/GEN mother-ALL
   ‘Did Shota tell my mother?’ or ‘Did SHOTA tell my mother?’
(e) Focus on either ‘mother’ or ‘my mother’ or ‘MY mother’:
   se nan-ego-i a4-i” šota-s?
   1SG/GEN mother-ALL-Q tell-AOR Shota-ERG
   ‘Did Shota tell my mother?’
(f) Focus on either ‘older’ or ‘older sister’:

seⁿ Jaquxũ jašo-i Jag-iⁿ hoⁿ

1SG/GEN older sister-Q see-AOR 2SG-DAT

‘Did you see my older sister?’

(g) Focus on ‘today’:

txa-i Vax-eⁿ ilô uis?

today-Q go-AOR Ilo there

‘Did Ilo go there TODAY?’

(In (b), (e), and (f), the final vowel and question particle, separated here for clarity, form the diphthong [ui].)

The constituent with i, if not the verb, must precede the verb, if there is one. As shown in (e) and (f), the question particle can’t be attached to a modifier within a headed NP, but only to the following head, even if the modifier or determiner is the focus of questioning. Questioned constituents may occur alone, as in alternative questions (101)(c).

In affirmative responses to yes-no questions, haʔ ‘yes’ is used and in negative responses, co ‘no’. They can occur alone, or with some repeated material. A response to (99)(b): haʔ or haʔ, Vağos ‘yes, I’m coming’.

The question particle can also be attached to co ‘not’ ( --> [cui]) which in preverbal position forms negative questions.

(100) o lamzur joh co-i Ja?

3SG pretty girl not-Q is

‘Isn’t she a pretty girl?’

3.7.2. Content questions. In content questions, the interrogative constituent is usually followed by the verb (but note (101)(d)). (Interrogative proforms are given in 2.4.4.)

(101) (a) e vux Da?

3SG what is

‘What is this?’

(b) haini bader Da?

who/GEN child is

‘Whose child is this?’

(c) moluⁿ k’nat Va e, ġazen-i le mos:iⁿ?

what/kind/of boy is 3SG good-Q or bad

‘What kind of a boy is he (this), good or bad?’

(d) vuⁿ juq’mat: din-lomciⁿ toho-aįšiʔ com-i Da šu-go?

why midday-unti sleep-2PL nothing-Q is 2PL-ALL/LOC

‘Why do you sleep until midday? Don’t you have anything to do?’

(101)(c) also illustrates an alternative question. An exclamative use of interrogatives is achieved by suffixing the particle k’ to the interrogative word (see (71).

3.7.3. Questions are also formed with the particle xum (from Georgian xom)

(102) vaišeⁿ xum comena Deʔenda e t’q’uihšinlečũ din-a-x?

of/ours Q noone come DEM last day-PL-CON

‘None of our [people] came in the last days, did they?’
3.8. Negation

The negative particle _co_ is used in clausal and phrasal negation. In clauses, it must immediately precede the verb. It is not used in sentences with negative pronouns (see 2.4.7).

(103) (a) co a-s-o-s ho-gô
   not tell-1SG 2SG-ALL
   ‘I won’t tell you.’
(b) xk’olix lav co Datx-ê
   summer snow not fall-PRES
   ‘It doesn’t snow in summer.’
(c) ilu-in manan Jec’-ê, keto-k’ co
   Ilo-DAT Manana love-PRES Keto-PRT not
   ‘Ilo loves Manana and not Keto.’
(d) mit’ô se” vašô Va-iê p’et’ô ma co
   Mito 1SG/GEN brother is-& Peto however not
   ‘Mito is my brother, but not Peto [but Peto isn’t].’

The particle _ma_ is used in negative imperatives (similar to English ‘don’t’) and occurs immediately before the verb, which is in the present or future tense.

(104) (a) ȟalô ma oc’-ô
   PVB don’t pull-PRES
   ‘Don’t turn it up.’ [a radio]
(b) gonc’li ma Jo
   silly/things don’t do/PRES
   ‘Don’t do silly things.’
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NOTES

1 The transcription used here differs to a certain extent from that used in the rest of this volume. The mid front vowel is lax, but rendered with ‘e’. The palatal glide is rendered with ‘j’, to be consistent with the transcription of Chechen and Ingush. Diphthongs are written with two full vowel letters; the second letter represents the non-syllabic.

Other symbols and abbreviations used in glosses:
- morpheme boundaries
/ parts of gloss not segmented in the original
& coordinating particle
i, ē, ō, ū reduced vowels
i̋, e̋, a̋, ő, ű nasalized vowels
J, V, B, D gender markers
AFF affirmative particle ci
OBL oblique (in paradigms making only a nominative/oblique distinction)
PAST suffix ra
PRT particle (see 2.7.)
RPT suffix lo used in Imperfect Reported
SUBJ subjunctive suffix lo
VN verbal noun

2 In the absence of experimental studies of the phonetics of Tsova-Tush, phonetic detail concerning the pronunciation of the Tsova-Tush phonemes is lacking. In particular, with respect to the consonants, it is unclear whether the series /t/, /d/, etc. is alveolar or dental or whether the series /x/, /g/, etc. is velar or uvular (or mixed, as in Chechen and Ingush). Other descriptions of Tsova-Tush, including published work by Gagua and CHRELASHVILI 1975, posit three consonants in the pharyngeal/laryngeal area, though
accepted phonemic analysis would view one of the three as a positional variant of one of the other two, as is done here.

3 The failure of Nasalization to apply in the dative preserves a formal distinction between the dative and genitive (see (29 - (30)). The dative $n$ may undergo Nasalization in those forms where the dative and genitive would otherwise remain distinct (e.g., when the nominal stem is different, see (43)).

4 The coordinating particle does not always surface as $e$, for what seem to be phonological reasons.

5 Nothing has been written which focusses specifically on subordination in Tsova-Tush and these remarks, therefore, are quite tentative.

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