Tumpisa Shoshone verbs are the most complex word class in the language. At the outset, it should be noted that verbs have a number of phonological peculiarities that distinguish them from other word classes; these are discussed later on in section 9.3.7.

3.1 VERB STRUCTURE

Typically, verbs in the language are inflected with suffixes for aspect, tense, or mode. Many verbs are also inflected for number (singular, dual, and plural) with suffixes, stem-internal changes, or alternating suppletive roots. Verbs may also contain suffixes marking direction and other adverbial notions. Most voice and other valence categories are marked on verbs with prefixes, but in one case with a suffix. Many verbs contain instrumental prefixes which incorporate nominal notions of the instrument with which an activity is performed. Some verbs also incorporate whole noun roots, usually functioning as objects. Most auxiliary verbs are also incorporated into the (main) verb word. These auxiliaries are appended after main verb stems and form compounds with them. In subordinate clauses, verbs may also have a terminal subordinating suffix (not shown in the formula below; see 3.1.6 and chapter 8). There is no person marking on verbs. The structure of a verb is approximately the following:
The only obligatory element in the verb word is the verb root or stem itself. Any given verb may have one or more of the other possibilities. A given verb may actually be even more complex than the above formula indicates, because there are several positions for adverbial suffixes and at least two for aspect and tense suffixes.

To a large extent the distinction between 'inflection' and 'derivation' within the verb complex is fuzzy or perhaps not even relevant. On the one hand, some things like the aspect and tense suffixes are clearly inflectional, and some things like the set of affixes used to form new verb stems are clearly derivational. On the other hand, a number of the elements in the formula above have characteristics of both inflectional and derivational morphemes. Thus, for example, the directional and adverbial suffixes can be added like inflections to virtually any verb to add nuances of meaning, but they add much more contentive meaning than is typical of inflections. In fact, quite a number of combinations of verb stem plus adverbial or directional suffixes have become lexicalized as new verb words distinct from the stems themselves. Similarly, many verb stems require an instrumental prefix much like an inflection, but the instrumental prefixes are much too contentive to be considered purely inflectional.

It is virtually impossible to give a 'verb paradigm' in the traditional sense. The possibilities are simply too great. There are over a dozen aspect and tense suffixes, a dozen adverbial and directional suffixes, nearly a score of instrumental prefixes, and so on. Any given verb has the potential of assuming hundreds and thousands of different
forms. The only restrictions are those imposed by semantic incongruity in context—which, given the right context, may mean no restrictions at all.

Verb formation is extremely productive, whether or not one views the productivity from the perspective of inflection or derivation.

3.1.1 Aspect, Tense, and Mode

Most finite verbs occur with at least one aspect, tense, or mode suffix. However, the three categories are not always clearly distinguished from one another, since they are often conflated to some degree in a given suffix. Aspect, tense, and mode suffixes occur in two general groups: Those in the first group normally occur finally in the verb word; they are called final suffixes. Those in the second group may occur finally, but frequently occur immediately before one of the final suffixes; these are called prefinal suffixes. Both groups are listed below with definitions; the final and prefinal suffixes are then exemplified in order of occurrence in the lists and, when appropriate, comments are made about particular suffixes.

FINAL ASPECT, TENSE AND MODE SUFFIXES

-kwan ~ -kkwan ~ -hwan momentaneous completive
-nna general aspect and tense
-nnuhi indefinite future
-ppuh perfective (and pp)
-tun habitual and general imperfective (and prp)
-tu'ih = -to'ih = -to'eh simple future 'will'
-kwantu'ih = -kkwantu'ih = -hwantu'ih intentional future
-mmaahwan cessative 'just finished'
-ppuhantun ~ -ppantun past tense and perfective aspect
-tühantün ≈ -tu’ihantün  obligatory future 'must, have to'

PREFINAL ASPECT, TENSE, AND MODE SUFFIXES

-’ih  iterative and durative
-mmaah  past
-mmi  iterative, habitual, durative
-nnuh  simulactive completive
-wiah ≈ -wi’ah  inchoative 'get, become; start to'
-yun  continuative

The momentaneous completive suffix -kwan ≈ -kkwan ≈ -hwan is a metaphorical extension of the homophonous directional suffix meaning 'away' (see 3.1.2 below). It indicates an activity taking place all at once and quickly (cf. prefinal simulactive completive -nnuh). The three different variants are due to effects of preceding final segments (see section 9.3.7).

(1) Nù pippatto’ekwa.  'I fell on my butt.'
    with butt-fall-cmplt

(2) Tukwiikkwa settu. 'The fire went out.'
    go out(fire)-cmplt this

(3) Puikkappuh pikkwahwa. 'The glass shattered.'
    glass shatter-cmplt

The general aspect and tense suffix -nna is by far the most common aspect and tense suffix. It covers both present and past tenses as well as narrative present. It is rather neutral with regard to aspect, but always seems to imply some duration to the designated event. It (or a homophonous suffix) also forms verbal nouns or infinitives (see 3.3.1).
(4) Nümü sukkuh naamminna.
We(exc) there be-dur-general
'We are/were there in the winter.'

(5) Nu nu pantsa puhainna. 'I'm looking for my shoe.'
I my shoe look for-gen

The indefinite future suffix -nnuhi implies that the occurrence of the activity in the future is not a certainty. It may be a compound form from -nnuh simulactive completive and -hi dubitative.

(6) Nu imaa ko'epittuhunnuhi.
I tommorrow return-arrive-fut
'I'll (probably) be back tommorrow.'

(7) Nümü supe'e sanappim ma u tsappo'ongkunnuhi.
we then pitch with him cover head-fut
'Then we'll cover his head with pitch.'

The perfective suffix -ppuh (or one etymologically related to it) also forms past participial adjectives (see 3.3.2). In addition, there is also a homophonous absolutive noun suffix and a homophonous noun derivational suffix. In subordinate clauses, -ppuh usually has the form -ppuha (see 8.2).

(8) Nüu tsukupputtsi naappuh.
I old man be-prf
'I am/have gotten to be an old man.'

(9) Nü sukkuw naasuntama tühüya napakkahwappuh.
I that-O remember deer was killed-cmplt-prf
'I remember that the deer got killed.'
The habitual and general imperfective suffix -tun (or one etymologically related to it) also forms present participles (see 3.3.2). There is also a common homophonous noun derivational suffix.

(10) Nummu sukkwa tükkatu, u tusukkwantu tükkatu.  
we(exc) that-O eat-hab it smash-hab eat-hab  
'We eat that, smash it and eat it.'

(11) Nu ke u punitu.  'I don't see it.'  
I not it see-imprf

The simple future -tu'ih et al. is ultimately an extended usage of the intransitive verb to'eh sg 'emerge'. The several variant forms apparently are in free variation, but the first listed is the most common. Its meaning and function is essentially like that of 'will' in English, in that it can be a rather neutral future, or it can imply promise to some degree. -Tu'ih is also used in compound with other suffixes (i.e., -kwantu'ih and -tuhihantun: see below).

(12) Hakatu u yaatu'ih wihnu?  
who it get-will then

-- "Nuu naatu'ih," mii yukkwI.  
I be-will quot say

'Who'll get it then?  
-- "I'll be (the one)," he said.'

The intentional future -kwantu'ih et al. is essentially like the 'be going to' future in English, indicating that the event is already somehow underway, either with respect to intent or prior cause. It is a compound from the directional -kwan ≈ -kkwan ≈ -hwan 'away', and -tu'ih simple future.
(13) Nū wasūwūkkikwantu'ih. 'I'm going hunting.'
   I hunt-fut

(14) Satū nian tamanna tsoppoikwantu'ih.
    that my tooth pull(pl)-fut
    'He's going to pull my teeth.'

The cessative aspect suffix -mmaahwan is a compound from
-mmaah past and -kwan ≈ -han momentaneous completive. It is
often used along with the adverbs pue 'just, already, soon'
or ükūttsi(ttsi) 'a little while ago'.

(15) Satū pue nangkawimaahwa.
    that just talk-cessative
    'He just finished talking.'

(16) Sutū ükūttsi a pakkazmaahwa.
    that little while ago it kill-cessative
    'He just finished killing it a little while ago.'

The past tense and perfective suffix -ppuhantun is the
most common past tense and perfective marker. It is used
essentially like the simple past tense in English, but it is
also often used where English would require the perfective.
It is a compound suffix from -ppuh prf, -kan ≈ -han stv, and
-tun prp. The variant -ppantun is a contracted form mainly
used by younger speakers.

(17) Nūū sakka takkamappuhantu. 'I took care of him.'
    I that-O take care of-past

(18) Kunna tukwippuhantu. 'The fire has gone out.'
    fire go out-prf
The obligative future suffixes -tūhantūn and -tu'ihantūn indicate future obligation or inevitability. They are compounds from -tun imprf or -tu'ih future, -kan ~ -han stv, and -tun prp. There is also a variant -tūhantūn, contracted from -tūhantūn.

(19) Nūu ma kwūuntūhantū. 'I have to marry her.'
I her marry-oblg

(20) Üitsū'intūhantū setū. 'It'll be cold.'
be cold-oblg this

(21) Ma tūkkatu'ihantū satū. 'He must eat it.'
it eat-oblg that

The iterative and durative suffix -'ih is often used in combination with the continuative Aux nooh or the 'in motion' Aux nai. Look at 22-23 as well as 111-113.

(22) Nūu Tonia taanoo'ikwantu'ih.
I Tony-O visit-go along-dur-fut
'I'm going to go along and visit Tony.'

(23) Tunaa nūū tuupūkka'ippūhantū.
extremely I get mad-dur-past
'I got extremely angry [and stayed that way].'

The past tense suffix -mmaah seems to imply a past activity which either lasted for a while or had some lasting effect. It is also commonly used in questions about past activities. In this regard, -mmaah is more common than -ppūhantūn, although the latter is much more common in declaratives.
(24) Sető ūnammaa; sető sokopi potso'inna; nū ke
this rain-past this ground be wet I not
sakka sumpanai; nū kūtaappūh uppūltaimmaa.
that-O know I really sleep-cmplt-past

'It rained; this ground is wet; I didn't know it;
I fell completely asleep.'

(25) Hakatū mi'appūha naammaa? 'Who was it that went?'
who go-sub be-past

The aspect suffix -mmi can indicate habitual, iterative, and durative activities. See the example in 4 as well as
those below in 26-28.

(26) Sape'esū tūhūyanna kuttismitū.
long ago deer shoot-hab-hab
'They used to shoot deer.'

(27) Tamū tattsikohimminna.
we(inc) with feet-slip-iterative-sfx
'We are slipping around.'

(28) Kee nū ūitsū'ismitū. 'I wasn't cold.'
not I be cold-dur-imprf

The simulactive completive aspect marker -nnuh
indicates an activity that takes place all at once but not
necessarily quickly (cf. momentaneous completive -kwan et al. above).

(29) Nū u takkūpanuppūhantū.
I it with foot-break-cmplt-past
'I broke it with my foot.'
(30) Piarnmuttsi tutakainnuh. 'The baby was born.'
  baby be born-cmplt

The inchoative suffix \(-wiah\) denotes a state or process coming into being, but may also indicate the start of an action. It is used essentially like the inchoative Aux \(-mmi'a\) and may be related to it etymologically (see 3.1.5).

(31) Tukkuapi ha püe pasawi'ah?
  meat Q already be dry-start
  'Is the meat starting to get dry?'

(32) Püe wasüwükkivi'ahwantu'ih.
  already hunt-start-fut
  He's going to start to hunt.'

(33) Nüü tuupükkawi'a. 'I'm getting mad.'
  I be mad-get

Continuative \(-yun\) describes an event that endures continuously.

(34) Nummü ükusü ukkwah supe'e tommo
  we(exc) after while that time winter
  üitsü'iyuntu'ih, nummü supe'e mia ntünnaa
  be cold-cont-will we(exc) that time go down

Death Valley katü ütüntü katü.
  to heat to

'Then after while it would be cold in the winter, and we would go down to Death Valley to the heat.'
A number of common verbs indicate **durative** aspect with a technique different from suffixation. In these verbs, duration is marked with a stem-internal change in which the last intervocalic single consonant in the stem is geminated. This means of marking durative aspect is limited, therefore, to verbs which have a single intervocalic and geminatable consonant. Some of the verbs with durative forms are listed below, and then they are followed by a few sentence examples.

### SOME VERBS WITH DURATIVE FORMS

<table>
<thead>
<tr>
<th>Normal</th>
<th>Durative</th>
</tr>
</thead>
<tbody>
<tr>
<td>hapī&quot; sg 'lie (down)'</td>
<td>happi</td>
</tr>
<tr>
<td>katū&quot; sg 'sit'</td>
<td>kattū</td>
</tr>
<tr>
<td>mukuatu 'think'</td>
<td>mukuattu</td>
</tr>
<tr>
<td>nuwi sg 'walk around'</td>
<td>nūmī</td>
</tr>
<tr>
<td>puni&quot; 'see'</td>
<td>punni</td>
</tr>
<tr>
<td>pusikwa 'know'</td>
<td>pusikkwa</td>
</tr>
<tr>
<td>wunu&quot; sg 'stand'</td>
<td>wūnū</td>
</tr>
<tr>
<td>yake&quot; sg 'cry'</td>
<td>yakke</td>
</tr>
<tr>
<td>yūkwi 'say'</td>
<td>yūkkwi</td>
</tr>
</tbody>
</table>

With only one exception, verbs in the durative aspect do not take other aspect or tense suffixes. In fact, they do not take any other suffixes at all. The only exception to this statement is nūmī, the durative of nuwi" (< earlier *numi).

(35) Tūmpi kattū paa kuppā.
   rock sit(dur) water in
   'The rock is sitting in the water.'

(36) Kaakki naangka yakke.
   crow make noise cry(dur)
   'The crow is making noise crying.'
(37) Piammüttsi númmikkinümí.
    baby walk(dur)-hither-walk(dur) inceptive
'"The baby is (just now) walking around.'

Before leaving the aspect, tense, and mode inflections, I should note that the categories of aspect and mode are indicated in other ways as well. For example, some directional suffixes (section 3.1.2), some adverbial suffixes (3.1.3), and some auxiliary verbs (3.1.4) may also indicate aspectual and modal notions. However, these cases do not seem to be part of the inflectional system per se.

3.1.2 Directional Suffixes

One important group of suffixes is the directionals. Directional suffixes are deictic markers indicating the direction of movement of the subject of the verb to which they are affixed. The movement is relative either to the speaker or to the current topic in the discourse. The directionals are listed below.

DIRECTIONAL SUFFIXES

-kin 'come to do, come and do, come do'
-kin = -kkin = -hin 'hither; come doing, come while doing'
-kon 'around, here and there; moving randomly'
-kwai 'around; moving about'
-kwan 'go to do, go and do, go do'
-kwan = -kkwan = -hwan 'away; go doing, do while going'

The variations in form of the 'hither' and 'away' directional suffixes are due to the effects of final segments (see section 9.3.7). The other directional suffixes are
unaffected by final features and so have invariant forms. Example sentences of each of the directionals follow.

(38) Nūmmū piliya himakhantū.
we(exc) beer carry(pl)-come to-stv-imprf
'We are coming to get some beers.'

(39) Sūmūttūsū ma tükkakintu'ih.
one it eat-come and-will
'One will come and eat it.'

(40) Patūmmu piliya himakkintu'ih.
liquor buyer beer carry(pl)-hither-will
'The liquor buyer'll bring some beers.'

(41) Tuittsi sepa'a pitūhi.
young man here arrive-hither
'A young man is coming around here.'

(42) Supe'e kaakki yūtsükminna.
that time crow fly-around-dur
'Then crow was flying all around.'

(43) Satū sakka u pakkangkūkoppuhantū.
that that-O him kill for-around-past
'He went around killing that for him.'

(44) Nūu etūmpa'etu pūū, nū wasūwūkkikaippūh,
I gun-have emph I hunt-around-prf
nū kee etūmpa'e pūū.
I not gun-have emph

'If I had a gun, I'd be hunting around, but I don't have a gun.'
(45) Nū hipikwantu'ih. 'I'll go and drink.'
I drink-go and-will

(46) Nū kapaayu kwūkwantu'ih.
I horse catch-go and-will
'I'll go catch the horse.'

(47) Nū tsao nasungkwa'anna piiya hipikkwasu.
I good feel beer drink-go doing-sub
'I feel good when I go drinking.'

(48) Nūü ma kwūkkwantu'ih.
I it catch-away-will
'I'm going away catching it.'

On verbs which have no final features, there is potential ambiguity between -kin 'come and do' and -kin 'hither' and between -kwan 'go and do' and -kwan 'away'. This ambiguity is seen, for example, with the verb in 49-50, which has no final features.

(49) Nū súngkiakwantu'ih.
I stagger-go and-will
-away-
'I'll go and stagger.' vs. 'I'll stagger away.'

(50) Satū súngkiakinna.
that stagger-come and-sfx
-hither-
'He is coming to stagger.' vs.
'He's coming staggering.'

The meanings of some of the directional suffixes have been metaphorically extended, and therefore their functions have been extended as well. As already mentioned, -kwan = -kkwan = -kwan also functions as a final suffix marking
momentaneous completive aspect (e.g., 57). Similarly, -kin ≈ -kkin ≈ -hin also functions as an aspect marker, though not as a final suffix. Its aspectual meaning is repetitive or durative (i.e., 'around and around' or 'over and over'), as in 51-52.

(51) Tammū ningkakkingkakwantu'ih.
     we(inc) walk(pl)-dur-walk-fut
     'We're going to walk all around.'

(52) Tsao kwanakkinna.
     good smell-dur-sfx
     'It smells good / keeps smelling good.'

The directional -kin is used as an inchoative or inceptive marker, meaning something like 'start to, get to, come to', as in 53-54.

(53) Kuttsappi utüiki. 'The soup is getting hot.'
     soup be hot-get

(54) Tsao nasungka'akinningka satu.
     good feel-start-sfx that
     'He's starting to feel good.'

The directional -kon also has aspectual function; it indicates a repetitive or durative activity, as in 55-56.

(55) Satu nangkawikonna.
     that speak-dur-sfx
     'He's going to speak awhile.'

(56) Tatsa númmu nuupaikomma númmín Noompai ka.
     summer we(exc) stay-dur-past our Lone Pine at
     'In the summer we stayed in our Lone Pine.'
In this regard, -kon is probably also the etymological source of the certaintive adverbial suffix -kon ≃ -kkon ≃ -hon, discussed in the next section.

### 3.1.3 Adverbial Suffixes

Several important suffixes indicate various kinds of adverbial, aspectual, and modal notions. These suffixes occur in several position classes after the verb stem (or after the first auxiliary, if there is one) and before the prefinal and final suffixes. The positions of the adverbial suffixes relative to the verb stem, auxiliaries, directionals, and (pre)final aspect and tense suffixes are shown in the formula below, which is a detailed emendation of the postverb part of the one given at the beginning of this chapter.

**RELATIVE POSITIONS OF ADVERBIAL SUFFIXES**

\[
\text{STEM} + \text{Aux1} + \text{Adv1} + \text{Dir} + \text{Adv2} + \text{Adv3} + \text{Aux2} + \text{Adv4} + \text{Aspect}
\]

\[
\text{Tense}
\]

The suffixes occurring in each adverbial position follow. The variants in form are due to the effects of final segments (see section 9.3.7).
Adverbial Suffixes in 1st Position:

-tain ≈ -ttain absolute completive
-kku resultive

Adverbial Suffix in 2nd Position:

-hi dubitative 'might, may'

Adverbial Suffixes in 3rd Position:

-kan ≈ -kkan ≈ -han stative
-sin ≈ -tain negative

Adverbial Suffix in 4th Position:

-kon ≈ -kkon ≈ -hon certaintive, definitive

The completive suffix -tain indicates an activity that is or will be done completely and absolutely, as in 57-59. It is also often used in conjunction with the past participle suffix -ppuh to indicate states that have been reached unequivocally, as in 59.

(57) Piiya nū hipippuh nū kammangkūtaihwa.
   beer I drink-prf me make sick-cmplt-cmplt
   'The beer I drank made me completely sick.'

(58) Tammū kahni tsannuhittaintu'ih.
    we(inc) house tear down-cmplt-will
    'We'll tear the house completely down.'

(59) Satummu tsuuwataippuh.
    those die(pl)-cmplt-pp
    'They are absolutely dead.'
The resultive suffix -kkun describes an activity that must logically result from some prior action, force, cause, etc. The prior event need not be explicitly stated, and in fact its existence is most often simply implied, as in 60-62 and 65.

(60) Un nampe antappu katükk. 
your foot askew sit-resultative 
'Your foot is twisted somehow.'

(61) Piiya nu üppüngkükkummi'a. 
beer me sleep-make-result-get 
'The beer is making me get sleepy somehow.'

(62) Satümü pokoakkunt'ih. 
those fall(pl)-result-will 
'They'll fall off (for some reason).'

The dubitative suffix -hi signifies an activity that is either unreal or only a potentiality. It is also used on the verb naa" to form the modal adverb naahi 'might'.

(63) Nuu atammupipain tukwah, Pisippu ka 
I car-have if Bishop to
mi'akwahippu. 
go-away-dubitative-prf

'If I had a car, I'd go to Bishop.'

(64) Mümü u mantünnä kwüühi. 
you all him part-of marry-dubitative 
'One of you might marry him.'
The stative suffix -kan ≈ -kkan ≈ -han indicates the state resulting from the inception of the activity denoted by the verb stem. Consequently, it also always indicates duration.

(65) Hii satu hapikkuhantu atu?
what that fall-result-dubitative-stv-imprf that
'What was it that fell down?'

The stative suffix is extremely common, and aside from its adverbial function it is also frequently used in forming new verbs (e.g., nümukan 'move in position' in 66 is from nümü 'move (about)'; see 3.2.2). As noted in 3.1.1, it is also used to form compound suffixes such as -ppuhantun past and -tuhantun obligatory.
I have already mentioned the negative suffix `-sin` in the last chapter (2.3.1). It is used in negative sentences with *kee*.

(71) Kee u punisihoppuhantu satu.  
not it see-neg-def-past that  
'He surely didn't see it.'

(72) Satungku kee teewingkutsinna.  
those(DL) not tell-neg-general  
'Those two didn't tell (her).'

The certaintive suffix `-kon` denotes an activity that happened or is happening or ought to happen most definitely, as in 71 and 73-76.

(73) Nu witsa koyahomminna.  
my calf have cramp-def-dur-general  
'My calf really has a cramp!'

(74) Sutu üküttsi mi'akoppüh.  
that little while ago go-def-prf  
'He has just now gone for sure.'

(75) Ke nangkawihontu'ih! 'Don't talk!'  
not talk-def-future

(76) Nu tsotahekkoppühantu. 'I was really choking.'  
I choke-def-past

3.1.4 Number Marking

Many verbs in Túmpisa Shoshone are inflected for number on an ergative pattern. Thus, many intransitive verbs cross-reference the number of their subjects, and many transitive verbs cross-reference the number of their objects. The
language also has means for marking number on verbs in an accusative way, discussed later on in this section, but obligatory number inflection on verbs is based on the ergative system.

Most verbs cross-reference only two numbers, singular and plural, but a number of common intransitive verbs are inflected for dual as well as singular and plural. Several different techniques are employed for marking number on verbs. Many of the most common verbs, both intransitive and transitive, show complete stem suppletion in the singular and plural. However, marking dual number with stem suppletion is rare. Most commonly, if distinct dual forms of the verb exist, they are marked by reduplicating the first syllable of the singular stem. Usually, however, either the singular or plural stem, or both, are used in the dual. Most of the suppletive verbs are listed below with dual forms if they exist. (N.B. Forms with a preceding dash are instrumental verb stems requiring an instrumental prefix; see 3.2.1.2.)

**SUPPLETIVE VERBS**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>hapi&quot;</td>
<td>Vi sg, kwopi&quot; ≈ kopi&quot; dl, kopittuki pl</td>
<td>'lie(down)'</td>
<td></td>
</tr>
<tr>
<td>ika&quot;</td>
<td>Vi sg-dl, weeki&quot; pl-dl 'enter, go down'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ka'ah</td>
<td>Vi sg, kopia pl; -kopiih instr V pl</td>
<td>'break (flexible object)'</td>
<td></td>
</tr>
<tr>
<td>katū&quot;</td>
<td>Vi sg-dl, yukwi dl, nuupaih ≈ yuunaah pl</td>
<td>'sit, stay'</td>
<td></td>
</tr>
<tr>
<td>nangkawih V sg-dl, ningwunu&quot; pl-dl 'talk'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mukkwi</td>
<td>Vi sg, munukkwi dl, nuataan pl 'run'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nuwi (nummi)</td>
<td>Vi sg-dl, ningk ≈ yingka pl-dl</td>
<td>'walk around'</td>
<td></td>
</tr>
<tr>
<td>pahe&quot;</td>
<td>Vi sg-dl, pokaah pl-dl 'fall (down)'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pakkah</td>
<td>Vt sg-dl, wasū&quot; pl 'kill'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-siiwa</td>
<td>instr Vt sg, situi pl 'scratch'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
takkuna"(kkun) ≈ tangwi Vt sg, toppotsiki pl
'throw away'
-tia   instr Vt sg, -we'i pl 'empty, dump out'
tiyaih Vi sg-dl, tsüwah ≈ ko'i" pl 'die'
to'eh Vi sg, toto'eh dl, küa" pl 'emerge'
tuki" Vi sg-dl, taha" pl-dl 'put, locate, situate'
-tükwan instr V sg, -pah pl 'hit'
-ts'i'ah instr V sg, -so'e pl 'pinch, occlude'
üppüih Vi sg-dl, okko'ih pl-dl '(go to) sleep'
wüü" Vi sg, wuwüü dl, toppangih ≈ tättäho pl
'stand'
yaa" Vi sg-dl, hima" pl-dl 'carry'
yakai" Vi sg-dl, namo'ih pl-dl 'cry'
yütsü" Vi sg-dl, yoti" pl 'fly, jump'

Aside from suppletion, many verbs cross-reference number with internal stem changes. Some of these verbs are listed below.

**INTERNAL STEM-CHANGING VERBS**

kimma Vi sg, kikimma dl, kimmah pl 'come'
ko'eh Vi sg-pl, koko'eh dl 'return, come back'
küü" Vi/instr V sg, kümipphani pl 'tighten'
m'a Vi sg, mima' dl, m'a" pl 'go'
pikkwan Vi sg, pikwaa pl, -pikwai pl instr 'shatter'
pitüh ≈ pittuhun Vi sg-dl, pippittuhun dl, pitükkan pl
'arrive'
potsö Vi sg, potsotsö pl 'drip'
waya" ≈ wayan Vi sg, wayayoono pl 'burn'

Still other verbs cross-reference number with the verb plural suffixes -ppaih ≈ -päch, or -iäh and -iah, as in the examples below. Both -iäh and -iah replace the final vowel in the verb stem. Some of the verbs below display stem-internal changes as well as suffixation.
VERBS WITH PLURAL SUFFIXES

annih Vi sg, anniah Vi pl, -annippeh V instr pl 'fall'
kuppah ≈ kúpah Vi sg, kúpiah Vi pl, -kúpiih pl instr 'break rigid object'
-küümah V instr sg, -küüniih pl 'cover, put on top of' kwayah Vi/instr sg, kwayuppih pl 'loosen'
-munuh Vt instr sg, -munuppih pl 'turn'
-nguna" Vt instr sg, -nguniih pl 'put away, place'
paha" V sg, pakiäh Vi pl: -pakiih pl instr 'split in half'
-patah Vt instr sg, -patiiih pl 'spread out'
-pattaih Vt instr sg, -patappaih pl 'slam down'
-pattsanah Vt instr sg, -pattsaniih pl 'fasten'
-pokkohi ≈ -pokoh Vt instr sg, -pokoppih pl 'violate'
sakkah Vi/instr sg, sakiih pl 'crack, snap'
sommah Vg, somiah pl, -somiih pl instr 'bend'
-tamah V instr sg, -tamiih pl 'secure, tie tight'
tawin Vi/instr sg, tawiih pl 'be/make a hole'
tisikwa Vt sg, tisikwiin pl 'put in a slot'
-tumah Vttv instr sg, -tumiih pl 'close'
-túp(a)h Vt instr sg, -túppaih pl 'undo, release'
-tútua Vt instr sg, -tútuppih pl 'tear (fabric)'
-tomppokkah Vt instr sg, -tomppowiih pl 'fasten'
-tomponah Vt instr sg, -tomponiih pl 'wrap'
-tsakwah Vt instr sg, -tsakwiin pl 'kill by...'
-tsokwah Vt instr sg, -tsokwiin pl 'tie'
yuna" Vt sg, yuniih pl 'put away, place'

Sometimes the different plural suffixes are used in different ways on a given verb. For example, -iah marks the plural intransitive of annih, but -ppeh marks the plural instrumental stem; similarly, -iah marks the plural intransitive of sommah, but -iih marks the plural instrumental stem. -iah tends to mark plural intransitives,
while -iih and -ppaih ~ -ppee tend to mark the plural of (instrumental) transitives, but this tendency is not without exception. Basically, the different forms of a verb cross-referencing number are not predictable; they simply must be memorized. Whether or not a given verb cross-references number at all in any way is not even predictable.

The sentence examples in 77-82 further illustrate number cross-referencing on verbs.

(77) a. Kaakki yakainna. 'The crow is squawking.'
    crow cry

b. Wahattu kaakki(angku) yakainna ~ namo'inna.
    two crow(-dl) cry(sg) cry(pl)
    'Two crows are squawking.'

c. So'oppütu kaakki(ammu) namo'enna.
    many crow(-pl) cry(pl)
    'Many crows are squawking.'

(78) a. Satu to'ehi. 'That is coming out.'
    that emerge-hither

b. Satungku toto'ehi.
    those(dl) emerge(dl)-hither
    'Those two are coming out.'

c. Satummu kuakki. 'They are coming out.'
    those emerge(pl)-hither

(79) a. Patummu piiya yaakkintu'ih.
    liquor buyer beer carry-hither-will
    'The liquor buyer'll bring a beer.'
b. Patümü piiya himakkintu'ih.
liquor buyer beer carry(pl O)-hither-will 'The buyer'll bring some beers.'

(80) a. Nümü piiya yaakkintu'ih sumuttuttsia.
we(exc) beer carry-hither-will only one-O 'We'll bring just one beer.'

b. Nümü so'oppütünna piiya
we(exc) much-O beer himakkintu'ih.
carry(pl O)-hither-will 'We'll bring a lot of beers.'

It should be clear from the examples above that verbs do not simply cross-reference number, but in fact they commonly are the only number reference in the sentence. In other words, 'cross-referencing' here does not mean that verbs are plural (or dual) if their subjects or objects are overtly marked plural (or dual). Verbs are marked for plurality (or duality) depending on reference or meaning, and are not dependent on overt marking of number on their subjects or objects. In fact, inanimate and nonhuman animate nouns are often not marked for number at all (e.g., piiya above). But verbs must reference number, at least if they have different forms in the plural or dual, whether suppletive, internal stem-changing, or suffixed. Number marking on verbs is not an agreement or concord system then, but rather a referencing system. The examples in 81-82 further illustrate this point.

(81) a. Nü u tsappahekku. 'I dropped it.'
I it drop-result
b. Nu u tsoppokoakku. 'I dropped them.'
   I it drop(pl OJ-result

(82) a. Nu ma takkuunanna.
   I it with rock-cover
   'I covered it with rock.'

b. Nu ma takkuuniinna.
   I it with rock-cover(pl OJ)
   'I covered them with rock.'

Another interesting fact with regard to this number marking system is that many plural verb stems are somewhat ambiguous, at least in one sense. They may either indicate that the activity occurs with a number of different participants or that the activity occurs with one participant but with plural results. For example, the singular intransitive verb pikkwan means for a hard subject to 'break, shatter in two', but its plural form pikwa can mean either for a plural number of subjects to 'break, shatter' or for one subject to 'shatter into pieces'. Likewise, singular intransitive ka'ah means for a flexible subject to 'break in two', but its (suppletive) plural stem kopiah can mean either 'break' of more than one flexible subject or 'break into pieces' of one flexible subject. The plural stems of many transitive verbs work in a similar fashion, but with respect to their objects, not subjects. For example, the singular transitive stem wukka'ah means 'chop (a flexible object) in two', but its plural stem wukkopiih means either 'chop (flexible objects)' or 'chop (a flexible object) into pieces'. Similarly, singular transitive wuppikkwan means to 'break, shatter (a hard object) in two', but its plural wuppikwaih can mean either to 'break (hard objects)' or to 'break (a hard object) into pieces'.

Aside from the ergative number-marking system just described, verbs may also mark number in an accusative way
with the two enclitics -ungku ≈ -ongku dl and -ummü ≈ -ommu pl. These two enclitics mark the number of subjects, whether intransitive or transitive. Their use is obligatory on imperative verbs in the dual and plural (e.g., 83-84 below and examples 126 and 128-132 in chapter 2). But, they are occasionally used on nonimperatives to emphasize the number of the subject, as in 85.

(83) a. Ma miakwa! 'Go away!' it go away
   b. Ma mimiakwa-ongku! 'Go away, you two!' it go(dl) away-dl
   c. Ma miakkwa-ommü! 'Go away, you all!' it go(pl) away-pl

(84) a. Ma yaakki! 'Bring it!' it carry-hither
   b. Ma yaakki-ungku! 'Bring it, you two!' it carry-hither-dl
   c. Ma yaakki-ummü! 'Bring it, you all!' it carry-hither-pl
   d. Ma himakki! 'Bring them!' it carry(pl O)-hither
   e. Ma himakki-ungku! 'Bring them, you two!' it carry(pl O)-hither-dl
   f. Ma himakki-ummü! 'Bring them, you all!' it carry(pl O)-hither-pl
(85) Sümüsü mia-ommü atü himpu antsaapanappüh, atü all go-pl that some flicker that kaakki, tukopoyo’ittsi, sümüsü kasattsikantü crow kingbird all bird mia-ommü.
go-pl

'Everyone went, that flicker, that crow, and kingbird; all of the birds went.'

3.1.5 Auxiliary Verbs

In Tümpisa Shoshone, a distinct set of verbs commonly follow other verb stems and form compounds with them. The verbs in this set add various kinds of adverbial and aspectual notions to the meanings of the verb stems which they follow and are in compound with. I will refer to these verbs as auxiliaries (or auxiliary verbs). The auxiliary verbs occur in two different position classes after the main verb. Most of the auxiliaries occur immediately after the main verb stem before any of the adverbial, directional, or aspect and tense suffixes. Another smaller group of auxiliaries occurs after the directional suffixes and after most of the adverbial suffixes but before at least one adverbial suffix and before any of the prefinal and final aspect and tense suffixes. The auxiliaries in the first group are indicated as 'Aux1', and those in the second group as 'Aux2' in the formula called 'Relative Position of Adverbial Suffixes' at the beginning of section 3.1.3.

Most of the auxiliaries also function as main verbs, although their meanings are usually somewhat different as auxiliaries than as main verbs, and there are usually minor phonological differences as well.
**AUXILIARY VERBS**

Aux1

hapi" 'prone, lying'
  < hapi" Vi sg 'lie (down)'

katuh sg-dl, yuksi dl, yingka ≈ nuupaih pl 'sitting;' alone, separately; awhile; be doing situated'
  < katuh" Vi 'sit'

kimma 'coming'
  < kimma Vi sg 'come'

ko'eh 'returning, going backward'
  < ko'eh Vi 'return, go back, come back'

kuhnakkun '(start) running'
  < kuhnakkun Vi 'start to run, go forward'

-nmuu 'unable to, can't'
  < muu Vi 'be unable to, fail to do'

naah ≈ naa 'continuously, duratively'
  < naa" 'be'

nooh 'continuatively in motion'
  < noo" Vi 'carry on back'

nukkwi 'running, fast'
  < nukkwi(n) Vi sg 'run'

pitū ≈ -pitū ≈ pittuhu 'arriving, becoming; completely'
  < pitū Vi sg 'arrive'

tükīn 'begin to, start to'
  < tukī Vi sg 'put'

tunga 'tell to, have do'
  < ?

wunu 'standing, upright; awhile'
  < wunu" Vi sg 'stand, stay, stop'
Aux2

mi'ah = -mmi'a 'get, become; about to do'
< mi'a Vi sg, mi'a pI 'go'

naih = nai'ih 'in motion'
< ? naa" 'be' + -ih iterative

nuwi ≈ núwi sg, -nmümmi dur, ningka pI 'walking around; continuously'
< núwi sg, ningka ≈ yingka
Vi pI 'walk around, live'

suwan 'want to, need to, feel like'
< suwa" Vt 'think, feel, want'

One to several example sentences of each of the auxiliaries are given in 86-118, in the order that they appear in the lists above.

(86) Kammahapitu sutu. 'She is laid up sick.'
be sick-lie that

(87) Öü hakami suwakkatü?
you what think-sit
'What are you sitting thinking about?'

(88) Tangkusü napuniyükwí.
ourselves(dl) each other-see-sit(dl)
'You and I are sitting looking at each other.'

(89) Sutu nü taakimmappuhantü.
that me visit-come-past
'He came visiting me.'

(90) Patümmu piyya yaakko'ehwantu'ih.
liquor buyer beer carry-return-fut
'The liquor buyer is going to get beer.'
(91) Nüü imaa ko'epittuhunnühi.
I tomorrow return-arrive-fut
'I'll be back tomorrow.'

(92) Nüü watsikkuhnakkü.
I hide-running
'I'm running and hiding.'

(93) Nü sakka takkamammühi.
I that-O take care of-can't-stv
'I can't take care of him.'

(94) Keesua tükkasü kwitammühi.
cheese-O eat-sub shit-can't
'I can't shit because I ate some cheese.'

(95) Nü sukkwa wütühiimmühi.
I that-O wait for-fail to-stv
'I waited for him, but he failed to show up.'
[lit: I'm unable to wait for him.]

Auxiliaries of the first and second positions are not infrequently used together following the same main verb, as in 96.

(96) Satü pai tsainnaanai'ih.
that water-O hold-continuative-in motion
'She's carrying water.'

Even auxiliaries of the same position class may be used together, as 97.

(97) Nüü nü pantsa tsainnaawünnü.
I my shoe hold-dur-stand(dur)
'I'm standing holding my shoe.'
When auxiliaries function as main verbs, they may be followed by other auxiliaries, as in 98 and 114 below (and 87 and 91 above).

(98) Nu nukwintum pa'a katūnoohonto'eh.
    I train on sit-continuative-definite-fut
    in motion
    'I'll get to ride on a train.'

(99) Satū tukutinnoohinna.
    that aps-shoot-continuative-hither-sfx
    in motion
    'He's coming along shooting [things].'    

(100) Tangku nuinnukwikomminna.
    we(dl inc) play-run-definite-iterative
    'We two were running around playing.'

(101) Nu tümpitta himappituhuppuhantü.
    I rock-O carry(pl)-arrive-past
    'I brought the rocks.'

(102) Nu u makapitükoppuhantü.
    I him feed-arrive-definite-past
    'I came to feed him.'

(103) Numū tükkatükintu'ih.
    people eat-start-will
    'People are about to start to eat.'

(104) Nu piiya hipisū tsao nasungkwa'atükintu'ih.
    I beer drink-sub good feel-begin-will
    'When I drink beer, I'll begin to feel good.'

(105) Nu hipittūnganna ū. 'You told me to drink.'
    me drink-tell-sfx you
(106) Um pia u tükkatünganna.
   her mother her eat-tell-sfx
   'Her mother told her to eat.'

(107) Nüü Tümpisakkatünna puningwünnu.
       I Death Valley-o see-stand(dur)
       'I'm standing looking at Death Valley.'

(108) Satu tühüya u pakkappühantü u tükkawünükwa.
       that deer it killed it eat-stand-sub
       'He killed the deer as it was standing eating.'

(109) Nüu tsao naammi'a.
       'I'm getting well.'
       I well be-get

(110) Nü siikkwammi'a.
       'I'm about to go pee.'
       I pee-away-go

(111) Satu pünnä summo'a noonnai'inna.
       that her own clothes carry on back-in motion
       'She's carrying her own clothes around on her back.'

(112) Nü piapü pai katünna'i'inna.
       I mare on sit-in motion
       'I'm riding on the mare.'

(113) Piammuttsi kuntu mapanai'ippühantü.
       baby yesterday crawl-in motion-past
       'Yesterday the baby was crawling around.'

(114) Sutu u kappinnangkwatü katünnuwitü.
       that it outside-direction sit-walk around
       'She was sitting around outside.'
The auxiliaries may also follow themselves when they occur both as main verbs and auxiliaries, as in 115.

(115) Nü nummikkinuippuhantu puninnuippuhaantu.
I walk-hither-walk-past see-walk-past
'I walked all around and looked all around.'

(116) Nüü tipingasuwhaha noohinnattsia.
I ask-want-stv something-O
'I want to ask something.'

(117) Nüü kee mi'asuwatsi. 'I don't want to go.'
I not go-want-neg

(118) Punnang kahni kattu u petsuttaiasuwamisü.
his own house to her take-cmplt-want-sfx
'He wanted to take her to his own house for good.'

As the preceding examples indicate, most auxiliaries generally function like adverbials and aspect, tense, and mode markers. They function much like the verb suffixes discussed in preceding sections (3.1.1, 3.1.2, and 3.1.3), modifying the main verb and adding semantic subtlety to the basic notion denoted by the main verb stem. However, four auxiliary verbs, -mmuih, suwan, tukin, and tunga, behave like predicates superordinate to the verbs to which they are appended (see 8.2.3 on object-complement clauses). Tunga also changes the basic argument structure of the verb complex in which it occurs (see 3.2.1.6 on jussives).

There is more than a functionally parallel relationship between the auxiliaries and verb suffixes. Clearly, some of the suffixes were auxiliaries at an earlier stage in the language. For example, the intransitive verb to'eh 'emerge' is the etymological source of the final future suffix -tu'ih ~ -to'eh, and the directional suffixes -kin 'come to do' and
-kin \approx -kkin \approx -hin 'hither' are both etymologically related to the intransitive and auxiliary verb kimma 'come'. No doubt other suffixes have their origins in auxiliaries that have now been lost. In any event, it seems that there is a development from verb to auxiliary, and then at least in some cases the auxiliary begins to float towards the end of the word, eventually becoming a suffix. It is quite possible that auxiliaries in the second position class (Aux2) are further along in this process than those in the first position class (Aux1).

3.1.6 Subordinating Suffixes

Subordinating suffixes occur in the last or final position on the subordinate verb, after any other suffixes or auxiliaries. Their function is to mark various kinds of subordinate clauses, which are discussed and exemplified in detail in chapter 8. Because a whole chapter is devoted to subordinate clauses later on, I merely list the subordinate suffixes here, without giving examples. However, to recognize and better understand subordinate clauses in examples given before chapter 8, the reader should be aware of two factors which are important in subordinate constructions: (1) whether the subject of the subordinate clause is identical with or different from the subject of the main clause, and (2) which case the subordinate subject is in. Usually, when the subordinate subject is the same as that of the main clause, no overt subordinate subject occurs in the clause; it is simply understood to be coreferential with that of the main verb. On the other hand, if the subordinate subject is different from the subject of the main verb, then it must overtly appear as some sort of noun phrase (e.g., noun, pronoun, or demonstrative) and is usually in either the objective or the possessive case. These factors are indicated for each subordinate suffix below. Also, functional names and translations are given for each suffix.
SUBORDINATING SUFFIXES

-ka = -ha temporal 'when, after'
  (different subject in obj or poss case)
-ku contemporative 'when, while'
  (different subject in obj case)
-kwa temporal 'when, after'
  (different subject in obj case)
-mi intentional
  (identical subject)
-nna infinitive
  (identical subject, or no notional subject)
-ppuh past participle and perfective
  (identical subject or different subject in poss case)
-sin = tsin sequential
  (identical subject)
-sū = -tsū resultive 'because, when, still'
  (identical subject)
-tun present participle and habitual
  (identical subject)
-tukwah conditional 'if' and temporal 'when'
  (identical subject)

3.2 VERB DERIVATION

This section deals primarily with the formation of new verbs, but it also is a continuation of the discussion of verb structure. In the first part (3.2.1) of this section on verb derivation, I discuss the systematic formation of new verbs from existing verbs via various kinds of voice and valence changes. In the second part (3.2.2), I discuss less systematic means for forming verbs from whatever word class.
3.2.1 Valence and Voice Changes

Nearly all verbs in Tumpisa Shoshone are unequivocally either *intransitive* or *transitive*. This means, for intransitive verbs, that they may take only a single core (or direct) participant, a subject (see 2.2.2 on intransitive sentences). For transitive verbs, it means that they must take two core participants, a subject and an object. A few verbs are basically *ditransitive*, and so they take three core participants, a subject, a direct object, and an indirect object. Other noun phrase participants are normally marked with postpositions because they are not direct or core participants; rather, they are oblique or peripheral participants (see chapter 5 on noun phrases and postpositions). A small number of verbs, however, are both intransitive and transitive, and therefore they optionally may or may not take an object (e.g., tükkah 'eat', tukumahannii'h 'cook', and wasuwwuki 'hunt').

It is possible to change the valence of a given verb, but changes of this sort nearly always result in some formal marking, usually special affixation. When the valence of a verb is changed, a new related verb is derived. For example, if the valence of a transitive verb is decreased by one, then the result is a derived intransitive verb. Conversely, if the valence of an intransitive verb is increased by one, then a derived transitive verb is formed. Regular and systematic valence changes involving transitive verbs are traditionally called *voice* changes. By changing the voice of a verb, speakers alter the basic relationship between a transitive verb and its two direct participants, the subject and object. Motivation for voice changes ultimately reside in the discourse situation. For example, speakers may wish to discuss transitive activities without mentioning agents (or experiencers), or they may wish to discuss transitive activities without mentioning patients.
3.2.1.1 Noun Root Incorporation

A number of verbs regularly incorporate noun roots directly into the verb word itself. The incorporated noun root immediately precedes the verb root, and semantically it is most commonly the object. Verbs which do this on a regular basis are listed below.

REGULARLY INCORPORATING VERBS

- 'amih 'make, build'
- naappa'in ≈ naappa'en 'have, possess alienably'
- pa'in ≈ pa'en 'have, possess'
- tuah 'create, engender, make'
- yukwi" ≈ yukwi" 'do, go after, gather, get'

Those verbs above marked with a preceding dash must incorporate their object nouns. Their incorporated object nouns may or may not be specific and referential, but they are never marked for case (see 119-123). However, when the incorporated object noun has modifiers, such as an adjective, then the (unincorporated) adjective may be marked for objective case (e.g., 121-122 below and 90 in chapter 2, but cf. 123). On the other hand, the verbs above without a preceding dash may or may not incorporate nouns. When the noun is incorporated, it is unspecific or generic and is never marked for case (e.g., 124 below and 91 in chapter 2). But when it is not incorporated, it is specific and takes objective case marking (e.g., 125 below and 92 in chapter 2).

(119) Satuí huu'etüaminna. 'He's making a bow,' that bow-make
Aside from the verbs listed above, which regularly incorporate nouns, a number of other verbs exist which have incorporated noun roots, but incorporation in these verbs seems to be sporadic and unproductive.
EXAMPLES OF SPORADIC INCORPORATION

kiikuttih Vt 'jab with the elbow'
< ma-kii-ppuh 'elbow' + kuttih 'shoot'
mitükkaannangkawih V 'speak English'
< mitükkaano 'English, white man' + nangkawih 'speak'
nampunih Vt 'track'
< nam(pe) 'foot(print)' + puni' 'see'
namo'okoitsoi'I V 'wash hands'
< na- reflexive + mo'o 'hand' + koitsoi'I 'wash'
pao'okwe' V 'bleed'
< pao'(ppi) 'blood' + okwe' 'flow'
siliyatükingkun Vt 'saddle (a horse)'
< siiya 'saddle' + tuki' 'put' -ngkun cat
takkanto'eh V 'ejaculate'
< takkan 'sperm' + to'eh 'emerge'
tünto'eh V 'climb up'
< tum(pin) 'rock' + to'eh 'emerge'
tümpahe' V 'fall down'
< tum(pin) 'rock' + pahe' 'fall'

These verbs could be viewed simply as noun root plus verb root compounds, but the ordering of the component roots and the process itself are reminiscent of productive noun root incorporation discussed above, as well as the incorporation of instruments with prefixes discussed next.

3.2.1.2 Instrumental Prefixes

The most productive and systematic incorporation of nominal notions within verbs occurs with a set of nearly 20 instrumental prefixes. These prefixes typically indicate the instrument with which a transitive activity is done, but sometimes they indicate the manner of the activity, and sometimes, especially with intransitive verbs, they may
indicate the source or causal factor of an activity. The latter situation is rare, however, because usually when an instrumental prefix is used on an intransitive verb stem, the derived stem becomes transitive. Instrumental prefixes are also found on a good many noun stems, but their use with nouns does not seem to be productive, or at least not nearly as productive as their use on verbs. All of the instrumental prefixes are monosyllabic, and historically most of them are attenuated forms of Numic or Uto-Aztecan noun roots, although one or two of them come from other sources such as verbs. The instrumental prefixes are listed below together with some example verbs formed with them. The etymon of each prefix is provided if known. The Uto-Aztecan etyma are from Kaufman and Campbell (1981); the forms to be compared in parentheses are contemporary related words in Tömpisa Shoshone. The variations in forms of the instrumental prefixes are due to vowel harmony with following vowels (see section 9.3.3).

**INSTRUMENTAL PREFIXES**

\[
\begin{align*}
\text{ku"-} & \approx \text{ko"-} & \text{'with heat or fire'} \\
< \text{UA *kuh} & & \text{'fire'} \quad \text{(cf. kunna" 'fire(wood)')} \\
\text{kotto'eh} & & \text{Vi 'boil'} \\
\text{kottoon} & & \text{Vt 'make a fire'} \\
\text{kuppuah} & & \text{Vi 'cook'} \\
\text{kusangwe} & & \text{Vt 'roast'} \\
\text{kuttiyaih} & & \text{Vi sg} \\
\text{kuttsúúwah} & \approx \text{kukko'ih} & \text{pl 'die from heat, be too hot'}
\end{align*}
\]

\[
\begin{align*}
\text{ku"-} & \approx \text{ku"-} & \text{'with the teeth or mouth'} \\
< \text{UA *kũ'i} & & \text{'bite'} \\
\text{kosope} & & \text{Vt 'lick'} \\
\text{kunnoo(nnai'ih)} & & \text{Vt 'carry (along) in the mouth'} \\
\text{kuttsi'ah} & & \text{Vt sg 'bite'} \quad \text{(kuso'eh pl)} \\
\text{kütsohi} & & \text{Vt 'chew'}
\end{align*}
\]
ma-≈mo- 'with the hand'
<UA *maa 'hand' (cf. mo'o 'hand')
mapah Vi 'crawl'
masakakah Vt 'snap/break with hand' (masakiih pl)
masutuhi Vt 'rub with hand'
matükih Vt 'slap hand down on'
mokose" Vt 'smash, mash, knead'

mu-≈mo- 'with the nose'
<UA *mu-pl 'nose' (cf. mupin 'nose')
motamangkün Vt 'bridle (a horse)'
mo'ti Vl 'vomit'
mukwayah Vt 'touch with nose'
mungwai Vt 'kiss and hug, neck with'
musungwai" Vt 'feel with nose'

ni"- 'with words; by talking'
(cf. niya ≈ niha 'name')
nanikkoih Vi pl 'laugh together'
nihattatukwi Vi 'joke'
niingkün Vt 'say, tell'
nimma'i Vt 'talk to/with'
nippoosi Vt 'boss around'
nittüuhai Vt 'talk endearingly to'

pa-≈po- '(with or pertaining to) water'
<UA *pa 'water' (cf. paa 'water')
paaka Vt 'give drink to'
pakatüh Vi 'be a body of water'
pakwi" Vi 'swell'
patümüüh Vt 'buy drinks'
poto'ih Vi 'be a spring'
VERBS

pi"- 'with the butt or behind'
< UA *pih 'back'
pingonoki vi 'buck (as a horse)'
pippattaih vi 'fall on butt' (pippatappaih pl)
pippahe" vt 'drop; shed; have baby' (pippokoah pl)
pisoto" vt 'pull, drag'
pittatah(an) vi 'pull dress up; bare one's butt'

sü"- 'with or from cold'
< UA *seh 'cold'
sükka'ah vi 'break from cold (flexible object)'
(sükkopiah pl)
sükkapah vi 'break from cold (rigid object)'
(sükkapiah pl)
sunnunnuki vi 'shiver, shake'
suttiyaih vi 'die from cold; be cold'
süttsuüwah vi pl 'die from cold; be cold'

sun- 'with the mind, by feelings or sensing'
< UA *suuna 'heart' or *suuwah 'notice, believe' (cf. suwa" 'want, feel')
nasuntamah vt med-pass 'remember'
nasuwatsi" vt med-pass 'forget'
sumanai vt 'know'
suwa" vt 'feel, want, think'
suwa'ih vt 'think about'

ta"- to"- 'with the foot'
< UA *tannah 'foot'
tasiiwah vt 'scratch with feet/claws' (tasitui pl)
tasu'ukuttih vt 'kick'
tattükiih vi 'step'
tatstsiko"i vi 'slip (on one's feet)'
tokkotsa" vt 'smash by stepping on'
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*ta"- = to"-* 'with a hard rock-like instrument'
< ? UA *tün 'rock' (cf. tumpe 'rock')
tangwi ≈ takkuna" Vt 'throw' (tappotsiki pl)
toppikkwan Vt 'break (hard object)' (tappikwai pl)
tasakkah Vt 'crack, break' (tasakkihih pl)
tassingwe Vt 'shell, crack (nuts)'
tattukwan Vt 'hit' (tappaih pl)

to"- 'with the fist, by violent motion'
< ?
toppokoah ≈ toppokkohi Vt sg, toppokkipaih pl 'rape'
toseaki Vt 'spur'
tosommah Vt 'bend' (tosomiih ≈ tosomiah pl)
tottawin Vt 'punch holes in' (tottawiih pl)
tottukwan Vt 'hit' (tappaih pl)

tsa"- = tsō"- 'by grasping in the hand'
< Numic *tsa'i" 'grasp, hold' cf. tsai" ≈ tse" 'grasp, hold'
tsakkumī" Vt 'tighten' (tsakkumipihami pl)
tsakkwinu Vt 'wind, reel in'
tsanuwan Vt 'lift'
tsotto'eh Vt 'take out' (tsakkuuh ≈ tsappu'e pl)
tsonnopah Vt 'tear out/down' (tsonnopiih pl)

tsī"- 'with a sharp or pointed instrument'
< ?
tsikkittsih Vt 'lock (with a key)'
tsikkwinu'i Vt 'screw'
tsittawin Vt 'pierce'
tsittukwan Vt 'hit with sharp/pointed instrument' (tsippaih pl)
tsittsukwih Vt 'point'
VERBS

tsō- 'with the head'
< UA *cohngi 'head' (cf. tsoppippūh 'head')
tsōkottih Vt 'bump head on; break with head'
tsōnuwan Vt 'lift the head'

wū"- = wo"- 'with an (elongated) instrument' generic
< ? UA *wūpaa 'whip' (cf. wū'ā' 'penis')
wūsommah = wosommah Vt 'bend' (wūsomiih = wosomiih pl)
wū'annih Vt 'knock over' (wū'annippeh pl)
wūppaha" Vt 'split' (wūppakihih pl)
wūttukwan Vt 'hit' (wūppalih pl)
wūttompokkah Vt 'fasten' (wūttompokwiih pl)

The instrumental prefixes are used productively with many verb stems. The limits to productivity seem primarily due to semantic incompatibility rather than to any grammatical factors. Many verb stems cannot be used at all without at least one instrumental prefix appended to them. Those verb stems which must have an instrumental prefix are called instrumental verbs. Some examples are given below of derived verbs formed with instrumental prefixes and a number of verb roots. The verb roots preceded by a dash are instrumental verbs which must have an instrumental prefix.

ka'āh Vi sg 'break (of flexible object)'
kukka'āh Vt sg 'break from heat'
kūkka'āh Vt sg 'bite in two, break with the teeth'
muka'āh Vt sg 'break with the nose'
pikka'āh Vt sg 'break with the butt'
sūkka'āh Vt sg 'break from cold'
takka'āh Vt sg 'chop with a rock-like instrument'
tsakka'āh Vt sg 'break by pulling apart'
tsīkka'āh Vt sg 'cut'
wūkka'āh Vt sg 'chop'
kúppah _ Vi sg 'break (of rigid object)'
kukkúppah _ Vi sg 'break from heat'
kúkkúppah _ Vt sg 'break with the teeth'
makúppah _ Vt sg 'break with the hand'
pikkúppah _ Vt sg 'break with the butt'
súkkúppah _ Vi sg 'break from cold'
takkúppah _ Vt sg 'break with the foot'
tsakkúppah _ Vt sg 'break by grasping in the hand'
wúkkúppah _ Vt sg 'break with something'

-kúunah _ Vt sg instr 'cover, be on top of'
makuúnah _ Vt sg 'cover, be on top of'
pikkuúnah _ Vt sg 'sit on top of'
takkúunah _ Vt sg 'cover with rock, put rock on top of'
tsíkkúunah _ Vt sg 'put pointed object on top of'
wúkkúunah _ Vt sg 'cover with something'

-kwa'ah _ V instr 'feel'
nasungkwa'ah _ Vt 'feel (internally)' (< na- med-pass)
 kusungkwa'ah _ kusungkwa'ah _ Vt 'taste'
 masungkwa'ah _ Vt 'feel with the hand'
 musungkwa'ah _ Vt 'feel with the nose'
 pisungkwa'ah _ Vt 'feel with the butt'
 tasungkwa'ah _ Vt 'feel with the foot'
 wúsungkwa'ah _ wósungkwa'ah _ Vt 'feel with something'

kwayah _ Vi sg 'be loose, loosen'; instr V 'take off; touch'
mukwayah _ Vt sg 'touch with nose'
makwayah _ Vt sg 'touch with hand'
pikkwayah _ Vt sg 'take off of butt (as a skirt)'
takkwayah _ Vt sg 'take off of feet (as shoes)'
tsakkwayah _ Vt sg 'take off by grasping'
tsíkkwayah _ Vt sg 'touch with something pointed'
wúkkwayah _ Vt sg 'touch with the body'
VERBS

paha" Vi sg 'split in half'
tappaha" Vt sg 'split with a rock'
tsappaha" Vt sg 'split by pulling apart'
tsippaha" Vt sg 'split with something sharp'
wüppaha" Vt sg 'split with something'

-sukwih V instr 'penetrate with, put in a hole'
masukwih Vt 'penetrate with hand, put hand in a hole'
musukwih Vt 'penetrate with nose, put nose in a hole'
pisukwih Vt 'put butt in a hole'
tasukwih Vt 'penetrate with foot, put foot in a hole'
wüsukwih Vt 'penetrate with, put something in a hole'

-tamah V instr sg 'secure'
nasuntamah Vt 'remember' (< na- med-pass)
mutamangkün Vt 'bridle' (< -ngkün cat)
tsattamah Vt sg 'tie'
wüttamah Vt sg 'tie tight, secure'

to'eh ≡ to'ih Vi sg 'emerge, come up/out'
kotto'eh Vi sg 'boil, be really hot'
moto'eh Vi sg 'vomit'
poto'ih ≡ pato'ih Vi sg 'be a spring'
tasso'eh ≡ tsotto'eh Vt sg 'take out'

Occasionally more than one instrumental prefix is used in the same word, as the forms above built on -kwa'ah attest (e.g., masungkwa'ah < ma- 'with the hand' + sun- 'with the mind'), and as do tukumahannih 'cook' (< tu- aps, ku'- 'with heat' + ma- 'with the hands', hannih 'do, fix') and tasuttiyaih 'freeze the feet' (< ta'- 'with feet', su'- 'with cold', tiyaih 'die').

The use of instrumental prefixes and the incorporation of noun roots (discussed in the previous section, 3.2.1.1) share a number of characteristics. In both cases nominal notions are incorporated into the verb word, and in both
cases the incorporated nominal morphemes immediately precede the verb root or stem and follow any voice prefixes (discussed in the next two sections, 3.2.1.3 and 3.2.1.4). However, even though instrumental prefixes and incorporated noun roots are similar, there are some important differences. First, the instrumental prefixes are just that—prefixes, not roots. In many cases they are attenuated or atrophied forms of roots, but they are never identical with the roots from which they come. And in some cases, their ultimate ety...
kuttih 'shoot'; tangappuhakatu 'pray kneeling' < puha 'supernatural power' + katū' 'sit'). Perhaps tanga- is on its way to becoming an instrumental prefix.

Of all the instrumental prefixes, pa- (< paa 'water') acts most like an incorporated noun, at least semantically, since it not infrequently marks the patient (e.g., patumuuh 'buy drinks' < tumuuh 'buy'; ponoo 'fetch water' < noo' 'carry on the back'). Nevertheless, even though the line between instrumental prefixes and incorporated nouns is not absolute, the distinction still seems to be an important one in the grammar.

To get a good sense of the productivity of the instrumental prefixes, the reader should consult the Tumpisa (Panamint) Shoshone Dictionary (Dayley 1989), looking at the words that follow each instrumental prefix and that have the same first consonant and vowel. Many of these words are derived with the instrumental prefixes. Of course there will be other derivatives from the instrumental prefixes as well, but in other parts of the dictionary because they begin with other prefixes or because of vowel harmony (see section 9.3.3). Here, it will suffice to say that some of the prefixes are very productive; for example, tsa"- and wū"- are used in forming over 50 different words each. Others are not so productive; for example, su"- occurs in only about 10 words, and nil"- and sun- in about 15.

As noted above, a fairly large number of (instrumental) verbs require instrumental prefixes and may not be used alone without at least one of them. A partial list of the most important of these follow.
SOME INSTRUMENTAL VERBS

- kaka (-kikappaih pl) 'tear, rip'
- kitso'o (-kitsoppeh pl) 'smash'
- kontonah (-kontoniih pl) 'wrap up'
- kopiih pl (cf. kopiah Vi) 'break flexible object'
- kose" 'smash (with horizontal motion)'
- kotsa" 'smash (with vertical motion)'
- kuna" ≈ -ngwi (-potsiki pl) 'throw'
- kūpīhih pl (cf. kūpiah Vi) 'break rigid object'
- kūūniih pl 'cover, be on top of'
- kw'a'ah ≈ -kwai" 'touch, feel'
- munuppeh pl 'turn (around or over)'
- nopiih pl 'pull out, tear down'
- nguniih pl 'place, set, locate'
- pakiah Vi pl) 'break rigid object'
- patiih pl 'spread out'
- patappaih pl 'slap, flop against'
- patsaniih pl 'fasten'
- pihwa (-pihwai pl) 'break (soft object)'
- pikwa (cf. pikwaa Vi pl) 'shatter, break (rigid object)'
- pikoah ≈ -pokoppaih pl) 'violate'
- sakkah (-sakihih pl) 'crack, snap'
- siiwah (-sitihih pl) 'scratch, rub'
- sommah sg, somiah Vi pl) 'bend'
- sone 'sweep, comb'
- sukwin 'put in a hole'
- su'ukuttih 'kick'
- tamah (-tamihih pl) 'secure'
- tia (-we'ih pl) 'discard, dump out'
- tūkwan (-paih pl) 'hit'
- tūmiih pl) 'close'
- tuppuah (-tupuppaih pl) 'undo, release, open'
- tūtua (-tūtuppaih pl) 'tear, cut (fabric)'
- tompokkah (-tompokwihih pl) 'fasten'
-tomponah (-tomponiih pl)  
'trap or put in a rag'  
-tsakwah (-tsakwiih pl)  
'kill by...'
-tsi'ah (-so'eh pl)  
'pinch, occlude'  
-tsokwah (-tsokwiih pl)  
'tie a knot, stitch'  
-tsokweh  
'smash by pounding'

A few basically intransitive plural verbs have special stems when instrumental prefixes are used on them; for example, kūpiiah Vi pl 'break (of rigid object) > -kūpiih pl instr V (kuppah Vi sg); kopiiah Vi pl 'break (of flexible object) > -kopiih pl instr V (ka'ah Vi sg); and pakiah Vi pl > -pakihih pl instr V (paha' Vi sg).

Clauses having verbs with instrumental prefixes may or may not have postpositional phrases in ma 'with' containing overt instrumental nouns (or noun phrases). When overt instrumental nouns occur, they are specific and referential, as in 126b-c and 127b. But, when they do not occur, there is no specificity implied about the instrument, as in 126a and 127a.

(126)  
a. Nū o tottsokwenna.  
I it rock-smash  
'I smashed it (with some rock-like instrument).'  
b. Nū tümpim ma o tottsokwenna.  
I rock with it rock-smash  
'I smashed it with the rock.'  
c. Nū nū pampi ma o tottsokwenna.  
I my head with it rock-smash  
'I smashed it with my head.'
(127)  a. Nū sakka masungkwa'anna.
I that-O hand-feel
'I'm feeling him (with my hand).'

b. Nū sakka nū mo'o ma masungkwa'anna
I that-O my hand with hand-feel
'I'm feeling him with my hand.'

The situation is similar in those few cases where instrumental prefixes actually designate the patient or object, as in 128. If an overt object noun appears, then it is specific (e.g., 128b); if not, then it is not specific (e.g., 128a).

(128)  a. Sam tammi patumuungkuppühantu.
Sam us(inc) drink-buy for-past
'Sam bought us something to drink.'

b. Sam piiya tammi patumuungkuppühantū.
Sam beer us(inc) drink-buy for-past
'Sam bought us some beer.'

3.2.1.3 Passives, Mediopassives, Reflexives and Reciprocals

In Tümpisa Shoshone, the function of the passive voice is to remove agents from the discussion of normally transitive activities. That is, it is a means for talking about transitive activities without having to mention the agent. Passive sentences in the language may never contain an agent, although an indefinite agent is implied. Verbs in the passive voice are productively formed from transitive verbs with the important prefix na- (e.g., 129-134). The subject of a passive verb in na- is typically the patient, or what would be the direct object in a normal active transitive sentence. But the subject of a passive sentence may also be
the dative participant or what would be the indirect object of a ditransitive verb (e.g., in 133b). Whenever the subject of a passive sentence is animate, it is always in the nominative case (e.g., 129-131 and 133a-b). On the other hand, when the subject of a passive sentence is inanimate (e.g., 132 and 134), it is frequently in the accusative case, just as it would be in an active transitive clause.

(129) Nummū sapettū namiangkūtaiippūhantū.
    we(exc) there be sent-past
    'We were sent there.'

(130) Tukopoyo'oitssi pahannai ipantu napakkataihwa.
    kingbird down here be killed-cmplt
    'Kingbird was killed down here.'

(131) Nungku atammupi kuppa napunihappūhantū.
    we(dl exc) car in be seen-past
    'We two were seen in the car.'

(132) Pūe tammin tupanna nayaappūh.
    already our(inc) pinenut-O be taken-prf
    'Our pine nuts have already been taken.'

(133) a. Nū nateewinna.  'I was talked about.'
    I be told about

b. Nū nateewingkūnna.  'I was told (something).'
    I be told-cat

c. Nū sukkwa teewitu'ih.  [=active of a]
    I that-O tell about-will
    'I'll tell about that.'
d. Nū sukkwa ma teewingküppühantu. [=active of b]  
I that-O him told  
'I told him that.'

(134) a. Sohopitta namo'ihanna. 'Land is drawn.'  
land-O be drawn-stv = 'map'  
b. Wisikkia natumeninna. 'Whiskey is sold.'  
whiskey-O be sold = 'liquor store'  
c. Tükappia natumeninna. 'Food is sold.'  
food-O be sold = 'grocery store'

Whereas the function of the passive voice is to remove the agent from the discussion of a transitive activity, the function of the mediopassive voice is to discuss an event in a way which explicitly denies the involvement of an initiating agent. The mediopassive is a means for indicating that the event is not prototypically transitive because no agent is involved, even if under other circumstances a similar activity might be initiated by an agent. Like the passive, the mediopassive is also marked with the prefix na-. Events, especially processes or states, that are typically marked as mediopassive are those in which the subject of the verb may be the source of energy of the event but is not actively initiating it. A number of mediopassive verbs are listed below. Some mediopassive verbs are intransitive, taking only a subject, semantically either a patient or experiencer; while others are grammatically transitive, taking an experiencer subject and some sort of mental phenomenon as object.
MEDIOPASSIVE VERBS

nahona Vi 'be nothing'
   < ?

nakuttapinaih Vi 'be light(ed)'
   < ku"- 'with heat' + tape 'sun' + naih 'do'

nakūtsasa Vi 'be bad'
   < ?

nanangkah ≈ nangkah Vi 'be noise'
   < nangkah Vt 'hear'

naniyah(an) Vi 'be named, be called'
   < niya 'name' + -kan stv

napakatūh Vi 'be flooded'
   < pakatūh Vi 'be a body of water'

napunih Vi 'appear, look'
   < puni" Vt 'see, look at'

nasungkwa'ah Vt 'feel (internally)'
   < sun- 'with mind' + -kwa'ah instr V 'feel'

nasuntamah Vt 'remember'
   < sun- 'with mind' + -tamah instr V 'secure, tie'

dsungku'ah Vt and Vt 'be ashamed (of)'
   < suwaih Vt 'think about'

nasuwatsi" Vt 'forget'
   < sun- 'with mind' + watsi" Vi 'be lost, hidden'

natiliingwa" ≈ natüliingwa" Vi and Vt 'learn, study'
   < tuttiingwa" Vt 'teach'

natüpinniahen Vi 'be named, called'
   < tüpinnia(han) Vt 'name, call'

natsattumah Vi 'close, be closed'
   < tsattumah Vt 'close'

natsittoonai'ih Vi 'use a cane'
   < tsii"- 'with pointed instr' + too" ? + nai'ih
   'in motion'

na'ūma ≈ na'ūngwa Vi 'be rained on'
   < ūma" ≈ ūngwa" Vi 'rain'
nawakanaa" Vi 'be married'
< wakan 'by, toward (someone)' naa" 'be'
nawuttumah Vi 'close, be closed'
< wuttumah Vt 'close'
nopusawih Vi 'dream'
< ?

The examples above are lexicalized mediopassive verbs; they are not spur-of-the-moment formations. The formation of mediopassive verbs is not as regular or productive as the formation of passives, but it is clear from the examples above that the process has been at least semiproductive during the language's history. Some sentence examples of mediopassives are given below.

(135) Tūwuttumappūh nawuttumawi'ah.
   door close-inchoative
   'The door is closing.'

(136) Kahni tumpe natsattawiha. 'The door is open.'
   house mouth open-stv
   = door

(137) Nummi appū wa'i napunni satū.
   our(exc) father like look(dur) that
   'He looks like our father.'

The prefix na- is also used in the formation of reflexives. Reflexive clauses are those in which the subject is coreferential to the object. Reflexive clauses are formed with na- prefixed to a transitive verb stem, as with passives, but reflexive clauses require in addition the presence of a reflexive pronoun (see 4.2).
Subject pronouns are usually not used in reflexive constructions with first and second persons. In the third person, subject pronouns or noun phrases may be used (e.g., 138d), but are often omitted if they are given information (e.g., 138c and h).

Na- is also used to indicate reciprocals where two or more individuals do something to each other. Actually, in the dual number, na- ambiguously indicates either reflexive
or reciprocal, as in 139. But as 140 illustrates, the semantics of the sentence usually makes one interpretation or the other paramount.

(139)  

a. Tangkusù napunihappuhantù.  
ourselves(dl inc) pmpr-stv-past  
'You and I saw ourselves/each other.'

b. Nungkusù napunnih.  
ourselves(dl exc) pmpr-see(dur)  
'We two see ourselves/each other.'

c. Mungkusù napunnih.  
yourselves(dl) pmpr-see(dur)  
'You two see yourselves/each other.'

d. Satungku pungkutakasù napuniha.  
those(dl) themselves(dl) pmpr-see-stv  
'Those two see themselves/each other.'

(140)  

Satungku napitungkünna.  
those(dl) recip-fight  
'Those two are fighting each other.'  
(*themselves)

Plural reciprocals, however, are unambiguously marked with the plural reciprocal prefix anna"- 'each other', as illustrated in 141-142. In reciprocals based on anna"-, apparently either subjective or reflexive pronouns are appropriate.

(141)  

a. Tammù(sù) annappuninuupaiha.  
we(ourselves inc) recip-see-sit-stv  
'We all are sitting looking at each other.'
**VERBS**

b. Nüümü(sü) annappuniha.
   we(ourselves exc) recip-see-stv
   'We are looking at each other.'

c. Mümümüsü annappunni.
   you all recip-see(dur)
   'You all are looking at each other.'

(142) Satümü annappitungkunna.
    those recip-fight
    'They are fighting each other.'

Both na- and anna"- are used in the formation of many words, not just verbs (e.g., na- + nüü 'people' > nanüü 'relative'; anna"- + man 'with' > annamman 'together'; see the word formation sections in other chapters).

3.2.1.4 Absolutive Antipassives

Tümpisa Shoshone has a productive absolutive antipassive voice that makes possible the discussion of transitive activities without mentioning direct objects (or patients). The antipassive is formed with the prefix tü- (~ tu-), which is affixed to transitive verbs, making them derived active intransitives with agent subjects. Even though antipassive clauses with verbs in tü- normally do not take direct objects, indefinite and unspecific objects are implied.

(143) Satü tuwasunnuwi.
    that aps-kill(pl)-walk around
    'He is going around killing [things].'

(144) Nü tüsaawaha.  'I'm boiling [something].'
    I aps-boil-stv
(145) Nu tumo'ikattu. 'I'm sitting writing.'
    I aps-write-sit(dur)

(146) Nu tukoitoitu'ih, nu takkottukitu'ih.
    I aps-wash-will  I aps-scrub-will
    'I'll wash, and I'll scrub.'

A number of verbs formed with tu- have become
lexicalized (e.g., tupunih vi 'wake up' < tu- + puni" 'see'),
and a few have then been reanalyzed as transitives (e.g.,
tukummahannih vi and vt 'cook' < tu- aps + ku"- 'with heat' +
ma- 'with hands' + hannih 'do, prepare').

3.2.1.5 Causatives and Applicatives

A very important valence-changing affix in Tumpisa
Shoshone is the suffix -ngkun, which is used to increase the
valence of a given verb by one. When -ngkun is used on
intransitive verbs, it transitivizes them, typically forming
causatives of them. Normally, the subjects of the
intransitive stems become the objects of the transitive
causatives formed with -ngkun. Thus, the causatives formed
from stative or process intransitives generally mean that
some agent or force causes (makes, gets, has, forces) a
patient to change states or to undergo the process denoted by
the verb stem. And similarly, the causatives formed from
active intransitives mean that an agent causes (makes, gets,
has) someone or something to do the action denoted by the
active verb stem. There are literally hundreds of causative
verbs formed with -ngkun from intransitives; a list of some
of them follows.
CAUSATIVES FROM INTRANSITIVES

hapıngkun 'fell, make fall'
  < hapı "sg 'lie'
hipittaingkun 'make drunk, intoxicate'
  < hipittain 'get drunk'
hüttsawungkun 'cool'
  < hüttsawun 'be cool'
kammangkun 'make sick'
  < kammah 'be sick, sore, ache'
kuppuangkun vt 'cook'
  < kuppuah Vi 'cook'
kotto'engkun Vt 'boil'
  < kotto'eh Vi 'boil'
kwitasu'ungkun 'make fart'
  < kwitasu'u " 'fart, break wind'
mi'angkun 'send, make go'
  < mi'a 'go'
muiyaingkun 'intoxicate, make drunk'
  < muiyai 'become intoxicated, get drunk'
pitsingkun 'nurse, breastfeed'
  < pitsi 'suckle'
potso'ingkun 'make wet'
  < potso'in 'be wet'
siingkun 'make urinate'
  < sii " 'urinate'
sunnunnukingkun 'shake, make shiver'
  < sunnunnuki 'shiver'
tammayaingkun 'drive crazy, make (go) crazy'
  < tammayain 'be crazy'
tamminoingkun 'tire, make tired'
  < tammino 'be tired'
uitsü'ingkun 'cool, make cold'
  < uitsü'in 'be cold'
uppüingkun 'make sleep(y)'
  < uppuih '(go to) sleep'
ütüingkūn 'heat'
< ütün 'be hot'
watsingkūtain 'lose'
< watsi" 'be lost, missing' + -tain cmplt
wūkkatūngkūn 'stack, pile up'
< wūkkatūh 'be a pile'
yuhupūkkangkūn 'fatten, make fat'
< yuhupūkkan 'get fat'

A number of examples of causative verbs used in complete sentences are given below.

(147) Tsao ú sīingkūtu tuttumpi.
really you make pee-hab ephedra
'Ephedra really makes you pee.'

(148) Wa'ippū kottsappia utuingkūnna.
woman soup-O heat
'The woman is heating the soup.'

(149) Wainnih noohakka tammiyaingkūnna.
wine everybody-O make crazy
'Wine makes everybody go crazy.'

(150) Piiya nu hipippūh nu kammangkūtaihwa.
beer I drink-prf me make sick-cmplt-cmplt
'The beer I drank has made me absolutely sick.'

Besides forming causatives from intransitive verbs, -ngkūn is also used to form other kinds of transitive verbs from intransitives, but in a much less regular and systematic way. A few of these are listed below.
TRANSITIVES FROM INTRANSITIVES

kimmangkun 'come after, chase'
  < kimm 'come'
kuttusüngkun 'fry'
  < kuttusü 'sizzle'
mi'angkun 'go after, chase'
  < mi'a 'go'
natümuingkun 'tell a story to'
  < natümu Vi 'tell a story'
nuingkun Vi 'play (at)'
  < nui Vi 'play'
paitsüngkun 'holler at, yell at'
  < paitsu = petsü 'holler, yell'
tükümüingkun 'translate for, interpret for'
  < tükümüi 'talk, each using one's own language'
tsahapingkun 'lay down, put in bed'
  < tsa- 'by grasping' + hapi sg 'lie (down)'
tsawünungkun 'stand up, set upright'
  < tsa- 'by grasping' + wünu sg 'stand'

The suffix -ngkun is not only used on intransitive verbs to increase valence, but is also used on transitive verbs to form what have been traditionally called applicatives in studies of Uto-Aztecan languages (see Andrews 1975). Applicatives are transitive verbs which have had their valence increased by one, such that they take three core participants (i.e., subject, direct object, and indirect object) rather than just two (i.e., subject and direct object), as is normal for transitive verbs. What -ngkun does to transitive verbs is like a voice change that makes ditransitives of simple transitives. In the simplest terms, it makes it possible for a simple transitive to take an indirect object as a core participant, as well as a direct object. Semantically, the indirect object is typically either a dative participant (e.g., 151-154) or a benefactive
participant (e.g., 155-162). Thus, the indirect object is usually either the recipient of the direct object (= patient) or goal of the action denoted by the verb or somehow benefits from the action.

(151) Sümüttü nia sümü teewingküppühantü.
    one me something told-cat-past
    'Someone told me something.'

(152) Nüü sukkwa ma teewingküntu'ih.
    I that him tell-cat-will
    'I'll tell him that.'

(153) Nü ün teewingkünna.
    I you tell-cat-sfx
    'I'm telling you (something).' 

(154) Utümü sümü yüngkünna, pünnam pii tsa those-O something said to their own mom emph
    sümü yüngkünna, 'Tammi appü naammaa something said to our(inc) father was
    satü wihnu.'
    that then

    'She said to them, their own mom said, "That was our father then."'

(155) Antsia tümümüngküppühantü nü kwasu'unna.
    Angie-O buy-cat-past I dress-O
    'I bought Angie a dress.'

(156) Samma piiya tahi patümümüngküppühantü.
    Sam beer us(dl inc) liquor-buy-cat-past
    'Sam bought us two some beer.'
The process of forming benefactives from transitive verbs is completely productive, and in fact it is obligatory whenever a benefactive participant is involved in the action. On the other hand, aside from the many productively formed spur-of-the-moment applicatives, many applicatives have been lexicalized. Some of these are listed below, with sentence examples following in 163-164.
LEXICALIZED APPLICATIVES

hanningkun 'help, do for'
< hannih 'do, fix'
motamangkun 'bridle (a horse)'
< mu- 'with nose' + -tamah 'secure, tie'
niingkun 'tell'
< ni"- 'with words' -i- ?
nukwingkun 'tell, say to'
< nukwi" 'say'
nukwingkun 'do for'
< nukwi" 'do'
puningkun 'show to; look at'
< puni" 'see'
suwangkun 'feel about, have feelings about'
< suwa" 'feel, want, think'
teevingkun 'tell'
< teewi 'tell about, talk about, point'
yukwingkun 'do for'
< yukwi" = yukwi" 'do'
yukwingkun ≈ yüngkun 'tell, say to'
< yukwi" 'say'

(163) Nüu sakka tuttsüppüh suwangkünna.
I that-O ugly feel about
'I hate her.'

(164) Nüü üm puningkükwantu'ih tūpanna.
I you show-going to pinenut-O
'I'm going to (go) show you the pinenuts.'

There are a few causatives formed from transitives with -ngkun much like causatives from intransitives discussed earlier. However, it is not known whether or not the process of forming causatives from transitives with -ngkun is productive. The only examples recorded are given in 165-166.
3.2.1.6 Jussives

Causative-like constructions from transitive verbs are usually formed with the jussive auxiliary verb tunga 'tell to, order to' (see 3.1.5), which may be used with intransitive verbs as well. Like other auxiliaries, tunga is appended to the main verb stem, but like the suffix -ngkun it changes the valence of the verb complex in which it occurs, as illustrated in 167-171. The subject of the clause in which jussive tunga appears is the person doing the ordering, and the object is the person being told to do what is denoted by the main verb stem. Constructions with tunga in fact must have human or talking subjects and objects that presumably understand language.

(165) Um pia u tükkanngkunna.
her mother her eat-cat-sfx [= feed]
'Her mother fed her.'

(166) Nu hipingkunna üü. 'You made me drink.'
me drink-cat-sfx you

(167) Urn pia u tükkatunganna.
her mother her eat-tell-sfx
'Her mother told her to eat.'

(168) Nuhipittunganna üü.
me drink-tell-sfx you
'You told me to drink.'

(169) Wa'ippü pünnang kuhmattsia wasuükkitunganna.
woman her own husband-O hunt-tell-sfx
'The woman told her husband to hunt.'
(170) Tangummu pūnnam pūnnahapittsia
man his own wife-O
tukummahannitūnganna.
cook-tell-sfx
'The man told his wife to cook.'

(171) Nu ma mi'atūngappūhantū.
I him go-tell-past
'I told him to go.'

The reader may wish to compare 167-168 with 165-166, and 169-170 with 161-162, to see the differing effects of the causative and benefactive suffix -ngkūn and the jussive auxiliary tūnga.

3.2.2 Unsystematic Verb Derivation

Aside from the verb-forming and valence-changing processes discussed in the previous section (3.2.1), a number of suffixes are used to form verbs, but on a much less productive and systematic basis. The most important derivational suffixes forming verbs are listed below, along with some examples of derivations. Glosses indicating function and notes on productivity are provided when known.

**VERB-DERIVING SUFFIXES**

-(')i ≈ -ih ≈ -in ≈ -"i" general verbalizer; productive

- hüppai 'be shady' < hüppa 'shade'
- kūttai 'be hard, tough' < kūtaan 'tough'
- niingkūn 'tell' < ni"- 'with words', -ngkūn cat
- nasoo'ih 'be a movie' < na- pmp, Eng show
- nūhai 'make baskets' < nūha(kka) 'basket'
- ohil" 'cough' < ohi- 'cough'
paho'in 'smoke (tobacco)' < pahon 'tobacco'
tutakaih 'be born' < tü- aps + taka 'self'

-kain ≈ -kaih ≈ -kai′ general verbalizer;
semiproductive
pihyakai" 'itch' < pihya 'weak'
posiakaih 'delouse' < posia 'louse'
sumakkain 'breathe' < suma" 'breath'
tooyakain 'be thunder' < toya- 'mountain'
woongkwain 'be jealous' < woon- 'jealous'

-kan ≈ -kan ≈ -han stative; semiproductive
numukan 'move' < númú 'person'
tusukkwan 'smash' < tusu" 'grind'
tumpunihan 'watch' < tü- 'rock', puni" 'see'
tukikkkan (tahakkkan pl) 'keep' < tüki" (taha" pl) 'put'
yunnukkan 'keep' < yunnu" sg 'put'

-pukkan involuntary stative; semiproductive
kammahpukkan 'be/get sick' < kammah 'be sick'
oxapukkan 'be/get pregnant' < no'a- 'pregnant'
pakantuupukkan 'have/get an erection' < pakan 'penis'
tuupukkan 'be/get angry' < tuu- 'mean'
wuattuupukkan 'have/get an erection' < wuâ" 'penis'
yuhupukkan 'get fat' < yuhu- 'fat'

-tu ?; unproductive
kuhmatu 'acquire a husband' < kuhma 'husband'
mukatu 'think' < mukua 'mind'
punnahapitu 'acquire a wife' < punnahapi 'wife'
tuammatu 'bear offspring' < tuammu 'offspring'
-wih general verbalizer; semiproductive

hukkuntüwi 'be dusty' < hukkun 'dust'
isa'awih 'lie, deceive' < isan 'lie' + -'a ?
kumawih 'sharpen' < kuma- 'sharp'
nangkawih 'talk' < nangkah 'hear'
nühakkawih 'make baskets' < nühakka 'basket'
pangkuwih 'swim with head under water' < paa 'water' ?

-yai(n) ?: unproductive
muiyai 'become intoxicated' < mui- 'jimson weed'
tammayain 'get crazy' < tamma 'crazy'

-yun general verbalizer; productive (?)
hakanniyun 'be how' < hakanni 'how'
napakayun 'be in halves' < napakan 'half'
pangwiyun 'fish' vt < pangwi 'fish'
wummanniyun 'be naked' < wümmani- 'naked'

3.3 NONFINITE FORMS

Virtually all Tumpisa Shoshone verbs have several nonfinite deverbal forms. They are distinguished from finite forms in that they do not take the full range of verbal suffixes (see 3.1.1) such as the adverbial suffixes or prefinal and final aspect, tense, and mode suffixes; they function as members of other word classes, and they are used in certain kinds of subordinate clauses (discussed later on in chapter 8). The position of the nonfinite suffixes is immediately after the verb stem.

3.3.1 The Infinitive

Verbal nouns are formed with the suffix -nna. Verbal nouns in -nna function much like infinitives or gerunds and will be called infinitives in this work. The infinitive suffix is homophonous with the general aspect suffix -nna.
but infinitives are easily distinguished, since they function as nouns, not verbs, and they normally have no adverbial, aspect, tense, or mode suffixes. The two example sentences below contain infinitives in -nna: they are tutuainna 'to work/working' in 172 and hipinna 'to drink/drinking' in 173. Both sentences also have finite verbs in aspectual -nna as well.

(172) Tütüainna nü tamminoingkünna.
working me make tired
'Working makes me tired.'

(173) Nüü hipinna tsao suwangkünna.
I to drink really like
'I really like to drink.'

3.3.2 Present and Past Participles

There are two participles: the present participle formed with the suffix -tun (obj -tunna = -tj), and the past participle formed with the suffix -ppuh (obj -ppuha). The participles may function either as adjectives or as nouns. For example, in 174-176 the present participles function as nouns; whereas in 177-179 the present participles function as deverbal participial adjectives in subordinate clauses.

(174) Nü nuaitunna nangkappuhantü tunga umatü ma'i.
I blowing-O heard and rain(ing) with
'I heard the wind and rain.'

(175) Wayantünna punikka nü.
burning-O see I
'I see the fire [=burning].'
(176) Nū neeyangwitünna punikka.
I handgame-playing-O see
'I see handgame-playing.'

(177) Tammu neeyangwippuhantū tukwanni
we(inc) play handgame-past night
piiya hipitū.
beer drinking

'We played handgame last night, drinking beer.'

(178) Tangummū pa'appūh wünütū nia pusikwa.
man tall standing me know
'The tall man knows me.'

(179) Nūu tangummi pa'appūh wünütünna pusikwa.
I man-O tall standing-O know
'I know the tall man.'

Past participles in -ppūh commonly are used in conjunction with the adverbial completive suffix -tain (i.e., -taippūh). Past participles typically function as predicate adjectives (e.g., 180-182) or as deverbal participial adjectives in subordinate clauses (e.g., 183-185).

(180) Tupattsi kuppuataippūh.
pinenut cook-cmplt-pp
'The pinenuts are cooked.'

(181) Nūu tamminoippūh. 'I'm tired.'
I tire-pp
The present participle suffix and the past participle suffix are homophonous, respectively, with the habitual aspect suffix -tun and the perfect aspect suffix -ppuh (see 3.1.1). The participles and finite forms are distinguished, of course, in function, but also in that the participles do not occur with other verbal suffixes (except -tain).

3.4 VERB PHRASES

As discussed and amply exemplified in section 2.2 of the previous chapter, the predicate or verb phrase in Tumpisa Shoshone may contain as its head constituent either a verb or a predicate complement such as a predicate noun (or NP), a predicate adjective (or Adj phrase), or a predicate
adverbial. A verb may be intransitive, either stative, process, or active, or it may be transitive or ditransitive. As should be apparent from the discussion throughout earlier sections of this chapter, the real complexity of the verb phrase occurs within the verb word itself. The verb phrase outside of the verb is not particularly complex, since the verb may contain, aside from the verb root or stem, morphemes indicating aspect, tense, mode, direction, voice, instrument, and various other adverbial and nominal notions, as well as compounded auxiliaries. Nevertheless, the verb may be modified by various kinds of adverbs and postpositional phrases, which are discussed in detail later on (see chapter 5 on postpositions and chapter 7 on adverbs).

What is covered in chapters 2, 5, and 7 is not repeated in this section. Rather, I simply illustrate how the verb is modified within the verb phrase. Nearly all verb modifiers normally occur before the verb, although they may also occur after it. Only the two enclitic particles puu and -nnu'u always follow the verb when modifying it. Both are emphatic markers, but puu often marks contrastiveness as well as simple emphasis.

(186) Setū otammanni miattaisū sūmmi yūkwitū puu!
    this old man went away that saying emph
    'This old man went away saying that!'

(187) Nuū naaiyangwitūkī-nnu'u.
    I play handgame-start-emph
    'I'm starting to play handgame!'

Other verb modifiers seem to have considerable freedom in terms of their positioning. They either occur immediately before the verb (e.g., 194) or second in the sentence after the subject (e.g., 188 and 193), but sometimes they are sentence-initial (as in 189-191), and somewhat less frequently they follow the verb (as in 191-192 and 196). It
should be stated, however, that the restrictions on the positioning of modifiers of the verb are simply not known.

In terms of function, some are delimiters, such as utuku in 188, which is itself further modified by emphatic puu.

(188) Setu utuku puu umannuh. 'It was just raining!'
this just emph rained

Some are intensifiers, like küttaappüh in 189.

(189) Küttaappüh nüenna. 'It's really blowing.'
really blow

Others, such as noohimpe in 190, indicate aspectual notions; while still others, like püesü(sü) and miikkwa in 191, denote time.

(190) Noohimpe sutu yahinna. 'He always laughs.'
always that laugh

(191) Püesü(sü) pünnanni númmi nukkwippüh
long ago which way us do-past-sub
nuu sukkwa teewitu'ih miikkwa.
I that tell-will now

'Now I will tell the way that we did (things) long ago.'

Some, like sope" in 192, indicate place.

(192) U makakoomminna sopetti.
her feed-around-iterative there abouts-emph
'He would feed her around there.'
And finally, some indicate manner, like *yawusu* and *tsao* in 193-194.

(193) Nūū *yawusu* miakwantu'ih.
I quickly go away-will
'I'll quickly go away.'

(194) Nūū kee sakka tsao suwangkūna.
I not that-O well like
'I don't like that [that] well.'

All of the examples given so far have been with verbs as head of the verb phrase, but of course nonverbal predicates may have modifiers as well. For example, the intensifier *kenumūni* modifies the predicate adjective in 195, the emphatic *-nnu'u* modifies the predicate adjective in 196, and the time adverb *miikkwa* modifies the predicate noun phrase in 197.

(195) Nūū *kenumūni* pasampūtsi.
I really skinny
'I'm really skinny.'

(196) Nūū pihyapi-nnu'u! 'I'm really weak!' 
I weak-emph

(197) Tsawuntū tangumū miikkwa.
good man now
'He's a good man now.'

Note to Chapter 3

1. This verb stem and the one exemplified next are either etymologically related or there has been some contamination between them.