Verbal Endings

(1)Vattamāna (Present Indicative Tense)

	Parassapada			Attanopada
	Sing.	Plu.	Sing.	Plu.
3^{rd}	ti	anti, are	te	ante, are
2^{nd}	si	tha	se	vhe
1 st	mi	ma	e	mhe

(2)Paţcamī (Imperative)

	Paras	ssapada	Attanopada	a
2	Sing.	Plu.	Sing.	Plu.
3^{rd}	tu	antu	taṃ	antaṃ
2^{nd}	hi	tha, thavho	ssu	vho
1^{st}	mi	ma	e	āmase

(3)Sattamī (Optative)

	Parassapada		Attanopada		
	Sing.	Plu.	Sing.	Plu.	
3^{rd}	eyya, e	eyyum, um	etha	eraṃ	
2^{nd}	eyyāsi, e	eyyātha, eyyātho	etho	eyyāvho	
1 st	eyyāmi	eyyāma, eyyāmu, emu	eyyaṃ, e	eyyāmhe	

(4)Parokkhā (Past Perfect Tense)

	Parassapada		Attanopada	
	Sing.	Plu.	Sing.	Plu.
3^{rd}	a	u	ttha	re
2^{nd}	e	ttha	ttho	vho
1 st	a	mha	i	mhe

(5)Hiyyattanī / Anajjatana (Past Imperfect Tense)

Parassapada		Attanopa	da		
	Sing.	Plu.	Sing.	Plu.	
3^{rd}	a, ā, ttha	u, ū	ttha	tthuṃ	
2^{nd}	o, a, i, ttho, ttha, si	ttha	se	vhaṃ	
1 st	a, aṃ	mha, mhā	iṃ, siṃ	mhase	

(6)Ajjatanī / Bhūta (Aorist Tense)

- For polysyllabic stems

Parassapada			Attanop	oada
	Sing.	Plu.	Sing.	Plu.
3^{rd}	i, ī, ttho, (si)*	iṃsu, uṃ, aṃsu	a, ā, ttha	u, ū
2^{nd}	o, a, i, ttho, ttha, si	ttha	se	vhaṃ
1 st	im, sim	mha, mhā	a, aṃ	mhe

^{*}To be used with *polysyllabic* stems ending in *a*, *e*, or *o*.

-For monosyllabic stems

	Parassapada		Attanopada	
	Sing.	Plu	Sing.	Plu.
3^{rd}	- si, -ttho	-iṃsu,-suṃ, (aṃsu)*	-ttha	X**
2^{nd}	-si, -ttha, -ttho	-ttha	-se	-vhaṃ
1 st	-siṃ	-mha, mhā	X**	-mhe

^{*} To be used with the general rule (4) only for stems ending in - \bar{a} .

(7) Bhavissanti (Future Tense)

	Parassapada		Attanopada	
	Sing.	Plu.	Sing.	Plu.
3^{rd}	ssati	ssanti, ssare	ssate	ssante, ssare
2^{nd}	ssasi	ssatha	ssase	ssavhe
1 st	ssāmi	ssāma	ssaṃ	ssāmhe

(8) Kālātipatti (Conditional Tense)

	Parassapada		Attanopada		
	Sing.	Plu.	Sing.	Plu.	
3^{rd}	ssa, ssā	ssaṃsu	ssatha	ssiṃsu	

^{**} No verbal endings for these particular persons and numbers have been discovered.

 2^{nd} sse, ssa ssatha ssase ssavhe

1st ssam ssāmha, ssāmhā ssim ssāmhase

Derivational Rules

General Rules

(1) Root $(dh\bar{a}tu)$ + sign (paccaya) >> verbal stem

e.g.
$$\sqrt{h\bar{u} + a} >> ho$$

- (2) Verbal stems generally end in a, \bar{a} , e, or o. (For stems ending in u, i.e. $Tan\bar{a}di$ stems, separate rules are given.)
- (3) The ending vowel (*a*, \bar{a} , *e*, *o*) of the stem is generally dropped before an ending that begins with a vowel.

e.g.
$$\sqrt{j}i + n\bar{a} >> jin\bar{a} \text{ (stem)} >> jin\bar{a} + anti >> jinanti (verb)$$

(4) If a verbal ending begins with a double consonant and is added directly to a stem that ends in " \bar{a} ", " \bar{a} " is shortened.

- (5) Verbal endings are directly added to verbal stems unless stated otherwise.
- (6) When a general rule disagrees with any one of the following special rules, the special rule must be given priority.

Processes Used For Some Tenses

The following processes are used only if **special rules** for a given tense or mood explicitly **permit**.

a. I-Insertion

When a verbal stem is followed by certain endings that have consonants as initials, the stemending vowel (a, \bar{a}, e, o) is replaced by the vowel i.

b. A-augment

When certain verbal endings are added, the vowel a is added as an augment before the stem and, thereby, made into the initial vowel of the verb. However, if the stem is headed by one or more prefixes, a - augment must be placed after the prefixes.

Ex. paccaṭṭāsim (verb) = pati (prefix) + a (a - augment) + ṭṭā (stem) + sim $(verbal\ ending)$

Special Rules

I. Vattamāna (Present Indicative Tense)

a. If a stem ends in **e** or **o**, the initial vowel **a** of the verbal endings is dropped.

b. If a stem ends in *a*, it is lengthened before the verbal endings "*mi*" and "*ma*".

c. The ending [are] can be used only when the notation [$c^2 + v$ - short + re] is applicable to the resulting verb.

e.g
$$\sqrt{\text{gam}} + \text{a} >> \text{gaccha}$$

gaccha + are >> gacchare
$$\lceil \sqrt{\rceil}$$
 jinā + are >> jinare $\lceil x \rceil$

II Paţcamī [Imperative Mood]

a. The same as the rule (a) of Present Tense.

b. The same as the rule (b) of Present Tense.

E.g., labha + mi/ ma >> labhāmi/ labhāma

c. The stem-ending vowel *a* is lengthened before *hi* or *hi* is dropped without any other change.

III Sattamī (Optative Mood)

No special rule. The general rule (4) must be used.

IV Parokkhā (Past Perfect Tense)

- a. For this tense, special stems ending in a are used.
- b. I- insertion rule is used. E.g. Babhūva + ttha = Babhūvittha

V Hiyyattanī (Past Imperfect Tense)

For this tense, stems should be divided into monosyllabic and polysyllabic ones.

Monosyllabic stems are seldom found in usage with Past Imperfect Tense. But, if a stem is **polysyllabic**, i.e., if it has two or more syllables-----

a. The general rules (3, 4, 5) must be used.

$$karo + \bar{a} >> kar\bar{a} [general rule (3)]$$

dadā +ttha >> dadattha [general rule (4)]

b. **A-** augment rule is used optionally.

E.g. karottha / akarottha, karā / akarā, dadattha / adadattha

VI. Ajjatanī (Aorist Tense)

Here also stems can be divided into monosyllabic and polysyllabic stems.

The special rules used for monosyllabic stems are...

- a. A- augment rule is used optionally.
- b. If the verbal ending begins with a vowel, the consonant s is inserted.
- e.g. ho + imsu >> hosimsu, ahosimsu (a-augment)
- c. If the verbal ending begins with a double consonant, *si* is inserted.
- e.g. ho + ttha >> hosittha, ahosittha (a-augment)
- d. If the verbal ending begins with a single consonant, there is no change.

If a stem is polysyllabic---

a. I-insertion is used optionally.

kiṇā + ttha >> kiṇittha, kiṇattha [general rule (4)]

- **b**. **A**-augment rule is used optionally.
 - e.g. kiņisi/ akiņisi, kiņāsi/ akiņāsi, kiņittha/ akiņittha, kiņattha/ akiņattha
- **c.** For the endings, $mha \& mh\bar{a}$ (1st person plural) and ttha (2nd person plural)...
 - 1. the stem-ending vowel $[a, \bar{a}, e, o]$ of the stem is replaced by [u] (OR)

2. [si] is inserted before the ending without dropping the stem-ending vowel ...besides the direct addition or I- insertion.

e.g. karo +mhā >> karomhā (general rule - 5), karimhā (i-insertion),

karumhā (u- insertion), karosimhā (si - insertion)

With A-augment, *akaromhā*, etc.

d. For stems ending in e or o, s - insertion before the ending um is optional.

 $dad\bar{a} + um >> dadum$ (no s- insertion because the stem ends in \bar{a})

Note: Whether a stem is mono ... or polysyllabic, if it ends in a long vowel, it can be used as a 3rd per. sing. *parassapada* form without any verbal ending. But the A-augment rule is usually applied.

$$\sqrt{\text{kar} + a} >> k\bar{a} / / k\bar{a} + si / x >> ak\bar{a}si / ak\bar{a}$$

VII. Bhavissanti [Future Tense]

a. If a stem is polysyllabic, I- insertion is usually used.

Note: - For some polysyllabic stems ending in **e**, I-insertion is optional.

e.g. core + ssatha >> corissatha / coressatha (general rule- 5)

b. If a stem is monosyllabic, I- insertion is not used.

e.g. anubho + ssati >> anubhossati (general rule -5)

 $d\bar{a} + ssati >> dassati (general rule - 4)$

VIII. Kālātipatti [Unreal Conditional Tense]

- 1. If a stem is monosyllabic, the general rule (5) must be used.
- 2. If a stem is polysyllabic, I insertion must always be used.
- 3. A augment is used optionally.

```
e.g. jin\bar{a} + ss\bar{a} >> jiniss\bar{a} (i - insertion), ajiniss\bar{a} (with a - augment) je + ss\bar{a} >> jess\bar{a} (general rule - 5), ajess\bar{a} (with a - augment) d\bar{a} + ss\bar{a} >> dass\bar{a}, adass\bar{a} (general rule - 4)
```

Stems ending in *u* (tanādi stems)

a. The verbal endings with initial consonants are added directly.

```
e.g., tanu + te >> tanute.
```

b. When the verbal endings begin with vowels, the stem-ending vowel u is changed into v.

Note: For the root \sqrt{kar} , $\sqrt{kar + u} >> karo / kuru(a > u)$

By means of **analogy**, the stem *kubba* is also found with the endings having initial consonants. **E.g.**, kubbati, kubbate, etc.

Conjugation of $\sqrt{Bh\bar{u}} > bhava(stem)$

1. Vattamāna (Present Indicative Tense)

Singular Plural

Parassapada

3rd Per.- ti Bhavati - anti Bhavanti

2nd Per.- si Bhavasi - tha Bhavatha

1st Per. - mi Bhavāmi - ma Bhavāma

Attanopada

3rd Per. - te Bhavate - ante Bhavante

2nd Per.- se Bhavase - vhe Bhavavhe

1st Per.- e Bhave - mhe Bhavamhe

2. Pañcamī (Imperative)

Singular Plural

Parassapada

3rd Per. - tu Bhavatu - antu Bhavantu

2nd Per. - hi Bhavāhi - tha Bhavatha

- a Bhava - thavho Bhavathavho

1st Per. - mi Bhavāmi - ma Bhavāma

Attanopada

3rd Per. - tam Bhavatam - antam Bhavantam

2nd Per. - ssu Bhavassu - vho Bhavavho

1st Per. - e Bhave - āmase Bhavāmase

3. Sattamī (Optative)

Singular Plural

Parassapada

3rd Per. - eyya Bhaveyya - eyyum Bhaveyyum

- e Bhave - um Bhavum

2nd Per. - eyyāsi Bhaveyyāsi - eyyātha Bhaveyyātha

- e Bhave - eyyātho Bhaveyyātho

1st Per. -eyyāmi Bhaveyyāmi - eyyāma Bhaveyyāma

- eyyāmu Bhaveyyāmu

- emu Bhavemu

Attanopada

3rd Per. - etha Bhavetha - eram Bhaveram

2nd Per. - etho Bhavetho - eyyāvho Bhaveyyāvho

1st Per. - e Bhave - eyyāmhe Bhaveyyāmhe

- eyyam Bhaveyyam

4. Parokkhā(Past Prefect Tense)

Singular Plural

Parassapada

Attanopada

5. Hiyyattanī (Past Imperfect Tense)

Singular Plural

Parassapada

- ā Bhavā, Abhavā - ū Bhavū, Abhavū

- ttha Bhavattha, Abhavattha

2nd Per. - o Bhavo, Abhavo - ttha Bhavattha, Abhavattha

- a Bhava, Abhava

- i Bhavi, Abhavi

- ttho Bhavattho, Abhavattho

- ttha Bhavattha, Abhavattha
- si Bhavasi, Abhavasi
- 1st Per. a Bhava, Abhava mha Bhavamha, Abhavamha
 - -am Bhavam, Abhavam mhā Bhavamhā, Abhavamhā

Attanopada

3rd Per. - ttha Bhavattha, Abhavattha - tthum Bhavatthum, Abhavatthum

2nd Per. - se Bhavase, Abhavase - vham Bhavavham, Abhavavham

1st Per. - im Bhavim, Abhavim - mhase Bhavamhase, Abhavamhase

- sim Bhavasim, Abhavasim

6. Ajjatanī / Bhūta (Aorist Tense)

Singular Plural

Parassapada

3rd Per. - i Bhavi, Abhavi - imsu Bhavimsu, Abhavimsu

- ī Bhavī, Abhavī - um Bhavum, Abhavum

- ttho Bhavattho, Abhavattho -amsu Bhavamsu, Abhavamsu

Bhavittho, Abhavittho

2nd Per. - o Bhavo, Abhavo - ttha Bhavattha, Abhavattha

- a Bhava, Abhava Bhavittha, Abhavittha

- i Bhavi, Abhavi Bhavuttha, Abhavuttha

- ttho Bhavattho, Abhavattho Bhavasittha, Abhavasittha

Bhavittho, Abhavittho

- ttha Bhavattha, Abhavattha

Bhavittha, Abhavittha

- si Bhavasi, Abhavasi

Bhavisi, Abhavisi

1st Per. - im Bhavim, Abhavim - mha Bhavamha, Abhavamha

- sim Bhavasim, Abhavasim Bhavimha, Abhavimha

Bhavisim, Abhavisim Bhavumha, Abhavumha

Bhavasimha Abhavasimha

- mhā Bhavamhā, Abhavamhā,

Bhavimhā, Abhavimhā

Bhavumhā, Abhavumhā

Bhavasimhā, Abhavasimhā

Attanopada

Singular Plural

3rd Per. - a Bhava, Abhava - u Bhavu, Abhavu

- ā Bhavā, Abhavā- ū Bhavū, Abhavū

- ttha Bhavattha, Abhavattha

Bhavittha, Abhavittha

2nd Per. - se Bhavase, Abhavase - vham Bhavavham, Abhavavham

Bhavise, Abhavise Bhavivham, Abhavivham

1st Per. - a Bhava, Abhava

- mhe Bhavamhe, Abhavamhe

- ā Bhavā, Abhavā

Bhavimhe, Abhavimhe

7. Bhavissanti (Future Tense)

Parassapada

Singular Plural

3rd Per. - ssati Bhavissati - ssanti Bhavissanti

- ssare Bhavissare

2nd Per. - ssasi Bhavissasi - ssatha Bhavissatha

1st Per. - ssāmi Bhavissāmi - ssāma Bhavissāma

Attanopada

Singular Plural

3rd Per. - ssate Bhavissate - ssante Bhavissante

- ssare Bhavissare

2nd Per. - ssase Bhavissase - ssavhe Bhavissavhe

1st Per. - ssam Bhavissam - ssāmhe Bhavissāmhe

8. Kālātipatti (Conditional Tense)

Parassapada

Singular Plural

3rd Per. – ssa Bhavissa, Abhavissa - ssamsu Bhavissamsu,

- ssā Bhavissā, Abhavissā Abhavissamsu

2nd Per. – sse Bhavisse, Abhavisse - ssatha Bhavissatha,

- ssa Bhavissa, Abhavissa Abhavissatha

1st Per. - ssam Bhavissam, - ssāmhā Bhavissāmhā, Abhavissāmhā

Abhavissam -ssāmha Bhavissāmha, Abhavissāmha

Attanopada

Singular Plural

3rd Per. - ssatha Bhavissatha, - ssimsu Bhavissimsu, Abhavissimsu

Abhavissatha

2nd Per. - ssase Bhavissase, - ssavhe Bhavissavhe,

Abhavissase Abhavissavhe

1st Per. - ssim Bhavissim, - ssāmhase Bhavissāmhase,

Abhavissim Abhavissāmhase

Conjugations of Model Athematic Stems

 $\sqrt{\text{vad}}$ (-- to say, to speak, to tell) + a >> vajje (stem)

[All tenses and moods except Past Perfect given here -- with parassapada endings only]

Present Tense

Sing. Plu.

3rd person vajjeti vajjenti

2nd person vajjesi vajjetha

1st person vajjemi vajjema

Imperative Mood

3rd person vajjetu vajjentu

 2^{nd} person vajjehi vajjetha, vajjethavho

1st person vajjemi vajjema

Optative Mood

3rd person vajjeyya, vajje vajjeyyum, vajjum

2nd person vajjeyyāsi, vajje vajjeyyātha, vajjeyyātho

1st person vajjeyyāmi vajjeyyāma, vajjeyyāmu, vajjemu

Past Imperfect

3rd person vajja, avajja, vajjā vajju, avajju

avajjā, vajjettha, vajjū, avajjū

avajjettha

2nd person vajjo, avajjo, vajja vajjettha,

avajja, vajji, avajji avajjettha

vajjettho, avajjettho

vajjettha, avajjettha

vajjesi, avajjesi

1st person vajja, avajja, vajjemha, avajjemha,

vajjam, avajjam vajjemhā, avajjemhā

Aorist

3rd person vajji, avajji, vajjimsu, avajjimsu

vajjī, avajjī vajjum, avajjum

vajjettho, avajjettho vajjesum, avajjesum

vajjittho, avajjittho vajjamsu, avajjamsu

vajjesi, avajjesi

vajjisi, avajjisi

2nd person vajjo, avajjo, vajja, vajjettha, avajjettha,

avajja, vajji, avajji vajjittha, avajjittha

vajjettho, avajjettho vajjuttha, avajjuttha

vajjittho, avajjittho vajjesittha, avajjesittha

vajjettha, avajjettha

vajjittha, avajjitha

vajjesi, avajjesi

vajjisi, avajjisi

1st person vajjim, avajjim vajjemha, avajjemha

vajjesim, avajjesim vajjimha, avajjimha

vajjisim, avajjisim vajjumha, avajjumha

vajjesimha, avajjesimha

vajjemhā, avajjemhā

vajjimhā, avajjimhā

vajjumhā, avajjumhā

vajjesimhā, avajjesimhā

Future Tense

3rd person vajjissati vajjissanti, vajjissare

2nd person vajjissasi vajjissatha

1st person vajjissāmi vajjissāma

Unreal Conditional

3rd person vajjissa, avajjissa vajjissaṃsu

vajjissā, avajjissā avajjissaṃsu

2nd person vajjisse, avajjisse vajjissatha

vajjissa, avajjissa avajjissatha

3rd person vajjissam, avajjissam vajjissāmhā, avajjissāmhā

vajjissāmha, avajjissāmha

$\sqrt{d\bar{a}}$ - to give

 $\sqrt{d\bar{a} + a}$ >> dadā (**Imperfect & Aorist Tense** with *parassapada* Endings)

Imperfect Tense

	Singular	Plural
3 rd pers	dada, adada	dadu, adadu
	dadā, adadā	dadū, adadū
	dadattha, adadattha	
2 nd pers	dado, adado, dada	dadattha,
	adada, dadi, adadi	adadattha
	dadattho, adadattho	
	dadattha, adadattha	
	dadāsi, adadāsi	
1 st pers	dada, adada,	dadamha, adadamha
	dadam, adadam	dadamhā, adadamhā
Aorist Tense		
3 rd pers	dadi, adadi, dadī,	dadiṃsu, adadiṃsu
	adadī, dadattho	dadum, adadum
	adadattho, dadittho	dadaṃsu, adadaṃsu
	adadittho, dadāsi,	

adadāsi, dadisi, adadisi

2nd pers dado, adado, dada dadattha, adadattha

adada, dadi, adadi dadittha, adadittha

dadattho, adadattho daduttha, adaduttha

dadittho, adadittho dadāsittha, adadāsittha

dadattha, adadattha

dadittha, adadittha

dadāsi, adadāsi

dadisi, adadisi

1st person dadim, adadim dadamha, adadamha

dadāsim, adadāsim dadimha, adadimha

dadisim, adadisim dadumha, adadumha

dadāsimha, adadāsimha

dadamhā, adadamhā

dadimhā, adadimhā

dadumhā, adadumhā

dadāsimhā, adadāsimhā

$\sqrt{D\bar{a} + a} \gg de$

de (in Aorist, future and unreal conditional tense with parassapada endings)

	singular	plural
Aorist Tense		
3 rd pers.	desi, adesi	desiṃsu, adesiṃsu
	desittho, adesittho	desum, adesum
2 nd pers.	desi, adesi	desittha, adesittha
	desittha, adesittha	
	desittho, adesittho	
1 st pers.	desim, adesim	desimha, adesimha
		desimhā, adesimhā
Future Tense		
3 rd pers.	dessati	dessanti, dessare
2 nd pers.	dessasi	dessatha
1 st pers.	dessāmi	dessāma
Unreal Conditional Tense		
3 rd pers.	dessa, adessa	dessaṃsu, adessaṃsu
	dessā, adessā	
2 nd pers.	desse, adesse	dessatha, adessatha
	dessa, adessa	

1 st pers.	dessam, adessam	dessāmhā, adessāmhā
-----------------------	-----------------	---------------------

dessāmha, adessāmha

$$\sqrt{D\bar{a} + a} \gg d\bar{a}$$

dā (in Future and Unreal Conditional Tense with parassapada endings)

Future Tense

3 rd pers.	dassati	dassanti, dassare
2 nd pers.	dassasi	dassatha
1 st pers.	dassāmi	dassāma

Unreal Conditional Tense

	singular	plural
3 rd pers.	dassa, adassa	dassaṃsu,
	dassā, adassā	adassaṃsu
2 nd pers.	dasse, adasse	dassatha
	dassa, adassa	adassatha
1 st pers.	dassam, adassam	dassāmhā, adassāmhā
		dassāmha, adassāmha

Some Irregular Stems and Verbs

 $\sqrt{\mathbf{ap}(Tan\bar{a}di)}$ - to reach, to arrive

When combined with the prefix *pa*----

Eg. pa $\sqrt{ap + u} >> pappo (p \text{ is doubled})$

 \sqrt{as} - to be

Present Tense

 3^{rd} pers. 2^{nd} pers. 1^{st} pers.

Sing. atthi asi asmi, amhi

Plu. santi attha asma, amha

Imperative Mood

Sing. atthu ahi asmi, amhi

Plu. santu attha asma, amha

Optative Mood

Sing. assa, siyā assa assam, siyam

Plu. assu, siyum assatha assāma

Aorist Tense

Sing. āsi āsi āsiṃ

Plu. āsiṃsu, āsuṃ āsittha āsimhā

 $\sqrt{\mathbf{\bar{a}sa}}$ (bhuvādi) - to stay, to sit

 \sqrt{a} sa + a \bar{a} sa, accha

 $\bar{\mathbf{a}}\sqrt{\mathbf{har}}$ (bhuvādi) - to say, to tell, to speak (Past Perfect Tense, *parassapada* only)

 3^{rd} pers. 2^{nd} pers. 1^{st} pers.

Sing. $\bar{a}ha$ X X

Plu. āhu, āhaṃsu X āhaṃsu

 $\sqrt{\mathbf{i}}$ (bhūvādi) - to go, to move

$$\sqrt{i + a} \gg e$$
, aya

The part ssa of Future and Unreal Conditional endings following the stem e is optionally changed into hi. E.g. essati / **ehiti**, essatha / **ehitha**

 \sqrt{is} (bhūvādi) - to seek, to wish for

$$\sqrt{is + a} >> esa, iccha$$

√ kam (bhuvādi) - to go

$$\sqrt{\text{kam} + \text{a}} >> \text{kama}$$

If preceded by the prefix *ni*, *k* of the root is optionally changed into *kkh*.

E.g. **nikkhamati**, nikkamati, etc.

√ kar (Tanādi) - to do

$$\sqrt{\text{kar} + u} >> \text{karo (P.A)} / \text{kuru (A.)}$$

- * With the endings *mi* and *ma*, there are irregular forms *kummi* and *kumma* respectively besides the regular ones.
- * With Aorist endings, the stem $k\bar{a}$ is optionally used. E.g. akarosi, $ak\bar{a}si$
- Sometimes Future and Unreal Conditional endings are added directly to the root, and, thereby, produce the change $\sqrt{\ker + \operatorname{ss---}} >> k\bar{a}h$ ---.

E.g. **kāhati** / karissati, **kāhā** / karissā.

• With Optative endings, the stem *kayirā* is **optionally** used.

* When preceded by a prefix, k of the stem karo is optionally changed into kh.

E.g.
$$sam \sqrt{kar + u} >> sankharo$$

 $sankharo + ti >> sankharoti$

√ **kus** (bhuvādi) - to curse, to use abusive language

$$\sqrt{\text{kus} + \text{a}} >> \text{kosa}$$

When followed by the Aorist endings i or \bar{i} , the stem koccha is optionally used.

E.g. akkosi, akkocchi

 $\sqrt{\mathbf{gam}}$ (bhuvādi) - to go, to move

 $\sqrt{\text{gam} + a} >> \text{gaccha, game (Present, Future & Conditional tenses, Imperative & Optative moods)}$

jagāma (Past Perfect tense)

gaccha, gama, gā, gaṭca (Past Imperfect & Aorist tenses)

ghamma (optionally in all tenses and moods)

 $\sqrt{\operatorname{gan}}$ (curādi) - to count, to enumerate $\sqrt{\operatorname{ghat}}$ (curādi) - to beat, to combine, to attempt

No vuddhi process for these roots. E.g. gaņe, gaṇaya / ghaṭe, ghaṭaya

 $\sqrt{\mathbf{gah}}$ (kiyādi) - to take, to receive

 $\sqrt{gah + n\bar{a}} >> ganh\bar{a}$ (general), gheppa (optional)

 $\sqrt{\mathbf{ci}}$ (bhūvādi) - to collect, to gather

When preceded by the prefix ni with the sense changed into "to decide", c of the root is changed into ch. E.g. ni $\sqrt{ci + a} >>$ nicchayati

 $\sqrt{\text{chid}}$ (rudhādi) - to cut, to sever

* Future and Unreal Conditional endings are directly added to the root optionally, which results in the following change.

 $\sqrt{\text{chid} + \text{ss...}} >> \text{ched} + \text{ss...} >> \text{checch...}$ E.g. **acchecchā** / acchindissā

 $\sqrt{\mathbf{jan}}$ (divādi) - to arise, to appear, to come into existence

$$\sqrt{\text{jan} + \text{ya}} \gg \text{j}\bar{\text{a}}\text{ya}$$

 $\sqrt{\text{jar}}$ (bhūvādi) - to decay, to become old in age

$$\sqrt{\text{jar} + \text{a}} \gg \text{jīra}, \text{jīya}, \text{jiyya}$$

 $\sqrt{\mathbf{ji}}$ (bhūvādi) - to win, to conquer, to be victorious

Present tense, Imperative and Optative moods >> jaya, je ($\sqrt{ji + a} >> jaya, je$)

Past Perfect Tense >> jigāya

Past Imperfect Tense >> jaya

Future & Unreal Conditional Tenses >> jaya, je

 $\sqrt{\tilde{n}}$ **a** (kiyādi) - to know, to be aware of

$$\sqrt{\,n\bar{a} + n\bar{a}\,} >> j\bar{a}n\bar{a}$$

 $j\bar{a}n\bar{a} + ti >> j\bar{a}n\bar{a}ti$, $n\bar{a}yati$

jānā +
$$eyya >>$$
jāneyya, **jāniyā, jaññā**

*Aorist or Future endings are optionally added to the root directly.

$$\sqrt{\tilde{n}a} + ssati >> \tilde{n}assati [j\bar{a}nissati - regular form]$$

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*In passive / absolute voices, the initial ssa of Future or Unreal Conditional endings are optionally changed into hi.
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pa√ ñā + ya + ssati >> **paññāyihiti**, paññāyissati (regular form)

 $\sqrt{\mathbf{th}}$ (bhūvādi) - to stand, to be placed

 $\sqrt{\frac{1}{100}}$ that + a >> tittha (generally when followed by a verbal ending, ant or mana)

 $prefix + \sqrt{th\bar{a} + a} >> prefix + thaha (optionally)$

 $sam + \sqrt{tha} + a >> samthaha / santittha$

 $\sqrt{\text{dah (bhūvādi)}}$ - to set on fire, to be burned

 $\sqrt{dah + a} >> daha / daha$

 $[\bar{a} \sqrt{dah + ana} >> \bar{a} | ahana, pari \sqrt{dah + a} >> pari | \bar{a} ha (vuddhi process)]$

√ dā

Present Tense, Imperative and Optative moods >> dadā, dajja, de ($\sqrt{d\bar{a}} + a >>$ dadā, dajja, de)

Past Perfect Tense >> dada

Past Imperfect Tense >> dadā, dajja

Aorist, Future and Unreal Conditional Tenses >> dadā, dajja, dā

*Note---- The stem *da* takes **only** irregular forms **dammi** and **damma**, for respective endings *mi* and *ma* **only**, in Present Tense and Imperative Mood.

* Some irregular forms for $d\bar{a}$ in Aorist Tense with parassapada suffixes

2nd per. (Sing.) dāsi, adāsi (*si*), dāsittha, adāsittha (*ttha*), dāsittho, adāsittho (*ttho*), **ado** (Plu.) dāsittha, adāsittha (*ttha*), **adittha**

1st per. (Plu.) dāsimha, adāsimha (*mha*), dāsimhā, adāsimhā (*mhā*), **adamha, adamhā**

*With the prefix \bar{a} (the sense also changes to "to get"), the stem $d\bar{a}$ would become $\bar{a}diya$. √dis (bhūvādi) - to point out, to point to, to indicate $\sqrt{\text{dis} + a} >> \text{disa} / \text{diccha}$ (when followed by verbal endings, ant or māna) $\sqrt{\text{dis}}$ (bhūvādi) - to see, to look at $\sqrt{dis} + a >>$ passa / dassa / dakkha (passati, dassati, dakkhati, etc.) disa + a / $\bar{a} >>$ addasa, addasā (Aorist, 3rd pers. sing. Att.) (or) disa: $da + \bar{a} / am >> add\bar{a}$, addam (Aorist, 3rd & 1st pers. sing. Att.) (or) **da**: When Future & Unreal Conditional endings follow the stem dakkha, they optionally lose the initial ssa. E.g. dakkhati / dakkhissati $[\sqrt{dis + tum / ta / tabba}]$ datthum, dattha, datthabba √ nī Present Tense, Imperative and Optative moods >> ne, naya ($\sqrt{n\bar{1}} + a >>$ ne, naya) Past Perfect Tense nināya Past Imperfect Tense >> naya Aorist, Future and Unreal Conditional Tenses >> ne, naya $\sqrt{\mathbf{p}}$ (bhūvādi) - to drink $\sqrt{p\bar{a} + a} >> piva$, $p\bar{a}$ (when followed by all tenses & moods, ant or $m\bar{a}na$) $\sqrt{\mathbf{bhid}}$ - (rudhādi) to break, to smash $\sqrt{\text{bhid} + \text{ss...}} >> \text{bhed} + \text{ss...} >> \text{becch...}$ (optionally when followed by Future &

Unreal Conditional endings)

E.g. bhecchati / bhindissati

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\sqrt{\mathbf{bhuj}} (rudhadi) - to eat, to consume
    \sqrt{\text{bhuj} + \text{ss ...}} >> \text{bhoj} + \text{ss ...} >> \text{bhokkh ...} (optionally when followed by Future &
                                                                           Unreal Conditional endings)
   E.g. bhokkhati / bhutjissati
\sqrt{\text{mar}} (bhūvādi) - to die, to be dead
    \sqrt{\text{mar} + a} >> m\bar{t}ya (optionally when followed by all endings, ant & māna)
     E.g. mīyati / marati
\sqrt{\mathbf{m}} (kiyādi) - to measure
     \sqrt{m\bar{a} + n\bar{a}} >> min\bar{a} (for all endings)
\sqrt{\text{muc}} (rudhādi) - to set free, to release
   \sqrt{\text{muc} + \text{ss ...}} >> \text{moc} + \text{ss ...} >> \text{mokkh ...} (optionally when followed by Future &
                                                                           Unreal Conditional endings)
      E.g. mokkhati / muñcissati
\sqrt{\text{yam}} (bhūvādi) - to abstain, to avoid
    \sqrt{\text{yam} + \text{a}} >> \text{yaccha (optionally when followed by all endings, } ant \text{ or } m\bar{a}na)
      E.g. yacchati / yamati
\sqrt{\text{rud}} (bhūvādi) - to weep, to cry
    \sqrt{\text{rud} + \text{ss ...}} >> \text{rucch ...} (optionally when followed by Future & Unreal Conditional
endings)
      E.g. rucchati / rodissati
\sqrt{\text{ruh (bhūvādi)}} - to be, to come into existence
    \sqrt{\text{ruh} + a} >> ruccha (optionally when followed by the Aorist endings i or i)
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E.g. **abhirucchi**, abhiruhi

 $\sqrt{\text{labh (bhūvādi)}}$ - to get, to obtain

1. $\sqrt{\text{labh} + \text{ss ...}} >> \text{lacch ...}$ (optionally when followed by Future or Unreal Conditional endings)

E.g. lacchati / labhissati, alacchā / alabhissā

2. Irregular forms for Aorist, 3rd per. sing. parassapada - alattha

Aorist, 1st per. sing. parassapada - alattham

√ vac (bhūvādi) - to say, to speak, to tell

1. The radial vowel a is always changed into o when followed by an Aorist ending.

E.g. $\sqrt{\text{vac} + \text{a (conjugational sign)}} + \text{a (Aorist, } 3^{\text{rd}} \text{ per. sing. Attanopada ending)} >> \text{avoca}$

 $2. \sqrt{\text{vac} + \text{ss ...}} >> \text{vakkh ...}$ (optionally when followed by Future or Unreal Conditional endings)

E.g. vakkhati / vacissati avakkhā / avacissā

3. $\sqrt{\text{vac} + \text{ya}}$ (Passive / Absolute sign) >> **vucca / ucca**

 $\sqrt{\text{vad (bhūvādi)}}$ - to say, to speak, to tell

 $\sqrt{\text{vad} + \text{a}} >> \text{vajja}$ (optionally when followed by all endings, ant or māna)

 $\sqrt{\text{vas}}$ (bhūvādi) - to stay, to live, to dwell

 $\sqrt{\text{vas} + \text{ss ...}} >> \text{vacch ...}$ (optionally when followed by Future or Unreal Conditional endings)

E.g. vacchati / vasissati

√ vis (bhūvādi) - to enter, to go into

√ vis + ss ... >> ves + ss ... >> vekkh ... (optionally when followed by Future or Unreal

Conditional endings)

E.g. vekkhati / visissati vekkhā / visissā

√ sak (tanādi / svādi) - to be able, to be competent

√ sak + u / no >> **sakko, sakkuno**

 $\sqrt{\mathbf{sak}}$ (kiyādi) - to be able, to be competent

- $1. \sqrt{\mathrm{sak} + \mathrm{n}\bar{\mathrm{a}}} >> \mathrm{sakkun}\bar{\mathrm{a}}$
- 2. The special stem *sakkha* is compulsorily used when followed by an Aorist ending. E.g. **asakkhi** (with the Aorist ending *i*)
- 3. The special stem *sakkha* is optionally used when followed by Future or Unreal

Conditional endings. (Or) these endings are directly added to the root.

E.g. sakkhissati / sakkuṇissati sakkhissā / sakkunissā

(or) $\sqrt{sak + ss}$... >> sakkh ... E.g. sakkhati / sakkhā

√ sad (bhūvādi) - to sit

 $\sqrt{\text{sad} + \text{a}} >> \text{s}\bar{\text{d}}\text{a} \text{ (generally)}$

 $\sqrt{\mathbf{su}}$ (tanādi / svādi) - to hear, to listen to

 $\sqrt{\sin + n\bar{a}/nu} >> \sin\bar{a}/\sin\cos$ (generally)

 $\sqrt{\text{su} + \text{x}}$ >> so (optionally when followed by Aorist, Future or Unreal Conditional

endings)

E.g. assosi / asuņi

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\sqrt{\sqrt{\text{han} + \text{ss ...}}} >> \text{haṃ} + \text{ss ...} >> \text{haṃch...} / \text{haṃkh ...} >> \text{hañch ...} / \text{haṅkh ...}
                           (optionally when followed by Future or Unreal Conditional endings)
       E.g. hañchāmi / haṅkhāmi / hanissāmi
\sqrt{\text{har}(\text{bhūvādi})} - to carry, to bring
       \sqrt{\text{har} + \text{a}} >> \text{hara (generally)}, \mathbf{h}\bar{\mathbf{a}} (optionally when followed by Past Imperfect or
                                                                                   Aorist endings)
   E.g. ahā / ahara >> ahāsi / ahari
\sqrt{\mathbf{h}}ā (bhūvādi, divādi) - to discard, to remove
       \sqrt{h\bar{a} + a} >> jahā, \sqrt{h\bar{a} + ya} >> hāya (generally)
       \sqrt{h\bar{a} + ss ...} >> h\bar{a}h... (optionally when followed by Future or Unreal Conditional
                                                                                                     endings)
       E.g. jahissati / hāyissati / hāhati
\sqrt{\mathbf{h}\mathbf{\bar{u}}} (bhūvādi) - to be, to exist
    Present Tense, Imperative and Optative Moods >> ho (\sqrt{h\bar{u} + a} >> ho)
    Past Perfect tense.
                                                               >> x
                                                               >> huva
   Past Imperfect tense
 *Aorist tense
                                                               >> ho (with a few irregular forms)
Parassapada
3<sup>rd</sup> person
                hosi, ahosi, hosittho, ahosittho,
                                                                  hosimsu, ahosimsu, hesum,
                                                                                            ahesum
                            ahu
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 $\sqrt{\text{han (bhūvādi)}}$ - to kill, to hit, to strike

1stperson hosim, ahosim, ahosim, ahosimha, ahosimha, ahosimha

*Future Tense

Only the special stems he, heha, hoha are used.

Parassapada

	singular	plural
3 rd person	hessati, hehissati, hohissati	hessanti, hehissanti, hohissanti
	hehiti, hohiti	hehinti, hohinti
2 nd person	hessasi, hehissasi, hohissasi	hessatha, hehissatha, hohissatha
	hehisi, hohisi	hehitha, hohitha
1 st person	hessāmi, hehissāmi, hohissāmi	hessāma, hehissāma, hohissāma
	hehāmi, hohāmi	hehāma, hohāma
Attanopada		
3 rd person	hessate, hehissate, hohissate	hessante, hehissante,
		hohissante
	hehite, hohite	hehinte, hohinte, hessare,
		hehissare, hohissare,
		hehire, hohire
2 nd person	hessase, hehissase, hohissase	hessavhe, hehissavhe, hohissavhe
	hehise, hohise	hehivhe, hohivhe
1 st person	hessam, hehissam, hohissam	hessāmhe, hehissāmhe,
		hohissāmhe

*Unreal Conditional Tense

Only the stem hava ($\sqrt{hu + a} >> hava$) is used with regular rules.

Exercises

- 1. To write notes, e.g., on the usage of various tenses and moods.
- 2. To give various verbal stems to be conjugated in various tenses and moods:

 $\mathbf{E.g.}$ a. labha b. $dad\bar{a}$ c. $k\bar{a}re$ d. karo e. $d\bar{a}$ f. je.

3. To analyze an unseen verb form into its components and find out its **paradigmatic** form, i.e., 3rdper. sing. *parassapada*. Present Tense form (conjugated verbs given in dictionaries are usually of this form). Then use a dictionary to find its sense (i.e. that of the paradigmatic form) and the sense of the given verb.

E.g. atāsāpīyittha

1. atāsāpīyi + ttha (Past Perfect Par.2nd per.plu, Att.3rd per.sing

Past Imperfect Par.3rdper.sing & 2nd per.plu, Att. 3rdper.sing

2. a (a-augment) + tāsāpīyi + ttha

(Past Perfect **not possible** with **a-augment**

Past Imperfect Par. 3rdper.sing & 2nd per.plu, Att. 3rdper.sing

3. $a + t\bar{a}s\bar{a}p\bar{t}y - + i$ (**I - insertion**) + ttha

(Past Imperfect **not possible** with **I-insertion**

(Aorist *Par.* 2nd per.sing & plu., *Att.* 3rdper.sing)

4. $a + t\bar{a}s\bar{a}p\bar{i} + ya$ (passive/ absolute sign) + i + ttha

5. $a + t\bar{a}s\bar{a}p-- + \bar{\iota}$ (**ī- insertion**) + ya + i + ttha

6.
$$a + t\bar{a}s$$
-- / tas -- + $\bar{a}pe$ (causal suffix) + \bar{i} + ya + i + $ttha$

Then the **paradigmatic** form may be one of the following---

taṃsati (Rudhādi)

tassati (Divādi)

tāsuņoti or tasuņoti (**Svādi**)

tāsunāti or tasunāti (Kiyādi)

tāsoti, tāsute or tasoti, tasute(**Tanādi**)

tāseti, tāsayati or taseti, tasayati (Curādi)

From the dictionary, it comes to be known that *tasati* (**Bhūvādi**) is the correct paradigmatic form, and that its sense is "fears, is afraid of".

Therefore, $at\bar{a}s\bar{a}p\bar{\imath}yittha$ is a **Causal Passive** / **Absolute** stem with the verbal ending ttha (Aorist Tense, Par. 2nd per.sing & plu., Att. 3rdper.sing) and it should be translated as "was / were caused to fear, to be afraid of".