

Chapter 2

Sanskrit Verb Morphology

2.1.0 Sanskrit verb-roots: dhātupāṭha (DP)

Sanskrit verb forms are derived, as traditional analysis follows, from verb roots. These verb-roots are called *dhātus*-the meaning-bearing entity. This concept of *dhātu* has a practical use in explaining the language through its analysis without implying that the *dhātus* afford the ultimate explanation. The discovery of *dhātus* is supposed to take place long before Pāṇini compiled his *Dhātupāṭha*-the catalogue of *dhātus*. There are several *dhātupāṭhas* but the one which is compiled by Pāṇini is considered to be the oldest among available *dhātupāṭhas*. The pattern followed in the Pāṇinian *dhātupāṭha* is mostly followed by the latter grammarians.

In Pāṇinian DP., roots are listed alongwith their meanings. These two – root and its meaning- form a sentence, usually known as *dhātusūtra*. Generally only one meaning is assigned to a root and is given in the form of an action noun in the locative case. For example: *bhū sattāyām, edha vṛddhau* etc. Sometimes, however, it is given in the form of a *bahuvrīhi* compound with – artha as the second member, such as *gatyārtha, śabdārtha* etc. The root is, further, accompanied by one or more *anubandhas* or the code letters indicating certain features of the root.

With reference to certain peculiar modifications (*vikaraṇas*) which the roots undergo before the terminations of the two tenses -present and imperfect- and the two moods -imperative and potential- Sanskrit verbs are divided into ten classes (*gaṇas*) called conjugations. Each class or conjugation has been named after the root it begins with. The ten classes with related information are listed in the table produced here:

S. No.	Class (gaṇa)	First root	Vikaraṇa	Characteristic	Number of roots
1	<i>bhvādigāṇa</i>	<i>bhū</i>	<i>śap</i>	<i>a</i>	1035
2	<i>adādigāṇa</i>	<i>ad</i>	<i>luk~śap</i>	-	71
3	<i>juhotyādi</i>	<i>hu</i>	<i>ślu~śap</i>	<i>u</i>	24
4	<i>divādi</i>	<i>div</i>	<i>śyan~śap</i>	<i>a</i>	141
5	<i>svādi</i>	<i>su</i>	<i>śnu~śap</i>	<i>nu</i>	34
6	<i>tudādi</i>	<i>tud</i>	<i>śa</i>	<i>a</i>	155
7	<i>rudhādi</i>	<i>rudh</i>	<i>śnam</i>	<i>na</i>	25
8	<i>tanādi</i>	<i>tan</i>	<i>u</i>	<i>u</i>	10
9	<i>kryādi</i>	<i>krī</i>	<i>śnā</i>	<i>nā</i>	62
10	<i>curādi</i>	<i>cur</i>	<i>ṇic</i>	<i>ya</i>	410

The characteristics (*vikaraṇas*) of the ten classes or conjugations of verbs appear only in the two tenses and the two moods named above. These four are termed as special or conjugational tenses and moods whereas remaining six are called general or non-conjugational.

The list is further arranged into groups that share common accent-patterns, which can be of following types:

- a. the stem may be accented
- b. the stem may be unaccented in the list and again
 - (i) the group classifier vowel may be accented, or
 - (ii) the group classifier vowel may be unaccented, or
 - (iii) the group classifier vowel may have circumflex accent.

Sometimes monosyllabic stems ending in vowels are classified by consonant classifiers if they have a distinctive bunch of functions in terms of morphemic distribution. The arrangement within such a sub-group of lists sharing common accent-patterns is not in any alphabetical order, but quite often stems sharing the same vowel classifier are grouped together, as also phonemically similar items like *kūrd*, *khūrd* A, and *gūrd* A. There is specific functions of each classifier.

Verb roots or stems can also be sub-classified by following classifiers:

- I. non-*i*-augmenting (*aniṭ*), which include**
- a.** unaccented monosyllabic stems (listed in DP)¹
 - b.** other stems under specific environments²
 - (i)** Exclusively middle ending (*ātmanepada*)
 - a.** Unaccented vowel- classified and -Ñ classified³
 - b.** All stems under passive⁴
 - c.** Other stems in specified environments enumerated in⁵
 - (ii)** Middle ending (only if the action is for the subject) otherwise active ending (*parasmaipada*) class
 - a.** Circumflex accented vowel classified and *ñ*-classified stems⁶
 - b.** Other stems in specified environments enumerated in⁷
 - (iii)** Exclusively active ending class
 - a.** By elimination the rest, i.e., the acute accented vowel classified and others⁸
 - b.** Other stems in specified environments enumerated in⁹
- II. *i*-augmenting (*seṭ*)**
- a.** the residue of *i* under non -*i*- augmenting 7.2.10
 - b.** other stems in specified environments enumerated in¹⁰
- These stems can be also classified among (i), (ii) and (iii) as above.
- III. Optionally –*i*- augmenting (*veṭ*)**
- a.** Stems enumerated in¹¹
- These stems can be also classified among (i), (ii) and (iii) as above.

¹ *ekāca upadeśe anudāttāt* 7/2/10

² *Aṣṭādhyāyī*: 7/2/11-26, 7/2/59-65

³ *anudātta nīta ātmanepadam* 1/3/12

⁴ *bhāva-karmanoh* 1/3/13

⁵ *Aṣṭādhyāyī*: 1/3/14-71

⁶ *svarita-ñītaḥ kartrabhiprāye kriyā-phale* 1/3/72

⁷ *Aṣṭādhyāyī*: 1/3/73-77

⁸ *śeṣāt kartari parasmaipadam* 1/3/78

⁹ *Aṣṭādhyāyī*: 1/3/79-93

¹⁰ *Aṣṭādhyāyī*: 7/2/35-36, 7/2/52-54, 7/2/58, 7/2/66-78

¹¹ *Aṣṭādhyāyī*: 7/2/27-34, 7/2/37-51, 7/2/55-57

2.1.1 Lakāras-Tenses and Moods:

Sanskrit has six tenses (*kāla*) and four moods (*artha*) technically termed as ten *lakāras*.

Tenses are as follows:

*laṭ*¹² or *bhavantī vṛtīḥ* (Present - *vartamānaḥ*)

Three kinds of past tenses-

*lañ*¹³ or *hyastanī vṛtīḥ* (Imperfect - *anadyatanabhūtaḥ*)

*liṭ*¹⁴ or *parokśavṛtīḥ* (Perfect - *parokṣabhūtaḥ*)

*luñ*¹⁵ or *adyatanī vṛtīḥ* (Aorist - *bhūtaḥ*)

Two kinds of future tenses-

*luṭ*¹⁶ or *śvantanī vṛtīḥ* (1st Future - *anadyatanabhaviṣyat*)

*lṛṭ*¹⁷ or *bhaviṣyantī vṛtīḥ* (2nd Future - *bhaviṣyat*)

Moods:

*loṭ*¹⁸ (Imperative - *ājñā*)

*vidhiliñ*¹⁹ or *saptamī vṛtīḥ* (Potential - *vidhiḥ*)

*āśīrliñ*²⁰ or *āśīrvṛtīḥ* (Benedictive - *āśīḥ*)

*lṛñ*²¹ or *kriyātipattīḥ* (Conditional - *sanketaḥ*)

Seven of these *lakāra*-s are of common occurrence ; viz. 1. the present, 2. the imperfect (also called the first preterite), 3. the potential (or optative), 4. the imperative, 5. the perfect (also called the second preterite), 6. the first future, 7. the second future. Three are not so commonly used; viz. 8. the aorist (also called the third preterite), 9. the precative (also called the benedictive), 10. the conditional.²²

¹² *vartmāne laṭ* 3/2/123

¹³ *anadyatane lañ* 3/2/111

¹⁴ *parokṣe liṭ* 3/2/115

¹⁵ *luñ* 3/2/110

¹⁶ *anadyatane luṭ* 3/3/15

¹⁷ *lṛṭ* śeṣe ca 3/3/13

¹⁸ *loṭ* ca 3/3/162; *āśīṣi liñloṭau* 3/3/173

¹⁹ *vidhinimantraṇāmantraṇādhiṣṭasampraśnaprārtheṣu liñ* 3/3/161

²⁰ *āśīṣi liñloṭau* 3/3/173

²¹ *liñnimite lṛñ kriyātipattau* (3/1/139); *bhūte* ca (3/3/140)

²² Whitney

There is also an infinitive mood, and several participles. Of these, the present, the three past tenses, and the two futures belong to the indicative mood.

The **imperfect** refers to an event done at some time in recent past, but before the current day. It may denote action past or continuing. The **perfect** refers to an event completely done before the present day at some remote period, unperceived by or out of sight of the narrator. The **aorist** refers to an event done and past at some indefinite period, whether before or during the current day. The *luṭ* or **first future** expresses definite futurity. *lyñ* or **second future** expresses indefinite futurity. The **potential** expresses the sense of commanding, directing, inviting, expression of wish, enquiring, requesting. The **conditional** is occasionally used after the conjunctions *yadi* and *cet*, 'if'. The **precative** or **benedictive** is used in praying and blessing.

2.1.2 Terminations:

The terminations affixed to the verb roots-primitive or derived- to produce verb forms are called *tiñ* terminations. These are a set of 18 terminations, termed as *tiñ* following the pratyāhāra technique of Pāṇini.²³ The terminations are divided into two parts, each consisting of 9 in two different padas: Parasmaipada and Ātmanepada. In each group nine terminations are result of multiplication of three persons to three numbers.²⁴

<u>Parasmaipada</u>			<u>Ātmanepada</u>		
Singular	Dual	Plural	Singular	Dual	Plural
3 rd person - <i>tip</i> ²⁵	<i>tas</i>	<i>jhi</i>	<i>ta</i> ²⁶	<i>ātām</i>	<i>jha</i>
2 nd person - <i>sip</i>	<i>thas</i>	<i>tha</i>	<i>thas</i>	<i>āthām</i>	<i>ḍhvam</i>
1 st person - <i>mip</i>	<i>vas</i>	<i>mas</i>	<i>iṭ</i>	<i>vahiñ</i>	<i>mahiñ</i>

The terminations listed here have certain memorial letters such as *p* in *tip*, *sip* etc. These letters serve special purposes in the declension process. Each of the set of 9 is replaced

²³ *tip-tas-jhi-sip-thas-tha-mip-vas-mas-ta-ātām-jha-thās-āthām-dhvam-iṭ-vahiñ-mahiñ* 3/4/78

²⁴ *tiñastrīṇi trīṇi prathamamadhyamottamāḥ* 1/4/100;
tānyekavacana-dvivacana-bahuvacanānyekaśaḥ 1/4/101

²⁵ *laḥ parasmaipadam* 1/4/98

²⁶ *tañānāvātmanepadam* 1/4/99

with corresponding forms in different lakāras. The terminations thus obtained are again modified so that they can be affixable to the verb roots.

The *parasmaipada* is that inflected word or verb (*pada*) the action of which is addressed to another than the agent (*parasmai*, dative of *parā* ‘another’). *Ātmanepada* is a word or verb the action of which is addressed or reverts to the agent himself (*ātmane*, dative of *ātman*, ‘self’). These might be rendered, therefore, ‘transitive’ and ‘reflective’ verbs, but in a peculiar sense that the action is said to affect either a different agent or the agent himself; it is the result rather than the action, and this is therefore compatible with an intransitive verb. Thus, in ‘*devadattaḥ odanam pacati*’ where the root *pac* (to cook) is conjugated in *parasmaipada*, the sense denoted is ‘Devadatta cooks for his master/ or someone else’; but in ‘*devadattaḥ odanam pacate*’ where the root is in *ātmanepada* it means ‘Devadatta cooks for himself’. In ordinary usage, however, the distinction import is little observed. Some verbs are conjugated in one voice, some in the other, and some in both, without much attention being paid to their signification or relations. Pāṇini formulates some rules for the determination of *ātmanepada*.

The four tables given here lists all the *tiṅ* terminations of *parasmaipada* and *ātmanepada* in ten *lakāra*-s. The column of terminations lists the basic set of *tiṅ* terminations. The column-I lists, separately for each *lakāra*, the terminations which are replacements of basic *tiṅ* suffixes. The terminations listed in column-II are modified terminations which are appended as such to the verb roots.

Table-1(a) The list of terminations for parasmaipada in first five lakāras

Ter mi.	Present (laṭ)		Perfect (lañ)		Potential (vidhiliñ)		Imperative (loṭ)		Imperfect (liṭ)	
	I	II	I	II	I	II	I	II	I	II
तिप्	तिप्	ति	दिप्	त्/द् ²⁷	यात् ²⁸	इत् ²⁹ यात् 2,3,7,5,8,9	तुप् ³⁰	तु	णल् ³¹	अ
तस्	तस्	तः	ताम् ³²	ताम्	याताम्	याताम् इताम्	ताम् ³³	ताम्	अतुस्	अतुः
झि	अन्ति ³⁴	न्ति 1,4,6,10 अन्ति। अति	अन्	न्, 1,4,6,10 अन्, उः	युस् ³⁵	इयुः 1,4,6,10 युः/	अन्तु	न्तु 1,4,6,10 अन्तु/ अतु	उस्	उः
सिप्	सिप्	सि	सिप्	स्	यास्	इः/ याः/	हि ³⁶	- ³⁷ /हि/ धि/ -आन	थल्	इथ ³⁸ / थ
थस्	थस्	थः	तम्	तम्	यातम्	इतम्/ यातम्	तम्	तम्	अथुस्	अथुः
थ	थ	थ	त	त	यात	इत/ यात/	त	त	अ	अ
मिप्	मिप्	मि	अमप्	म्/अम्	याम्	इयम्/ याम्/	आनिप् ³⁹	आनि	णल्	अ
वस्	वस्	वः	व ⁴⁰	व	याव	इव/ याव/	आवप्	आव	व	इव
मस्	मस्	मः	म	म	याम	इम/ याम/	आमप्	आम	म	इम

²⁷ itaśca 3/4/99

²⁸ yāsuḥ parasmaipadeṣūdātto nicca 3/4/103; liñaḥ salopo'nantyaśya 7/2/79

²⁹ ato yeyaḥ 7/2/80; lopo vyorvali 6/1/64

³⁰ eruḥ 3/4/83

³¹ parasmaipadānām ṅalatususthalathusaṅalvamāḥ 3/4/82

³² tas-thas-tha-mipām tān-tan-tāmaḥ 3/4/101

³³ loṭo lañvat 3/4/85

³⁴ jho'ntaḥ 7/1/3

³⁵ jherjus 3/4/108

³⁶ serhyapicca 3/4/87

³⁷ ato heḥ 6/4/105

³⁸ ārdhadhātukasyeḍvalādeḥ 7/3/35

³⁹ merniḥ 3/4/89; āduttamasya picca 3/4/92

⁴⁰ nityam nītaḥ 3/4/99

Table-1(b) The list of terminations for parasmaipada in other five lakāras

Term i.	First Future (luṭ)		Second Future (lṛṭ)		Aorist (luṅ)		Benedictive (āśīrlin)		Conditional(lṛñ)	
	I	II	I	II	I	II	I	II	I	II
तिप्	ता ⁴¹ 42	ता	स्यति ⁴³	स्यति	सीत्	सीत्/ईत्/ अत्, त्	यात् ⁴⁴	यात्	स्यत्	स्यत्
तस्	तारो ⁴⁵	तारो	स्यतस्	स्यतः	स्ताम्	स्ताम्।ताम् इष्टाम्/ अताम्। ताम्	यास्ताम्	यास्ताम्	स्यताम्	स्यताम्
ङि	तारस्	तारः	स्यन्ति	स्यन्ति	सुः	सुस्/ इषुस्/ अन्,उस्	यासुस्	यासुः	स्यन्	स्यन्
सिप्	तासि ⁴⁶	तासि	स्यसि	स्यसि	सीः	सीस्/ ईस्/ अस्,स्	यास्	याः	स्यस्	स्यस्
थस्	तास्थस्	तास्थः	स्यथस्	स्यथः	स्तम्	स्तम्, तम्/ इष्टम्/ अतम्।तम्	यास्तम्	यास्तम्	स्यतम्	स्यतम्
थ	तास्थ	तास्थ	स्यथ	स्यथ	स्त	स्त,त/ इष्ट/ अत,त	यास्त	यास्त	स्यत	स्यत
मिप्	तास्मि	तास्मि	स्यामि	स्यामि	सम्	सम्/ इषम्/ अम्	यासम्	यासम्	स्यम्	स्यम्
वस्	तास्वस्	तास्वः	स्यावस्	स्यावः	स्व	स्व/इष्वा/ आव/व	यास्व	यास्व	स्याव	स्याव
मस्	तास्मस्	तास्मः	स्यामस्	स्यामः	स्म	स्म/इष्म/ आम,म	यास्म	यास्म	स्याम	स्याम

⁴¹ *sya-tāsī lṛ-luṭoḥ* 3/1/33

⁴² *luṭaḥ prathamasya ḍā-rau-rasaḥ* 2/4/85

⁴³ Ibid.

⁴⁴ *liṅaḥ salopo'nantyasya* 7/2/79

⁴⁵ *ri ca* 7/4/51

⁴⁶ *tāsastyorlopaḥ* 7/4/50

Table-2(a) The list of terminations for ātmanepada in first five lakāras

Termi.	Present (laṭ)		Perfect (lañ)		Potential (vidhiliñ)		Imperative (loṭ)		Imperfect (liṭ)	
	I	II	I	II	I	II	I	II	I	II
त	ते ⁴⁷	ते	तन्	त	ईत् ⁴⁸	ईत	ताम् ⁴⁹	ताम्	ए ⁵⁰	ए
आताम्	आते	इते आते	आताम्	इताम् आताम्	ईयाताम्	ईयाताम्	आताम्	इताम् आताम्	आते	आते
झ	अन्ते	अते अन्ते	अन्त	न्त अत	ईरन् ⁵¹	ईरन्	अन्ताम्	अताम् न्ताम्	इरे	इरे
थास्	से ⁵²	से	थास्	थाः	ईथास्	ईथाः	स्व ⁵³	स्व	से	इषे
आथाम्	आथे	इथे/ आथे	आथाम्	इथाम् आथाम्	ईयाथाम्	ईयाथाम्	आथाम्	इथाम् आथाम्	आथे	आथे
ध्वम्	ध्वे	ध्वे	ध्वम्	ध्वम्	ईध्वम्	ईध्वम्	ध्वम्	ध्वम्	ध्वे (द्वे ⁵⁴)	इध्वे(इद्वे)
इट्	ए	इ/ ए	इ	इ	ईय ⁵⁵	ईय	ऐप् ⁵⁶	ऐ	ए	ए
वहिङ्	वहे	वहे	वहि	वहि	ईवहि	ईवहि	आवहैप्	आवहै	वहे	इवहे
महिङ्	महे	महे	महि	महि	ईमहि	ईमहि	आमहैप्	आमहै	महे	इमहे

⁴⁷ ṛita ātmanepadānām ṛere 3/4/79

⁴⁸ linaḥ sīyūṣ 3/4/102

⁴⁹ āmetaḥ 3/4/90

⁵⁰ liḥastajhayorośireca 3/4/81

⁵¹ jhasya ran 3/4/105

⁵² thāsaḥ se 3/4/80

⁵³ savābhyām vā'mau 3/4/91

⁵⁴ iṇaḥ śīdhvamliñliṭām dho'ngāt 8/3/78

⁵⁵ iṭo't 3/4/106

⁵⁶ eta ai 3/4/93

Table-2(b) The list of terminations for Ātmanepada in other five lakāras

Terminations	First Future (luṭ)		Second Future (lr̥)		Aorist (luṅ)		Benedictive (āśīrlīṅ)		Conditional (lr̥ṅ)	
	I	II	I	II	I	II	I	II	I	II
त	ता	ता	स्यते	स्यते	स्त	स्त	सीष्ट ⁵⁷	सीष्ट इष्ट अत	स्यत	स्यत
आताम्	तारौ	तारौ	स्येते	स्येते	साताम्	साताम्	सीया- स्ताम्	सीयास्ताम् इषाताम् एताम्/ आताम्	स्येताम्	स्येताम्
झ	तारस्	तारः	स्यन्ते	स्यन्ते	सत	सत	सीरन्	सीरन् इषत ⁵⁸ अन्त/अत	स्यन्त	स्यन्त
थास्	तासे	तासे	स्यसे	स्यसे	स्थास्	स्थाः/ थाः	सीष्ठास्	सीष्ठाः इष्ठाः अथाः	स्यथास्	स्यथाः
आथाम्	तासाथे	तासाथे	स्येथे	स्येथे	साथाम्	साथाम्	सीया- स्थाम्	सीयास्थाम् इषाथाम् एथाम्/ आथाम्	स्येथाम्	स्येथाम्
ध्वम्	ताध्वे ⁵⁹	ताध्वे	स्यध्वे	स्यध्वे	ध्वम् (द्वं ⁶⁰)	ध्वम् (द्वं)	सीध्वम्	सीध्वम् इध्वम् अध्वम्	स्यध्वम्	स्यध्वम्
इट्	ताहे ⁶¹	ताहे	स्ये	स्ये	सि	सि	सीय	सीय इषि ए/इ	स्ये	स्ये
वहिङ्	तास्वहे	तास्वहे	स्यावहे	स्यावहे	स्वहि	स्वहि	सीवहि	सीवहि इष्वहि आवहि	स्यावहि	स्यावहि
महिङ्	तास्महे	तास्महे	स्यामहे	स्यामहे	स्महि	स्महि	सीमहि	सीमहि इष्महि आमहि	स्यामहि	स्यामहि

⁵⁷ *suṭ tithoḥ 3/4/107*

⁵⁸ *ātmanepadesvanataḥ 7/1/5*

⁵⁹ *dhi ca 8/2/25*

⁶⁰ *iṅaḥ śīdhvam̐luṅliṅām dho'ngāt 8/3/78*

⁶¹ *ha eti 7/4/52*

These terminations are supposed to be applicable to all verbs, whether primitive or derivative: and as in noun, so in verbs, the theory of Indian grammarians is, that before these terminations can be affixed to roots, an inflective base must be formed out of the root. Ten different rules, therefore, are propounded for forming verbal bases out of roots in the first four tenses; while all verbs are arranged under ten classes, according to the form of the base required by one or other of these rules. In the other tenses there is one general rule for forming the base, applicable to all verbs of whatever class.

2.1.3 Passive forms:

In Sanskrit, the passive form varies entirely in the conjugational tenses from that of the active verb (unless that verb belong to the 4th conjugation), while the terminations may sometimes be the same, as those of *ātmanepada*. It is rather a distinct derivative from a root, formed on one invariable principle, without any necessary community with the conjugational structure of the active verb. Thus, the root *dviṣ* (to hate) of the 2nd class makes *dveṣṭi* or *dviṣṭe* (he hates); another root *bhid* (to divide) of the 7th class makes *bhinatti* or *bhinte* (he divides); but the passive forms of both the roots is formed according to one invariable rule, by the simple insertion of *ya*, without reference to the conjugational form of the active, i.e. *dviṣyate* (he is hated) and *bhidiate* (he is divided) respectively.

In fact, though it is a distinct form of the root, a passive verb is really nothing but a verb conjugated according to the rule for the 4th class restricted to the *ātmanepada*. To say that every root may take a passive form is to say that roots of the 1st, 2nd, 3rd, 5th, 6th, 7th, 8th, 9th and 10th classes may all belong to the 4th, when they yield a passive sense: so that if a root be already of the 4th class, its passive form is frequently identical in form with its own *ātmanepada*. The only difference is that the accent in the former is on the syllable *ya* while in the *ātmanepada* of the primitive root, it is on the radical syllable.

2.1.4 Causal Verbs

Any root in every one of the ten classes may take a causal form, which is conjugated as a verb of 10th class in all the tenses and moods of the three voices. Causal forms are created by adding the suffix *ṇic* to the roots, thus being called *ṇijanta* (ending in *ṇic* suffix). Causal forms are primarily employed to give a causal sense to a primitive verb, i.e. the sense that a person or thing causes another person or thing to perform the action or to undergo the state denoted by the root. In some cases, causal form also supplies an active sense to a neuter verb. For example, *paṭhati* '(he) reads' becomes *pāṭhayati* '(he) causes to read' or '(he) teaches', and the neuter verb *kṣubhayati* 'he shakes,' 'is shaken' (from *kṣubh*) becomes *kṣobhayati* 'he shakes' (actively). Sometimes, causal forms denote other analogous senses. For example, *hārayati*, 'he allows to take', *nāśayati*, 'he suffers to perish;', *kṣamayati*, 'he asks to be forgiven'.

The terminations added to the verbal base of the causal forms are same as those of the primitive verbs. The root, however, undergoes certain changes before terminations are added to it. The suffix *ṇic* converts to *aya* that is added to every root in order to create a causal form.

2.1.5 Desideratives

A root in any of the ten classes may take a desiderative form. Some primitive roots also take desiderative form, though they not give the sense of desiderative. For ex. *jugups* (to blame) from *gup*, *cikits* 'to cure' from *kit*. A desiderative form yields the sense that a person or thing wishes to perform the action or is about to undergo the state indicated by the desiderative form. For ex. *bodhati* (from *budh*, to know) he knows, '*bubodhiṣati*' he wishes to know.

To derive a desiderative base, the root is first reduplicated according to the general rules of reduplication. Then, termination *s* is added on to it in the non-conjugational tenses and moods. In conjugational *lakāras*, *a* is added to *s*.

The desiderative verb-base takes the same terminations of *parasmaipada* or *ātmanepada* or both as the primitive root does.

2.1.6 Frequentatives

Roots that contain single vowel and start with a consonant,⁶² can adopt frequentative forms. The frequentative implies repetition or heightens the idea contained in the root. It, however, is of two kinds: the first one is a reduplicated *Ātmanepada* verb, with *ya-*affixed, confirming, like neuter and passive verbs, to the conjugation of the 4th class, and usually yielding a neuter signification. The other one is a reduplicated *parasmaipada* verb, following the conjugation of third class of the verbs. The terminations for the former will be those of *Ātmanepada* and for the latter, they will be the regular *parasmaipada* terminations.

2.1.7 Rules for formation of verbal bases in general:

1st Class (*bhvādigāṇa*)

The vowel of the root is replaced with its *guṇa* vowel (unless it be *a*, or a long vowel not final, or a short vowel followed by a double consonant) before every termination of the four tenses, and affix *a* is added to the root thus gunated. This vowel *a* is lengthened into *ā* before the initial *m* and *v* of a termination, but not when *m* is final, as in the 1st sing imperfect *parasmaipada*.

2nd Class (*adādigāṇa*)

The vowel of the root is gunated (if it is, as above, capable of *guṇa*) before those terminations only which are marked with *parasmai*. Before all other terminations, the original vowels of the root are retained.

⁶² *dhātorekāco halādeḥ kriyāsamabhihāre yañ 3/1/22*

3rd Class (juhotyādigaṇa)

The initial consonant and vowel is reduplicated, and the radical is gunated and not the reduplicated vowel before the *parasmai* terminations only, as in the 2nd conjugation.

4th Class (divādigaṇa)

ya—lengthened to *yā* is affixed before initial *m*⁶³ and *v*-- to the root, the vowel of which is generally left unchanged.

5th Class (svādigaṇa)

nu is affixed to the root, and *nu* is gunated to *no* before the *parasmaipada* terminations only.

6th Class (tudādigaṇa)

a—which is lengthened to *ā* before initial *m** and *v*—is affixed to the root. It, however, does not change in other environments.

7th Class (rudhādigaṇa)

na is inserted between the vowel and final consonant of the root before the *parasmaipada* terminations, and *n* before the other terminations. The peculiarity of this conjugation is that the conjugational *na* or *n* is inserted into the middle of the root, and not affixed.

8th Class (tanādigaṇa)

u is added to the root, and this *u* is gunated to *o* before the *parasmaipada* terminations only. As all the roots, except one, in this class, end in *n*, the 8th conjugation appears similar to the 5th.

9th Class (kryādigaṇa)

nā is affixed to the root before the *parasmaipada* terminations; *nī* before all the others, except those beginning with vowels, where only *n* is affixed.

⁶³ but not before initial *m* of the termination of the 1st sing. Imperfect perfect.

10th Class (curādigaṇa)

The radical vowel (if capable of guṇa) is substituted with its guṇa throughout all the persons of all the tenses. *aya*—lengthened to *ayā* is affixed before initial *m* and *v*—to the root thus guṇated.

An examination of the above listed rules shows that the object of all of them, except the 2nd, 3rd and 7th classes, is to insert a vowel, either alone or preceded by *y* or *n*, between the modified root and the terminations; and that the 1st, 4th, 6th and 10th, agree in requiring that the vowel, which is immediately to precede the terminations, shall be *a* or *ā*. It will appear, moreover, that the 2nd, 3rd and 7th, alone agree in not interposing a vowel between the final of the root and the terminations; and that the 5th, 8th and 9th classes agree in interposing either *u*, *ā* or *ī*, after the letter *n*. However, the conjugational characteristic has reference only to the four conjugational tenses (except only in the tenth conjugation), and that in the other tenses the base is formed according to one general rule for all verbs of whatever class; or, in other words, that in these tenses all verbs, of whatever class, are as if they belonged to one common conjugation.

2.2 The roots of first class-*bhvādigāṇa*:

The 1st class of verb roots which is also called *bhvādigāṇa*, includes more than half of the total roots of *dhātupāṭha*. Roots of this class commonly adopt *a* as characteristic. This *a* is remaining of characteristic *śap*. The initial and ending vowels are deleted. This characteristic, however, is only applied in the conjugational tenses and moods before the terminations are added, and not in all tenses and moods.

The ending vowel of roots short or long and the penultimate vowel substitute their guṇa before the characteristic *a* of this conjugation. Thus *i/ī* becomes *e*; *u/ū* replaced by *o*; *r/ṛ* change to *ar*; *l* to *al*.

2.2.1 Rules to form verb forms (of *bhvādigāṇa*) in ten *lakāras*:

This section describes general rules to form verbal bases from verb roots in Sanskrit in all the tenses. The description, though takes into account verb roots all the 10 classes (*gaṇas*), focuses on the roots of 1st classes for the sake of this dissertation.

The present tense (laṭ):

The final *a* of the base (*aṅga*) is lengthened before any conjugational termination beginning with a semi-vowel, nasal, or the letter *h*, *jh*, *bh*.

When the final *a* of a base is followed by *a*, *e* or *o*, the latter vowel is substituted for both.

When *i-u-r-ḷ* (short/long) follow *a/ā*, the substitute for both is corresponding *guṇa* letter.

Examples: *bhū* → *bho*; *hṛ* → *har*; *budh* → *bodh*; *nī* → *nay*

Some roots of *bhvādigāṇa* undergo peculiar changes concerning the formation of their bases. Some others take certain substitutes in the conjugational tenses and moods before the conjugational affix is added.

The penultimate vowel of many roots is lengthened.

a → *ā* :- *kram* → *krām*⁶⁴; *klam* → *klām*; *ācam* → *ācām*⁶⁵

i → *ī* :- *ṣṭhiv* → *ṣṭhīv*⁶⁶

u → *ū* :- *guha* → *gūha*⁶⁷

Where the penultimate *r* or *v* of a root is followed by a consonant, the vowels *i-u-r-ḷ* preceding the *r* or *v* are lengthened.⁶⁸

Examples: *hurcch* → *hūrccch*, *murcch* → *mūrccch*

The vowel of *mṛj* takes *ṛddhi*⁶⁹; *kḷp* and *kṛp* becomes *kalp*⁷⁰ and the *s* of *lasj* and *sasj* is changed to *j*.⁷¹

⁶⁴ *kramaḥ parasmaipadeṣu*; hence not in Atmanepada

⁶⁵ *cam* alone does not lengthens its vowel

⁶⁶ *ṣṭhivuklamucamāṁsīti*

⁶⁷ *ūdūpadhāyāgohaḥ*

⁶⁸ *upadhāyāñca* 8/2/78

⁶⁹ *mṛjervṛddhiḥ* 7/2/114, *uraṅraparah* 1/1/51

⁷⁰ *kṛpo ro laḥ* 8/2/18

⁷¹ *stoḥ ścunāścuḥ* 8/4/40; *jhalām jaś jhaśi* 8/4/53

Illustrations: *mṛj* → *mārj*; *klp* → *kalp*; *kṛp* → *kalp*; *lasj* → *lajj*; *sasj* → *sajj*.

vrddhi of *a* is *ā*, *i/ī* is *e*, *u/ū* is *au*, *ṛ/ṝ* is *ār*, *ḷ* is *āl*.

The following roots have *āy* added on to them in the conjugational tenses and moods.

Examples: *gup* → *gopāy*; *dhūp* → *dhūpāy*; *vicch* → *vicchāy*; *paṇ* → *paṇāy*; *pan* → *panāy*.⁷²

The root *kam* lengthens its vowel and has *ay* added on to it before the conjugational sign.

kam → *kāmāy*⁷³

Root *ṛt* has *īy* added on to it before the conjugational sign; *ṛt* → *ṛtīy*⁷⁴

Many roots drop their nasals: *rañj* → *raj*⁷⁵; *dañś* → *daś*; *sañj* → *saj*; *svañj* → *svaj*⁷⁶

jabh adopts a nasal, *jabh* → *jambh*⁷⁷

The following roots take the substitutes before the conjugational sign is applied:

pā → *pib*; *ghrā* → *jighr*; *dhmā* → *dhm*; *sthā* → *tiṣṭh*; *mnā* → *man*; *dā* → *yacch*;

ḍṛś → *paśy*; *ṛ* → *ṛcch*; *sṛ* → *dhāv*; *śad* → *śīy*; *sad* → *sīd*; *gam* → *gacch*; *yam* → *yacch*.⁷⁸

The root *śad*, though parasmai, becomes *ātmanepadi* in conjugational tenses and moods.

The following seven roots, though being desiderative in their forms, are considered as primitive ones. These retain the same base in the conjugational as well as in the non-conjugational tenses and moods.

kit (*cikits*), *badh* (*bībhats*), *dāt* (*dīdāms*), *sān* (*śīsāms*), *mān* (*mīmāms*), *tij* (*titikṣ*), *gup* (*jugups*)

Following roots are declined like the 5th conjugation:

*śru*⁷⁹ (*śṛṇu*); *dhinv* (*dhinu*); *kṛṇv*⁸⁰ (*kṛṇu*)

⁷² *gupūdhūpavicchīpanīpanībhyā āyaḥ* 3/1/28

⁷³ *kamerṇīñ* 3/1/10

⁷⁴ *ṛterīyañ* 3/1/29

⁷⁵ *rañjeśca* 6/4/26

⁷⁶ *dañśasañjasyañjośapi* 6/4/25

⁷⁷ *radhijabhoraci* 7/1/61

⁷⁸ *pāghrādhmāsthāmnādāṇḍṛśyartisartīśadasadāmpibajighradhamatiṣṭhamanayacchapaśyarchadhausītyasīdāḥ* 7/3/78

⁷⁹ *śruvaḥ śṛ ca* 3/1/74

⁸⁰ *dhinvikṛṇvyoraca* 3/1/80; *atolopaḥ* 6/4/48

Some roots add a penultimate nasal necessarily in the conjugational moods and tenses:

Parasmai: *kad* (*kand*); *cad* (*cand*); *bid* (*bind*); *bhid* (*bhind*).

Ātmanepada: *ah* (*amh*); *piḍra* (*piṇḍra*); *śuṭh* (*śuṇṭh*)

The Imperfect Tense (lañ):

The roots are prefixed with augment *a* in this tense.

This *a* is replaced by *ā* if the root begins with a vowel.

When this *a* is followed by *i-u-ṛ* short or long becomes *ai-au-ār* respectively.

In case a root is prefixed with an *upasarga*, the augment *a* or *ā* comes between the *upasarga* and the root, and the sandhi rules have to be applied:

Similar vowels, followed by similar ones, substitute for both the same vowel lengthened.

When a dissimilar vowel follows *i, u, ṛ, l*, short or long, *y, v, r, l* are respectively substituted for them.

The Imperative Mood (loṭ):

Imperative mood also follows the same process. However, in the first person singular of *parasmaipada*, if *n* follows *ṛ-r* or *ṣ* in the same word or follows any vowels, semi-vowels (*l* expected), and letters of the gluttural or labial class with *ṛ-r* or *ṣ* before them, it is changed to *ṇ*. If this *n* is at the end of a grammatical form, as in *aharan*, or is followed by a letter of the dental class, it remains changed.

Potential Mood (vidhiliñ):

No major changes occur in the base formation in this tense. The formation of base is, for the most part, similar to that of present tense.

Perfect Tense (liṭ):

The perfect tense is of two kinds: Reduplicated Perfect and Periphrastic Perfect. Some roots adopt exclusively the former and some the latter. Also, there are other roots which take either of them.

The Reduplicative Perfect: All primitive or monosyllabic roots beginning with *a*, *ā*, or *i*, *u*, *ṛ* or with any consonant and the roots *ṛcch*, and *ūrṇu* take the reduplicative perfect.

The Periphrastic Perfect: All primitive roots of more than one syllable except *ūrṇu*,⁸¹ all roots beginning with long *ī*, *ū*, *ṛ* or prosodically long vowel, *i.e.* a short vowel followed by a conjunct consonant except *ṛcch*,⁸² roots beginning with *e* and *o*, all derived roots such as those of the 10th conjugation, causals, desideratives and others, and the roots *day-ay-kās* and *ās*⁸³ take the periphrastic perfect.

The roots *uṣ*, *vid*, *jāgr*, *bhī*, *hī*, *bhr*, *hu* and *daridrā* admits of both the perfects.⁸⁴

Three terminations *tha*, *va*, *ma* in the parasmaipada, and four *vahe*, *mahe*, *se* and *dhve* in the *ātmanepada* may adopt the augment *i*.

Rules regarding augment *i* in the perfect are as follows:

1. All *seṭ* roots admit *i* necessarily.
2. All *veṭ* roots adopt *i* optionally.
3. *Aniṭ* roots *kṛ-sṛ-bhr-vṛ-stu-dru-sru-ṣru* do not admit *i* in the perfect tense.⁸⁵ Root *vṛ*, however, takes *i* optionally before *tha*. Root *kṛ* with *sam-pari* or *upa* is also an exception.
4. *Aniṭ* roots ending in short *ṛ* admit *i* necessarily before *va-ma* or *vahe-mahe-se* and *dhve* but not before *tha*. Root *ṛ* (1 and 3 conj.) parasmaipada is an exception of this rule.
5. *Aniṭ* roots with a final vowel except short *ṛ* or having an *a* in them take *i* optionally before *tha* and necessarily before *va-ma* or *vahe-mahe-se* and *dhve*.
6. All other *aniṭ* roots take *i* necessarily in the perfect.

When the 2nd person plural terminations *ṣīdhvam*, *dhvam* and *dhve* of the benedictive, aorist and perfect follow a vowel except *a* or *ā* or follow *y-v-r-l* or *h*, the *dh* is changed to

⁸¹ *ūrṇoterām netivācyam*

⁸² *ijādergurumato'ṛcchaḥ 3/1/36*

⁸³ *dayāyāśaśca 3/1/37*

⁸⁴ *uṣavidajāgrbhyo'nyatarasyām 3/1/53; bhī-hrībhṛhuvāmīślūvacca 3/1/39*

⁸⁵ *kṛsṛbhrvṛstudrusruśruvolīṭi 7/2/13*

dh necessarily in the absence of the intermediate *i* is preceded by any vowel except *a* or *ā* or the consonants *y-v-r-l* or *h*.

The root is reduplicated according to the following rules of reduplication.⁸⁶

Rules of Reduplication:

Roots consisting of one vowel reduplicate, i.e. repeat or double the initial vowel, if any, or the initial consonant together with the following vowel.⁸⁷ Thus *ikh* becomes *īkh* and *puṣ* becomes *pupuṣ*.

In the case of roots consisting of two or more vowels the consonant following the initial vowel is reduplicated instead of the initial vowel.⁸⁸

Roots with an initial vowel and *n, d, r* as the first member of a conjunct consonant following it, reduplicate the second member of a conjunct consonant.⁸⁹ Thus *ūrṇu* becomes *ūrṇunu*, *n* being repeated instead of *r*.

Roots with an initial conjunct consonant reduplicate the first member of it only with *rh* following vowel.⁹⁰ Thus *druh* become *dudruh*.

Roots with an initial conjunct, the first member of which is a sibilant and the second a hard consonant, reduplicate the second member with the following vowel.⁹¹ Thus *spardh* becomes *paspardh*. The syllable so reduplicated or repeated is called the *reduplicative syllable*.⁹² Thus the first *i* in *īkh*, *pu* in *pupuṣ*, and *du* in *dudruh* is the reduplicative syllable.

In the reduplicative syllable, a radical hard or soft aspirate i.e. the second or fourth letter of a class is replaced by its corresponding hard or soft unaspirate, i.e. the first or third

⁸⁶ *liṭidhātoranabhyāsasya* 6/1/8

⁸⁷ *ekācodve prathamasya* 6/1/1

⁸⁸ *ajāderdvitīyasya* 6/1/2

⁸⁹ *nandrāḥ saṁyogādayaḥ* 6/1/3

⁹⁰ *halādih śeṣaḥ* 7/4/60

⁹¹ *śarpūrvāḥ khayāḥ* 7/4/6

⁹² *pūrho'bhyaśaḥ* 6/2/4

letter of the class.⁹³ Thus *sphuṭ* becomes *phusphuṭ* and then *pusphuṭ*; *dhinv*, *phaṇ-bhaj* becomes *didhinv*, *paphaṇ* and *babhaj*.

A reduplicative long vowel becomes short, and *r* is replaced by *a*.

bādh → *bābādh* → *babādh*; *bhāṣ* → *babhāṣ*; *bhṛ* → *bhṛ-bhṛ* → *babhṛ*

The parasmaipada singulars are strong; all other terminations are weak.

The penultimate short of roots take *guṇa* before the strong terminations and the final vowel and penultimate *a* take *vṛddhi* necessarily before the *a* of the third person singular and optionally before the *a* of the first person singular parasmaipada. Before the *tha* of the 2nd person singular parasmai, the final vowel of the root takes *guṇa* and penultimate *a* remains the same.

Irregularities regarding *guṇa* and *vṛddhi*.

1. the vowel of *vid* is not gunated before the affix *ām* which is strong.
2. the *r* of *jāgr* takes *guṇa* before any *sārvadhātuka* or *ārdhadhātuka* affix except *vi*, *ciṇ* (*i*), *ṇal* (*a* 1st and 3rd person singular perfect) or one distinguished by a mute *ṇ*.

The Aorist (luṅ)

The personal terminations in this tense undergo certain peculiarities and it may, therefore, be classified into the Radical Aorist and the Sibilant Aorist. In the Radical Aorist, the terminations are added immediately to the root whereas *s* or *siṣ* or *sa* is prefixed to the terminations in the Sibilant Aorist, before fixing the terminations to the root.

There are seven varieties of terminations in the Aorist. They have been illustrated in the next chapter in detail.

The simple future (lṛṭ)

The final vowel and the penultimate short of roots take *guṇa*.

The ending *s* of a root, when followed by any termination, beginning with *s* and belonging to the non-conjugational tenses and moods, takes *t* as its substitute.

⁹³ *abhyāse carca* 8/4/54

Aniṭ roots, having *r* for their penultimate change it to *ra* optionally before a strong termination beginning with any consonant except a nasal or a semi-vowel. Thus *srj* and *drś* become *sraj* and *draś*.

The intermediate *i* is optionally lengthened in the case of *vr* and roots ending in long \bar{r} before the terminations of the non-conjugational tenses and moods except those of the perfect. It is necessarily lengthened in the case of the root *grah* under the same circumstances.

Aniṭ roots: Aniṭ roots don't take *i*.

Exception:

1. Roots with a final *r* and the roots han admit *i* in the future and conditional.
2. *gam* in the parasmai takes *i* in the future, conditional and desiderative, *gam* (substitute for *i* [2nd parasmai], and *i* with *adhi* 'to remember') does the same in the desiderative.
3. The root *daridrā* drops its \bar{a} .

Seṭ roots: Seṭ roots admit *i*.

Exceptions:

1. The roots *vr̥t*, *vr̥dh* and *śr̥dh*, though ātmanepadi, become optionally parasmaipada in the future, conditional, and desiderative, in which case they do not take *i* before the parasmaipada terminations.

Veṭ roots: Veṭ roots take *i* optionally.

However, roots *syand* and *kḷp* follow exception.

The periphrastic future (luṭ)

Seṭ, *veṭ* and *aniṭ* roots adopt the augment *i* according to the nature of the root.

Exception: The roots *iṣ*, *sah*, *lubh*, *ruṣ* and *riṣ*, though seṭ, take *i* optionally when followed by any non-conjugational termination beginning with *t*.

The final vowel and the penultimate short of roots take their guna substitute before the terminations are applied.

The root *kḷp* is optionally parasmaipada in the two futures, conditional and desiderative, in which case it does not take *i* before the parasmaipada terminations.

The conditional mood (lṛñ)

a is prefixed to the roots. Roots like *vṛt*, *vṛdh*, *śṛdh*, *syand*, *kḷp*, *kṛt*, *cṛt*, *tṛd* etc. follow the same rules that of simple future.

The benedictive mood

The *dh* of *sīdhvam* is to be changed to *dh* if they follow a vowel other than *a* or *ā*; or follow *y*, *v*, *r*, *l*, *h*. The change is necessary in the absence of the intermediate *i* and is optional if intermediate *i* is preceded by any vowel except *a* or *ā*; or *y,v,r,l,h*.

The parasmai terminations are weak except in the case of roots ending in short *ṛ* which is preceded by a conjunct consonant and the roots *jāgr* and *ṛ*.

The ātmanepada terminations are the strong except in the case of *aniṭ* roots and roots ending in *ṛ* short or long when the terminations do not take *i*; viz. the ending *ṛ* vowel (short or long) of roots whether *seṭ*, *veṭ* or *aniṭ* when they admit *i* and the final vowels and the penultimate short of roots of all *seṭ* roots except *gur* (4th Atmane), the penultimate vowel of *veṭ* roots *kḷp* and *grh* when they take *i* and the final of *sū* and *dhū* with or without *i* and the ending *i-ī* and *u* of *aniṭ* roots take *guṇa* in the ātmanepada benedictive.

The parasmai terminations of the benedictive mood begin with *y*. Consequently, *seṭ* roots do not take the augment *i*. Hence all roots whether *seṭ*, *veṭ* or *aniṭ* do not take the augment *i* in the benedictive parasmai.

Roots ending in vowels: Roots ending in *ā-e-ai* and *o* and not preceded by a conjunct consonant retain the final *ā* before the terminations.

Exceptions:

1. Roots ending in *ā*, *e*, *ai* and *o* and preceded by a conjunct consonant change the final *ā* to *e* optionally. The root *daridrā* drops its *ā*.
2. The *ghu* verbs *dā*, *dhā*, *dā*, *do*, *de*, *dhe* and the roots *mā-sthā-gai-pā-hā* and *so* change the ending *ā* to *e* necessarily.

3. The roots *ve-vye-hve* and *vyā* take *samprasāraṇa* and lengthen the vowel in the benedictive and before the *ya* of the passive; viz. *ve* and *hve* substitute *ū* for *ve*, while *jye* and *vyā* substitute *ī* for *ye* and *yā*. The base, therefore, in each case becomes *ū*, *hū*, *vī* and *jī*.
4. The ending *i* and *u* of roots lengthen before the weak terminations of the benedictive parasmai, and the *ya* of the passive, as *cī* and *dhū* from *ci* and *dhu*.

Exception: The root *śvi* takes *samprasāraṇa* and lengthens the vowel in the benedictive, and before the *ya* of the passive, the base becomes *śū*.

Roots ending in *r* change to *ri*. However if the *r* is preceded by a conjunct consonant, it takes *guṇa* before the weak terminations of the benedictive parasmai and the *ya* of the passive; as *kri* from *kr*, and *smar* from *smr*. The roots *jāgr* and *r* (1,3 parasmai) take *guṇa*.

Roots ending in *r̄* change it to *īr* but if *r̄* follows a labial or *v*, it is changed to *ūr* before the weak terminations of the benedictive parasmai, and the *ya* of the passive; as *stīr* and *vūr* from *st̄r̄* and *v̄r̄*.

Roots ending in consonants:

The roots *vac*, *svap*, *yaj*, *vap*, *vah*, *vas*, *vad*, *grah*, *vyadh*, *vaś*, *vyac*, *vraśc*, *pracch*, *bhrasj* take *samprasāraṇa* in the *parasmaipada* only and before the *ya* of the passive. The roots *div*, *siv*, *ṣṭhiv* and *sriv* lengthen their penultimate *i* before the terminations of the benedictive and before the *ya* of the passive.

The roots *jan*, *san* and *khan* optionally substitute *ā* for the final *n* and the root *ūh* when with a preposition shortens its penultimate before the parasmai terminations of the benedictive and the *ya* of the passive.

The *ay* of the 10th conj. and causals and the denominative *y* are dropped in the benedictive parasmaipada but retained in the *ātmanepada*.

The penultimate nasal of the following parasmaipada roots is dropped in the benedictive and before the *ya* of the passive:

añc, vañc, kuñc, luñc, sañj, skand, tump, dañś and *śaṁś, rañj, manth*.

Exception:

1. The root *añc* meaning to worship does not drop its nasal.
2. The penultimate nasal of all *ātmanepada* roots and that of the following parasmaipada ones is invariably retained in the benedictive and before the *ya* of the passive:

tañk and *kāñkṣ, liṅg, laṅgh, daṁh, khañj, guñj, luñṭ, kuñṭh, luñṭh, mañḍ, muñḍ, krand, kland, klind, nind, nand, manth* and *cand, dhinv* etc.

The root *jabh* (1st ātmane) adopts a nasal in the benedictive and in the passive, as *jambhiṣṭya, jambhiṣṭvahi, jambhyate*.

Ātmanepada:

Seṭ roots take *i* necessarily.

Exception: Roots ending in long *r* take *i* optionally in the *ātmanepada* benedictive. This intermediate *i* is not lengthened in the benedictive as in the perfect.

In the case of *Seṭ* roots, final vowels, penultimate short of roots and the ending long *r* of roots, when they take *i*, take their guṇa substitute in the *ātmanepada* benedictive.

When roots ending in long *r* do not take *i*, it is changed to *īr*, and to *ūr* if a labial or *v* precedes.

aniṭ roots do not take *i*.

Exceptions: Roots ending in short *r* preceded by a conjunct consonant admit *i* optionally. Final *i-ī-u* and final *r* preceded by a conjunct consonant when it admits *i* take their guṇa substitute while roots ending *ā-e-ai-o*; roots ending in *r* not preceded by a conjunct consonant and also in *r* preceded by a conjunct consonant but when it does not take *i* remains unchanged. *kr* and *str* are the examples.

veṭ roots take *i* optionally.

All *seṭ* roots ending in long *r* and the root *vr*; all *aniṭ* roots ending in short *r* preceded by a conjunct consonant and the *veṭ* roots *kḷp*, *grh*, *guh*, *svr* take *i* optionally in the *ātmanepada* benedictive.

The roots *sū* and *dhū* take *guṇa* with or without *i*. The roots *vr*, *kḷp*, *grh*, *svr* take *guṇa* when with *i* and remain unchanged when without *i*; while the root *guh* lengthens its vowel instead of taking *guṇa* when it takes *i* and remains unchanged when without *i*.

The rules stated above are illustrated with examples of roots *bhū* (भू) and *edha* (एध) of *bhvādigāṇa*. The former is *parasmaipadi* and the latter is *ātmanepadi*. They may be taken as samples representing the forms of whole class.

भू कर्तृवाच्य active

laṭ	भवति	भवतः	भवन्ति	भवसि	भवथः	भवथ	भवामि	भवावः	भवामः
liṭ	बभूव	बभूवतुः	बभूवुः	बभूविथ	बभूवथुः	बभूव	बभूव	बभूविव	बभूविम
luṭ	भवित्ता	भवितारौ	भवितारः	भवितासि	भवितास्थः	भवितास्थ	भवितास्मि	भवितास्वः	
	भवितास्मः								
lrṭ	भविष्यति	भविष्यतः	भविष्यन्ति	भविष्यसि	भविष्यथः	भविष्यथ	भविष्यामि	भविष्यावः	
	भविष्यामः								
loṭ	भवतु,तात्	भवताम्	भवन्तु	भव,तात्	भवतम्	भवत	भवानि	भवाव	भवाम
lan	अभवत्	अभवताम्	अभवन्	अभवः	अभवतम्	अभवत	अभवम्	अभवाव	अभवाम
Vlin	भवेत्	भवेताम्	भवेयुः	भवेः	भवेतम्	भवेत	भवेयम्	भवेव	भवेम
Alin	भूयात्	भूयास्ताम्	भूयासुः	भूयाः	भूयास्तम्	भूयास्त	भूयासम्	भूयास्व	भूयास्म
luṇ	अभूत्	अभूताम्	अभूवन्	अभूः	अभूतम्	अभूत	अभूवम्	अभूव	अभूम्
lrṇ	अभविष्यत्	अभविष्यताम्	अभविष्यन्	अभविष्यः	अभविष्यतम्	अभविष्यत			
	अभविष्यम्	अभविष्याव	अभविष्याम						

एध कर्तृवाच्य active

laṭ एधते एधेते एधन्ते एधसे एधथे एधध्वे एधे एधावहे एधामहे

liṭ एधाञ्चक्रे एधाञ्चक्राते एधाञ्चक्रिरे एधाञ्चकृषे एधाञ्चक्राथे एधाञ्चकृद्धे
एधाञ्चक्रे एधाञ्चकृवहे एधाञ्चकृमहे

(optional) एधाम्बभूवे एधाम्बभूवाते एधाम्बभूविरे एधाम्बभूविषे एधाम्बभूवाथे

एधाम्बभूविद्धे,ध्वे एधाम्बभूवे एधाम्बभूविवहे एधाम्बभूविमहे

luṭ एधिता एधितारौ एधितारः एधितासे एधितासाथे एधिताध्वे एधिताहे
एधितास्वहे एधितास्महे

lṛṭ एधिष्यते एधिष्येते एधिष्यन्ते एधिष्यसे एधिष्येथे एधिष्यध्वे
एधिष्ये एधिष्यावहे एधिष्यामहे

loṭ एधताम् एधताम् एधन्ताम् एधस्व एधथाम् एधध्वम् एधै एधावहै
एधामहै

lan् एधत ऐधताम् ऐधन्त ऐधथाः ऐधथाम् ऐधध्वम् ऐधे ऐधावहि ऐधामहि

Vlin् एधत एधेयाताम् एधेरन् एधेथाः एधेयाथाम् एधेध्वम् एधेय एधेवहि एधेमहि

Alin् एधिषीष्ट एधिषीयास्ताम् एधिषीरन् एधिषीष्ठाः एधिषीयास्थाम् एधिषीध्वम् एधिषीय
एधिषीवहि एधिषीमहि

luñ् ऐधिष्ट ऐधिषाताम् ऐधिषत ऐधिष्ठाः ऐधिषाथाम् ऐधिद्ध्वम् ऐधिषि ऐधिष्वहि ऐधिष्महि

lṛñ् ऐधिष्यत ऐधिष्येताम् ऐधिष्यन्त ऐधिष्यथाः ऐधिष्येथाम् ऐधिष्यध्वम्
ऐधिष्ये ऐधिष्यावहि ऐधिष्यामहि

2.2 .2 The passive voice and the impersonal constructions:

The passive and the impersonal forms are formed in one and the same manner from all roots of ten classes without any conjugational distinction. They, however, differ in their formation in the conjugational and non-conjugational tenses and moods. The roots also undergo certain peculiar modifications before they take the terminations.

Conjugational tenses and moods:

The passive and the impersonal forms in the four conjugational tenses and moods, whether the root is parasmaipada or ātmanepadi in the active, are formed by adding *ya* to the original root and then applying the ātmanepada terminations,.

This *ya* is weak and no *guṇa* or *vṛddhi* substitute takes place before it. Exceptionally, roots of the 10th conjugation capable of taking *guṇa* or *vṛddhi* substitute in the active voice, do the same in the passive also.

Some roots such as *dā, de, dhā, gai, sthā, pā* change the ending *ā* to *ī* before the *ya* of passive. The ending *ā* of the other roots and the *ā* to be substituted in the case of the roots that end with *e, o* and *ai*, remain unchanged.

Roots ending in short *i* and *u*, in *r* preceded by a simple or conjunct consonant and roots ending in long *ī* take the same changes which they undergo before the parasmai terminations of the benedictive. Roots *r, jāgr* take their *guṇa*.

Roots ending in consonants such as *vac, svap, yaj, vap, vah, vas, vad, grah, vyadh, vaś, vyac, vraśc, pracch, bhrasj; vañc, kuñc, luñc, sañj, skand, tump, dañś, śaṁs, rañj, manth*, etc. take *samprasāraṇa* and drop their nasal before the *ya* of the passive also. Root *khan* optionally substitutes *ā* for its final, *khan* → *khanyate, khāyate*. Of Ātmanepadi roots having a penultimate nasal, *syand, srañs, srambh* and *khanj* drop their nasal before the *ya* of the passive.

Non Conjugational tenses and moods:

The perfect:

The passive of the reduplicated perfect is formed by affixing the ātmanepadi terminations to every root whether it is parasmaipadi or ātmanepadi in the active, as *gam* → *jagme, yaj* → *ije, bhid* → *bibhide, añj* → *ānaje*.

The periphrastic perfect of the passive is formed by affixing *ām* to the root, and then appending the *ātmanepada* forms of three auxiliary verbs *am*, *kṛ* and *bhū* whether the root is *parasmai* or *ātmane*. *kath* → *kathayāñcakre*, *kathayāmbabhūve*, *kathayāmāse*.

The Aorist:

The first and the sixth varieties are exclusively *parasmaipadi*. All the roots belonging to them are *aniṭ* except the roots *bhū* which is *seṭ*. *bhū* takes *ātmanepada* forms of the 5th variety in the passive and impersonal of the aorist, and all the rest takes terminations of 4th variety.

The *ātmanepada* forms of the 2nd and 3rd varieties are not used in the passive and the impersonal of the aorist. Consequently roots belonging to them take the *ātmanepadi* forms of the fourth, fifth or seventh varieties in the passive and the impersonal of the aorist according as they are *seṭ* or *aniṭ*. The passive and impersonal forms of the 4th, 5th and 7th varieties of the aorist are simply formed by appending the *ātmanepada* terminations to the prepared base.

The third person singular of the aorist passive and impersonal of all roots except *tap* is made up by prefixing to the root the augment and adding to it the termination *i* instead of *sta* or *sata*. The root *tap*, in the sense of repenting and in the reciprocal passive too, does not take *i*.

Before the passive *i* of the third person singular of the aorist, the roots take some changes:

The penultimate short of the root takes its *guṇa* before the passive *i*.

Seṭ roots ending in *m* and the roots *vadh* and *jan* do not lengthen the penultimate vowel before the passive *i*.

The passive and impersonal forms of the aorist of roots ending in a vowel, of roots ending in *ay*, and of roots *han*, *grah* and *dṛśare* optionally formed by adding *i* to the root even when it is *aniṭ* except in the third person singular.

The two futures, the conditional and the benedictive:

The passive and the impersonal forms of the two futures, the conditional and the benedictive are formed simply by adding the *ātmane* terminations to the prepared base, whether the root is *parasmai* or *ātmane* in the active. However, the passive and impersonal forms in the same *lakāras* of roots ending in vowels and of roots *grah*, *drś* and *han* may optionally be formed by adding *i* to the root, though it is *aniṭ*.

भू कर्मवाच्य (passive)

laṭ	भूयते	भूयेते	भूयन्ते	भूयसे	भूयेथेभूयध्वे	भूये	भूयावहे	भूयामहे	
liṭ	बभूवे	बभूवाते	बभूविरे	बभूविषे	बभूवाथे	बभूविद्वे,ध्वे	बभूवे	बभूविवहे बभूविमहे	
luṭ	भविता,भाविता	भवितारौ	भवितारः	भवितासे	भवितासाथेभविताध्वे	भविताहे	भवितास्वहे	भवितास्महे	
lrṭ	भविष्यते	भविष्येते	भविष्यन्ते	भविष्यसे	भविष्येथे	भविष्यध्वे	भविष्ये	भविष्यावहे भविष्यामहे	
loṭ	भूयताम्	भूयेताम्	भूयन्ताम्	भूयस्व	भूयेथाम्	भूयध्वम्	भुयै	भूयावहै	भूयामहै
lañ	अभूयत	अभूयेताम्	अभूयन्त	अभूयथाः	अभूयेथाम्	अभूयध्वम्	अभूये	अभूयावहि	अभूयामहि
Vlin	भूयेतभूयेयाताम्	भूयेरन्	भूयेथाः	भूयेयाथाम्	भूयेध्वम्	भूयेयभूयेवहि	भूयेमहि		
Aliñ	भविषीष्ट,भावि	भविषीयास्ताम्	भविषीरन्	भविषीष्ठाः	भविषीयास्थाम्	भविषीध्वम्	भविषीय	भविषीवहि	भविषीमहि
luñ	अभावि	अभाविषाताम्,अभवि	अभाविषत	अभाविष्ठाः	अभाविषाथाम्	अभाविध्वम्	अभाविषि	अबोभूयिष्वहि	अबोभूयिष्महि
lrñ	अभविष्यत	अभविष्येताम्	अभविष्यन्त	अभविष्यथाः	अभविष्येथाम्	अभविष्यध्वम्	अभविष्ये	अभविष्यावहि	अभविष्यामहि

एध कर्मवाच्य (passive)

laṭ	एध्यते	एध्येते	एध्यन्ते	एध्यसे	एध्येथे	एध्यध्वे	एध्ये	एध्यावहे	एध्यामहे
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luṭ एधिता एधितारौ एधितारः एधितासे एधितासाथे एधिताध्वे एधिताहे एधितास्वहे
 एधितास्महे
lṛṭ एधिष्यते एधिष्येते एधिष्यन्ते एधिष्यसे एधिष्येथे एधिष्यध्वे एधिष्ये एधिष्यावहे एधिष्यामहे
loṭ भूयताम् भूयेताम् भूयन्ताम् भूयस्व भूयेथाम् भूयध्वम् भुयै भूयावहै भूयामहै
lan̄ ऐधयत ऐधयेताम् ऐधयन्त ऐधयथाः ऐधयेथाम् ऐधयध्वम् ऐधये ऐधयावहि ऐधयामहि
Vlin̄ एध्येत एध्येयाताम् एध्येरन् भूयेथाः भूयेयाथाम् भूयेध्वम् भूयेयभूयेवहि भूयेमहि
Aliñ एधिषीष्ट, भावि एधिषीयास्ताम् एधिषीरन् एधिषीष्ठाः एधिषीयास्थाम् एधिषीध्वम् एधिषीय
 एधिषीवहि एधिषीमहि
luñ ऐधि ऐधिषाताम् ऐधिषत ऐधिष्ठाः ऐधिषाथाम्
lṛñ ऐधिष्यत ऐधिष्येताम् ऐधिष्यन्त ऐधिष्यथाः ऐधिष्येथाम् ऐधिष्यध्वम् ऐधिष्ये
 ऐधिष्यावहि ऐधिष्यामहि

2.2 .3 Causals:

Roots ending in *ā, e, ai* and *o*; roots *ṛ, knūy, kṣmāy, ji* add on the augment *p* before *aya*.
 The *y* of *knūy* and *kṣmāy* is dropped by the rule that *v* or *y* is dropped before any
 consonant except *y*. The roots *kṣai, śrā* or *śrai* and *jñā* shorten their *ā* necessarily before *p*
 and *glai* and *srā* do it optionally when not preceded by a preposition. The root *smi* is
 regular as *smāyayati*.

The roots *śo, cho, so, hve, vye, ve, sai* and *pā* take the augment *y* instead of *p* before *aya*.
 Root *vai*, when meaning to shake or tremble take the augment *j* before *aya*. The same
 root, however, in the other senses also form their causals regularly.

The final vowels take *vṛddhi* substitute before *aya*, as *kṣāyaya* from *kṣi*.

Exception: *smṛ* in the sense of 'to cause', 'to long for', 'to regret' and the roots *ṛ, hrī, rī*
 take *guṇa* substitute instead of *vṛddhi*.

ā is necessarily substituted for the vowels of *krī*, *i*, *ji*, *mi* *mī* to destroy *dī* and for those of *smi* if the effect is produced by the agent, *sidh* if the import is not a spiritual topic. *ā* is optionally substituted for the vowels of *ci* and *sphur* and for those of *bhī* if the effect is produced by the agent, and *dī* if it means ‘to cause’, and ‘to conceive’.

The penultimate *a* is changed to its *vṛddhi* substitute before *aya*, as *khānaya* from *khan*; *chādaya* from *chad*.

Exception-1: Roots ending in *am* (except *kam*, *am*, *yam*) and the following roots which are marked as *mit* in the *dhātupāṭha* do not change their vowel:-

ak, *cak* ‘to be satisfied’, *stak*, *kagv*, *ag*, *kag*, *rag*, *lag*, *sag*, *stag*, *hag*, and *hlag*; *ghaṭ*, *bhaṭ*, *naṭ*, *gaḍ*, *laḍ* (*laḍayati/lāḍayati* in different senses), *heḍ* (*hiḍayati/heḍyati* in different senses), *kaṇ*, *raṇ*, *phaṇ*, *caṇ*, *śraṇ*, *śaṇ*, *vyath*, *prath*, *śrath*, *knath*, *krath*, *klath*, *mrath*, *skhad*, *van*, *dhvan*, *svan*, *krap*, *ram*, *tvar*, *jvar*, *dakṣ*, *pras* etc.

Exception-2: The roots *van*, *vam* *nam*, *jval*, *hval*, *hmal*, *dhvan* and *cal* lengthen their *a* optionally when not preceded by a preposition.

The roots *rabh*, *labh*, *jabh* insert a nasal before their final. *lambhayati/te*

Penultimate short vowel takes *guṇa* substitute before *aya*, as *tepayaya* from *tip*.

sphāy changes its *y* to *v* in the causal, and *bhrasj* assumes two forms *bharj* and *bhrajj*.

Conjugations:

Causal roots are generally conjugated in both the *padas*.

Exception: The causals forms of roots having the sense of ‘to swallow’ or ‘to move’ and of the following roots are conjugated in the *parasmaipada* only: *īṛsy*, *garv*, *jvar*, *nand*, *lal*, *klind*, *galbh*, *jan*, *jabh*, *ram*, *vyath*, *klam*, *ṣṭhiv*, *bhram*.

The following roots have the sense of to swallow or to move:

kṣar, *khād*, *khel*, *gal*, *cam*, *cal*, *dru*, *sru*, *vel*, *vep*, *kamp*, *gras*, *ceṣṭ*, *pru*.

भू णिजन्त (Causal) कर्तृवाच्य (active) परस्मैपद

laṭ	भावयति	भावयतः	भावयन्ति		
liṭ	भावयाञ्चकार भावयाञ्चक्र	भावयाञ्चक्रतुः भावयाञ्चकार	भावयाञ्चक्रुः भावयाञ्चकृव	भावयाञ्चकर्थ भावयाञ्चकृम	भावयाञ्चक्रथुः
luṭ	भावयिता	भावयितारौ	भावयितारः		
lrṭ	भावयिष्यति	भावयिष्यतः	भावयिष्यन्ति		
loṭ	भावयतु,तात्	भावयताम्	भावयन्तु		
lañ	अभावयत्	अभावयताम्	अभावयन्		
Vlin	भावयेत्	भावयेताम्	भावयेयुः		
Alin	भाव्यात्	भाव्यास्ताम्	भाव्यासुः	भाव्याः	भाव्यास्तम्
luñ	अबीभवत्	अबीभवताम्	अबीभवन्	अबीभवः	अबीभवतम्
lrñ	अभावयिष्यत्	अभावयिष्यताम्	अभावयिष्यन्		

भू णिजन्त (Causal) कर्तृवाच्य (active) आत्मनेपद

laṭ	भावयते	भावयेते	भावयन्ते		
liṭ	भावयाञ्चक्रे भावयाञ्चक्रे	भावयाञ्चक्राते भावयाञ्चकृवहे	भावयाञ्चक्रिरे भावयाञ्चकृमहे	भावयाञ्चक्राथे	भावयाञ्चकृध्वे
luṭ	भावयिता	भावयितारौ	भावयितारः	भावयितासे	
lrṭ	भावयिष्यते	भावयिष्येते	भावयिष्यन्ते		
lot	भावयताम्	भावयेताम्	भावयन्ताम्		
lañ	अभावयत	अभावयेताम्	अभावयन्त		
Vlin	भावयेत	भावयेयाताम्	भावयेरन्	भावयेथाः	
Alin	भावयिषीष्ट	भावयिषीयास्ताम्	भावयिषीरन्	भावयिषीष्ठाः	

luñ अभीभवत अभीभवेताम् अभीभवन्त अभीभवथाः अभीभवेथाम् अभीभवध्वम् अभीभवे अभीभवावहि
अभीभवामहि

lṛñ अभावयिष्यत अभावयिष्येताम् अभावयिष्यन्त

एध णिजन्त (Causal) कर्तृवाच्य (active) परस्मैपद

laṭ एधयति एधयतः एधयन्ति एधयसि एधयथः एधयथ एधयामि एधयावः एधयामः

liṭ एधयाञ्चकार एधयाञ्चक्रतुः एधयाञ्चक्रुः एधयाञ्चकर्थ एधयाञ्चक्रथुः एधयाञ्चक्र
एधयाञ्चकार एधयाञ्चकृव एधयाञ्चकृम

luṭ एधयिता एधयितारौ एधयितारः एधयितासि

lṛṭ एधयिष्यति एधयिष्यतः एधयिष्यन्ति

loṭ एधयतु,तात् एधयताम् एधयन्तु एधय,तात्

lañ ऐधयत् ऐधयताम् ऐधयन् ऐधयः ऐधयतम्

V.liñ एधयेत् एधयेताम् एधयेयुः एधयेः एधयेतम्

A.liñ एध्यात् एध्यास्ताम् एध्यासुः एध्याः एध्यास्तम्

luñ ऐदिधत् ऐदिधताम् ऐदिधन् ऐदिधः ऐदिधतम् ऐदिधत ऐदिधम् ऐदिधाव ऐदिधाम

lṛñ ऐधयिष्यत् ऐधयिष्यताम् ऐधयिष्यन् ऐधयिष्यः ऐधयिष्यतम् ऐधयिष्यत ऐधयिष्यम् ऐधयिष्याव
ऐधयिष्याम

णिजन्त Nijanta कर्तृवाच्य active आत्मनेपद

laṭ एधयते एधयेते एधयन्ते एधयसे एधयेथे एधयध्वे एधयेएधयावहे एधयामहे

liṭ एधयाञ्चक्रे एधयाञ्चक्राते एधयाञ्चक्रिरे एधयाञ्चकृषे

luṭ एधयिता एधयितारौ एधयितारः एधयितासे

lṛṭ एधयिष्यते एधयिष्येते एधयिष्यन्ते

loṭ एधयताम् एधयेताम् एधयन्ताम् एधयस्व

lañ ऐधयत ऐधयेताम् ऐधयन्त ऐधयथाः

Vliñ एधयेत एधयेयाताम् एधयेरन् एधयेथाः

Aliñ एधिषीष्ट एधिषीयास्ताम् एधिषीरन् एधिषीष्ठाः एधिषीयास्थाम्

Iuñ ऐदिधत ऐदिधताम् ऐदिधन्त ऐदिधथाः ऐदिधथाम् ऐदिधध्वम् ऐदिधे ऐदिधावहि ऐदिधामहि

Iṛñ ऐधयिष्यत ऐधयिष्येताम् ऐधयिष्यन्त ऐधयिष्यथाः

2.2 .4 Desideratives:

To form a desiderative base, the root is first reduplicated according to the general rules of reduplication. Then termination *s* is added on to it in the non-conjugational tenses and moods. In the conjugational tenses and moods, *a* is added to *s*.

Roots beginning with a vowel reduplicate the following consonant with *i* added on to it; or where necessary they first undergo the vowel changes and then take their reduplication, as *aṭiṭṣati*, *īcīṣati*, *arcīcīṣati*, *arñiñṣati*, *pratīṣiṣati*, *adhīṣiṣati* from the roots *aṭ*, *īkṣ*, *ṛ*, *arc*, *ṛñ* etc.

The *a* of the reduplicative syllable is changed to *i*, and the characteristic *s* of the desiderative becomes *ṣ*, but the *s* of a primitive root remains unchanged when the desiderative *s* is changed to *ṣ*. When the latter remains unchanged the primitive *s* becomes *ṣ*; as *sinaniṣati-te* or *siṣāṣati-te* from *san*. The root *stu* is an exception, it forms *tuṣṭūṣati*. other examples are *si*, *smi*, *su*, *sthā* and *sad*.

The desiderative base takes the same terminations of *parasmaipada* or *ātmanepada* or both as the primitive root does.

Exception:

The desiderative forms of *jñā*, *śru*, *smṛ*, and *ḍṛś* are conjugated in the *ātmanepada* while root *jñā* with prefix *anu* and root *śru* with *prati* or *ā* take *parasmaipada* terminations. Roots *kṛp*, *vṛt*, *vṛdh*, *śṛdh*, and *syand* may optionally form their desiderative in *parasmai*.

Peculiarities of *anit*, *set* and *vet* roots:

Aniṭ roots don't take *i* before *s*.

Excep: *smi*, *r* take *i* necessarily before *s* as *sismayiṣate* and *aririṣati*.

The root *gam* takes *i* in the *parasmai* and rejects it in the *ātmanepada*, as *jigamiṣati*, *saṃjigamsate*.

Seṭ root takes *i* before *s*:

Exception: Roots ending in long *ū* and the following roots do not take *i* before *s*.

Roots ending in long *r* and some other roots take *i* optionally before *s*.

pat → *pitsati*, *pipatiṣati*

The roots *vṛt*, *vṛdh* and *śṛdh* take *i* in the *ātmanepada* and reject it in the *parasmai*, but the root *kram* takes *i* in the *parasmai* and rejects it in the *ātmanepada*; as *vivartiṣate* or *vivṛtsati*, *vivardhiṣate* or *vivṛtsati*, *śiśardhiṣate* or *śiśṛtsati*. *cikramiṣate* or *cikramsate*.

Veṭ roots take *i* optionally before *s*.

Exception: The roots *guh-dhū* and *sū* do not take *jughukṣati-te*, *dudhūṣati-te*, *susūṣate*. *añj* and *aś* take *i* necessarily as *añjijiṣate* and *aśiśiṣate*.

The roots *syand* and *kḷp* take *i* optionally in the *ātmanepada* and altogether reject it in the *parasmai* as *sisyandiṣate* or *sisyantsate*, *sisyantsati*. *cikalpiṣate* or *cikḷpsate*, *cikḷpsati*.

Roots ending in *iv* take *i* optionally before *s*, and this final *iv* is changed to *y* when the *s* is unaugmented. *kṣiv* → *cikṣeviṣati*, *cukṣyūṣati*. *ṣhiv* → *tiṣṭheviṣati*, *tiṣṭheviṣti*, *tuṣṭhyūṣati*, *tuṣṭhyūṣati*.

The desiderative characteristic *s* is considered weak when it does not take the argument *i*.

Special rules regarding radical vowel change in the desiderative are listed below:

The ending *i* and *u* of a root is lengthened and the ending *r* and *r̄* are changed to *īra*, or to *ūra* if a labial precedes when the *s* of the desiderative is weak or unaugmented; as *cikṣīṣati*, *bubhūrṣati-te* and *titīrṣati* from *kṣi*, *bhṛ* and *tṛr*.

When the *s* of the desiderative is strong, viz. augmented the final *i-u* and *r* (short or long) take their guṇa substitute. *śvi-śiśvayiṣati*, *ḍī-ḍiḍayiṣate*, *pū-pipaviṣate* etc.

The penultimate short *r* and *l* of roots, and the penultimate short *i* and *u* of roots beginning with vowels take their *guṇa* substitute before the augmented *s* and remain unchanged before the unaugmented one. *uṣ-oṣiṣiṣati*, *vṛt-vivartiṣate*, *kḷp-cikalpiṣate*. Also *vivrṣati* and *cikḷpsati* occur when the *s* is augmented.

But the penultimate short *i* and *u* of such roots as begin with consonants and end with any except *y* or *v* take *guṇa* optionally and the penultimate *i* of roots in *iv* does it necessarily when the *s* of the desiderative is strong, viz. augmented and the same vowels remain unchanged when it is unaugmented.

Roots ending in *e-ai* and *o* except *me,de,dhe* change their final vowel to *ā* before the *s* of the desiderative; as *kṣai-cikṣāṣati*, *cho-cichchāṣati*.

Irregularities regarding reduplication and vowel changes of certain roots in the desiderative, are furnished below:

Some roots reject reduplication and substitute short *i* for their vowel when the *s* is unaugmented; e.g. *rabh-ripsate*, *labh-lipsate*, *pat-pitsati*, *pipatiṣati*. Such a root, if ends in a vowel, add *t* to the desiderative *s*. *dā-ditsati*, *de-ditsate*, *me-mitsate* etc.

The roots *grah*, *svap*, *pracch*, *dyut* and *hve* take *samprasāraṇa* as *jighṛkṣati-te*, *susupsati*, *pipṛcchiṣati* and *didyutiṣate* or *didyotiṣate*, *juhūṣati-te*.

ji → *jigīṣati*

gup → *jugopāyiṣati*, *jugopiṣati-te*, *jugupiṣati-te*, *jugupsati*,

vicch → *vivicchiṣati*, *vivicchāyiṣati*

paṇ → *pipaṇāyiṣati*, *pipaṇiṣate*, *kam-cikamiṣate/cikāmayiṣate*

aj → *ajijiṣati*

mṛj → *mimārjiṣati*, *mimṛkṣati*

Conjugation of the desiderative base:

In the active voice, the desiderative base takes *a* and then it is conjugated like the base of a root of the 6th class. In the passive *ya* is added to the base and it is then conjugated like an ordinary Passive verb.

भू सन्नन्त sannanta कर्तृवाच्य active परस्मैपद

laṭ	बुभूषति	बुभूषतः	बुभूषन्ति		
liṭ	बुभूषाञ्चकार	बुभूषाञ्चक्रतुः	बुभूषाञ्चक्रुः	बुभूषाञ्चकर्थ	बुभूषाञ्चक्रथुः
luṭ	बुभूषिता	बुभूषितारौ	बुभूषितारः		
lrṭ	बुभूषिष्यति	बुभूषिष्यतः	बुभूषिष्यन्ति		
loṭ	बुभूषतु,तात्	बुभूषताम्	बुभूषन्तु		
lañ	अबुभूषत्	अबुभूषताम्	अबुभूषन्		
Vlin	बुभूषेत्	बुभूषेताम्	बुभूषेयुः		
Alin	बुभूष्यात्	बुभूष्यास्ताम्	बुभूष्यासुः		
luñ	अबुभूषीत् अबुभूषिष्ट	अबुभूषिष्टाम् अबुभूषिषम्	अबुभूषिषुः अबुभूषिष्व	अबुभूषीः अबुभूषिष्म	अबुभूषिष्टम्
lrñ	अबुभूषिष्यत्	अबुभूषिष्यताम्	अबुभूषिष्यन्		

भू सन्नन्त desiderative कर्तृवाच्य active आत्मनेपद

laṭ	बुभूषते	बुभूषेते	बुभूषन्ते		
liṭ	बुभूषाञ्चक्रे	बुभूषाञ्चक्राते	बुभूषाञ्चक्रिरे	बुभूषाञ्चकृषे	बुभूषाञ्चक्राथे बुभूषाञ्चकृध्वे
	बुभूषाञ्चक्रे	बुभूषाञ्चकृवहे	बुभूषाञ्चकृमहे		
luṭ	बुभूषिता	बुभूषितारौ	बुभूषितारः	बुभूषितासे	
lrṭ	बुभूषिष्यते	बुभूषिष्येते	बुभूषिष्यन्ते		
loṭ	बुभूषताम्	बुभूषेताम्	बुभूषन्ताम्		
lañ	अबुभूषत	अबुभूषेताम्	अबुभूषन्त		
Vlin	बुभूषेत	बुभूषेयाताम्	बुभूषेरन्		
Alin	बुभूषिषीष्ट	बुभूषिषीयास्ताम्	बुभूषिषीरन्	बुभूषिषीष्ठाः	बुभूषिषीयास्थाम्
luñ					
lrñ	अबुभूषिष्यत	अबुभूषिष्येताम्	अबुभूषिष्यन्त		

एध सन्नन्त sannanta कर्तृवाच्य active आत्मनेपद

laṭ एदिधिषते एदिधिषेते एदिधिषन्ते

liṭ एदिधिषाञ्चक्रे एदिधिषाञ्चक्राते एदिधिषाञ्चक्रिरे एदिधिषाञ्चकृषे एदिधिषाञ्चक्राथे

एदिधिषाञ्चकृद्वे एदिधिषाञ्चक्रे एदिधिषाञ्चकृवहे एधाञ्चकृमहे

luṭ एदिधिषिता एदिधिषितारौ एदिधिषितारः एदिधिषितासे

lrṭ एदिधिषिष्यते एदिधिषिष्येते एदिधिषिष्यन्ते

loṭ एदिधिषताम् एदिधिषेताम् एदिधिषन्ताम्

laiṅ एदिधिषत एदिधिषेताम् एदिधिषन्त

Vliṅ एदिधिषेत एदिधिषेयाताम् एदिधिषेरन् एदिधिषेथाः

Aliṅ एदिधिषिषीष्ट एदिधिषिषीयास्ताम् एदिधिषिषीरन् एदिधिषिषीष्ठाः

luṅ एदिधिषिष्ट एदिधिषिषाताम् एदिधिषिषत एदिधिषिष्ठाः एदिधिषिषाथाम् एदिधिषिष्ट्वम्

एदिधिषिषि एदिधिषिष्वहि एदिधिषिष्महि

lriṅ एदिधिषिष्यत एदिधिषिष्येताम् एदिधिषिष्यन्त

2.2.5 Frequentatives:

The frequentative is formed from mono-syllabic roots of the first nine classes, beginning with any consonant. However, the roots *mūtr*, *sūc*, *sūtr* of 10th class; and the roots *aṭ*, *ṛ*, *aś* and *ūrṇu* though beginning with a vowel, take frequentative forms. The frequentatives import repetition or intensity of the action or state expressed by the root from which it is derived; as *cekrīyate* ‘he does repeatedly/ intensely’ from the root *kr*.

The freq. forms of roots implying motion does not import the usual sense but also shows tortuous motion, as *vāvraṅyate* ‘he walks crookedly’ from the root *vraj* ‘to walk’. The frequentative of the roots *lup*, *sad*, *car*, *jap*, *jabh*, *dah*, *daś*, *bhañj* and *gṛ* does not express the usual sense but imports censure; as *lolupyate* ‘he cuts clumsily’ from *lup* ‘to cut’.

The frequentative base is of two kinds. Both follow the same peculiar rules of reduplication. One base is called *ātmanepada* frequentative (*yañanta*) as it is conjugated in the *ātmanepada* only, in which case the root takes *ya* before reduplication. The other base is called *parasmaipada* frequentative (*yañluganta*) which rejects *ya* and is conjugated in the *parasmaipada* only. For example: *ātmanepada* frequentative for *bhū* is *bobhūya* and *parasmaipada* frequentative base is *bobhū*.

The frequentative base is reduplicated according to the general rules of reduplication. Though there are certain special rules of reduplication and vowel changes which are equally applicable to both the *ātmanepada* and *parasmaipada* frequentative. They are:

1. If a root begins with a vowel, the following consonant is reduplicated, as *aṭ-aṭya-aṭa*; *aś-aśya-aśaśya*; also *arārya* and *ūrṇonūya* from *r* and *ūrṇu*.
2. The vowels *i* or *u* in the reduplicative syllable takes *guṇa* substitute; as *bhū-bhūya-bhubhūya-bubhūya-bobhūya*; *nī-nīya-nīnīya-ninīya-nenīya*; *bhid-bhidya-bhibhidya-bibhidya-bebhidya*; *tud-tudya-tutudya-totudya* etc.
3. The *a* in the reduplicative syllable is changed to *ā*; as *aṭāṭya* and *aśāśya* from *aṭ* and *aś*; and also *pac-pāpacya*, *smṛ-sāsmarya*.
4. The *a* of the reduplicative syllable of a root having a penultimate short *r*, or *r̄* which is a result of *samprasāraṇa*, is not lengthened, but the syllable *rī* is inserted between the vowel *a* of the reduplicative syllable and the first radical consonant in the *ātmanepada* frequentative base. Under the same circumstances, *lī* is inserted in the reduplicative base of the root *klp*. In the case of the *parasmaipada* freq. base, the letter *r* or the syllable *ri* or *rī* is inserted between the vowel *a* of the reduplicative syllable and the first radical consonant, if the root ends in short *r* or has a short *r̄* for its penultimate. *l* or *li* or *lī* is likewise inserted in the *parasmai* freq. base of the root *klp*. Examples: *vṛt-vṛtya-vavṛtya-varīvṛtya*; *pracch-ṛcchya-papṛcchya-parīṛcchya*; *klp-klpya-cakīklpya*; *nṛt-nṛtya-nanṛtya-narīnṛtya*.
5. The *a* of the reduplicative syllable of a root ending in a nasal and the *a* of the roots *car*, *phal*, *jap*, *jabh*, *dah*, *damś*, *bhañj*, *paś* is not lengthened and anusvāra or the nasal of that class to which the first radical consonant belongs is inserted between the vowel *a* of the reduplicative syllable and the first radical consonant except in

the case of roots whose final radical consonant except in the case of roots whose final radical nasal is changed or dropped before the *ya* of the freq. base. The roots *car* and *phal* after inserting a nasal, change the *a* of the following syllable to *u*.

Examples: *car-carya-cacarya-cañcarya-cañcurya/cañcūrya*;

phal-phalya-phaphalya-paphalya-pamphalya-pamphulya-pamphūlya;

bhram-bhramya-bambhramya; yam-yamya-yamyamya.

6. The *a* of the reduplicative syllable of the roots *vañc*, *srañs*, *dhvañs*, *bhrañs*, *kas*, *pat*, *pad* and *skand* is not lengthened and *nī* is inserted between the vowel *a* of the reduplicative syllable and the first radical consonant.

<i>vañc</i>	-	<i>vacya</i>	-	<i>vanīvacya</i>
<i>srañs</i>	-	<i>srasya</i>	-	<i>sranīsrasya</i>
<i>dhvañs</i>	-	<i>dhvasya</i>	-	<i>dhvanīdhvasya</i>
<i>bhrañs</i>	-	<i>bhrasya</i>	-	<i>bhranībhvasya</i>
<i>kas</i>	-	<i>kasya</i>	-	<i>kanīkasya</i>
<i>pat</i>	-	<i>patya</i>	-	<i>panīpatya</i>
<i>pad</i>	-	<i>padya</i>	-	<i>panīpadya</i>
<i>skand</i>	-	<i>skadya</i>	-	<i>skanāskadya</i>

The Ātmanepada frequentative:

To form the *ātmanepada* freq. base, the syllable *ya* is added to the root; as *bhū-bhūya*; *nī-nīya*; *bhid-bhidya* etc.

Following radical vowel changes before *ya* are notable:

1. Final *i* and *u* are lengthened; as *śri-śrīya*, *du-dūya*.
2. Final *r* preceded by a simple consonant is substituted by long *rī* and that preceded by a conjunct consonant takes *guṇa*; as *kṛ-krīya*; *smṛ-smṛya*.
3. Final long *r̄* becomes *īr*, or *ūra* if a labial or *v* precedes; as *kṛṛ-kīrya*, *pṛṛ-pūrya*.
4. Of roots ending in *ā*, the *ghu* verbs viz. *dā*, *do*, *de*, *dhe* and the roots *mā*, *sthā*, *gai*, *pā*, *hā*, *so*, *ghrā*, *dhmā* change the final *ā* to *ī*. The final *ā* of other roots, however, remains unchanged and the final *e*, *ai* and *o* except that of the roots *vye* and *hve* are changed to *ā*. The root *vyā* substitutes long *ī*, and *vye* and *hve*

substitutes *ī* and *ū* for *ye* and *ve*. Ex: *dā-dīya*, *dhe-dhīya*, *gai-gīya*, *so-sīya*. But *cho-chāya*, *glai-glāya*, *jñā-jñāya*, *ghrā-ghrīya*, *dhmā-dhmīya*, *vye-vīya*, *hve-hūya*.

5. The roots *vyac*, *vyadh*, *syam*, *svap*, *grah*, *pracch*, *bhrasj* and *vraśc* take samprasāraṇa; as *vyac-vicya*, *grah-grhya*. The roots *yaj*, *vac*, *vap*, *vah*, *vas*, *vad* and *vaś* do not take samprasāraṇa. *yaj-yajya*.
6. The roots *śas* and *pyāy* become *śiṣ* and *pī*. As: *śās-śiṣya*, *pyāy-pīya*.
7. The roots *div*, *siv*, *ṣhiv*, *sriv* lengthen their penultimate vowel.
div-dīvyā; *siv-sīvyā* etc.
8. A penultimate nasal is generally dropped. *śams-śasya* etc.

Conjugation of the Ātmanepada freq. base:

In the active voice, the base is conjugated like the base of a root of the 4th class in Ātmanepada in the Conjugational tenses and moods. In the non-conjugational tenses and moods and in all the tenses of the passive, the base drops its ending *a* when the final *ya* is preceded by a vowel. But when this *ya* is preceded by a consonant, *ya* itself is dropped ; as *bobhūya* becomes *bobhūy*, *bobudhya* becomes *bobudh*. The base thus obtained in each case does not undergo any more changes, and the non-conjugational tenses and moods and all the tenses of the passive are formed exactly in the same way.

भू यञन्त yaNanta कर्तृवाच्य active

laṭ	बोभूयते	बोभूयेते	बोभूयन्ते	
liṭ	बोभूयाञ्चक्रे	बोभूयाञ्चक्राते	बोभूयाञ्चक्रिरे	बोभूयाञ्चकृषे
luṭ	बोभूयिता	बोभूयितारौ	बोभूयितारः	बोभूयितासे
lrṭ	बोभूयिष्यते	बोभूयिष्येते	बोभूयिष्यन्ते	
loṭ	बोभूयताम्	बोभूयेताम्	बोभूयन्ताम्	
lan	अबोभूयत	अबोभूयेताम्	अबोभूयन्त	
Vlin	बोभूयेत	बोभूयेयाताम्	बोभूयेरन्	बोभूयेथाः
Aliñ	बोभूयिषीष्ट	बोभूयिषीयास्ताम्	बोभूयिषीरन्	बोभूयिषीष्ठाः

luñ	अबोभूयिष्ट	अबोभूयिषाताम्	अबोभूयिषत	अबोभूयिष्ठाः	अबोभूयिषाथाम्	अबोभूयिध्वम्
	अबोभूयिषि	अबोभूयिष्वहि	अबोभूयिष्महि			
lriñ	अबोभूयिष्यत	अबोभूयिष्येताम्	अबोभूयिष्यन्त			

Formation and conjugation of the *parasmaipada* Frequentative base:

To form the *parasmaipada* frequentative base, the root is reduplicated according to the general and special rules of reduplication. The base thus obtained is conjugated like the special base of a root of the 3rd class in the conjugational tenses and moods.

Augment *i* is optionally prefixed to the strong terminations beginning with a consonant, viz. before *mi*, *si*, *ti* of the present, *s* and *t* of the imperfect, and *tu* of the imperative. Before this *ī*, the penultimate short vowel does not take *guṇa* substitute. Examples: *bobhoti* or *bobhavīti* from *bhū*; *bebhetti* or *bebhidīti* from *bhid* etc.

In the non-conjugational tenses and moods, the base takes the *seṭ* terminations. The augment *i* is always prefixed except in the benedictive; as perfect *bobhavāñcakāra-bobhāva*; Aorist *abobhūvīt-abobhot-abobhavīt-abobhūta-abobhāvīt*.

भू यङ्लुगन्त yaNluganta कर्तृवाच्य active

laṭ	बोभवीति/बोभोति	बोभूतः	बोभुवति		
	बोभवीषि/बोभोषि	बोभूथः	बोभूथ		
	बोभवीमि/बोभोमि	बोभूवः	बोभूमः		
liṭ	बोभवाञ्चकार	बोभवाञ्चक्रतुः	बोभवाञ्चक्रुः	बोभवाञ्चकर्थ	बोभवाञ्चक्रथुः
	बोभवाञ्चक्र	बोभवाञ्चकार	बोभवाञ्चकृव	बोभवाञ्चकृम	
luṭ	बोभविता	बोभवितारौ	बोभवितारः	बोभवितासि	बोभवितास्थः
	बोभवितास्मि	बोभवितास्वः	बोभवितास्मः		
lriṭ	बोभविष्यति	बोभविष्यतः	बोभविष्यन्ति		

loṭ	बोभवीतु	बोभूताम्	बोभुवतु	बोभोहि	बोभूतम्	बोभूत	बोभवानि	बोभवाव	बोभवाम
	बोभोतु/	बोभूतात्		बोभूतात्					
laiṅ	अबोभवीत्/	अबोभोत्	अबोभूताम्	अबोभवुः	अबोभवीः/	अबोभोः		अबोभूतम्	
	अबोभूत	अबोभवम्	अबोभूव	अबोभूम					
Vliṅ	बोभूयात्	बोभूयाताम्	बोभूयुः	बोभूयाः	बोभूयातम्	बोभूयात			
	बोभूयाम्	बोभूयाव	बोभूयाम						
Aliṅ	बोभूयात्	बोभूयास्ताम्	बोभूयासुः	बोभूयाः	बोभूयास्तम्	बोभूयास्त			
	बोभूयासम्	बोभूयास्व	बोभूयास्म						
luṅ	अबोभूवीत्	अबोभूताम्	अबोभवुः	अबोभूवीः	अबोभूतम्	अबोभूत	अबोभूवम्	अबोभूव	
	अबोभूम								
	अबोभोत्		अबोभोः						
lriṅ	अबोभविष्यत्	अबोभविष्यताम्	अबोभविष्यन्						

2.2.6 Passive forms of derived verbs:

Derived verb forms - causals, desideratives and ātmanepada frequentatives take passive forms like regular verb forms. The conjugation for the same is, for the most part, similar to that of regular verb forms. These forms with instance of *bhū* are produced below:

भू सन्नन्त sannanta कर्मवाच्य passive

laṭ	बुभूष्यते	बुभूष्येते	बुभूष्यन्ते
liṭ	बुभूषाञ्चक्रे	बुभूषाञ्चक्राते	बुभूषाञ्चक्रिरे
luṭ	बुभूषिता	बुभूषितारौ	बुभूषितारः
lriṭ	बुभूषिष्यते	बुभूषिष्येते	बुभूषिष्यन्ते
loṭ	बुभूष्यताम्	बुभूष्येताम्	बुभूष्यन्ताम्
laiṅ	अबुभूष्यत	अबुभूष्येताम्	अबुभूष्यन्त
Vliṅ	बुभूष्येत	बुभूष्येयाताम्	बुभूष्येरन्

Aliñ बुभूषिषीष्ट बुभूषिषीयास्ताम् बुभूषिषीरन् बुभूषिषीष्ठाः बुभूषिषीयास्थाम्
 बुभूषिषीध्वम् बुभूषिषीय बुभूषिषीवहि बुभूषिषीमहि
 Irñ अबुभूषिष्यत अबुभूषिष्येताम् अबुभूषिष्यन्त

भू णिजन्त nijanta कर्मवाच्य passive

laṭ भाव्यते भाव्येते भाव्यन्ते
 भाव्यसे भाव्येथे भाव्यध्वे
 भाव्ये भाव्यावहे भाव्यामहे

liṭ भावयाञ्चक्रे भावयाञ्चक्राते भावयाञ्चक्रिरे
 भावयाञ्चकृषेभावयाञ्चक्राथे भावयाञ्चकृध्वे
 भावयाञ्चक्रे भावयाञ्चकृवहे भावयाञ्चकृमहे

luṭ भाविता भावितारौ भावितारः

lṛṭ भाविष्यते भाविष्येते भाविष्यन्ते

loṭ भाव्यताम् भाव्येताम् भाव्यन्ताम्

lañ अभव्यत अभव्येताम् अभव्यन्त अभव्यथाः

Vlin भाव्येत भाव्येयाताम् भाव्येरन्

Aliñ भाविषीष्ट भाविषीयास्ताम् भाविषीरन् भाविषीष्ठाः भाविषीयास्थाम् भाविषीध्वम् भाविषीय
 भाविषीवहि भाविषीमहि

luñ अभावि अभाविषाताम्, अभाविषत, अभाविष्ठाः, अभाविषाथाम्, अभाविध्वम्,
 अभाविषि, अभावि०, अभाविष्महि,
 अभावयि० अभावयि० अभावयि० अभावयि० अभावयि० अभावयि०
 अभावयिष्वहि अभावयि०

lṛñ अभाविष्यत अभाविष्येताम् अभाविष्यन्त

भू यडन्त yananta कर्मवाच्य passive

laṭ बोभूयते बोभूयेते बोभूयन्ते

liṭ बोभूयाञ्चक्रे बोभूयाञ्चक्राते बोभूयाञ्चक्रिरे बोभूयाञ्चकृषे बोभूयाञ्चक्राथे बोभूयाञ्चकृद्वे
बोभूयाञ्चक्रे बोभूयाञ्चकृवहे बोभूयाञ्चकृमहे

luṭ बोभूयिता बोभूयितारौ बोभूयितारः बोभूयितासे बोभूयितासाथे बोभूयिताध्वे बोभूयिताहे
बोभूयितास्वहे बोभूयितास्महे

lṛṭ बोभूयिष्यते बोभूयिष्येते बोभूयिष्यन्ते

loṭ बोभूयताम् बोभूयेताम् बोभूयन्ताम्

laiṅ अबोभूयत अबोभूयेताम् अबोभूयन्त अबोभूयथाः अबोभूयेथाम् अबोभूयध्वम्
अबोभूये अबोभूयावहि अबोभूयामहि

vlaiṅ बोभूयेत बोभूयेयाताम् बोभूयेरन् बोभूयेथाः बोभूयेयाथाम् बोभूयेध्वम् बोभूयेय
बोभूयेवहि बोभूयेमहि

Alaiṅ बोभूयिषीष्ट बोभूयिषीयास्ताम् बोभूयिषीरन्

luaiṅ अबोभूयि अबोभूयिषाताम् अबोभूयिषत अबोभूयिष्ठाः अबोभूयिषाथाम् अबोभूयिध्वम्
अबोभूयिषि अबोभूयिष्वहि अबोभूयिष्महि

2.2.7 Prefixes:

Prefixes (*upasarga-s*) acquire special significance in Sanskrit morphology. Yāska, in fact, had categorized them separately in his four-fold classification. Pāṇini, however, didn't assign them this status, though he defined and enumerated them. Prefixes (*upasarga-s*), according to Pāṇini, are enumerated in a list of words that starts with *pra* and which are termed '*upasarga*' when they are attached to verbs.⁹⁴ These *upasarga-s* are 21 or 22 in number. They have their own sense, yet their main function is to reveal the other meanings of verb roots that they are prefixed to.⁹⁵ This new meaning, as grammarians hold, is contained within the verbs but is not mentioned in the DP; just as a lamp illuminates the things of a house that already exist there, *upasargas* reveal different

⁹⁴ *prādayaḥ* 1/4/58; *upasargāḥ kriyāyoge* 1/4/59

⁹⁵ *upasargeṇa dhātvartho balādanyatra nīyate |
prahārā''ra-samhāra-vihāra-parihāravat ||*

already existing meanings of the verb. This meaning sometimes is same as original, but more frequently is very different than the meaning of the combination. 22 *upasarga*-s are:

Prefix	Principal meaning of each prefix	examples
<i>ati</i>	Going beyond a real or imaginary limit	<i>atikrāmate</i>
<i>adhi</i>	Being above in place or degree	<i>adhirohati</i>
<i>anu</i>	After in order or manner	<i>anukaroti</i>
<i>antar</i>	Coming within a space or interval	<i>antardhīyate</i>
<i>apa</i>	Taking away in substance or kind	<i>apaharati</i>
<i>api</i>	Affirming of a certainty	<i>apigacchati</i>
<i>abhi</i>	Being present, opposite or near to	<i>abhisarati</i>
<i>ava</i>	Being below in place or degree	<i>avatarati</i>
<i>ā/ āñ</i>	Bounding or limiting; also reversing	<i>āgacchati</i>
<i>ut/ ud</i>	Being high in place or excellent in kind	<i>uttiṣṭhati</i>
<i>upa</i>	Being near or next to; whence also, being less than	<i>upakaroti</i>
<i>dur</i>	Condition of badness, pain, difficulty, and the like	<i>durācarati</i>
<i>ni</i>	Being within, below or under; also, being contrary or reverse	<i>nipatati</i>
<i>nir</i>	Being out or exempt from; whence also affirmation, as excluding doubt	<i>nirvartayati</i>
<i>parā</i>	Being opposite or opposed to; whence also reverse	<i>parājayate</i>
<i>pari</i>	Being all round or about; whence also fullness, completeness	<i>paricinoti</i>
<i>pra</i>	Being before in time, place, or quality	<i>praviśati</i>
<i>prati</i>	Reverted, or reflected, or repeated action or condition	<i>prati</i>
<i>vi</i>	Being several or separate; whence also privation	<i>vigāyati</i>
<i>sam</i>	Being conjoined with; whence also completeness	<i>saṁskaroti</i>
<i>su</i>	The opposite of <i>dur</i> , or condition of happiness, ease and the like	<i>sujānāti</i>

Example of how prefixes cause to change the purport of verb roots; and also the pada they are conjugated in, is given below with illustrations of roots *kram* and *yam*:

kram (krām) to go, to approach, to traverse, to go up or ascend, to leap.

kram

upakram

parākram

ākrām (parasmai) – to cover, to go up or ascend

ākram (Ātmane)- ‘to rise’ said of a luminary

vikrām (parasmai)- to split

vikram (ātmane) – to walk or step up

prakrām (parasmai)- to go

prakram (ātmane) – to begin

upakrām (parasmai) – to come

upakram (ātmane) – to begin

yam (yacch) to check or stop

āyam (āyacch) (ātmane)- to spread, stretch when intransitive; or with ‘a limb of body’ or with something else than ‘a literary composition’ for its object.

saṁyam (saṁyacch) (ātmane)- to gather

udyam (udyacch) (ātmane)- to lift up, with something else than ‘a literary composition’ for its object

udyam (udyacch) (parasmai) to try hard, to learn, with ‘a literary composition’ for its object.

upayam (upayacch) (ātmane) to marry