CHAPTER-VI

SANDHI (MORPHOPHONEMIC)
6.0. Introduction

*Sandhi* is the coalescence of two sounds coming in immediate contact with each other (P.1.4.109). It is derived from the verb root *dhā* 'to join' and prefixed *sam* 'together' which means to join together. *Samhitā* or *sandhi* is necessary in the case of the internal structure of a *pāda*, prepositions and roots joined together and *samāsa* 'compound word', while in that of a sentence, i.e. in the case of the finals and initials of the different words in a sentence, it depends on the will of the writer.¹ *Pāṇini* employs 43 *pratyāhāras* 'siglas' to account for the sound changes that place in the course of formation of *padas* (both derivation and inflection). In order to achieve economy, the sound changes are generalized and denoted by the *pratyāhāras*. In the course of formation of words and compounds and in speech, sounds that are adjacent to each other influence each other mutually leading to different kinds of resultant changes which can all be grouped together under three general types- *lopa* ‘deletion’, *vikāra* ‘modification’ and *āgama* ‘addition’.² In Oriya, lexicons are of two types: borrowed from Sanskrit and native Oriya words. In case of Sanskrit words, it can be analysed in terms of *Paratini* sandhi. But the analysis of such forms is not part of Oriya morphological Knowledge. But native words are described by the speakers’ assumption about the two joining sounds. Such sandhi processes are identified into three kinds: (a) *svara* ‘vowel’ sandhi, (b) *hal* 'consonant’ sandhi and (c) *visarga* ‘aspiration/ breath after a’ sandhi.

6.1. *Svara Sandhi* ‘Vowel Morphophonemic’

*Svara sandhi* is the combination of final and initial vowels of two morphemes. The circumstances in which such processes are followed discussed in the below:

(1) If a simple vowel, short or long, be followed by a similar vowel, short or long, the substitute for them both is the similar long vowel (P.6.1.101).

(6/1) e.g.

(i) *bidyā + ālaya > bidyālaya*

knowledge locus school

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(ii) \( \text{mahā} + \text{ānanda} > \text{mahānanda} \)  
\[ \text{great bliss} \quad \text{great bliss} \]

(iii) \( \text{ucca} + \text{āsana} > \text{uccāsana} \)  
\[ \text{high sit} \quad \text{high sit} \]

The above process can be represented as
\[ \text{a, i, u, r (short/long) + a, i, u, r (short/long) > a, i, u, r (long)} \]

(2) If \( \text{a} \) or \( \text{ā} \) is followed by \( \text{i} \) or \( \text{ī} \), then \( e \) is added to the preceding letter and the succeeding one is deleted.

\[ (6/2) \quad \text{e.g.} \]

(i) \( \text{mahā} + \text{īśvara} > \text{moheśvara} \)  
\[ \text{great God Siva} \]

(ii) \( \text{dhana} + \text{īśvara} > \text{dhaneśvara} \)  
\[ \text{wealth God wealth God} \]

The above process can be represented as
\[ \text{a/ā + i/ī > e} \]

(3) If \( \text{a} / \text{ā} \) is followed by \( \text{u} / \text{ū} \), then \( o \) is added to the preceding letter and the succeeding one is deleted.

\[ (6/3) \quad \text{e.g.} \]

(i) \( \text{mahā} + \text{utsaba} > \text{mahotsaba} \)  
\[ \text{great festival great festival} \]

(ii) \( \text{lamba} + \text{udara} > \text{lambodara} \)  
\[ \text{long belly long belly} \]

The above process can be represented as
\[ \text{a/ā + u/ū > o} \]
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(4) If \( a / \ddot{a} \) is followed by \( r \), then \( ar \) is added to the succeeding letter.  
\[ a / \ddot{a} + r > ar \]
\[ (i) \text{sapta} + \ddot{r} \ddot{s}i > \text{saptar} \ddot{s}i \]
seven    sage    seven sages

\[ (ii) \text{mah} \ddot{a} + \ddot{r} \ddot{s}i > \text{mahar} \ddot{s}i \]
great    sage    great sage

The above process can be represented as  
\[ a / \ddot{a} + r > ar \]

(5) If \( a / \ddot{a} \) is followed by \( e \) or \( ai \), then \( ai \) is added to the preceding letter and the succeeding one is deleted.  
\[ a / \ddot{a} + e / ai > ai \]
\[ (i) \text{jana} + \text{eka} > \text{janaika} \]
person    one    one person

\[ (ii) \text{mah} \ddot{a} + \text{ai} \ddot{s}v \ddot{a} \ddot{r} \ddot{j} \ddot{y}a > \text{mahai} \ddot{s}v \ddot{a} \ddot{r} \ddot{j} \ddot{y}a \]
great    prosperity    great prosperity

The above process can be represented as  
\[ a / \ddot{a} + e / ai > ai \]

(6) If \( a / \ddot{a} \) is followed by \( o / au \), then \( au \) is added to the preceding vowel and the succeeding vowel is deleted.  
\[ a / \ddot{a} + o / au > au \]
\[ (i) \text{bana} + \text{ausad} \ddot{a} > \text{banausad} \ddot{a} \]
jungle    medicine    jungle medicine

\[ (ii) \text{mah} \ddot{a} + \text{au} \ddot{s}d \text{ha} > \text{mahau} \ddot{s}d \text{ha} \]
great    medicine    great medicine

The above process can be represented as  
\[ a / \ddot{a} + o / au > au \]
(7) If \(i\) is followed by a dissimilar vowel, \(y\) is substituted for them. \(y\) is added to the preceding letter and the following vowel is added to the preceding one.

\[(6/7)\]
\[
\text{e.g.}
\]
\[
\begin{align*}
(i) & \text{ prati } + \text{ eka } \rightarrow \text{ pratyaka} \\
& \text{ each } \text{ one } \text{ each one}
\end{align*}
\]
\[
(ii) & \text{ súci } + \text{ agra } \rightarrow \text{ súcyagra} \\
& \text{ needle } \text{ point } \text{ needle point}
\]

(8) If \(u\) or \(ā\) is followed by a dissimilar vowel, \(v\) is substituted for them. \(v\) is added to the preceding letter and the following vowel is added to the preceding one.

\[(6/8)\]
\[
\text{e.g.}
\]
\[
\begin{align*}
(i) & \text{ su } + \text{ āgata } \rightarrow \text{ svāgata} \\
& \text{ well } \text{ come } \text{ welcome}
\end{align*}
\]
\[
(ii) & \text{ guru } + \text{ ādeśa } \rightarrow \text{ gurvādeśa} \\
& \text{ teacher } \text{ order } \text{ teacher’s order}
\]

(9) If \(r\) is followed by a dissimilar vowel, \(r\) is substituted for them. \(r\) is added to the preceding letter and the following vowel is added to the preceding one.

\[(6/9)\]
\[
\text{e.g.}
\]
\[
\begin{align*}
(i) & \text{ mātr } + \text{ ādeśa } \rightarrow \text{ mātrādeśa} \\
& \text{ mother } \text{ order } \text{ mother’s order}
\end{align*}
\]
\[
(ii) & \text{ bhrātr } + \text{ upadesa } \rightarrow \text{ bhrātrupadesa} \\
& \text{ brother } \text{ suggestion } \text{ brother’s suggestion}
\]

(10) Generally in Sanskrit, when \(a\) is followed by \(e\), \(ai\) is substituted for them. But in Oriya, generally in the context of \(eka\), \(a\) of the preceding letter is deleted / \(e\) of the succeeding letter is deleted.

\[(6/10)\]
\[
\text{e.g.}
\]
\[
\begin{align*}
(i) & \text{ jaṇa } + \text{ eka } \rightarrow \text{ jaṅka/jaṅaka} \\
& \text{ person } \text{ one } \text{ one person}
\end{align*}
\]
(ii) adha + eka > adheka / adhaka  
   half one half one

(11) Generally in Sanskrit, if a is followed by a, ā is substituted for both. But in some instances of Oriya, if a is followed by a, a of the preceding letter is deleted.

   (6/11) e.g.
   (i) ātha + anā > āthanā  
      eight a type of amount fifty paisa
   (ii) cāra + anā > cāranā  
      four a type of amount twenty five paisa

(12) The first vowel of the prakṛti often takes its vrddhi substitute. (see 2/50)

(6/12) e.g.
   hema + a > haima
   cold.N TSF cold wind.ADJ

(13) When a is followed by a, the first vowel of the first morpheme is lengthened.

(see 2/58)

(6/13) e.g.
   arānya + a > ārānya  
   jungle.N TSF related to jungle.ADJ

   śrābana + a > śrābaṇa  
   srabana.N TSF Indian month’s name.N

(14) When a is followed by ā, the last vowel becomes the ā. (see 2/63-64, 66-67).

(6/14) e.g.
   danta + ā > dantā  
   big teeth.N TSF having big teeth.ADJ

   daksīna + ā > daksīṇā  
   south.N TSF originated from south.ADJ
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(15) When $a$ or $ā$ is followed by $i$, then $a$ or $ā$ is deleted. (see 2/82- 88).

(6/15) e.g.

$kātha + i > kāthi$

wood.N TSF small wood.N

caka + i > caki

wheel.N TSF small wood.N

(16) When $ā$ is followed by $ei$ or $eya$, then $ā$ is deleted. (see 2/109- 111)

(6/16) e.g.

$mithā + ei > mitthei$

sweet.N TSF sweet containing object.N

(17) When $a$ is followed by $u$, then $a$ is deleted. (see 2/113- 20). But when $ā$ is followed by $u$, it retains the sequence. (see 2/121- 122)

(6/17) e.g.

$mada + uā > maduā$

wine.N TSF drunkard.N

$micha + uā > michuā$

lie.N TSF liar.N

gā + uli > gāuli

village.N TSF village settled person.N

(18) In case of tatpurusa samāsa, the case inflection is deleted. If the succeeding morpheme starts with vowel, then it is added to the last vowel of the preceding morpheme. Otherwise, the case inflection is deleted and follows the sequence. (see 2/184- 189).

(6/18) e.g.

rogaru mukta > roga mukta

disease.ABL free disease free

janmaru andha > janmāndha

birth.ABL blind blind by birth
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(19) If a is followed by i, then a is deleted. (see 3/35)
(6/19) e.g.
\[ \text{thaka} + \text{i}b\overset{\overset{\text{a}}{\overset{\overset{\text{a}}{\overset{\overset{\text{a}}{\text{d}}}}}{\text{a}}}} > \text{thakib}\overset{\overset{\overset{\text{a}}{\text{d}}}}{\overset{\overset{\text{a}}{\overset{\overset{\text{a}}{\text{d}}}}}{\text{a}}} \]
liar.N SUF lie.V.TR

(20) If a or ā is followed by e, then a or ā is deleted. (see 3/36)
(6/20) e.g.
\[ \text{kāna} + \text{e}b\overset{\overset{\text{a}}{\text{i}}} > \text{kāneib}\overset{\overset{\text{a}}{\text{i}}} \]
ear.N SUF give an ear.V.ITR
\[ \text{goḍa} + \text{e}b\overset{\overset{\text{a}}{\text{i}}} > \text{goḍeib}\overset{\overset{\text{a}}{\text{i}}} \]
leg.N SUF follow.V.ITR

6.2. Hal Sandhi ‘Consonant Morphophonemic’

Hal sandhi is the combination of final consonants with vowels and consonants. The circumstances in which such processes are followed discussed in the below:

(1) If t or d is followed by c or ch, c is substituted for t or d. c is added to the following c or ch.
(6/21) e.g.
(i) \[ \text{calat} + \text{citra} > \text{calaccitra} \]
running figure running figure
(ii) \[ \text{sat} + \text{chātra} > \text{sacchātra} \]
good student good student

(2) If t or d is followed by j or jh, j is substituted for t or d. j is added to the following j or jh.
(6/22) e.g.
(i) \[ \text{ut} + \text{j}vala > \text{ujjvala} \]
bright bright
(ii) $bipad + jaya > bipajjaya$
trouble winning trouble winning

(3) If $t$ or $d$ is followed by $t$ or $th$, $t$ is substituted for $t$ or $d$. $t$ is added to the following $t$ or $th$.

(6/23) e.g.
$brhat + tankara > brhattankara$
big money big money

(4) If $t$ or $d$ is followed by $h$, both of them form $ddha$.

(6/24) e.g.
(i) $ut + hāra > uddhāra$ ‘rescue’
(ii) $ut + hata > uddhata$ ‘violent’

(5) If $t$ or $d$ is followed by $l$, $l$ is substituted for $t$ or $d$.

(6/25) e.g.
(i) $ut + lāsa > ullāsa$
(ii) $ut + lekha > ulekha$

(6) If a vowel is followed by $cha$, $ca$ is added with $cha$.

(6/26) e.g.
(i) $pṛṇa + cheda > pṛṇaccheda$
full break full break

(ii) $bṛkṣa + chāyā > bṛksacchāyā$
tree shade tree shade

(7) If the first $vārṇa$ of a $varga$ ‘class’ is followed by the last $vārṇa$ of a $varga$, the first $vārṇa$ is substituted by the last $vārṇa$ of that $varga$.

(6/27) e.g.
(i) $jagat + nātha > jagannātha$
world God Jagannath

(ii) $ut + nati > unnati$ ‘development’
(8) If d or dh is followed by k, kh, g, gh or s, d or dh is replaced by t.

(6/28) e.g.

(i) šarad + kāla > šaratkāla ‘a season in Indian time’

(ii) sampad + sakhā > sampatsakhā
good time friend good time friend

(iii) tad + para > tatpara ‘early, quick’

(9) When the first varṇa of a varga is followed by a vowel, third and fourth varṇa of a varga or y, r, l, h, the first varṇa of a varga is substituted by the third varṇa of that varga. If the following word starts with the vowel, then it is added with the third varṇa.

(6/29) e.g.

(i) jagat + ṭiṣvara > jagadṭiṣvara
world God world God

(ii) ut+ joga > udjoga ‘trial’

(iii) sat + upāya > sadupāya
good way good way

(10) When a consonant is followed by y, the preceding vowel of the consonant is lengthened. (see 2/45)

(6/30) e.g.

kar + ya > kārya
do.V KSF workable.N

path + ya > pāṭhya
read.V KSF readable.N
6.3. *Visarga Sandhi* ‘Aspiration Morphophonemic’

By nature, *visarga* is not pronounced in Oriya. But borrowed words from Sanskrit have *visarga sandhi*. In Sanskrit, *visarga* is of two types: *r* and *s* addition. Generally, *r* is added to the *avyaya* in place of *visarga*.

(6/31) e.g.

*antah* > *antar* ‘inside’
*punah* > *punar* ‘repeated’

*s* is added to the words except *avyaya* in place of *visarga*.

(6/32) e.g.

*manah* > *manas* ‘wish’
*tapah* > *tapas* ‘meditation’

The circumstances in which *visarga sandhi* is followed discussed in the below:

(1) When *avyaya* having *visarga* is followed by vowel, third, fourth and fifth *varṇa* of a *varga*, *y, r, l, h*, then *r* is substituted in place of *visarga*. If *visarga* is followed by vowel, then vowel is added to the *r*. When *visarga* is followed by *vyaṁjana*, *ref* is added to that *vyaṁjana*.

(6/33) e.g.

(i) *antah* + *gata* > *antargata* ‘involved’
(ii) *punah* + *āgama* > *punarāgamaṇa* ‘coming again’
(iii) *punah* + *bāra* > *punarbāra* ‘repeatedly’

(2) When words having *visarga* except *avyaya* is followed by third, fourth and fifth *varṇa* of a *varga*, *y, r, l, h*, then *visarga* is replaced by *o* and added to the *visarga* *varṇa*.

(6/34) e.g.

(i) *manah* + *hara* > *manohara* ‘mind stealing’
(ii) *tapah* + *bana* > *tapobana* ‘meditating place’
(3) When visarga is followed by c or ch, ś is replaced by visarga.

(6/35) e.g.
(i) niḥ + caya > niścaya ‘sure’
(ii) duḥ + cintā > duścintā ‘bad thought’

(4) When visarga is followed by ca or cha, ṭa or ṭha, ta or tha. ś, s, s are replaced by visarga.

(6/36) e.g.
(i) puraḥ + kāra > puraskāra ‘prize’
(ii) catuḥ + pada > catuspada ‘four feeted’

(5) When visarga is followed by ta or tha, sa is replaced by visarga.

(6/37) e.g.
itṛ + tataḥ > itastataḥ ‘here there’

The above chapter can be concluded that most of the sandhi processes belong to svara sandhi. These sound changes are very regular and predictable.