Lesson 10.A

10.A.1 Introduction to Sandhi

Sandhi (‘placing together’) is the principle of sounds coming together naturally and harmoniously, which is to say without awkwardness or tongue-twisting. This is the principle behind the nasal substitution for the anusvāra that was considered earlier, and for the various pronunciations of the English letter ‘n’ mentioned in that section (8.A.3).

Sandhi applies to other consonants besides nasals: for example, consider the English phrase ‘cats and dogs’, which is pronounced as ‘cats and dogz’. Why should that be? Looking at it doesn’t help; you need to sound it. Have you heard why it is so? Well, try swapping the sibilants around: ‘catz and dogs’. Difficult, isn’t it? So there is an English sandhi rule that a sibilant preceded by an unvoiced consonant is unvoiced, and preceded by a voiced consonant it is voiced (ghoṣa). It is quite natural, and for the ease of pronunciation.

Sandhi applies to vowels too: consider how “he is” becomes “he’s”. When sounded — and that’s the key — you will hear that both vowels have the same sound: certainly one has a short measure, and the other a long measure, but the sound is the same. So, when a long Salir meets a short Salir, they are both replaced by a long Salir. (The apostrophe functions somewhat like the avagraha (§), inasmuch as it is not sounded.)

Sandhi applies whenever two sounds come together — and this is the point: it is sounds coming together. In the written form, the letters are symbols representing the sounds: in Sanskrit the notation changes when the sound changes, and thus it has an inherently phonetic script; the English script does not do this, and this is one of the reasons that foreigners mutter darkly about English spelling! The rules of sandhi only make sense in sound and not in writing: thus it is important, when reading the written word, to sound it aloud (or in the mind at least), and to hear that sound.

The rules of sandhi apply within a word as it is being developed from its elemental components to its fully inflected form: this is called internal sandhi, internal to an individual word. The rules also apply between words as they come together to form a sentence: this is called external sandhi, external to the individual words. The rules of internal and external sandhi are largely the same, but each has its own field of special cases and exceptions. We shall examine external sandhi broadly and
only lightly touch on internal sandhi as it affects the declension of formed words.

In these notes, the breve (˘) above the vowel indicates a short measure only, and the macron (¯) long measure only; combined (˘) they indicate a long or short vowel. Also V stands for any vowel, unless explicitly restricted.

10.A.2 Guṇa and Vṛddhi

The grammatical terms guṇa (‘secondary form’) and vṛddhi (‘increase’) can be considered as degrees of strengthening of the three primary vowels. Pāṇini defines guṇa as the three vowels ए ऐ ओ, and vṛddhi as ए ऐ ओ, and also gives the means for deriving the strengthened forms of the other two simple vowels ओ and ळ.

<table>
<thead>
<tr>
<th>simple vowel</th>
<th>a</th>
<th>ā</th>
<th>ē</th>
<th>ə</th>
<th>ə̀</th>
<th>ə́</th>
</tr>
</thead>
<tbody>
<tr>
<td>guṇa form</td>
<td>a</td>
<td>ā</td>
<td>e</td>
<td>o</td>
<td>ar</td>
<td>al</td>
</tr>
<tr>
<td>vṛddhi form</td>
<td>ā</td>
<td>ā</td>
<td>ai</td>
<td>au</td>
<td>ār</td>
<td>āl</td>
</tr>
</tbody>
</table>

1 The breve (˘) and macron (¯) diacritical marks, used together (˘) indicate a long or short measure of the vowel.
2 In the grammatical formation of words, the dīrga measure ळ does not occur.
3 The vṛddhi form of ळ, namely आर, does not arise in the grammar.

A useful way of considering guṇa, is the strengthening of the five simple vowels by the addition of a single measure of ए (so as to leave ए itself unchanged), and vṛddhi as the strengthening of the guṇa by the addition of a further measure of ए. This process has been described in Section 1.A.5.

10.A.3 Vowel Sandhi

Vowel sandhi, as you would expect, arises when a word ending in a vowel is followed by a word beginning with a vowel, in the same sentence or line of poetry: a vowel final is not changed before a consonant or in pausa, for example, at the end of a sentence. There are only six principles that cover all cases: it is not necessary to learn these, but what is important is to understand them, and that means to work through each principle—in sound—and understand that they are simply statements of the obvious.
1. When one of the five simple vowels (hrasva, short or dīrgha, long) meet a vowel of the same kind (hrasva or dīrgha), they are both replaced by the dīrgha measure of that vowel.

\[
\begin{align*}
\ddot{a} + \ddot{a} & \Rightarrow \ddot{a} \\
\dddot{y} + \dddot{y} & \Rightarrow \dddot{y} \\
\dddot{u} + \dddot{u} & \Rightarrow \dddot{u} \\
\ddot{r} + \ddot{r} & \Rightarrow \ddot{r}
\end{align*}
\]

Note that \(\text{dīrgha}\) is not shown here. It was mentioned earlier that the dīrgha measure of \(\text{dīrgha}\) is not used in the grammar (Section 1.A.4) and that \(\text{rasva}\) and \(\text{dīrgha}\) are savarṇa (Section 8.A.2), so that when \(\text{rasva}\) meets \(\text{dīrgha}\) or \(\text{dīrgha}\), the result is \(\text{rasva}\).

2. When \(\text{dīrgha}\) (hrasva or dīrgha) is followed by one of the five simple vowels other than \(\text{dīrgha}\) (hrasva or dīrgha), guṇa replaces both.

\[
\begin{align*}
\ddot{a} + \ddot{y} & \Rightarrow e \\
\dddot{a} + \dddot{u} & \Rightarrow o \\
\ddot{a} + \ddot{r} & \Rightarrow ar \\
\ddot{a} + \ddot{t} & \Rightarrow al
\end{align*}
\]

3. When \(\text{dīrgha}\) (hrasva or dīrgha) is followed by a guṇa or vṛddhi sound, the vṛddhi sound replaces both.

\[
\begin{align*}
\ddot{a} + e & \Rightarrow ai \\
\dddot{a} + o & \Rightarrow au \\
\ddot{a} + ai & \Rightarrow ai \\
\ddot{a} + au & \Rightarrow au
\end{align*}
\]

4. When a simple vowel (hrasva or dīrgha) other than \(a\) is followed by a different vowel, the first vowel is replaced by the antalsthā of the same mouth position:

\[
\begin{align*}
\ddot{y} + V & \Rightarrow yV \\
\dddot{u} + V & \Rightarrow vV \\
\ddot{r} + V & \Rightarrow rV \\
\ddot{l} + V & \Rightarrow IV
\end{align*}
\]

where \(V\) stands for any different vowel.
5. When a compound vowel (e ai o au) is followed by another vowel, it splits into its component parts (a or ā, and i or u) and the second of those parts is replaced by the antāṅgā of the same mouth position. The antāṅgā may then optionally be elided: generally it is only retained when the preceding vowel was au.

\[
\begin{align*}
e + V & \Rightarrow a + i + V \Rightarrow ayV \Rightarrow a V \\
ai + V & \Rightarrow ā + i + V \Rightarrow āyV \Rightarrow ā V \\
o + V & \Rightarrow a + u + V \Rightarrow avV \Rightarrow a V \\
au + V & \Rightarrow ā + u + V \Rightarrow āvV
\end{align*}
\]

where V stands for any vowel.

6. As a quite non-obvious exception to the above rule, and overriding it, when ər or ərə are followed by hrasva ə, the ə is elided and replaced by an avagraha.

\[
\begin{align*}
e + a & \Rightarrow e' \\
o + a & \Rightarrow o'
\end{align*}
\]

All the information on vowel sandhi may be conveniently displayed in tabular form—called a sandhi grid—which, though useful in its own way, is no substitute for understanding the principles in sound.

<table>
<thead>
<tr>
<th>Final Vowel</th>
<th>Following Vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ā</td>
<td>-i</td>
</tr>
<tr>
<td>-ar</td>
<td>-arə</td>
</tr>
<tr>
<td>-a</td>
<td>-ya</td>
</tr>
<tr>
<td>-a</td>
<td>-yā</td>
</tr>
<tr>
<td>-e</td>
<td>-ē</td>
</tr>
<tr>
<td>-o</td>
<td>-yu</td>
</tr>
<tr>
<td>-o</td>
<td>-yū</td>
</tr>
<tr>
<td>-ar</td>
<td>-yar</td>
</tr>
<tr>
<td>-ar</td>
<td>-yār</td>
</tr>
<tr>
<td>-a</td>
<td>-yl</td>
</tr>
<tr>
<td>-ai</td>
<td>-ye</td>
</tr>
<tr>
<td>-ai</td>
<td>-yai</td>
</tr>
<tr>
<td>-au</td>
<td>-yo</td>
</tr>
<tr>
<td>-au</td>
<td>-yau</td>
</tr>
</tbody>
</table>
1. The breve (\(^{\ddagger}\)) above the vowel indicates a short measure only, and the macron (\(^{-}\)) long measure only; combined (\(^{\ddagger^{-}}\)) they indicate a long or short vowel.

2. Optionally, the basic vowel may be replaced by its hrasva equivalent, and the \(\ddagger\) retained, for example: \(maha + \ddagger\) \(\Rightarrow\) \(maha\ddagger\) or \(mah\ddagger\).

**Note:** \(l\) does not occur as a word final, and neither \(l\) nor \(l\ddagger\) as a word initial, but they are included in the table for completeness.

One thing that the table does illustrate, is that resolving a given sandhi into its components is not at all straightforward: for example, while it is clear that \(-a+a-\) produces \(-\ddagger-\), the grid cannot determine from \(-\ddagger-\) whether either (or both) of the original \(a\)'s were long or not.

### 10.A.4 Exceptions to Vowel Sandhi

There are some exceptions, called prathya (‘to be taken separately’), where sandhi rules do not operate. For external sandhi these are:

a. Particles consisting of a single vowel, or ending in \(\ddagger\): these are usually interjections or exclamations, rather like the English ‘Ah’ and ‘Oh’.

b. The terminations of duals (whether nouns, pronouns, or verbs) ending in \(d\ddagger\), \(\ddagger\) or \(\ddagger\).

c. Prolonged (pluta) vowels.

### 10.A.5 Samprasārana

Samprasārana is the process whereby an antahstha is replaced by the simple vowel of the same mouth position (and the following vowel is elided). This is the complement to rule 4 in 10.A.3. Examples of this are \(ji\)-ya derived from \(dh\ddagger u\) yaj, sup-ta from \(dh\ddagger u\) svap, uc-atha from \(dh\ddagger u\) vac, and pṛcch-ati from \(dh\ddagger u\) prach.

A similar process occurs in English when a final ‘y’ is replaced by ‘i’ before adding another suffix, as for example, easy and easily, beauty and beautiful, holy and holiness.
Lesson 10.B

10.B.1 Introduction to Compound Words

The dhātu (root) is the basic form of a word denoting verbal activity: in order to form a noun (nāman) or adjective (viśeṣaṇa) etc., this activity needs to ‘freeze’, as it were, to make it into an object that is manifest and knowable. This ‘fixing’ of the meaning is accomplished by the addition of a suffix (pratyaya); the process in English is similar; for example, from the verb ‘attend’ given in 8.B.1, are derived:

- attendant: one who attends,
- attendance: the action of attending,
- attention: the quality of attending,
- attentive: having the quality of attending,
- attentiveness: the state of having the quality of attending.

As shown by the last word in this list, these suffixes may be concatenated; and further prefixes may be added, as for example, ‘inattentiveness’. Words thus ‘fixed’ by a suffix (pratyaya) may be joined together to form a compound word, as in the following English examples:

- bedroom, fireside, headache, screwdriver
- blackbird, gingerbread, housekeeping, sightseeing
- breakfast, greenback, newspaper, songwriter
- daydream, haircut, paperback, sunrise
- dressmaker, handwriting, rattlesnake, wheelbarrow

The compound word may simply be a conveniently brief way of expressing a longer phrase (e.g. gravestone: stone marking a grave), or express a specific idea related to its parts (e.g. fireman), or may have a meaning quite different from its parts (e.g. pigtail: a plait of hair hanging down from the back of the head [from its resemblance to the tail of a pig]).

When a compound is not yet fully accepted in English writing (e.g. where it may cause one to stumble when reading it), it is hyphenated, as:

- bread-winner, full-grown, light-weight, roof-garden
- break-down, ginger-beer, old-fashioned, single-minded
- double-decker, heart-shaped, pony-tail, store-room
- far-fetched, hot-house, red-hot, whole-hearted
- fire-fly, lamp-post, right-handed, world-wide
In devanāgarī, a compound word (samāsa) is always written without a break, but in transliteration these are often shown hyphenated, for example:

प्रथम-पूर्व prathama- (first) puruṣa person = first person.

A samāsa is formed by simply placing the prātipadika (stem) forms together and applying the sandhi rules at the junction. One exception to this should be noted: if the prātipadika ends in -an, then the n is dropped, for example:

ātman (self) + jñāna (knowledge) = ātmajñāna, self-knowledge.

In declining the compound word, the vibhakti ending is added to the end of the compound as a whole, i.e. only the last member appears to decline, while earlier members retain their prātipadika form.

Sanskrit makes extensive use of the samāsa, very extensive use indeed; so much so, that it is unusual to find a sentence without a samāsa. This makes expressions in Sanskrit at once concise and precise.

Although a samāsa may comprise many words, all the principles are covered in considering the joining of just two words (call them ‘A’ and ‘B’); a more complex samāsa is simply a case where A and/or B is itself a samāsa. If the principal (more important) word of the compound is underlined, then the four classes of samāsa may be indicated as:

AB dvandva (meaning ‘A and B’)  
AB tatpurva (A is in some case relationship to B)  
AB avayābyāva (forms indeclinable (avyaya) functioning as an adverb)  
AB baluvarthi (serves as an adjective qualifying an external principal)

Other types of samāsa are subdivisions, or special cases, of these four main classes.

There are few exceptions to the above: words such as ātmane-pada and parasmaipada where the case-affix of the first word is not dropped, are called a-luk samāsa.

10.B.2 Joining Words in Writing

Sanskrit is spoken without any break between words, and the written form reflects this: after the operation of sandhi, words are joined together in writing except after words ending in a vowel, anusvāra or visarga. For example:

नरान् अत्तेन अशेन गच्छामि = नरानत्तेनाशेन गच्छामि

Ideally, the virāma (,) may only be used at the end of a sentence.
10.B.3 Exercises

(a) Practise sounding the alphabetical order while following the consonants on the alphabet chart on page 74.

(b) Write out the alphabet chart on page 74 once per day from memory.

(c) Join the following word pairs using vowel sandhi: this exercise is most usefully done in sound alone, i.e. by repeatedly pronouncing the word pairs aloud very swiftly, and then writing down what is heard: the results may afterwards be checked against the rules or the sandhi grid.

Do remember that the purpose of the exercises is a practical understanding: one learns from mistakes, not from right answers!

1. वि + अनन्द
2. सत्य + आनन्द
3. सापु + ईश
4. कर्त्तृ + धर्मार
5. अत्र + प्राच
6. भू + आदि
7. आनन्द + प्रत्य
8. कप + द्वन्द
9. महा + कपि
10. हरे + अथ
11. शान्ति + अमृतम्
12. नदी + ईश
13. महा + ईश्वर
14. माया + प्रव
t
15. हस्ते + आस्ति
16. देवी + आनन्द
17. विष्णो + आस्य
18. परम + आत्मन्
19. न + इति
20. पितृ + आनन्द
21. पी + अकः
22. मभु + आवार्य
23. महा + द्वन्द
t
24. कर्त्तृ + आनन्द
t
25. का + दैम्
26. न + पव
27. शिव + ओदनम्
28. शुरु + एक्त्वम्
29. परम + ईश्वर
t
30. प्रति + एक्म्