CONCLUSION
&
BIBLIOGRAPHY
Conclusion

I. The Vedas as the early source of phonetics

As observed by S. Varma, "The study of phonetics was pursued in ancient India with an interest which has few parallels in antiquity". The observations of the RV (X.71) is also an interesting contribution to the early history of linguistics. The well-known mantra of RV (IV.58.3) is an interesting observation of the seers on speech which according to Patañjali's interpretation is compared to a bull, the sounds of which are attributed to three organs- viz.; the lungs, the throat and the head. In Aitarea Brāhmaṇa, speech is compared to the ocean on account of it's inexhaustible nature:-

\[
vāg vai samudro na vāk kṣyate / Aitareya Brāhmaṇa XIII.21
\]

It also enjoins that the stotriya verses should be recited in intermediate speech, which refines the soul:-

\[
tāṁ madhyamayā vācā śaṁśatyātmānam eva tat śaṁskarate / Aitareya Brāhmaṇa XII.13
\]

The study of phonetics in India had reached a considerably advanced stage even during 800-1000 B.C. The Āśvalāyana śrauta sūtra provides the data about the pronunciation prescribed during the recitation of certain verses on the fourth day of the navarātra ceremony. It prescribes that a single vowel was to be repeated sixteen times in varied quantity and accent. As aptly remarked by S. Varma:— "Thus the final ‘o’ of āpo in

1. S. Varma, Critical Studies in the Phonetic Observation of Indian Grammarians, p. 1
2. Patañjali Mahābhāṣya paspaśāhnikā- triḍhā baddhaḥ triṣu sthāneṣu baddha uryaṣi karphe śirasī //
āpo revatīḥ kṣayathā was (1) first pronounced with a quantity of three moras and the high tone: ॐ; (2) then five times as a short unaccented vowel- half O or ॐ; (3) again like (1); i.e. ॐ; (4) again five times like (2) i.e. ॐ; (5) like (1), i.e. ॐ; (6) three times like (2), i.e. O. So the final ‘o’ of āpo in this particular recitation was pronounced as follows: ॐ ॐॐibaba ॐ ॐॐibaba ॐ ॐibaba."

This minuteness of the details suggests that the phonetics had developed a lot in the Vedic period. Various sounds have been described in terms of different objects in nature.

II.  Śikṣā as the main source of phonetics

The general phonetics is to be met within the scope of Śikṣā literature, Śikṣā implied ‘general phonetics’ while prātiśākhyaś implied “applied phonetics”. Further Śikṣā lay down general principles of phonetics which were further applied by the prātiśākhyaś to the various Vedic texts with which they are related. The Śikṣāś claim a number of distinct contributions to phonetics; specially the Yajurvedic Śikṣāś along with some specific rules relating to YV prescribe certain general conditions for correct pronunciation as sound health, calm temperament, freedom from nervousness, abstention from omission of sounds, over-stress, faltering tone, consistently distinct pronunciation of the beginning and end of the speech, abstention from habits of roughness, projecting the lips, indistinct pronunciation, nasal twang, broken speech, and rigidity of the tongue, good teeth and lips. Other essentials are a clear throat, the cleaning of teeth and the throat with a twig-brush etc.

Minute details regarding the relation of the vowel and the

3. S. Varma, Ibid, p. 2
consonant, the nature of accent, the relation of accent and quantity etc.
are also dealt upon by the śikṣā texts. The Yāj. śik tells that the vedic
accent was musical. The seven musical notes mentioned in the science of
music are exactly the three accents, udāta etc. in the vedas.

gāndharvavedāye proktāḥ sapatā sadādayāḥ svarāḥ

ta eva vede viññeyāstraya uccādayāḥ svarāḥ // SS., p.1

The śikṣā texts also give details of svarabhakti, the nature and
quantity of anusvāra, rāṣṭa, the abhinidhāna, and the doublings. The
authors of śikṣā texts were authorities on phonetics. Their minute
observations on syllabication, accentuation etc. are distinct contributions
to general phonetics.

Thus for the development of modern phonetics in the computer
system, the knowledge about śikṣā texts is very essential. So the vedic
student must go through the śikṣā literature for the correct pronunciation
as well as correct appreciation of vedic texts.

III. Contribution of śikṣā literature for correct vedic recitation

The seers of ancient India had maintained the svādhyāya tradition
with utmost accuracy and intelligence as a result of which we are able to
get the vedic texts intact. But now-a-days, vedas which are the store
house of Indian wisdom and culture are only retained in certain texts in
the libraries only. The vedic students know the theories of the vedic
accents but not their effective application. Under such circumstances,
steps must be taken to preserve, protect and sustain the ancient heritage
of vedic oral tradition. As Manu has said:-
vedamevābhyasennityati yathākālamatandritaḥ /
taṁ hyasyāhuḥ paraṁ dharmamupadharmo 'nya ucyate //

(Manu-IV.147)

which means, the main duty is to recite and practise vedic chantings untiringly as it is the main duty.

The reward of correct reading of veda is suggested in the AV as follows:-

\[
\text{stutā mayā vardā vedamātā} / \\
\text{pracodayantāṁ pāvamānī dvijānāṁ} // \\
\text{āyuh prāṇāṁ prajāṁ kīrtīṁ dravīnāṁ brahmavarcasāṁ} / \\
\text{mahyāṁ dattvā brajata brahmalokam} // (AV XIX.71.1)
\]

The basic rules for the vedic recitations specially for the white yajurveda may be summerised here as follows:-

For the Vedic recitation one should be of humble attitude and pleasant mind and by fixing the eyes on the posture of hand (as shown in the picture: No.-1)

One should sit on a seat which is pure with a padmāsana or svastikāsana. Then he should keep his right hand on the fist of the left hand, and by arranging the fingers in the gokarṇākṛti, one should chant the mantras.⁴

---

⁴. suprasannamanā bhūtvā vinītaḥ svāsanāṁ bhajet / 
   niveṣyā dṛṣṭiṁ hastāre vedāṁ svāyaṁ samabhyaśet // 
   hastau susānyatau dhāryau ṣanumorupari sthitau / 
   guroranumatiṁ kuryāt paṭhamāṁya matir bhavet // 
   āsanaṁ svastikāṁ padmāṁ boddhorou daksīṇe karam / 
   savyāṁ samu śti vinyasya muṣṭau daksinākṣaṁparam //Sampradāyaprabodhiniśikṣā, verses-6-8
During the chanting of vedamantras one should not be very quick or very slow, should be of calm disposition, one should utter the mantras with a balanced tone free from high or low pitch defects.

Before starting the mantrapāṭha, one should utter “ḥarih om”, which is ādyudāṭṭa, svaritānta as: hariḥ oṃ.

IV. Hand movements during vedic recitation

In the Mādhyandina recession of ŚYV, the accent variations are indicated by hand movements. The utterance of accents like udāṭṭa, anudāṭṭa and svarīta etc. and the hand movements should coincide with each other, because it has been stated:-

\[ \text{yatrayatra sthūlavampanmatravisthati} / \]
\[ \text{hastabhraṣṭañ̄ḥ svarād bhraṣṭo na vedaphalamāṣnute} \text{ // Yāj. Śk.-24} \]

The hand-accent method has much significance as without such knowledge, the actual reward of vedapāṭha is not possible. Thus it is stated:-

\[ \text{ṛco yajūṛiṣi śaṃāni hastahīnāni yaḥ pathet} / \]
\[ \text{anṛco brāhmaṇastāvad yāvat svāratīna vindati} \text{ //} \]

Without the knowledge of svara, if one shows the hand movement while reciting the mantras then he incurs sin. Thus it is stated:-

\[ \text{hastahīnātīn tu yo'dhīte svaravarṇa-vivarjitam} / \]
\[ \text{ṛgyajuḥ śaṃabhirdagdho viyonomadhigacchati} \text{ // Yāj. Śk.-40} \]

During the utterance of udāṭṭa accent, the hand is to be raised up to the head, during the utterance of svarīta accent the hand is to be raised up to the tip of the nose and during the utterance of anudāṭṭa accent, the
hand is to be raised up to the heart.

V. **Summaries of rules for Vedic recitation of ŚYV.**

1. *anusvāra* has two divisions
   
a) where there is the ‘ष’ sign there one should know that the *anusvāra* is short and of one mora.

b) If after the above sign, a conjunct letter comes, then one should understand that there the *anusvāra* is long.

c) In certain places, the long *anusvāra* is indicated by the sign ‘ॐ’

In all the above cases, the *anusvāra* is to be uttered as ‘gum’

2. *visarga* is to be pronounced as *hakāra* but it is not to be regarded as *hakāra*.

For example:

- देवो व: / सविता *visarga* in *vah* is to be uttered as *ha*.
- देवी: *visarga* in *vih* is to be uttered as *hi*.
- आवृत्तेपशु: *visarga* in *suḥ* is to be uttered as *hu*.
- अग्रे: *visarga* in *gneh* is to be uttered as *he*.
- बाहो: *visarga* in *hvoḥ* is to be uttered as *ho*.
- स्त्र्ये: *visarga* is to be uttered as *hi*.
- श्री: *visarga* is to be uttered as *hu*.

3. *raṅga* or the half *anusvāra* has two varieties as: श्रां, २॥ लोकः २॥

(In these cases short and long *raṅga* is to be uttered as per the previous vowel.

4. where there is the sign ‘श’ between two vowels, there it is to
be understood as one mora hiatus.

5. where there is a stroke in the middle of ‘य’, it is to be understood as jakāra.

6. if ra comes after sa, sa, sa or ha, it is to be understood as ‘re’

7. The ‘ष’ if not joined with ta, tha, da, dha or na is to be uttered as ‘ख’ (kha).

8. The letter ‘श’ is to be pronounced as ज्ञ (ज्ञ). In Maharstra, the vedapāṭhīns utter it as ‘gnya’ ‘म्य’.

9. The various signs prescribed for different accents are as follows:

   **udātta-** The udātta accent has no sign as in अभिम.

   **svarita-** The svarita accent is indicated by a vertical straight line over the letter अ as in अभिमा

   **anudātta-** The anudātta accent is indicated by a horizontal line below the letter अ as in अभिमा

   **anusvāra (short)** - ऋ

   **anusvāra (long)** - ऋि

   **visarga before an udātta** - ऋि

   **visarga before an anudātta** - ऋिि

   **svarita in the middle** - L or ऋि

   **half nyubja or full nyubja** - (ि)
10. The hand movements as per the accents

i) *udāṭta* has two principal divisions as *ūrdhva-gāmī* and *vāma-gāmī*

a) If *udāṭta* is there before the *svarita*, then the hand is to be raised.

For example- “आह्मण्डल” (*SYV.XXIII.19*)

b) If *udāṭta* comes before the *svarita* with *nyūbja* sign and the *svarita* with the sign of a vertical line then the hand should be raised upward while uttering the *udāṭta*.

For example- “बहुतत्रिधिफल” (*SYV.XXIII.33*)

The second category of *udāṭta* has three subdivisions as

a) *udāṭta* coming in between two *anudāttas*. In this case, the hand is to be turned to the left of the reciter.

For example- “ग्रामुक्ति चित्रंव” (*SYV.XXIII.33*)

b) If *udāṭta* is there at the end of the *mantra* and after the *anudāṭta* and the next *mantra* starts with an *anudāṭta* letter, then the hand should move towards the left of the reciter.

For example- “गघण्ड” (*SYV.XXIII.19*)

(Note: Picture-2 and Picture-3 can be found in the original document)

c) If *udāṭta* is at the beginning of a *mantra* followed by an *anudāṭta* vowel, then the right hand should move towards the left as shown in the picture-3.
For example:- “य एवानीतस्तः” (ŚY.XVI.63)

In this way there are two types of raised (ूर्ध्वगमी) and three types of left turn (वामगमी) udāta accents.

ii) anudāta has five varieties as follows:-

a) nimmagāmi 
   b) antyadarśī

c) dakṣagāmi 
   d) tiryagdarśī

e) antargāmi

a) nimmagāmi anudāta- When anudāta comes first, then udāta and then svarita, the anudāta is to be known as nimmagāmi and the hand is to go downwards as shown in picture No.4.

For example:- “गणकल्पात्मकः” (ŚY.XXIII.19)

b) antyadarśī anudāta- It occurs when a series of anudāta are together. In this series the last anudāta letter is to be uttered with the low position of the hand as in picture No.4.

For example- “बलबिष्णुय स्थिरः.” (ŚY.XVII.37)

c) dakṣagāmi anudāta- When accents are in the order of anudāta, udāta and anudāta then the first anudāta is to be uttered with the movement of right hand to the right side as shown in the picture. No.5.

For example- “पुस्क्स्त्सा सह” (ŚY.XXIII.33)
d) **the antargāmi anudātta**- The letter under which ‘X’ or ‘L’ sign is given is known as madhyāvartti svara and an anudātta accent coming just before such madhyāvartti svara when uttered, the hand is to move towards the belly as shown in picture no.6.

For example- “च युज्ञेश्वर” (ŚYV.XVI.29)

e) **tiryagdarśī anudātta**- If the sign of nyubja (ॐ) comes after anudātta, then the hand is to be moved towards the right in the position of offering oblations to the manes (*piṇḍadāna*) as in picture no.7.

For example- “ब्रह्मण्विणिः” (Rudrī1/2)

iii) **Divisions of svarita**

The svarita accent has the following five varieties.

a) **madhyapāṭī svaritah**

b) **madhyadarśī svaritah**

c) **madhyāvartti svaritah**

d) **pūrṇanyubjasvaritah**

e) **ardhanyubjasvaritah**

a) **madhyapāṭī svarita**- When the sign of svarita is a vertical straight line above the letter, in that case the hand is to be placed at the middle in front of the heart as shown in picture no.8.

For example- “नामान्ते” (ŚYV.XXIII.19)
b) **madhyadarsi svarita** - The unmarked letters coming after svarita are known as *pracaya* and the handgesture is to be shown as in svarita accent as shown in picture no. 8.

For example- “गणपति श्रवणे” (*SYV* XXIII.19)

c) **madhyāvartisvarita** - The sign of ‘L’ or ‘X’ if given under a letter in a word before which an *anudātta* letter is there, then it is called madhyāvartisvarita. In such cases the right hand is to be placed in front of the chest and is to turn towards inside during the utterance of the *anudātta* letter, which precedes and during the utterance of the madhyāvartisvarita letter, the hand is to come outside after making a full turn.

For example- “च चापतेसास” (*SYV* XVI-29)

d) **pūrṇanyubjasvarita** - The sign of pūrṇanyubjasvarita is “ω”. If such sign is there under a letter which is preceded by letters of *anudātta svara* and followed by an unmarked letter which is further followed by madhyapātī svarita marked letter ‘ Descriptor’, then the palm is to move downwards while uttering the nyubja svarita as shown in picture no.9.

For example- “नुह्युपणिह” (*SYV* XXIII.33)

e) **ardhanyubjasvarita** - (sign ω) - If the letter with ‘ Descriptor’ sign comes after the *anudātta* letter and followed by the *udātta* after which an *anudātta* comes, then during the utterance of nyubja signed letter, the hand is to turn towards the right with the palm upwards as shown in picture no.10.

For example- “पुष्पो न रुमीन” (*Rudrī* 1/4)
11. **The hand gestures during the utterance of visarga**

There are three signs for *visarga*:

i) If *visarga* is in a letter with *urdhvagāmyudātta* then in that case, the index finger is to be turned upside as in picture no. 11.

For example- “आश्र: शिषानो” (*SY.V.XVII.33*)

and if that *visarga* comes after the *vāmagāmyudātta*, then the hand is to be placed towards the left with the raising of the index finger as shown in picture no. 12.

For example- “सहलस्कः” (*SY.V.XXI.1*)

ii) Where there is a horizontal line in the middle of the *visarga* as shown in the example, then the little finger and the index finger are to be kept straight and the middle and ring-finger are to move towards the hand as shown in picture no. 13.

For example- “पूजीभि ∕” (*Rudrī1/2*)
iii) When the middle line of *visarga* is turned downwards then the little finger is to be turned down as shown in picture no. 14.

For example- "पुः" *(ŚV.XXXXI.2)*

(Picture-14)

12. **The hand-postures during the utterance of *anusvāra***

i) Where the *anusvāra* is represented through 'ू' sign, there *anusvāra* is short or of one mora only. During the utterance of such *anusvāra*, the fingers are to be joined together as shown in the picture no. 15.

For example- "चन्द्रेण्सि" *(ŚV.XXXXI.7)*

(Picture-15)

ii) The *anusvāra* which is marked by 'ॆ' is to be represented by stretching the index finger towards the front as shown in picture no. 16.

For example- "स भूमि हूँ" *(ŚV.XXXXI.1)*

(Picture-16)
13. The hand-postures during the utterance of end-consonants in a mantra or mantrārdha

i) If the consonants \( k, t, ṇ, ṇ \) come at the end of a half mantra or a mantra or at the end of a pada during padapātha, then they are to be represented by making the index finger low as shown in picture no.17.

For example in the padapātha- "भिषकू, सम्प्रद, प्राइ, जूषण" etc.

ii) If at the end, the consonant "त-त" comes, then the index finger is to be attached to other fingers in round shape as shown in picture no.18.

For example- "सुहासपात" (ŚYV.XXXI.1)

iii) If the consonant 'न' comes at the end, then the tip of the index finger should touch the tip of the thumb as shown in picture no.19.

For example- "रसमीद" (Rudrī 1/4)

iv) If the consonant 'प-म' comes at the end, then it is to be shown by making a fist as shown in picture no.20.

For example- "ग्रामिष्म" (ŚYV.XXIII.19)
v) if the consonant ‘p’ comes at the end, then the five fingers are to be joined together as shown in picture no.21.

For example- “कलम्” in the padapātha

14. The faulty hand-postures

Sometimes it is found that the padapāthins show the faulty hand-movements which do not yield the desired result. As it is stated-

\[
\textit{culurnaukā sphauto daṇḍaḥ svastiko muṣṭikākṛtih} / \\
\textit{paraśurhastadosāḥ syustathāṅgulyā pradarśanam} //
\]

(Sampradāya prabodhini śikṣā -34, or Yāj.śik-38)

The followings are the faulty hand-postures-

i) \textit{culu cullū}- which is the ācamana posture as shown in the picture.

ii) \textit{naukā}- the hand in the shape of a boat as shown in the picture.
iii) *sphuta*- the palm in the straight position as shown in the picture.

iv) *danda*- the hand in the shape of slapping as shown in the picture.

v) *svastika*- the posture of the hand expressing *abhaya* or repelling fear as shown in the picture.

vi) *muśika*- the palm contracted to the form of a fist as shown in the picture.
vii) *paraśu-* the articulation of fingers in the shape of a *paraśu* or an axe as shown in the picture.

viii) *tarjana-* showing the accents by the index finger as shown in the picture.

The above eight postures are declared as faulty hand postures, the traditional hand postures.

In fact for Vedic recitations the traditional trained teachers are to be consulted. If a student with all sincerity learns the recitation from proper teachers, then through proper recitation he can realise Brahman, the Supreme Entity. Thus it may be concluded that *uccāraṇe vastutastu sadguruḥ śaraṇatī matam.*