

Vedic Accents

Following the rules of Pāṇini in the formation of a word from its rudimentary elements, the vowels acquire one of three basic pitch accents or *svara*:

- (a) *udāṭṭa*, raised pitch [1.2.29],
- (b) *anudāṭṭa*, not raised [1.1.30],
- (c) *svarita*, a blend of the first two [1.2.31].

The pronunciation of the *svarita* is initially *udāṭṭa* for the period of half a short vowel and *anudāṭṭa* for the rest (i.e. one and a half measures for a long vowel) [1.2.32]. In continuous speech or *saṃhitā*, all *anudāṭṭa* syllables following a *svarita* are called *pracaya* and are pronounced *ekāśruti* (monotone, between *anudāṭṭa* and *udāṭṭa*) [1.2.39], however, the *anudāṭṭa* immediately preceding a *svarita* or *udāṭṭa* is pronounced *sannatara* (lower than *anudāṭṭa*) [1.2.40]. The Vedas may also be recited entirely in *ekāśruti* (with exceptions) [1.2.36 ff.], nonetheless be aware that the accent may affect the meaning of a word, particularly a compound [6.1.223, 6.2.1] (e.g. *sú-kṛta*, ind. well done; *su-kṛtá*, n. a good deed).

With rare exceptions, a word standing alone has at most one vowel accented *udāṭṭa* or *svarita*, the rest being *anudāṭṭa* [6.1.158]. This is the basis of the Western system of marking Vedic accents in transliteration. Since most vowels are *anudāṭṭa*, this is taken as the basic or unaccented form, and the other accents are marked as:

- (a) acute (´) for the *udāṭṭa* (e.g. *kárma*).
- (b) grave (`) for the *svarita* (e.g. *vākyà*).

Vowel *sandhi*, besides producing a new vowel sound, also blends their accents: if this blending produces a *svarita* accent, it is called an **independent svarita** by Western grammarians. Where this independent *svarita* is within a word it is called *nitya* or **jātya** (innate), and where it arises due to the joining of words in *saṃhitā* (continuous speech) [8.2.4, 6] it is further classified according to the type of *sandhi*:

- (a) **Kṣaipra** (quick) when the first vowel is replaced by its semivowel [6.1.77]; the name arises from the shortening of the time measure from that of a vowel to that of a semivowel. The *svarita* accent replaces an *anudāṭṭa* occurring immediately after the semivowel substitution for an *udāṭṭa* or *svarita* vowel [8.2.4] (e.g. *apsú antáh* ⇒ *apsvàntáh*).

(U or S_i) + A ⇒ semivowel + S_i (1)
 where U=*udāṭṭa*, S_i=independent *svarita*, and A=*anudāṭṭa*.

(b) ***Praśliṣṭa*** (coalescence) when both vowels are replaced by a single vowel [6.1.84 ff]; the single substitute of an *anudāṭṭa* at the beginning of a word and the preceding *udāṭṭa*, becomes *svarita* optionally [8.2.6] (e.g. *ná evá* ⇒ *nàivá*).

U + A ⇒ S_i (2)

This rule applies to *sandhi* between words, whereas the general rule is that the single replacement of *udāṭṭa* and *anudāṭṭa* vowels (in either order) is *udāṭṭa* [8.2.5].

U + A or A + U ⇒ U (3)

(c) ***Abhinihita*** (close contact) when a following *a* is absorbed by a final *e* or *o* [6.1.109]; the rule for the accent follows that of the *praśliṣṭa* (e.g. *rayáḥ avániḥ* ⇒ *rayò'vániḥ*).

An independent *svarita*, when the next syllable has an *udāṭṭa* or independent *svarita* accent, is pronounced ***kampa*** (tremolo) in some traditions: this would apply in the above three examples.

S_i - (S_i or U) ⇒ K - (S_i or U)
 where K=*kampa svarita*.

In *saṃhitā* there is a further *svarita* called ***śuddha*** (simple, mere); Western grammarians name it the **dependent**, substitute, or enclitic *svarita*. An *anudāṭṭa* syllable following one that is *udāṭṭa* becomes *svarita* [8.4.66], unless it is in turn followed by an *udāṭṭa* or *svarita* [8.4.67].

U - A ⇒ U - S_d (4)

where S_d=dependent *svarita*.

But U - A - (U or S) ⇒ U - A - (U or S) (5)

These rules combine to produce a rhythm in the sound:

A_s - U - S_d - A_e - A_e caused by the *udāṭṭa*, and

A_s - S_i - A_e - A_e caused by the independent *svarita*,

where A_s=*sannatara*, and A_e=*ekasruti*.

The cadence becomes more complex with the reduction of syllables separating the main accents (U and S_i), so as to eliminate the *ekasruti* or even the dependent *svarita*.

At this point it would be useful to present a practical illustration of these accent changes that arise in continuous speech. The example is taken from the *R̥gveda* (10.125.7): the verse is shown as separate words and then in *saṃhitā* showing the applicable rules.

ahám suve pitáram asya mūrdhán máma yóniḥ apsú antáḥ samudré,
tátaḥ ví tiṣṭhe bhúvanā ánu vísvā utá amúṃ dyám varṣmāṇā úpa spr̥sāmi.

(4) (4) (5) (4) (1, *kampa*) (4)
 | | | | | |
ahám sùve pitáram asya mūrdhán máma yónirapsvântáḥ sàmudré,

(5) (4) (5)(3)(5) (5)(3*) (5) (3)(4)
 | | | | | | | | | | | |
táto ví tiṣṭhe bhúvanānu vísvotámúṃ dyám varṣmánópā spr̥sāmi.

(* optionally, rule 2 could apply here and become *kampa*.)

The tradition of Western sanskritists emphasizes grammar and translation, and thus will use the form of separated words in transliteration; it is unusual to find fully accented *saṃhitā* text in transliteration: at best only the *udātta* and *jātya svarita* are marked. India, on the other hand, has an oral tradition which emphasizes pronunciation and rhythm, and thus the marking of accents in *devanāgarī* script is optimized for correct pronunciation; in fact, the written form is a much later development and has given rise to different methods of accent notation. The various traditions are discussed separately:

(a) ***R̥gveda*** has *udātta* unmarked; the *svarita* (*jātya* or *śuddha*) is marked with a vertical line above the syllable (e.g. अ॑), but the *kampa* is indicated by a numeral 1 following the vowel if it is short, or the numeral 3 if it is long, and in both cases there is a vertical line above the numeral and a horizontal line below it; in the case of the long *kampa* vowel the syllable usually also has a horizontal line below it (e.g. अ॒॑ अ॒॒॑ अ॒॒॑). The *anudātta* is marked with a horizontal bar below the syllable: this applies to all *anudātta* syllables before the first *udātta* or *svarita* in a line of verse, after which only those *anudātta* that immediately precede an *udātta* or *svarita* (i.e. *sannatara*) is marked, and the rest of the *anudātta* (i.e. *ekasruti*) are not marked.

Using the sample verse from the *R̥gveda*, the accent marking in transliteration and the original *devanāgarī* is:

*ahaṃ suve pitarā́masya mūrdhan mama yonirapsva¹ntaḥ sāmudre,
tato vi tiṣṭhe bhuvanānu visvotāmūṃ dyāṃ varṣmanopā sprśāmi.*

अ॒हं सु॒वे पि॒तर॑मस्य मूर्ध॒न्मम् यो॒निर्प्स्व॑न्तः स॒मु॒द्रे ।
ततो॑ वि ति॒ष्ठे भु॒व॒नानु॑ विश्वो॒तामूं॑ द्यां व॒र्ष्म॒नोप॑ स्पृशामि ॥

To illustrate the notation when a verse begins with multiple *anudatta* syllables, let the first word have no accent, thus:

ahaṃ suve pitarā́masya mūrdhan mama ...

अ॒हं सु॒वे पि॒तर॑मस्य मूर्ध॒न्मम् ◦

For the *Rgveda* the current practice in India is, apparently, to pronounce all syllables marked with the underbar (*anudatta* and *sannatara*) as *anudatta*, all unmarked syllables (*udatta* and *ekasruti*) as *ekasruti*, and syllables marked *svarita* as moving from *udatta* to *ekasruti*.

(b) *Sāmaveda* accents are marked with a numeral, or numeral and letter, above the syllable: *udatta*, *svarita*, and *anudatta* are marked with the numerals 1, 2, and 3 respectively; the figure 2 is also used to indicate an *udatta* when there is no following *svarita*; *ekasruti* syllables are not marked. Special marking is used for particular accent sequences:

U - U - S ⇒ 1 - unmarked - 2r
U - U - A ⇒ 2u - unmarked - 3
A - S_i ⇒ 3k - 2r

Using the same passage from the *Rgveda* as an illustration, the marking in transliteration and *devanāgarī* would be:

³ ¹ ² ³ ¹ ² ³ ^{2u} ³ ¹ ² ^{3k} ^{2r} ¹ ²
*ahaṃ suve pitarā́masya mūrdhanmama yonirapsvantāḥ sāmudre,
tato vi tiṣṭhe bhuvanānu visvotāmūṃ dyāṃ varṣmanopā sprśāmi.*

३ १ २ ३ १ २ ३ २३ ३ १ २ ३क २र १ २
अ॒हं सु॒वे पि॒तर॑मस्य मूर्ध॒न्मम् यो॒निर्प्स्व॑न्तः स॒मु॒द्रे ।
२ ३ १ २ ३ २ ३ २ ३ २ ३ २ २३ ३ १ २र
ततो॑ वि ति॒ष्ठे भु॒व॒नानु॑ विश्वो॒तामूं॑ द्यां व॒र्ष्म॒नोप॑ स्पृशामि ॥

(c) *Śatapatha-Brāhmaṇa* uses only two accents, *udātta* and *anudātta*: a horizontal line below the syllable indicates *anudātta* (as in the *R̥gveda*). The relationship to the grammatical accents described by Pāṇini is rather indirect: the *anudātta* marked here are the syllables **before** those which would be marked *svarita* in the *R̥gveda* with rule (5) not applying.

Using the sample verse from the *R̥gveda*, the accent marking would be:

अहं सुवे पितॄमस्य मूर्धन्म योनिर्प्स्वन्तः समुद्रे ।
ततो वि तिष्ठे भुवनानु विश्वोतामूं द्यां वर्ष्मनोप स्पृशामि ॥

Caution: beyond this point, the information to hand is incomplete and should be treated circumspectly.

(d) *Maitrāyaṇī-Saṃhitā* marks the *udātta* with a vertical line above the syllable; the independent *svarita* is indicated by a curve below (अँ); the dependent *svarita* has a horizontal line crossing the middle of the syllable or three vertical strokes above it (अँ) or a dot below it (अँ); the *anudātta* is marked with a horizontal line below.

(e) *Kāthaka-Saṃhitā* marks the *udātta* with a vertical line above the syllable; the independent *svarita* is indicated by a curve below (अँ) only if an *anudātta* follows, otherwise by a hook below (अँ); the dependent *svarita* has a dot below the accented syllable (अँ); the *anudātta* is marked with a horizontal or vertical line below (अँ अँ).

(f) *Taittirīya-Saṃhitā*, *-Brāhmaṇa*, *and -Āraṇyaka*, *and Atharva-Veda*, *and Vājasaneyi-Saṃhitā* are marked as the *R̥gveda*, with minor differences, mainly in the marking of the *svarita* before an *udātta*.

Works consulted:

- (a) S.M. Katre, *Aṣṭādhyāyī of Pāṇini*, Motilal Banarsidass.
- (b) Ś.C. Vasu, *The Siddhānta Kaumudī*, Motilal Banarsidass.
- (c) A.A. Macdonell, *A Vedic Grammar for Students*, Appendix III.
- (d) W.D. Whitney, *Sanskrit Grammar*, para.80–97.
- (e) M. Williams, *A Practical Grammar of the Skt. Lang.*, para.975–985.
- (f) K.V. Abhyankar, *A Dictionary of Sanskrit Grammar*, M.S. Univ. Baroda.
- (g) Bureau of Indian Standards, ISCI (1991), Annex G.
- (h) The *Bhāṣika* Accentuation System, George Cardona, *Studien zur Indologie und Iranistik* 18 (1993): 1–40.

Notation	<i>udātta</i>	<i>svarita</i>	<i>anudātta</i>	special
<i>R̥gveda</i>		अ̇ अ॑ अ॒ अ॒	अ̇	
<i>Sāmaveda</i>	अ̇	अ̇	अ̇	अ॒ अ॒ अ॒
<i>Śatapatha</i>		अ̇		
<i>Maitrāyaṇī-Saṃhitā</i>	अ̇	अ॒ अ̇ अ̇	अ̇	
<i>Kāthaka-Saṃhitā</i>	अ̇	अ॒ अ̇ अ̇	अ̇ अ̇	
<i>Taittirīya-Brāhmaṇa, -Saṃhitā, -Āraṇyaka</i>		अ̇ अ॑	अ̇	
<i>Atharvaveda</i>		अ॒ अ̇ अ॑ अ॒ अ॒	अ̇	
<i>Vājasaneyi-Saṃhitā</i>		अ̇ अ॑ अ॒ अ॒	अ̇	
<i>Taittirīya-Upaniṣad</i>		अ̇ अ̇	अ̇	
<i>Śukla Yajurveda</i>		अ̇		
<i>Non-Tait.° Yajurveda</i>		अ̇		
??? Sentence ending	अ̇			

This file (possibly updated) is available from:
<ftp://ftp.nac.ac.za/wikner/accnt.ps600-june97>.
Comments and corrections to: wikner@nac.ac.za.

25 June 1997.