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 *svāra*:

(a) *udāttasya*, raised pitch [1.2.29],
(b) *anudāttasya*, not raised [1.1.30],
(c) *svarīta*, a blend of the first two [1.2.31].

The pronunciation of the *svarīta* is initially *udāttasya* for the period of half a short vowel and *anudāttasya* for the rest (i.e. one and a half measures for a long vowel) [1.2.32]. In continuous speech or *samhītā*, all *anudāttasya* syllables following a *svarīta* are called *pracayā* and are pronounced *ekaśruti* (monotone, between *anudāttasya* and *udāttasya*) [1.2.39], however, the *anudāttasya* immediately preceding a *svarīta* or *udāttasya* is pronounced *sannātara* (lower than *anudāttasya*) [1.2.40]. The Vedas may also be recited entirely in *ekaśruti* (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. *sū-kṛta*, ind. well done; *su-kṛtā*, n. a good deed).

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

(a) acute (´) for the *udāttasya* (e.g. kārma).
(b) grave (´) for the *svarīta* (e.g. vākyā).

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

(a) *Kṣaipa* (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 *svarīta* accent replaces an *anudāttasya* occurring immediately after the semivowel substitution for an *udāttasya* or *svarīta* vowel [8.2.4] (e.g. *apsū antāḥ* ⇒ *apsvāntāḥ*).
(U or S₁) + A ⇒ semivowel + S₁ ...........................(1)
where U=udāṭta, S₁=independent svarīta, and A=anudāṭta.

(b) Praśīṭa (coalescence) when both vowels are replaced by a single vowel [6.1.84 ff]; the single substitute of an anudāṭta at the beginning of a word and the preceding udāṭta, becomes svarīta optionally [8.2.6] (e.g. nā evā ⇒ nānvā).

U + A ⇒ S₁ ................................................. (2)

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

U + A or A + U ⇒ U ........................................ (3)

(c) Abhinīhita (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 praśīṭa (e.g. rayāḥ avānīḥ ⇒ rayō’vānīḥ).

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

S₁ - (S₁ or U) ⇒ K - (S₁ or U)
where K=kampa svarīta.

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

U - A ⇒ U - Sᵈ ................................. (4)
where Sᵈ= dependent svarīta.

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

These rules combine to produce a rhythm in the sound:

Aₜₘ - U - Sᵈ - Aₑ - Aₑ  caused by the udāṭta, and
Aₜₘ - S₁ - Aₑ - Aₑ  caused by the independent svarīta,
where Aₜₘ=sannatam, and Aₑ=ekaśruti.

The cadence becomes more complex with the reduction of syllables separating the main accents (U and S₁), so as to eliminate the ekaśruti or even the dependent svarīta.
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 *Rgveda* (10.125.7): the verse is shown as separate words and then in *samhītā* showing the applicable rules.

ahām suve pītārum asya mūrdhān máma yóniḥ apsū antāḥ samudrē, tāto viśṭhe bhūvanā ānu viśvā utā amāṃ dyām varṣmāṇā ūpa sprāṃī |

\[ (4) \quad (4) \quad (5) \quad (4) \quad (1, \text{kampa}) \quad (4) \]

ahāṃ suve pītārām asya mūrdhān máma yónirprsvāntāḥ sāmudrē, |

\[ (5) \quad (4) \quad (5)(3)(5) \quad (5)(3′) \quad (5) \quad (3)(4) \]

táto viśṭhe bhūvanānū viśvottāmāṃ dyām varṣmāṇāpā sprāṃī |

( * 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 *samhītā* text in transliteration: at best only the *udāatta* 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 *devānāgarī* 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) *Rgveda* has *udāatta* unmarked; the *svarita* (*jātya* or *śuddha*) is marked with a vertical line above the syllable (e.g. आ), 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. आ आ आ). The *anudāatta* is marked with a horizontal bar below the syllable: this applies to all *anudāatta* syllables before the first *udāatta* or *svarīta* in a line of verse, after which only those *anudāatta* that immediately precede an *udāatta* or *svarīta* (i.e. *sannataṃ*) is marked, and the rest of the *anudāatta* (i.e. *ekāsūrtī*) are not marked.

Using the sample verse from the *Rgveda*, the accent marking in transliteration and the original *devānāgarī* is:
To illustrate the notation when a verse begins with multiple anudatta syllables, let the first word have no accent, thus:

\[ \text{aham} \text{ sive} \text{ pitarāmasya mūrdhan} \text{ mama} \text{ yonirāpsva} \text{ ṭalāḥ sāmudre}, \]
\[ \text{tato vi tiśhe bhuvanānu viśvātāmāṁ dyāṁ varṣmanopā sprśāmā}. \]

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

\[ \text{aham} \text{ sive} \text{ pitarāmasya mūrdhan} \text{ mama} \ldots \]

For the Rgveda the current practice in India is, apparently, to pronounce all syllables marked with the underbar (anudatta and sannatarā) as anudatta, all unmarked syllables (udatta and ekaśruti) as ekaśruti, and syllables marked svarīta as moving from udatta to ekaśruti.

(b) Sāmaveda accents are marked with a numeral, or numeral and letter, above the syllable: udatta, svarīta, 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 svarīta; ekaśruti syllables are not marked. Special marking is used for particular accent sequences:

- \[ U - U - S \Rightarrow 1 - \text{unmarked} - 2r \]
- \[ U - U - A \Rightarrow 2u - \text{unmarked} - 3 \]
- \[ A - S_i \Rightarrow 3k - 2r \]

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

\[ \text{aham} \text{ sive} \text{ pitarāmasya mūrdhanmāṁ} \text{ yonirāpsvāntāḥ} \text{ samudre}, \]
\[ \text{tato vi tiśhe bhuvanānu viśvātāmāṁ dyāṁ varṣmanopā sprśāmā}. \]

\[ \text{aham} \text{ sive} \text{ pitarāmasya mūrdhanmāṁ} \text{ yonirāpsvāntāḥ} \text{ samudre}, \]
\[ \text{tato vi tiśhe bhuvanānu viśvātāmāṁ dyāṁ varṣmanopā sprśāmā}. \]
(c) Śatapatha-Brāhmaṇa uses only two accents, udāḷṭa and anudāḷṭa: a horizontal line below the syllable indicates anudāḷṭa (as in the Rgveda). The relationship to the grammatical accents described by Pāṇini is rather indirect: the anudāḷṭa marked here are the syllables before those which would be marked svarīṭa in the Rgveda with rule (5) not applying.

Using the sample verse from the Rgveda, the accent marking would be:

अहं सूवे पितरस्य मूर्त्तिः यो निर्प्वन्ति: समुद्रे।
ततो वि तिष्ठे भूवनाम विश्वोतांम् द्यां वर्षनोप स्पर्शामि।

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

(d) Maitrāyaṇī-Śamhitā marks the udāḷṭa with a vertical line above the syllable; the independent svarīṭa is indicated by a curve below (ः); the dependent svarīṭa has a horizontal line crossing the middle of the syllable or three vertical strokes above it (ः) or a dot below it (ः); the anudāḷṭa is marked with a horizontal line below.

(e) Kāṭhaka-Śamhitā marks the udāḷṭa with a vertical line above the syllable; the independent svarīṭa is indicated by a curve below (ः) only if an anudāḷṭa follows, otherwise by a hook below (ः); the dependent svarīṭa has a dot below the accented syllable (ः); the anudāḷṭa is marked with a horizontal or vertical line below (ःः).

(f) Taittirīya-Śamhitā, -Brāhmaṇa, and -Āraṇyaka, and Atharva-Veda, and Vājasaneyi-Śamhitā are marked as the Rgveda, with minor differences, mainly in the marking of the svarīṭa before an udāḷṭa.

Works consulted:

(a) S.M. Katre, Aṣṭāḍhyāyī of Pāṇini, Motilal Banarsidass.
(b) Ś.C. Vasu, The Siddhāṇṭa 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.
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