Editorial updates for Vedic characters
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Note 1: Consult the glossary at the end of this document for Samavedic technical terms.
Note 2: Samavedic notations for Grantha have been documented in L2/09-372 pp 14 and 15.
Note 3: In this document, “the proposal” refers to L2/07-343 N3366, esp. pp 5 and 6 thereof.

§1. Informative aliases in the Vedic Extensions block

1CD0 ◌᳐ V EDIC TONE KARSHANA
Replace: saamasvara karshanna
By: saamagaana aayata shruti
Other: add annotation “character name is an error; this does not denote karshana”

Rationale:

The proposal claimed that this written form denotes a karṣaṇa. It also claimed that this sometimes denotes a namana and “occasionally” praṇata. However, none of the attestations for this character given in the proposal or seen in the many publications in multiple scripts we have examined so far correspond to karṣaṇa, namana or praṇata.

Karṣaṇa is denoted not by this character but by a descending series of digits on the mainline. For example the karṣaṇa in sāman 284-1 is shown below:

As for namana, we have only seen it denoted by an S-like shape (as in A8F1 COMBINING DEVANAGARI SIGN AVAGRAHA) in scripts such as Devanagari, Bengali and Tulu-Tigalari (see L2/15-162) or by the script-specific letter NA as in Devanagari (see the proposal p 6 and 18) and Grantha (see L2/09-372 p 15 and also L2/15-163). Nowhere is the use of the present character for namana seen. Finally, praṇata is not marked at all but inferred from context.

In fact, the given shape is recognized by Samavedic scholars only as denoting an āyata śruti. As such, the very name of the character is in error. However, I am not sure if this is the kind of error that warrants a normative alias. If it is warranted, the term V EDIC SIGN AYATA SHRUTI is appropriate. If not, at the very least the informative alias should be corrected. In either case an annotation documenting the error should be added.
1CD1   ☞   Vedic Tone Shara

Remove:  <the entire alias reading “vaidika svarita uurdhva shara”>
Other:  annotate as “denotes Samavedic diipta shruti”; cross-ref 1CE1 and 1CF4

Rationale:

The character does not denote a svarita. The remaining words “uurdhva shara” mean “upright arrow” which is already clear from the formal character name.

Further, the proposal claimed that this character “is used in Sāmagāna to mark skipping (atikrama), usually ... from kruṣṭa to dvitiya” i.e. skipping the prathama svara. However, the attestations provided in the proposal and in the GoI’s L2/08-043 p 61 are in fact that of a dipta śruti from the Mahānāmnī Sāman-s on Ṛc-s 642, 644, 645 and 648 as can be known by comparing with Grantha which marks dipta śruti by a square cup:

The kruṣṭa svara only ever occurs in two sāman-s: 284-2 and 381-1. So the 1 here (circled in red) in these sāman-s denotes a prathama svara which continues to the syllables marked by the shara in Devanagari and square cup in Grantha and so there is no atikrama here.

1CD4   ☜   Vedic Sign Yajurvedic Midline Svarita

Add:  vaidika svarita madhyarekhaa

Rationale:  This is missing an alias. Further, the alias “vaidika madhyarekhaa” (“vedic central line”) of 1CE2 is over-applicable to this and so there has to be a distinction.

1CD8   ☞   Vedic Tone Candra Below

Replace:  adho’rdha vakra   By:  adhah chandra

Rationale:  The current wording means “half-bent below”. This does not clearly describe the shape. The proposed wording means “crescent below”. Compare the alias “upari chandra” (“crescent above”) we propose below for 1CF4.
1CE0  ❄️  **VEDIC TONE RIGVEDIC KASHMIRI INDEPENDENT SVARITA**

**Replace:**  uurdhva vakra rekhaa  
**By:**  svarita upari vagra rekhaa  
**Rationale:**  This denotes a svarita. Next, “uurdhva” means “upright” which does not describe the shape, but “upari” means “above” which does. Also, compare the alias “svarita adho vagra rekhaa” of the inverted form below i.e. 1CD7  ❄️  where “adho” means “below”.

1CE2  ❄️  **VEDIC SIGN VISARGA SVARITA**

**Replace:**  vaidika madhyarekhaa  
**By:**  vaidika visarga madhyarekhaa  
**Rationale:**  In keeping with the rest of the visarga characters, the word “visarga” should be inserted. Otherwise the meaning “Vedic central line” is over-applicable to 1CD4. The proposed wording will contrast with that proposed for 1CD4 above (“visarga” vs “svarita”).

1CF2  ❄️  ×  **VEDIC SIGN ARDHAVISARGA**

**Remove:**  <the entire alias reading “vaidika jihvaamuuliya upadhmaaniya”>

**Rationale:**

a. This character is not just vaidika (Vedic).

b. The usage for jihvāmūliya/upadhmāniya is common to 1CF3 as well.

c. This usage is well explained by the notice above these two characters.

1CF4  ❄️  **VEDIC TONE CANDRA ABOVE**

**Add:**  vaidika svarita upari chandra  

**Other:**

1. annotate as “sometimes used to denote shivaka udatta and diipta shruti in the Kauthuma Sama Veda” and cross-ref 1CD1 and 1CE1 under this

2. also annotate as “denotes non-augmented syllables in the Ranayaniya Sama Veda”

**Rationale:**

This character is missing an alias. Further, in L2/09-344 N3844, I had proposed it based on attestations for Yajurvedic. As such it is shown under the sub-header of “Sign for Yajurvedic”. However I have since found attestations for other usages in Kauthuma and Ranayaniya Sama Vedic texts in the Devanagari, Kannada and Tulu-Tigalari scripts.

Attestations of usage for the candra above denoting dipta śruti in Kauthuma are given below. Parallel attestations from Grantha printings of the same text using the square cup for the same are given for comparison:
Evidently in the Kannada printing, they have fallen back upon a sans-serif Latin \( \text{u} \) due to insufficient font support! Nevertheless, 1CF4 is the appropriate character here since it is the exact shape that is intended. One confirms this by noting that the śivaka udātta is also marked thus by the same Kannada script publication as above as seen for example in Ṛc 315:
... the Grantha version being:

... and noting that the following Devanagari sample (from p 3 of Sāma Sūkta Mañjarī pub. in 1979 by Ramanatha Dikshita) clearly uses the candra above for the śivaka udātta:

In L2/09-372 pp 13 and 14 I had documented 걁 and proposed it as 11374 COMBINING TAMIL LETTER PA due to its similarity to Tamil PA ப. However, I then had no explanation why a non-Grantha shape or why PA was chosen. It is probably the CANDRA ABOVE 걁 which was re-shaped as 걁, and then re-analysed and transliterated into Devanagari as COMBINING PA 걁.

Now the Gana texts of the Ranayaniya school in both the Kannada and Tulu-Tigalari scripts use this character (often rendering it as more than a half-circle) to mark non-lengthened syllables as seen below (from manuscripts in the possession of Parameshvara Bhat of Nīlkod village, Honnavara Taluk, Uttara Kannada District, Karnataka):
§2. Annotations in the Vedic Extensions block

1CD2 ◌᳒ VEDIC TONE PRENKHA
Remove: <the entire annotation reading “indicates vibrato”>
Rationale: Though the proposal suggested this annotation, it is incorrect. The Oxford Advanced Learner’s Dictionary¹ defines vibrato as “a shaking effect in singing ... made by rapid slight changes in pitch”. Wiktionary² defines it as “a musical effect consisting of a regular, pulsating change of pitch”. However, prenkha (see glossary) does not involve such repeated change of pitch. Thus the annotation is misleading and should be removed.

1CE1  ◎ VEDIC TONE ATHARVAVEDIC INDEPENDENT SVARITA
Add: also denotes Samavedic diipta shruti
Other: cross-ref 1CD1 and 1CF4
Rationale: Attestations are seen in Bengali script publications of the Kauthuma Sama Veda (ed. Durgadas Lahiri, Kolkata, 1922) for this character being used to denote dipta śruti. Compare the earlier Grantha samples using the square cup in the same passages.

Sāman 161-1

¹ http://www.oxforddictionaries.com/definition/english/vibrato, retrieved 2015-May-25
§3. Sub-headers in the Vedic Extensions block

1. The sub-header “Marks of nasalization” should take the notice “1CE9 to 1CEC are meant to be followed by non-spacing anusvara or candrabindu characters and then optionally by 1CED”. Note that L2/08-092 N3385 p 5 recommended the first part of this model and L2/08-042 p 16 recommended the part about 1CED TIRYAK.

2. 1CEE to 1CF1 should be put under a separate sub-header “Additional marks of nasalization” since the above notice and combining behaviour do not apply to these.

3. 1CF4 currently stands under a separate sub-header “Sign for Yajurvedic” but we have shown attestations above for non-Yajurvedic usages as well. Further, we have proposed in L2/15-160 a character at 1CF7 for Samavedic. Two characters denoting fricatives stand in between at 1CF5 and 1CF6. Thus:
   a. For simplicity, it seems that it would be sensible to group all these (i.e. 1CF4 to 1CF7) under a single sub-header “Various Signs”.
   b. The more cluttered alternative would be to have three separate sub-headers “Sign”, “Signs for fricatives” and “Sign for Samavedic” for one, two and one characters respectively.

§4. Informative aliases in the Devanagari Extended block

A8EA ◌꣪ COMBINING DEVANAGARI LETTER A

Replace: abhinihita           By: abhigiita

Rationale: This character is not attested to denote abhinihita (or more properly abhinihata) which is unrelated to the Sāma Gāna. The proposal only documented this character as denoting abhigiita of the Sāma Gāna.
Replace: saamasvara u  
By:  saamasvara shivaka udaatta  
Rationale: The point of the informative alias is to be informative. The proposal clearly documented this as denoting the udātta. Considering the adjective “saamasvara”, it denotes the śivaka udātta of the Sāma Ārcika as is seen by comparing the following sample of Rś 315 from Devanagari with the Kannada and Grantha samples of the same verse provided on p 5.

Replace: ka  
By:  kampa/svatantra svarita  
Rationale: The point of the informative alias is to be informative. The proposal documented this as denoting/preceding the “independent” (svatantra) svarita which may be “aggravated” (kampa) in specific contexts.

Replace: prannatam  
By:  diipta shruti  
Rationale: The proposal claimed that this character denotes preṇikha. The current alias (from L2/08-042) refers to praṇata. However, this character denotes neither, since the available attestations show dipta śruti, as can be seen by comparing the samples from the proposal and L2/08-042 (of sāman-s 169-3 and 284-2 respectively) to Grantha where the square cup denoting dipta śruti is used in the same context as Devanagari PA:

Replace: ra  
By:  aahata svarita/diirgha  
Rationale: The point of the informative alias is to be informative. The proposal documented this character as denoting the svarita in specific contexts in the Sāma Ārcika.
These contexts are where the svarita becomes āhata as per tradition. The proposal also documented this as marking dirgha (long) vowels which are retained as dirgha in the Sāma Gāna and do not become vṛddha. Samavedic scholars recognize this notation by the term dirgha. A8E0 ◌꣠ COMBINING DEVANAGARI DIGIT ZERO is alternately used for both purposes.

A8F1 ◌꣱ COMBINING DEVANAGARI SIGN AVAGRAHA

Current: diirghiibhaava  Proposed: avagraha

Rationale:

This character is not attested to denote any dirghibhāva i.e. “lengthening”. In L2/15-162 we provide attestation for this character to be used for multiple other purposes in multiple scripts. As such, it is better for the alias (if one is felt necessary) to include the common name of this character “avagraha” rather than attempt to capture its semantics.

Note that L2/15-162 also requests other editorial changes for this character.

COMBINING DEVANAGARI DIGITS:

<table>
<thead>
<tr>
<th>Replace</th>
<th>By</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8E0  ◌꣠ZERO</td>
<td>shuunya shuunyam</td>
</tr>
<tr>
<td>A8E1  ◌꣡ONE</td>
<td>eka ekam</td>
</tr>
<tr>
<td>A8E2  ◌꣢TWO</td>
<td>dvi dve</td>
</tr>
<tr>
<td>A8E3  ◌꣣THREE</td>
<td>tri triinni</td>
</tr>
<tr>
<td>A8E4  ◌꣤FOUR</td>
<td>chatur chatvaari</td>
</tr>
</tbody>
</table>

Rationale: The aliases of the rest of the digits six to nine are based on their nominative case forms (ṣaṭ to nava) rather than their roots (ṣaṣ to navan). This helps recognizability by those who are not Sanskrit scholars (since the roots are known only to scholars). The above changes bring the aliases for zero to four in line with this choice of nominative forms.

§5. Annotation in the Devanagari block

0951 ◌꣠DEVANAGARI STRESS SIGN UDATTA is attested in texts of Sāma Gāna as an alternative to the COMBINING <SCRIPT> DIGIT ONE characters (so far, A8E1 and 11366) to denote in combination with a regular Indic digit that the secondary svara denoted by that digit should be held for a period of one mora. Using this for the specific meaning of one mora means that the COMBINING DIGIT ONE characters will then uniquely denote the first svara and be only used above syllables and not digits.
The usage of this character will invariably be in triplets and invariably above the script-specific digits for 3, 4 and 5 as can be seen in the attestations.

Based on these attestations, it is recommended to annotate this character as “also used in Samavedic texts to indicate a length of one mora”.

Note: These scans are from Rāṇāyanaśākhiyān Sāmagānām (Āgneyam Ārabhya Mahānāṁnyanto Bhāgah) edited by Vijaya Kumar Sharma and published by Shri Sharada Peeth Vidya Sabha, Jamnagar, Gujarat in 2012. One can note the uniqueness in this publication that it uses for denoting svara-s both the Paribhāṣa system (which is to be encoded using Ruby, in this case below the baseline) and the Aṅka system (for which are the specially encoded characters).
§6. Sources of attestations

The Grantha samples in this document are from the Kauthuma Sāma Veda Saṃhitā published by AVMSSGDPS Samiti, Kumbakonam, Tamil Nadu, reprinted 1985. The Devanagari samples whose source was not mentioned are from the same publication by Satyavrata Samashrami and published by the Asiatic Society, Kolkata from 1871-75. The printed Kannada samples are from the publication by Drahyayana Pratishthana, Bangalore in 2002.

§7. Glossary of Samavedic technical terms

(Summarized from the Sanskrit introduction to Sāmavedīya Pūrvārccika published by Veda Shastra Research Centre, Chennai in 2008 and the Kannada source mentioned above.)

śivaka udātta: the first of two or more consecutive udātta-s followed by an anudātta
āhata svarita: lit. “beaten” svarita, a svarita preceded by two or more consecutive udātta-s, to be pronounced “strongly” (as in “beating” a drum)
abhinihata: a kind of svarita which is formed from a sandhi of e + a or o + a where the first element is udātta and the second anudātta
vṛddha: a long syllable of two mora-s augmented to three mora-s in singing
karṣaṇa: lit. “pulling”; lengthening of a syllable chiefly from the first svara down into consecutive lower svara-s
preṅkha: lit. “swing”; a swing-like action of the thumb employed during chanting to indicate a karṣaṇa from the first svara to the second
atikrama: lit. “skipping”; a descent from a higher svara to a lower one skipping one or more intermediate svara-s
namana: an atikrama from the first svara to the third
vinata: a descent from the first svara to the second without syllable lengthening
praṇata: a descent from the second svara to the third without syllable lengthening
abhigīta: a rise from the second svara to the first without syllable lengthening
dīpta śruti: lit. “sharp expression”; type of enunciation when a syllable descends to the second svara and is followed by a syllable with the same second svara
āyata śruti: lit. “lengthened expression”; type of enunciation when a syllable ending in the second svara is followed by a syllable in the third svara

-o-o-o-