



---

dharma

# **Prosody and Verse Forms Guide**

Draft Version 0.1

Dániel Balogh, Arlo Griffiths and Axelle Janiak



This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 809994).

# Comment daba 20230406

We will probably need to involve Manu in integrating Tamil metres with the Prosodic Patterns xml file and updating the relevant section in the new guide.

## Content lifted from the EGC, 20230406

### 9.2 List of Prosodic Patterns

For critical editions, all the prosodic patterns are recorded and documented in a single xml file stored in the [project-documentation](#) repository. This file is used for the display of the critical editions, and is intended to become a starting point for further research on prosody. We are gathering in this file the prosodic elements relevant to several traditions, and using @xml:lang where necessary to specify the relevant linguistic context.<sup>1</sup> To help everyone fill in this file, a template with the expected metadata and a schema (see §1) has been pregenerated.<sup>2</sup>

Example 9.2.A
<pre>&lt;?xml-model href="https://raw.githubusercontent.com/erc-dharma/project-documentation/master/schema/latest/DHARMA_ProsodySchema.rng" type="application/xml" schematypens="http://relaxng.org/ns/structure/1.0"?&gt; &lt;?xml-model href="https://raw.githubusercontent.com/erc-dharma/project-documentation/master/schema/latest/DHARMA_ProsodySchema.rng" type="application/xml" schematypens="http://purl.oclc.org/dsdl/schematron"?&gt;</pre>

#### 9.2.1 <text> and <body> elements

The file is structured with a <front> element (see §10.1) which contains a short explanation of the notation choices made by DHARMA. The rest of the element <text> is structured as usual with the element <body>, which contains a main element <list>. Inside it, we provide an <item> for each prosodic pattern attested (or liable to occur) in any DHARMA editions.

Example 9.2.1.A
<pre>&lt;text&gt;   &lt;front&gt;   &lt;/front&gt;   &lt;body&gt;</pre>

<sup>1</sup> To ease discussion between members of the project, a temporary basic HTML page has been made: <https://erc-dharma.github.io/output/display-prosody.html>.

<sup>2</sup> The schema is available on the project-documentation repository at: [https://github.com/erc-dharma/project-documentation/blob/master/schema/DHARMA\\_ProsodySchema\\_v01.xml](https://github.com/erc-dharma/project-documentation/blob/master/schema/DHARMA_ProsodySchema_v01.xml).

```

<list>
  <item/>
</list>
</body>
</text>

```

## 9.2.2 Describing a prosodic pattern

To describe a prosodic pattern, the following structure should be followed.

### 9.2.2.1 Identifying the meter

In the case of syllabic meters, the number of syllables per line must be recorded in the element `<measure unit="syllable">`, recording the relevant value as an Arabic number. In the case of moraic meters, leave the element `measure` empty (`<measure unit="syllable"/>`).

The meter's name should be given in the element `<name>`. Several `<name>`s can be given to allow for the fact that different traditions may use the same metrical pattern but under different names. Add the attribute `@xml:lang` to make it clear from which tradition the `<name>` is taken. Use the language code given in §[Appendix C](#). When you can't provide any name to the meter, you can record its group with `<label type="generic">`. Then, the `<name>` element will be left empty. We recommend you add an `@xml:lang` on the `<label>` as well. In your XML edition, when representing a meter whose name is unknown, you shall use the XML prosodic code instead of a name as value for `@met`. When no string can be found that matches any `<name>`, the XSLT transformation will take the `<label>` content and display it after an "Name unknown" between brackets. The class name will appear in italic.

Example 9.2.2.1.A

<pre> &lt;div type="canto" met="--+---+-----+---=" n="11" xml:id="rt_12"&gt;   &lt;note type="prosody"&gt;--+---+-----+---=&lt;/note&gt;   &lt;lg xml:id="rt_12.01" n="1"&gt;     &lt;l n="a"&gt;tadanantareki tumibaṇ ghaṭita tēlu ri sampuniṇ gati,&lt;/l&gt;     &lt;l n="b"&gt;irika ndatan vavaṇ aturva maharaja gēluṇ huvus lukar,&lt;/l&gt;     &lt;l n="c"&gt;karēṇa&lt;!-- unmet. read karēṇā? --&gt; ana babaniṇ aṇharéki pipi sumambya-suṇ sēpah,&lt;/l&gt;     &lt;l n="d"&gt;avarah ri sihnira silih suval ujar araras rinuṇvakēn.&lt;/l&gt;&lt;note&gt;Stanza numbered 67 in &lt;ptr target="#JK"/&gt;.&lt;/note&gt;&lt;/lg&gt; &lt;/div&gt; </pre>	<pre> &lt;item&gt; &lt;measure unit="syllable"&gt;20&lt;/measure&gt; &lt;label type="generic" xml:lang="san-Latn"&gt;kṛti&lt;/label&gt; &lt;name/&gt; &lt;seg type="xml"&gt;--+---+-----+---=&lt;/seg&gt; &lt;seg type="prosody"&gt;~~~~~&lt;/seg&gt; &lt;seg type="gana"&gt;sa-ja-sa-na-na-ja-ra&lt;/seg&gt; &lt;listBibl&gt; &lt;bibl&gt;&lt;ptr target="bib:Apte1890_01"/&gt;&lt;citedRange unit="appendix"&gt;A: Sanskrit Prosody&lt;/citedRange&gt;&lt;/bibl&gt; &lt;bibl&gt;&lt;ptr target="bib:Velankar1949_01"/&gt;&lt;/bibl&gt; &lt;bibl&gt;&lt;ptr target="bib:Zoetmulder1974_01"/&gt;&lt;citedRange unit="page"&gt;463&lt;/citedRange&gt;&lt;citedRange unit="item"&gt;XX.1&lt;/citedRange&gt;&lt;/bibl&gt; &lt;/listBibl&gt; &lt;/item&gt; </pre>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Display –

**Canto 11**

tadanantareki tumibaṇa ghaṭita telu ri sampuniṇ gati,  
irika ndatan vavaṇ aturva maharaja geluṇ huvus lukar,  
karəṇa ana babaniṇ aṇharéki pipi sumambya-suṇ sépah,  
avarah ri sihnira silih suval ujar araras rinuṇvakən.<sup>1</sup>

```
<item>
  <measure unit="syllable">20</measure>
  <label type="generic" xml:lang="san-Latn">kṛti</label>
  <name/>
  <seg type="xml">--+---+-----+---+</seg>
  <seg type="prosody">~~~~~</seg>
  <seg type="gana">sa-ja-sa-na-na-ja-ra</seg>
  <listBibl>
    <bibl><ptr target="bib:Apte1890_01"/><citedRange unit="appendix">A: Sanskrit Prosody</citedRange></bibl>
    <bibl><ptr target="bib:Velankar1949_01"/></bibl>
    <bibl><ptr target="bib:Zoetmulder1974_01"/>
      <citedRange unit="page">463</citedRange><citedRange unit="item">XX.1</citedRange></bibl>
  </listBibl>
</item>
```

# Content lifted from the EGD, 20230406

## Looking up Sanskrit metres

- to identify the metre of a Sanskrit stanza, check the lists of syllabic and moraic metres below and use Apte's (1957) Appendix A to identify metres not listed here
- to accelerate your identification, you can try one of these online tools:
  - <https://sanskritmetres.appspot.com/> requires a full stanza as input but will tolerate mistakes and lacunae and produce an approximate match
  - <http://sanskritlibrary.org:8080/MeterIdentification/> recognises a very large number of metres and accepts half or quarter stanzas as input (but does not tolerate errors); it accepts several transliteration schemes but these need to be selected manually instead of being recognised automatically
  - <https://skrutable.pythonanywhere.com/> requires full stanzas but can automatically split these into quarters and tolerates mistakes to some extent; it can identify moraic metres in addition to syllabic ones and includes sound recordings of the recitation of many metres
- if you have identified a metre not already listed in the Table 3 below, please get in touch with the authors of this guide to add its name and pattern to the table

## Syllable length

- quantitative and syllabo-quantitative verse in the languages we work with relies on the distinction of short and long syllables for producing rhythm in verse, therefore we prefer the terms “length”, “long” and “short” to the corresponding triad “weight” (or “quantity”), “heavy” and “light” often used in discussions of verse in other languages
- a *mora* is defined as the duration of a short syllable, and a long syllable is always equivalent to two *morae*
- as a reminder, syllable length is essentially determined as follows:
  - a **short syllable** is one whose vowel is short (in Sanskrit: *a, i, u, ṛ, ṝ*) and is followed by no more than one consonant (without regard to whether a word boundary is also present)
  - a **long syllable** is one that does not meet both of the above conditions for a short syllable; specifically, a syllable is called
    - long by nature, if its vowel is long (in Sanskrit: *ā, ī, ū, ē, ai, o, au*)
    - long by position, if its vowel is short but is followed by two or more consonants
- *anusvāra* and *visarga* normally count as consonants in determining syllable length, but
  - in Prakrit languages, *anunāsika* (usually not distinguished in writing from *anusvāra*) indicates the nasalisation of a vowel rather than a nasal consonant following the vowel, and a nasal vowel followed by a single consonant may still count as short
    - should you encounter this phenomenon, accept the metre as legitimate, and preferably encode a normalisation (§6.3.2) of *anusvāra* to *anunāsika*
  - in Sanskrit verse (though generally only in pre-classical Sanskrit), *anusvāra* may cause the preceding vowel to be long even when followed by another vowel
    - should you encounter this phenomenon in a classical metre, treat it as a metrical anomaly and add @real to the encoding of verse lines that exhibit it (§2.3.5)
- certain schools of versification permit some kinds of licence in determining syllable length, the most common licence being that a short vowel followed by a voiceless stop and an *r* or *l* may count as a short syllable

- our strategy is to encode the use of such licence as a metrical anomaly in order to facilitate research
- thus, `@real` must be added to the encoding of verse lines that employ it (§2.3.5)

## Prosodic code

- the signs set out below are to be used in values of XML attributes that require prosodic notation, namely in the following contexts
  - 1, `@met` used in `<lg>` to encode the metre for which a conventional name is not available (see §2.3.4)
  - 2, `@met` used in `<seg>` to encode the prosody of a lacuna (see §5.4.4 and §5.4.5)
  - 3, `@real` used in `<l>` to encode the actual prosody of a metrically deviant verse line (see §2.3.5)
- the final column of the table shows which of these contexts permit the use of each particular sign; the general rules are as follows
  - in the attribute `@real`, use only the signs + and - to encode the exact prosody of a metrical realisation
    - exceptionally, anceps or moraic notation is permitted in `@real` when necessitated by partial lacunae for which only the template, not the actual realisation, is known
  - in `@met`, use the notation for anceps (rather than for a long syllable) at the end of each line of syllabic verse
  - caesurae and odd/even quarter boundaries shall only be noted in context 1, and the latter only when the metre has a different template for odd and even lines (*ardhasamavṛtta*)
- prosodic code must not contain spaces
- the table also shows the equivalent conventional signs (where available), which will be used for displaying metrical notation
- when using **numbers to encode moraic feet or cola**, be aware of the following
  - numbers used in prosodic code (for moraic metre) must always be separated by the foot boundary sign |, but this sign should not be used after the last (complete or partial) foot within a lacuna
  - this allows multi-digit numbers to be used when necessary; however, consider whether large moraic units can be analysed into combinations of smaller feet
  - for partially lacunose feet, show only the number of lost morae
    - e.g. to encode the prosody of a partially lost tetramoraic foot of which one light syllable is extant at the end, use `"3-"`
  - for example,
    - `<seg met="4|4">` to wrap a lacuna of two complete *āryā* feet
    - `<seg met="4|4|2">` to wrap a lacuna of two complete *āryā* feet and an incomplete foot of which the last two morae are extant and are thus represented as text
    - `<seg met="4">` to wrap a lacuna of a single complete *āryā* foot
    - `<seg met="16|4">` to wrap a lacuna in a hypothetical case known to consist of a unit of 16 morae without further prosodic constraint, followed by another unit of 4 morae
- in the example used in §5.4.4 (yo vīkṣya `<seg met="3|4|4|4|-"><gap reason="lost" quantity="12" unit="character" precision="low"/></seg>` bandhana-niruddhaM)
  - the extant text covers the first foot of an *āryā* line and one mora of the second foot

- this is followed by a lacuna corresponding to three morae of the second foot, the whole of the third to fifth feet, one mora of the sixth foot
- followed by extant text comprising three morae of the sixth foot and the complete seventh and eighth foot
- the part of the lacuna comprising the beginning of the sixth foot was one mora, and is therefore encoded in the example as "-", i.e. a single short syllable; but the equivalent alternative with `@met="3|4|4|4|1"` could also have been used
- moraic feet may be constrained (e.g. the pattern  $\sim\sim$  is prohibited in many tetramoraic feet), but this depth of prosodic analysis is not desirable in our encoding of metre: simply encode all tetramoraic feet as 4 regardless of whether or not they exclude certain patterns

Table 2. Prosodic notation

Description	Code	Conventional notation	Context
one short/light syllable	-	˘	1, 2, 3
one long/heavy syllable	+	–	1, 2, 3
one syllable of indeterminate length (anceps)	=	≍	1, 2, (3)
two morae (one long or two short syllables)	2	≡	1, 2, (3)
larger moraic foot or colon	numeral(s)		1, 2, (3)
foot boundary			1, 2, (3)
caesura	<sup>3</sup>		1
boundary of odd and even quarter	/		1 <sup>4</sup>

### Sanskrit syllabic metres

- the names listed below are to be used as values of `@met` in `<lg>`
  - always use metre names exactly in the form shown there (rather than legitimate variant or alternative names)
- the XML notation shown below uses the prosodic code introduced on page 133 above
  - caesurae are indicated in conventional notation for the sake of accuracy and to help you in metre identification, but are not shown in the XML notation, so if you wish, you can copy and paste segments of this notation for use in the `@met` attribute of lost text (encoded as per §5.4.4)

Table 3. Sanskrit syllabic metres

Syllables	Name	XML notation	Conventional notation
-----------	------	--------------	-----------------------

<sup>3</sup> Two iterations of | [U+007C Vertical Line], not a || double vertical bar character.

<sup>4</sup> Use only in `@met` for stanzas where a conventional metre name is not available and the metre has a different template for odd and even lines (*ardhasamavṛtta*).

7	sumānikā <sup>5</sup>	+ - + - + =	~ ~ ~ ~ ~
8	pramāṇikā	- + - + - =	~ ~ ~ ~ ~
8/8	anuṣṭubh <sup>6</sup>	==== - + = / ==== - + =	~~~~~ ~ ~ ~ / ~~~~~ ~ ~ ~
10/11	vegavatī	-- + -- + -- + = / + -- + -- + -- + =	~~~~~ ~ ~ ~ ~ / ~~~~~ ~ ~ ~ ~
10/11	viyoginī <sup>7</sup>	-- + -- + - + = / -- + -- + - + =	~~~~~ ~ ~ ~ ~ / ~~~~~ ~ ~ ~ ~
11	triṣṭubh <sup>8</sup>		
11	bhramaravilasita	++++    ----- =	----    ~~~~~~
11	dodhaka	+ -- + -- + -- + =	~ ~ ~ ~ ~ ~ ~ ~
11	indravajrā	++ - + -- + - + =	~ ~ ~ ~ ~ ~ ~ ~
11	rathoddhatā	+ - + -- + - + =	~ ~ ~ ~ ~ ~ ~ ~
11	śālinī	++++    + - + - + =	----    ~ ~ ~ ~ ~
11	svāgatā	+ - + -- + -- + =	~ ~ ~ ~ ~ ~ ~ ~
11	upajāti <sup>9</sup>	= + - + -- + - + =	~ ~ ~ ~ ~ ~ ~ ~
11	upendravajrā	- + - + -- + - + =	~ ~ ~ ~ ~ ~ ~ ~
11	vātermī	++++ + -- + - + =	~ ~ ~ ~ ~ ~ ~ ~
11	vidhvaṅkamālā	++ - + -- + - + +	~ ~ ~ ~ ~ ~ ~ ~
11/11	upacitra <sup>10</sup>	-- + -- + -- + = / + -- + -- + -- + =	~~~~~ ~ ~ ~ ~ / ~~~~~ ~ ~ ~ ~
11/12	aparavaktra	----- + - + = ----- + - + =	~~~~~ ~ ~ ~ ~ ~ ~~~~~ ~ ~ ~ ~ ~
11/12	hariṇaplutā <sup>11</sup>	-- + -- + -- + = / --- + -- + -- + =	~~~~~ ~ ~ ~ ~ / ~~~~~ ~ ~ ~ ~

<sup>5</sup> In assigning a name to this very rare metre, we follow Damais (1952: 25) who in turn relies on an editorial (correction) to a list of metres in Colebrooke (1873: 141, n.1). It appears from Velankar (1949: १२१) that no two traditional authorities agree on a name for this metre. The names cited there from treatises on poetics are: *uṣṇih* (which is also the class name for 7-syllable *samavṛttas*), *kāminī*, *khetaka*, *gominī*, *raktā*, *śikhā* and *samānikā*.

<sup>6</sup> Also known as *śloka*, *vaktra*. See also the *Notes on anuṣṭubh* on page below.

<sup>7</sup> If a verse matches this template, do not classify it as *vaitāliya*; see the *Notes on the vaitāliya family* on page below.

<sup>8</sup> Used as an umbrella term for 11-syllable metres not conforming to one of the specific schemes listed here; see *Vedic trimeter* on page below.

<sup>9</sup> Also known as *triṣṭubh upajāti*; see the *Notes on the upajāti family* on page below.

<sup>10</sup> All lines contain 11 syllables, but the rhythm of the odd lines is different from the rhythm of the even lines.

<sup>11</sup> The rhythm of the first line of the *hariṇaplutā* is the same as that of the *upacitra*.



11/12	mālabhāriṇī <sup>12</sup>	--+--+--+=/ --+--+--++=	~~~~~ ~~~~~
12	candravartma	+--+  --+----	~v~  ~~~~~
12	indravaṁśā	++-+-+--+	~~~~~
12	jagatī <sup>13</sup>		
12	kusumavicitrā	-----+--+=	~~~~~
12	bhujaṅgaprayāta	-+-+--+--+	~~~~~
12	maṇimālā	++-++  +--+	~~~~~  ~~~~~
12	drutavilambita	---+--+--+	~~~~~
12	jaloddhatagati	-+---+  -+---	~v~v~  ~~~~~
12	pramitākṣarā	--+--+--+	~~~~~
12	toṭaka	--+--+--+	~~~~~
12	vaṁśamālā <sup>14</sup>	=+--+--+--+	~~~~~
12	vaṁśastha <sup>15</sup>	-+--+--+--+	~~~~~
12	vaiśvadevī	+++++  +--+	~~~~~  ~~~~~
12	tāmarasa <sup>16</sup>	-----+  -+--+	~~~~~  ~~~~~
12/13	puṣpitāgrā	-----+--+=/ -----+--++=	~~~~~ ~~~~~
13	mañjubhāṣiṇī	--+--+--+	~~~~~
13	mattamayūra	+++++  +--+	~~~~~  ~~~~~
13	praharṣiṇī	+++  -----+--+	~~~~~  ~~~~~
13	rucirā	-+--+  -----+--+	~~~~~  ~~~~~
14	asambādhā	+++++  -----+--+	~~~~~  ~~~~~
14	praharaṇakalikā	-----+  -----	~~~~~  ~~~~~

<sup>12</sup> If the whole of a stanza matches this template, do not classify it as *aupacchandāsika*.

<sup>13</sup> Used as an umbrella term for 12-syllable metres not conforming to one of the specific schemes listed here; see *Vedic trimeter* on page # below.

<sup>14</sup> Also known as *jagatī upajāti*; see the *Notes on the upajāti family* on page below.

<sup>15</sup> Also known as *vaṁśasthavila*.

<sup>16</sup> Called *svādamālīnī* in Javanese poetry.

14	vasantatilakā <sup>17</sup>	++-+---+---+=	~~~~~
15	mālinī	-----+  +--++=	~~~~~  ~~~~~
17	hariṇī	-----+  ++++  -+++=	~~~~~  ~~~~~  ~~~~~
17	mandākrāntā	++++  -----+  +--++=	~~~~~  ~~~~~  ~~~~~
17	nardaṭaka	-----+---+---+=	~~~~~
17	pr̥thvī	-+---+---+  -----+---+=	~~~~~  ~~~~~ <sup>18</sup>
17	śikhariṇī	-+++++  -----+---+=	~~~~~  ~~~~~
17	varṇśapatrapatita	+--+---+  -----=	~~~~~  ~~~~~
17	vilāsinī <sup>19</sup>	-----+---+---+  +---=	~~~~~  ~~~~~
18	mr̥dukomala <sup>20</sup>	++++---+---+---+=	~~~~~
19	navaharṣa <sup>21</sup>	--+---+-----+---+=	~~~~~
19	śārdūlavikrīḍita	++++---+---+  ++---+=	~~~~~  ~~~~~
19	sumadhurā	++++---+  -----+  ++---=	~~~~~  ~~~~~  ~~~~~
20	mattebhavikrīḍita	--+---+---+  ++---+=	~~~~~  ~~~~~
20	suvadanā	++++---+  -----+  ++---=	~~~~~  ~~~~~  ~~~~~
21	sragdharā	++++---+  -----+  +---+=	~~~~~  ~~~~~  ~~~~~
21	campakamālā <sup>22</sup>	-----+  ---+---+  ---+---=	~~~~~  ~~~~~  ~~~~~
23	aśvalalita	-----+---+  +---+---+=	~~~~~  ~~~~~
23	jagaddhita <sup>23</sup>	++++---+---+-----+---+	~~~~~

<sup>17</sup> Also known as *vasantatilaka*, *uddharṣiṇī*, *simhonnatā*. Though not explicitly prescribed in any extant metrical treatise, poets often observe a caesura after the 8th syllable of a *vasantatilakā* line. (For further discussion see Pollock 1977, 73-74.)

<sup>18</sup> The caesura in *pr̥thvī* is not observed by all poets.

<sup>19</sup> Called *viśvalalita* in Old Javanese.

<sup>20</sup> This metre is not found in Indian metrical treatises (as per Apte's appendix), but attested in Old Javanese. Like the related *śārdūlavikrīḍita*, it may have a caesura after the 12th syllable.

<sup>21</sup> Not found in Indian metrical treatises (as per Apte's appendix), but attested in Old Javanese, also by the name *kendragati*.

<sup>22</sup> This metre is rare in Sanskrit, though it is known (by multiple names) to several poeticians. It is popular in Telugu, where caesuras are not observed, but additional rules govern assonance within and across the lines.

<sup>23</sup> This Javanese metre may have a caesura after the 12th syllable (like the *śārdūlavikrīḍita*, to which it is identical up to this point), but this is not strictly observed.

## Notes on anuṣṭubh

- we use *anuṣṭubh* as an umbrella term and shall not make a distinction between Vedic *anuṣṭubh*, and classical *vaktra/śloka* in our classification
- when encoding the prosody of lost text (§5.4.4), apply the XML notation for the generic *anuṣṭubh* template shown in Table 3 above, i.e. ignore the possibility of *vipulā* variation and encode the first four syllables as indeterminate, and the latter four as per the *pathyā* pattern for odd or even quarters as applicable
- there are in fact some additional restrictions for these syllables, set out in Table 4 below
  - if you wish, feel free to mark up any non-conformant lines as metrically deviant (§2.3.5)
- note that *vipulā* variations (alternative cadences in the odd quarters) do not require any explicit markup but may be encoded as metrically deviant lines (§2.3.5)

Table 4. Permitted patterns in *pathyā anuṣṭubh*

	1	2–4	5	6	7	8
odd	⌞	—⌞ ∪⌞ —∪	∪	—	—	⌞
even	⌞	—⌞ ∪⌞ —∪	∪	—	∪	⌞

Table 5. Recognised *vipulā anuṣṭubh* patterns (even lines only)

	1	2–4	5	6	7	8
na-vipulā	⌞	——— ∪—— —∪—	∪	∪	∪	⌞
bha-vipulā	⌞	—∪—	—	∪	∪	⌞
ma-vipulā	⌞	—∪—	—	—	—	⌞
ra-vipulā	⌞	——— ∪—— —∪—	—	∪	—	⌞

## Notes on the upajāti family

- this family of metres includes 11 and 12-syllable metres which vary in the length of the first syllable and thus give rise to ambiguities concerning classification
  - *upajāti* or *triṣṭubh upajāti*, a free mix of *indravajrā* and *upendravajrā*
  - *varṇśamālā* or *jagatī upajāti*, a free mix of *indravarṇśā* and *varṇśastha*
- when every line of a stanza is in one of the “pure” metres (e.g. *indravajrā*), that stanza should normally be classified as that pure metre, whereas stanzas with one or more lines in the other child metre should be classified as the “mixed metre” (e.g. *upajāti*)
- however, the mixed metres are more widely used than the pure ones, therefore
  - if an inscription includes several successive stanzas of a mixed metre among which one or a few stanzas are in a pure metre, then it makes better sense to classify the pure

stanza(s) as being also of the mixed metre (assuming that the poet was composing in the mixed metre and by chance all lines of that particular stanza turned out in one of the pure metres)

- if an inscription includes a stanza in one of these metres with at least one line-initial syllable lost, then it is better to assume the stanza to be in the mixed metre even if all the fully extant lines are in one of the pure metres
- there may always be cases where the above considerations do not apply; for example when a composer shows off his skill by employing a wide variety of metres

#### Notes on the *vaitāliya* family

- this family of *ardhasama* metres also gives rise to ambiguities of classification because it uses a loose moraic template for the first part of each line and a syllabic template for the cadence (final part) of each line:
  - *vaitāliya*, with the pattern ~~~~~—~—~/~~~~~—~—~
  - *aupacchandasika*, with the pattern ~~~~~—~—~/~~~~~—~—~
  - and the much rarer *āpātalikā*, with the pattern ~~~~~—~—~/~~~~~—~—~
- in addition, there exist a small number of fully syllabic templates which are specific, constrained instantiations of the above, partly moraic templates:
  - *vaitāliya* may be realised as *viyoginī* or *aparavaktra* (see Table 3 for the patterns)
  - *aupacchandasika* may be realised as *mālabhāriṇī* or *puṣpitāgrā*
  - *āpātalikā* may be realised as *vegavatī*
- in actual poetic practice, these fully syllabic instantiations are much more common than the less constrained moraic templates
- nonetheless, many editors of Indic texts prefer to classify such stanzas by the generic metre and not by the specific instantiation
- you should avoid this and, if a previous edition identifies a stanza as one of these generic metres or if you are editing a previously unedited text, check whether the stanza in fact conforms to one of the specific metres, and if it does, mark it up as such

#### Vedic trimeter

- though rare in our epigraphic corpus, some stanzas may be composed in lines of 11 or 12 syllables that do not observe any of the strict schemes named in Table 3 above; instead,
  - lines consist of 11±1 or 12±1 syllables, with varying line number permitted within a stanza
  - the initial colon (the “opening”, before a more or less clear caesura) is relatively free, but predominantly trochaic
  - the caesura is generally followed by a pair of short syllables (“break”)
  - the final colon (cadence) of each line is relatively fixed in a trochaic pattern
- such metres shall be collectively referred to as trimeter, following Arnold (1905:7, 11-14)
- we judge that a rough typology of metrical patterns serves our needs better than a detailed encoding that could give due consideration to the intricacies of these metres
- therefore, use the following values of @met for stanzas in such metres
  - “**triṣṭubh**” for stanzas of predominantly 11-syllable lines which predominantly conform to either of the following patterns
    - ~—~—||~—|—~—~
    - ~—~—~—||~—|—~—~
  - “**jagatī**” for stanzas of predominantly 12-syllable lines which predominantly conform to either of the following patterns

– ॐ॒॒॒॒||ॐ॒॒॒॒|॒॒॒॒॒॒  
 – ॐ॒॒॒॒||ॐ॒॒॒॒|॒॒॒॒॒॒

- "trimeter" as a general token for stanzas where the metrical pattern and/or length of the lines varies more than in the more specific metres named above
- depending on the level of your interest in metrical studies, feel free to encode the actual prosody of each line in @real

#### Sanskrit/Prakrit moraic metres

- the metres of the *āryā* or *gāthā* family consist of two hemistichs, each comprised of eight feet
- in the basic form of these hemistichs, the first seven feet are tetramoraic (consist of 4 morae) and the eighth is bimoraic (consists of two morae), which means that a hemistich consists by default of 30 morae
  - in one alternative form of the standard hemistich, the sixth foot is reduced to a single mora, resulting in a hemistich of 27 morae
  - in another alternative form, the eighth foot is extended to four morae, resulting in a hemistich of 32 morae
- the full detail of permitted prosodic patterns for these three hemistich forms is shown in Table 7 below
- in addition to the three forms, there are two variations that may occur in any of the three forms, as also shown in Table 7
  - a hemistich without such a variation is called a *pathyā* hemistich and is never encoded in any special way
  - a hemistich in which the caesura after the third foot is ignored or displaced is called a *vipulā*, which may be marked up as an unobserved caesura (§2.3.2)
  - a hemistich with a special constraint applied to the first 5 feet is called a *capalā* and may be marked up by adding @real to the corresponding <1> element (§2.3.5)
- metres of this family bear different names depending on which combination of the three above variations is found in their hemistichs
  - the metre names pertaining to the combinations known to occur are listed in Table 4 below
    - the names listed there are to be used as values of @met in <lg>
  - while all possible combinations of 30-mora and 27-mora hemistichs do occur quite frequently (the most common being the *āryā* of 30/27 morae), the only common combination involving the 32-mora variation is the *āryāgīti* of 32/32 morae
  - the other combinations with such a variant are shown in Table 6 (on the basis of Warder 1967: 143) for the sake of completeness, and because some do have sporadic attestation in epigraphy, but you should not, as a rule, expect to encounter them
- keep in mind that by our encoding convention, a hemistich in such a metre is encoded as one <1> element (definition of "line" in §2.3.1), with the number "ab" or "cd" (§2.3.2)
- if you are encoding verse of this type with lacunae, it is not necessary to encode the prosody of lacunae more accurately than the generic template shown in Table 6 below (but feel free to do so where you can)
- keep in mind the encoding instructions given for moraic metres under Prosodic code above

Table 6. Names and general pattern of moraic metres

	Hemistich combination	Moraic feet (detailed template in Table 7)
--	-----------------------	--------------------------------------------

common combinations		
āryā	30 / 27 morae	4 4 4 4 4 4 4 2/ 4 4 4 4 4 1 4 2
gīti	30 / 30 morae	4 4 4 4 4 4 4 2/ 4 4 4 4 4 4 4 2
upagīti	27 / 27 morae	4 4 4 4 4 1 4 2/ 4 4 4 4 4 1 4 2
udgīti	27 / 30 morae	4 4 4 4 4 1 4 2/ 4 4 4 4 4 1 4 2
āryāgīti	32 / 32 morae	4 4 4 4 4 4 4 4/ 4 4 4 4 4 4 4 4
uncommon combinations		
sugīti	32 / 27 morae	4 4 4 4 4 4 4 4/ 4 4 4 4 4 1 4 2
anugīti	27 / 32 morae	4 4 4 4 4 1 4 2/ 4 4 4 4 4 4 4 4
vallarī	32 / 30 morae	4 4 4 4 4 4 4 4/ 4 4 4 4 4 4 4 2
lalitā	30 / 32 morae	4 4 4 4 4 4 4 2 4 4 4 4 4 4 4 4

Table 7. Specifics of moraic metres

morae	1	2	3	4	5	6	7	8
generic templates								
30								
27								
32								
specific constraints								
capalā								
vipulā								

## Tamil metres

- due to practical considerations, Tamil metre shall be classified only by major types (*pā*), as shown in Table 8 below
- the names in the first column are to be used as values of `@met` in `<lg>`

Table 8. Tamil metres

Major type	Included forms	Included subtypes ( <i>pāviṇam</i> )
veṇpā	kuṟaḷ-veṇpā (2 <i>aṭis</i> ) nēricai-veṇpā (4 <i>aṭis</i> ) iṇṇicai-veṇpā (4 <i>aṭis</i> ) cintiyal-veṇpā (3 <i>aṭis</i> ) paḷṟoṭai-veṇpā (5 to 12 <i>aṭis</i> )	kuṟaḷ-veṇcentuṟai kuṟaḷ-tāḷicai veṇ-tāḷicai veṇ-tuṟai veḷi-viruttam
ācīriyappā (3 to 1000 <i>aṭis</i> )	nēricai-ācīriyappā iṇaikkūṟaḷ-ācīriyappā nilaimaṇṭila-ācīriyappā aṭimaṇṭila-ācīriyappā	ācīriya-tāḷicai ācīriya-tuṟai ācīriya-viruttam
kalippā <sup>24</sup>	ottāḷicai-kalippā (with 3 subforms) veṇ-kalippā koccaka (with 5 subforms, the 5th one having 3 subsubforms)	kali-tāḷicai kali-tuṟai kali-viruttam kaṭṭalai-kalittuṟai kaṭṭalai-kalippā
vañcippā <sup>25</sup>	(no forms)	vañci-tāḷicai vañci-tuṟai vañci-viruttam
maruṭpā	composed of elements of veṇpā and ācīriyappā	

<sup>24</sup> Contains up to 6 different types of elements which are: *taravu*, *tāḷicai*, *arākam*, *ampōtaraṇkam*, *taṇiccol*, *curitakam*.

<sup>25</sup> Contains elements which are: *taṇiccol*, *akaval-curitakam*.