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The Moraic Metres in Prosody as Depicted in the Vṛttaratnākara

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Abstract

This research, implemented in the form of textual study, aims at examining the peculiarities of morae *(mātrā)* metres in the teaching of prosody with reference to the Kedāra Bhaṭṭa's *Vṛttaratnākara* [Vr]. Moraic metres is one of the main two categories of prosodic metres such as the moraic and the syllabic. They have a variety of classifications in conformity with different occurrences of morae in the practice of versification. This genre also plays a main role in the practice of the composition of verses in Sanskrit. One of the crucial features of moraic metres is that such metres are not counted in syllables. Therefore, this kind of metres cannot be found in the Vedic literature

where only the count of syllables is available or else there are only syllabic metres which are counted by means of syllables. As far as prosody is concerned, though most of the scholars excessively focus on popular facts in the subject, such as characteristic areas syllabic metres and their varieties, etc., this is one of the commonly neglected areas of the subject, regarding which many prosodic works are not even discussed. Therefore, the objective of this research is to make a critical study on the theme with reference to the Vr, being very popular among the readers, regarded as a handbook of prosody, which also covers all aspects of the discipline including the discussion of theories pertaining to the moraic metres by means of several *kārikās* or aphorisms in its second chapter. Since they are presented in aphoristic style, they are of the requirement of further explanations. Explanatory notes on each moraic metres together with illustrations are gathered with the assistance of select commentaries of the text. The confirmation of importance of getting better understanding of this crucial point in the study of prosody is another aspect of this research.

The methodology applied in this research, which is determined by qualitative approach, is to collect and analyze data with respect to primary, secondary, and tertiary sources. This study will provide significant motivation for making the subject familiar to beginners, increasing their desire of them in scope and stretching the space of its rapid growth among the local and foreign readers.

Keywords: morae metres, prosody, syllabic morae, count of syllables, syllabic metres, prosodic work, *Kedāra Bhaṭṭa*, *Vṛttaratnākara, kārikās,* aphorisms, moraic chandas

Research Problem

This study intends to investigate whether the contribution of the knowledge of moraic metres is essential to be perfect in understanding in prosody and that of the Vr is authentic to comprehend the true characteristics of moraic metres and their different classifications together with related examples.

Research Methodology

Since the entire research pertained to own a qualitative approach, is mainly based on textual study, the Vr is to be critically referred to and other relevant primary, secondary and tertiary sources are too used in respective manner.

Literature Review

The discussion of moraic metres (morae/ Instants-based metres) is though it is a significant element in the scope of prosodic teachings, a theme which has not been discussed in the Vedic writings where the whole focus has only been given on that of syllabic metres (syllable-based metres) in which only number of syllables are expected to be counted because the division of letters as syllables and morae is not considered at all in that period, instead of solely taking them there as syllables. In that context, no any writing regarding the topic is seen there. The first and foremost existent work related to the entire Vedic and Worldly prosody is the Chandaḥśāstra (A treatise on

prosody) by Piṅgala (3rd - 2nd BC) which also deals with morae metres in its forth chapter.

In the most of later writings such as Sṛtabodha by Kālidāsa, Suvṛttatilaka by Kṣemendra, Kavidarpaṇa (by the Unknown), etc. except Vṛttaratnākara by Kedāra Bhaṭṭa, Chandaḥkaustubha by Dāmodara Gupta, Vāgvallabha by Duḥkhabhañjana, Chandaḥkalāvatī by Rāmakiśoramiśra, Vṛttamauktika by Śrī Candraśekhara Bhaṭṭa, and etc., there is a vacuum of dealing with moraic metres, though the subject has been subjected to be highly discussed paying much attention on syllabic metres.

During the recent past five decades from 1970s, there are very few Ph.D. researches based on prosody like ***Metres of Kālidāsa*** by Madhusudan Mishra, Patna in 1974, ***A Comparative Study of Sanskrit Metres in Bharatamuni's Nāṭyaśāstra and Hemacandrācārya's Chandonuśāsanam*** by M.K. Moliya, Saurashtra in 1974,

Study of Metres in Sanskrit Dramas Bhāsa to Bhavabhūti by Ujjala Sharma, Delhi in 1974, ***Study***

of Vedic Metres, H. Shalini Ringe, Banaras in 1973, ***Metrics, Origin, and Development of Sanskrit*** by Arati Mishra, Calcutta in 1971 over which zero attention has been given to moraic metres.

Publications like Mishra S. ***Handbook of Sanskrit prosody***. University of Michigan: Sri Aurobindo Society; 1999, Ghaligi S, Nagendra H, Bhatt R. ***Effect of Vedic chanting on memory and sustained attention***. 2006, etc. do not focus on moraic scope.

Research papers like ***Sanskrit Prosody, Piṅgala Sūtras and Binary Arithmetic*** by R. Sridharan in 2005 of which the main aim is to give a brief description of the work of Piṅgala and discuss in detail the mathematics arising out of it, ***Sanskrit Prosody: A Potential Tool to Impact Neuropsychological Variables in Middle School Children*** by Mollika Ganguly, Sriloy Mohanty, Sampadananda Mishra and Sanjib Patra in 2021 which attempts to explore the impact of prosody/Chanda on sustained attention and response interference in middle school children, ***An Introduction to Sanskrit Chanda*** by Mithun

Howladar, West Bengal Received: in 2018 which discusses fundamental elements of both the Vedic and Classical prosody, ***Impact of Sanskrit prosody on anxiety, mindfulness, and self-concept in young adolescents: A four-armed control trial*** by Mollika Ganguly in 2022 which reveals that there was a significant reduction in anxiety levels in the humming group and few domains of anxiety in the chanting group as well, ***Effect of Prosody of Rhythmic Yoga-Based Recitation on Positive and Negative Affect among Adolescents: A Four-Armed Comparative Study*** by Sampadananda Mishra in 2021 and ***Gayatri Mantra Chanting and its Effect on Attention, Memory, Anxiety and Mental State in Young Athletes: A Prospective Study*** by Shatavisa Mukherjee in 2020 based on force of rhythmic recitations regarding emotional and behavioral changes, ***Sanskrit Prosody: A Potential Tool to Impact Neuropsychological Variables in Middle School Children*** by Sampadananda Mishra in 2021 dealing with the introduction of Chanting to have been beneficial to improve attention and other cognitive

parameters, *The Sanskrit Origins of Recent Style Prosody* by Mair Victor H.,Mei Tsu-lin,Tsuyoshi Hasebe in 1991, and so on except ***Meter Identification Of Sanskrit Verse*** by Keshav Melnad, Pawan Goyal, And Peter Scharf in which there is a slight mention on moraic theme, are too devoid of touching the aforesaid.

Such scenario confirms to implement such a study concerning the topic mostly untouched and possessing lack of writings.

Study

The second chapter of the Kedāra Bhaṭṭa's *Vṛttaratnākara* [Vr] namely *Mātrāvṛttādhikāra* is reserved for the moraic metres. It contains six sections such as *Āryāprakaraṇa, Gītiprakaraṇa, Vaitālīyaprakaraṇa, Vaktraprakaraṇa, Mātrāsamaprakaraṇa, Dvipātprakaraṇa* where all the characteristics of 40 moraic metres like *Āryā, Gīti, Vaitālīya, Vaktra, Mātrāsama, Dvipāt* and etc. in 50 *kārikā*s are explained.

The *Āryāprakaraṇa* deals with the characteristics of the first and second halves of Āryā metre with other varieties of Āryā-group such as Pathyā, Vipulā, Capalā, Mukhacapalā and Jaghanacapalā from *kārikā* 1 to 7. The *Gītiprakaraṇa,* belonging to the Āryā class is used to describe the characteristics of metres like Gīti, Upagīti, Udgīti and Āryāgīti from *kārikā* 8 to 11. The *Vaitālīyaprakaraṇa* discusses the features of the varieties of Vaitālīya group such as Vaitālīya, Aupacchandasika, Āpātalikā, Dakṣiṇāntikā, Udīcyavṛtti, Prācyavṛtti, Pravṛttaka, Aparāntikā and Cāruhāsinī from *kārikā* 12 to 20. The *Vaktraprakaraṇa* displays the characteristics of the varieties of Vaktra or Anuṣṭubh group such as Vaktra, Pathyāvaktra, Viparītapathyāvaktra, Capalāvaktra, Yugmavipulā, (Yugma)-Vipulā, Bhavipulā, Ravipulā, Navipulā and Tavipulā from *kārikā* 21 to 30. The *Mātrāsamaprakaraṇa* depicts the characteristics of the varieties of Mātrāsama group such as Acaladhṛti, Mātrāsama, Viśloka, Vānavāsikā, Citrā, Upacitrā and Pādākulaka and the device of computing the numbers of *gurus-laghus (Gurulaghusaṅkhyā-bodhopāya)* from

kārikā 31 to 38. The *Dvipātprakaraṇa* illustrates the characteristics of the varieties of Dvipāt metric group such as Śikhā, Khañjā, Anaṅgakrīḍā and Atirucirā from *kārikā* 39 to 42.

Glance of Content of *Adhyāya* 2 of the *Vṛttaratnākara*

The overview of the classification of moraic metrical classes and their varieties in the second chapter is as follows:

No.	Name of class	List of Metrical Varieties (MV)	Sum of MV
1	Āryā	Āryā, Pathyā, Vipulā, Capalā, Mukhacapalā, Jaghanacapalā, Gīti, Upagīti, Udgīti, Āryāgīti	10
2	Vaitālīya	Vaitālīya, Aupacchandasika, Āpātalikā, Dakṣiṇāntikā, Udīcyavṛtti, Prācyavṛtti, Pravṛttaka, Aparāntikā,	09

		Cāruhāsinī	
3	Vaktra	Vaktra, Pathyāvaktra, Viparītapathyāvaktra, Capalāvaktra, Yugmavipulā, (Yugma)-Vipulā, Bhavipulā, Ravipulā, Navipulā, Tavipulā	10
4	Mātrāsama	Acaladhṛti, Mātrāsama, Viśloka, Vānavāsikā, Citrā, Upacitrā, Pādākulaka	07
5	Dvipāt	Śikhā, Khañjā, Anaṅgakrīḍā, Atirucirā	04
Total			40

Moraic metrical classes and their varieties

Observations

The Vṛttaratnākara begins its second chapter by presenting the category of Āryā-*jāti*. The first verse describes the characteristics of the first half of Āryā-*jāti:*

लक्ष्मैतत्सप्तगणा गोपेता भवति नेह विषमे जः। षष्ठोऽयं च नलघु वा प्रथमेऽर्धे नियतमार्यायाः॥ १॥

lakṣmaitatsaptagaṇā gopetā bhavati neha viṣame jaḥ|

ṣaṣṭho'yaṁ ca nalaghu vā prathame'rdhe niyatamāryāyāḥ||1||

A regular (*niyata*) feature (*lakṣma*) of the first hemistich of the Āryā metre is that it consists of seven (four-moraic) *gaṇa*s and has one heavy syllable (at the end) and no *jagaṇa* in odd positions. The sixth *gaṇa* should have this (*jagaṇa*) or *nagaṇa*-laghu (i.e., four short syllables).

According to the identical quality i.e. the togetherness of containing examples and norms (लक्ष्यलक्षणसंयुतम्) of the work, Vr, all aforesaid features can be observed as follows:

First half of Āryā																			
ल क्ष ्	म ॅ	त त ्	स प ्	त	ग	ण ा	ग ॅ ्	प ्	त ा	भ	व	ि त ्	न	ह	ि व	ष ्	म ्	ज ः	
U	U	U	U	I	I	U	U	U	U	I	I	I	U	I	I	I	U	U	= m t^{30}
1		2		3			4		5			6			7			g	= g $ṇ^{7}$ + g

Āryā First Half

It shows that there are seven moraic feet accompanied by *guru* at the end in the first half of Āryā. *Jagaṇa* is not there in odd places. The sixth *gaṇa* can be either *jagaṇa* or *nagaṇa-laghu*. Its total number of morae is thirty.

The pause places of Āryā and characteristics of its second half are next explained:

षष्ठे द्वितीयलात् परके न्ले मुखलाच्च स यतिपदनियमः। चरमेऽर्धे पञ्चमके तस्मादिह भवति षष्ठो लः॥ २॥

ṣaṣṭhe dvitīyalāt parake nle mukhalācca sa yatipadaniyamaḥ|

carame'rdhe pañcamake tasmādiha bhavati ṣaṣṭho laḥ|| 2||

When the sixth (*gaṇa* in the first half of Āryā metre) is *nagaṇa-laghu* (that is, a *gaṇa* of four short syllables) there is a pause just before its second morae (i.e., just after its first morae). When the *gaṇa* just after the sixth (the seventh *gaṇa*) is *nagaṇa-laghu*, there is a pause at the beginning of its first morae (after the sixth *gaṇa*). In the second half, when the fifth *gaṇa* is *nagaṇa-laghu*, there is a pause just before its first morae (after the fourth *gaṇa*). Here [in this second half] the sixth *gaṇa* is a mere single short syllable.

First and second halves of Āryā with features and pause positions								
First half of Āryā								
ष ष्ठ ं	द्वितीय	लात् पर	के न्ले	मुखला	च्च स यति	पद्नि य	मः	
U U	IUI	UII	U,U	IIU	I,III,	IIII	U	m t^{3} 0
1 - 4	2-5	3-4	4-5	5-4	6-2	7-4	g	g ṇ 7 + g
Second half of Āryā								

च र म ्	र्धे पञ्	चमके	तस्मा	दिहभव	ति	षष्ठो	लः	
I I U	UU	IIU,	UU,	IIII	I	UU	U	m t^{2} 7
1 - 4	2-5	3-4	4-5	5-4	6-1	7-4	g	g ṇ 7 + g

Āryā metre

The first kind of Āryā which is known as Pathyāryā is discussed here:

त्रिष्वंशकेषु पादो दलयोराद्येषु दृश्यते यस्याः। पथ्येति नाम तस्याश्छन्दोविद्भिः समाख्यातम्॥ ३॥

triṣvaṁśakeṣu pādo dalayorādyeṣu dṛśyate yasyāḥ|

pathyeti nāma tasyāścchandovidbhiḥ samākhyātam|| 3||

If a *pāda* (a quarter) is identified after the first three (four-moraic) feet in both hemistiches, that Āryā metre is called 'Pathyā' by masters of prosody. (Note: A pause occurs at the end of each *pāda*.). Its *guru-laghu* collocation as in the above exemplary verse is exhibited by the following table:

First half of Pathyāryā								
UU	IUI	UU,	IIU	UU	IUI	UU	U	mt^{30}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	$gṇ^{7}$+g
Second half of Pathyāryā								
UU	IUI	UU,	UU	UU	I	UU	U	mt^{27}
1-4	**2-5**	**3-4**	**4-5**	**5-4**	**6-1**	**7-4**	**g**	**$gṇ^{7}$+g**

Pathyāryā metre

The characteristics of the Vipulāryā are explained:

उल्लङ्घ्य गणत्रयमादिमं शकलयोर्द्वयोर्भवति पादः। यस्यास्तां पिङ्गलनागो विपुलामिति समाख्याति ॥ ४ ॥

Ullaṅghyagaṇatrayamādimaṁ
sakalayordvayorbhavati pādaḥ|
yasyāstāṁ piṅgalanāgo vipulāmiti samākhyāti|| 4||

If the *pāda* in either hemistich extends beyond the first three moraic feet (into the middle of the fourth foot), that Āryā metre is called Vipulā by Piṅgalanāga.

First half of Vipulāryā								
UU	IIU	IIU	IU,I	IIU	IUI	IIU	U	mt^{30}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	$gṇ^{7}$+g
Second half of Vipulāryā								
UU	UU	IIU	U,II	UII	I	UU	U	mt^{27}
1-4	2-5	3-4	4-5	5-4	6-1	7-4	g	$gṇ^{7}$+g

Vipulāryā metre

The features of Capalāryā metre are exposed:

उभयार्धयोर्जकारौ द्वितीयतुर्यौ गमध्यगौ यस्याः। चपलेति नाम तस्याः प्रकीर्तितं नागराजेन ॥ ५ ॥

ubhayārdhayorjakārau dvitīyaturyau ca madhyagau yasyāḥ|

capaleti nāma tasyāḥ prakīrtitaṁ nāgarājena|| 5||

If in any [Āryā] the second and fourth *jagaṇa*s in either hemistich occur between two heavy syllables, then that Āryā metre is called Capalā by Nāgarāja (or Piṅgalanāga). Its *guru-laghu* configuration is as follows:

First half of Capalāryā								
IIU	IUI	UU,	IUI	UU	IUI	UU	U	mt[30]
1-2	2-1	3-1	4-1	5-2	6-2	7-4	g	gɲ[7]+g
Second half of Capalāryā								
IIU	IUI	UU,	IUI	UU	I	UU	U	mt[27]
1-2	2-1	3-1	4-1	5-2	6-1	7-4	g	gɲ[7]+g

Capalāryā metre

The features of the Āryā metre, Mukhacapalā are given in this verse:

आद्यं दलं समस्तं भजेत लक्ष्म चपलागतं यस्याः। शेषे पूर्वजलक्ष्मा मुखचपला सोदिता मुनिना ॥ ६ ॥

ādyaṁ dalaṁ samastaṁ bhajeta lakṣma capalāgataṁ yasyāḥ|
śeṣe pūrvajalakṣmā mukhacapalā soditā muninā|| 6||

If in any [Āryā] its first hemistich possesses all (the same) characteristics associated with the Capalā, and the rest (i.e., the second hemistich) owns the same features of the first (i.e., the Pathyā), that Āryā is called 'Mukhacapalā' by the sage (Piṅgalanāga).

First half of Mukhacapalāryā								
UU	IUI	UU,	IUI	UII	IUI	UU	U	mt^{30}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	$gṇ^{7}$+g
Second half of Mukhacapalāryā								
UU	UII	UU,	IIII	UU	I	UII	U	mt^{27}
1-4	2-5	3-4	4-5	5-4	6-1	7-4	g	$gṇ^{7}$+g

Mukhacapalāryā metre

Another Āryā type, Jaghanacapalā in name is introduced with its features:

प्राक्प्रतिपादितमर्धे प्रथमे प्रथमेतरे तु चपलायाः। लक्ष्माऽऽश्रयेत सोक्ता विशुद्धधीभिर्जघनचपला ॥ ७ ॥

prākpratipāditamardhe prathame prathametare tu capalāyāḥ|
lakṣmāśrayeta soktā viśuddhadhībhir
jaghanacapalā|| 7||

(The Āryā metre) whose first hemistich associates the features of the former (that is, Pathyā) and the second hemistich those of the Capalā is called 'Jaghanacapalā' by those with clear intellect. The following is its *guru-laghu* arrangement:

First half of Jaghanacapalāryā								
UII	UII	UU,	IIU	IIU	IUI	IIU	U	mt^{30}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	$g_{\underline{n}}^{7}$+g
Second half of Jaghanacapalāryā								
UU	IUI	UU,	IUI	UU	I	IIII	U	mt^{27}
1-4	2-5	3-4	4-5	5-4	6-1	7-4	g	$g_{\underline{n}}^{7}$+g

Jaghanacapalāryā metre

The aggregate sum of the entire varieties of the Āryā[1] depicted in the following table:

	1	2	3	4
1	पथ्यार्या	आदिविपुलार्या	अन्तविपुलार्या	उभयविपुलार्या
2	मुखचपला-पथ्या	मुखचपला-आदिविपुला	मुखचपला-अन्तविपुला	मुखचपला-उभयविपुला
3	जघनचपला- "	जघनचपला- "	जघनचपला- "	जघनचपला- "
4	महाचपला- "	महाचपला- "	महाचपला- "	महाचपला- "
5	गीति- "	गीति- "	गीति- "	गीति- "
6	मुखचपलागीति- "	मुखचपलागीत- "	मुखचपलागीत- "	मुखचपलागीति- "

[1] VRKB. pp. 53-55; *vide.* CHŚPH. pp. 51, 52

7	जघनचपलागीति- "	जघनचपलागीति- "	जघनचपलागीति- "	जघनचपलागीित- "
8	महाचपलागीति- "	महाचपलागीित- "	महाचपलागीित- "	महाचपलागीति- "
9	उपगीति- "	उपगीति- "	उपगीति- "	उपगीति- "
10	मुखचपलोपगीति- "	मुखचपलोपगीति- "	मुखचपलोपगीति- "	मुखचपलोपगीित- "
11	जघनचपलोपगीति- "	जघनचपलोपगीति- "	जघनचपलोपगीति- "	जघनचपलोपगीति- "
12	महाचपलोपगीति- "	महाचपलोपगीति- "	महाचपलोपगीति- "	महाचपलोपगीित- "
13	उद्गीति- "	उद्गीति- "	उद्गीति- "	उद्गीति- "

14	मुखचपलोद्वीगीति- "	मुखचपलोद्वीगीति- "	मुखचपलोद्वीगीति- "	मुखचपलोद्वीगीति- "
15	जघनचपलोद्वीगीति- "	जघनचपलोद्वीगीति- "	जघनचपलोद्वीगीति- "	जघनचपलोद्वीगीति- "
16	महाचपलोद्वीगीति- "	महाचपलोद्वीगीति- "	महाचपलोद्वीगीति- "	महाचपलोद्वीगीति- "
17	आर्यागीति- "	आर्यागीति- "	आर्यागीति- "	आर्यागीति- "
18	मुखचपलार्यागीति- "	मुखचपलार्यागीति- "	मुखचपलार्यागीति- "	मुखचपलार्यागीति- "
19	जघनचपलार्यागीति- "	जघनचपलार्यागीति- "	जघनचपलार्यागीति- "	जघनचपलार्यागीति- "
20	महाचपला	महाचपलार्या	महाचपलार्या	महाचपलार्यागी

	र्यागीति- "	गीति- "	गीति- "	ति- "

Varieties of the Āryā

Examples of all those are rare. The two words *mukha* and *jaghana* have been used to denote the preceding and the following as same as they mean in the body as front or face and hip or back. The use of the two stems *vipula* and *capala* is too alias or having an obvious meaning because the Vipulā and the Capalā due to the respective state of their largeness and inconstancy are with the state of exceeding the previously mentioned characteristics.[2]

The Gīti is another kind of Āryā:

आर्याप्रथमदलोक्तं यदि कथमपि लक्षणं भवेदुभयोः। दलयोः कृतयतिशोभां तां गीतिं गीतवान् भुजङ्गेशः॥ ८॥

āryāprathamadaloktaṁ yadi kathamapi lakṣaṇaṁ bhavedubhayoḥ|

[2] VRKB. p. 55; *vide.* VRP. p. 14; VRKB. pp. 61-63; VRSN. pp. 19, 20; VRPT. pp. 31, 32; VRRP. pp. 19, 20; VRBBV. pp. 38, 39; VRCV. pp. 22-24; SVVR. pp. 40, 41

dalayoḥ kṛtayatiśobhāṁ tāṁ gītiṁ gītavān bhujaṅgeśaḥ||8||

If the (same) characteristic declared for the first hemistich of the Āryā (i.e., Pathyāryā) metre somehow occurs in both hemistiches (of a verse), the lord of serpents, Piṅgala, called that Āryā endowed with (proper) pause embellishments as 'Gīti'. The collocation of its *guru-laghu*s are as follows:

First half of Gīti								
UU	IIII	UU,	IIII	IIU	IUI	IIU	U	mt^{30}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	$gṇ^{7}$+g
Second half of Gīti								
IIU	IIII	UU,	UU	UU	IUI	UU	U	mt^{30}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	$gṇ^{7}$+g

Gīti metre

The features of the second Gīti type called Upagīti are introduced:

आर्याद्वितीयकेऽर्धे यद्गदितं लक्षणं तत्स्यात्। यद्युभयोरपि दलयोरुपगीतिं तां मुनिब्रूते ॥ ९॥

āryādvitīyake'rdhe yadgaditaṁ lakṣaṇaṁ tatsyāt|

yadyubhayorapi dalayorupagītiṁ tāṁ munirbrūte||9||

If the characteristic mentioned for the second hemistich of the Āryā metre occurs in both hemistiches (of a verse), the sage Piṅgala calls (that metre) as Upagīti. Its *guru-laghu* arrangement is as follows:

First half of Upagīti								
UU	IUI	UU,	UII	UU	I	UU	U	mt^{27}
1-4	2-5	3-4	4-5	5-4	6-1	7-4	g	$gṇ^{7}$+g
Second half of Upagīti								
UII	UII	IIU,	IIU	UU	I	UU	U	mt^{27}
1-4	2-5	3-4	4-5	5-4	6-1	7-4	g	$gṇ^{7}$+g

Upagīti metre

The third Gīti type namely Udgīti is presented with its characteristics:

आर्याशकलद्वितयं व्यत्ययरचितं भवेद्यस्याः। सोद्गीतिः किल कथिता तद्वद्यत्यंशभेदसंयुक्ता ॥ १० ॥

āryāśakaladvitayaṁvyatyayaracitaṁ bhavedyasyāḥ|

sodgītiḥkilakathitā
tadvadyatyaṁśabhedasaṁyuktā||10||

If the two hemistiches of the Āryā metre, occurs in inverted order, that metre endowed with features like pause and *gana*s pertaining to the Āryā is called 'Udgīti'. Following is its *guru-laghu* collocation:

First half of Udgīti								
UU	IIU	IIU,	UII	IIU	I	UU	U	mt[27]
1-4	2-5	3-4	4-5	5-4	6-1	7-4	g	gṇ[7]+g
Second half of Udgīti								
UU	UII	IIU,	UU	UU	IUI	UU	U	mt[30]
1-4	2-5	3-4	4-5	5-4	6-2	7-4	g	gṇ[7]+g

Udgīti metre

The features of the third kind of Gīti titled Āryāgīti are shown:

आर्यापूर्वार्धं यदि गुरुणैकेनाधिकेन निधने युक्तम्। इतरद्वन्निखिलं दलं यदीयमुदितेयमार्यागीतिः ॥ ११ ॥

āryāpūrvārdhaṁ yadi guruṇaikenādhikena nidhane yuktam|

itaradvannikhilaṁ dalaṁ yadīyamuditeyamāryā gītiḥ||11||

If the first hemistich of the Āryā metre contains an extra heavy syllable at the end, and the other half (that is, the second hemistich) is exactly like the first, this metre is called 'Āryāgīti'. Its *guru-laghu* arrangement is as follows:

First half of Āryāgīti								
UU	UU	UII,	IIU	UU	IUI	IIU	UU	mt^{32}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	8-1	$gṇ^{8}$
Second half of Āryāgīti								
IIU	UU	IIU,	IUI	UII	IUI	UU	UU	mt^{32}
1-4	2-5	3-4	4-5	5-4	6-2	7-4	8-1	$gṇ^{8}$

Āryāgīti metre

Other than the above four types of Gīti, there are another eleven kinds[3] of it as follows:

	Name	**Feature**
1	Saṁgīti	When the Āryā gets an additional *guru* at the end.
2	Sugīti	When the first half of Āryā gets an additional *guru* at the end.
3	Pragīti	When the second half of Āryā gets an additional *guru* at the end.
4	Anugīti	When both halves of Sugīti were turned upside down.
5	Mañjugīti	When both halves of Pragīti were turned upside down.
6	Vigīti	When the second half of Āryā gets an additional *guru* at the end and the both halves are made with that feature.
7	Cārugīti	When both halves of Udgīti get an additional *guru* at the end.
8	Valggīti	When the second half of Āryāgīti reduces

[3] SVVR. pp. 45, 46

		one *guru* at the end.
9	Lalitā	When the first half of Āryāgīti reduces one *guru* at the end.
10	Pramadā	When the first half of Upagīti gets an additional *guru* at the end.
11	Candrikā	When the second half of Upagīti gets an additional *guru* at the end.

Other eleven kinds of Gīti

As each of them too is of sixteen types, the total of them is (16x11) one hundred and seventy-six (176).

In the same way the divisions of the previously mentioned fourfold Gīti are too (16x4) sixty-four (64). Finally, all together there are (240+16) two hundred and fifty-six (256). As far as their optional uses of *gaṇa*s are concerned, they get a large number of further divisions, and they can also be viewed through the method applied for the early-mentioned metres.[4]

[4] VRKB. pp. 69-71; *vide.* VRP. pp. 14, 15; VRKB. pp. 68-71; VRSN. p. 22; VRPT. pp. 36, 37; VRRP. pp. 23, 24; VRBBV. pp. 43-46; VRCV. pp. 26, 27; SVVR. pp. 44-46

The features of the moraic metre, Vaitālīya are expressed:

षड् विषमेऽष्टौ समे कलाः षट् च समे स्युर्नो निरन्तराः। न समात्रपराश्रिता कला वैतालीयेऽन्ते रलौ गुरुः ॥ १२ ॥

ṣaḍ viṣame'ṣṭau same kalāḥ ṣaṭ ca same syurno nirantarāḥ|

na samātraparāśritā kalā vaitālīye'nte ralau guruḥ||12||

In the (moraic) metre, Vaitālīya, there are six morae in the odd (1st, 3rd) quarters and eight morae in the even (2nd, 4th) quarters. And in the even quarters six morae do not occur in Uninterrupted Sequence of short syllables by heavy syllable. Here in this Vaitālīya group, the even morae (i.e., second, fourth and sixth) do not depend on the following (third, fifth, seventh, respectively. that is, each does not coalesce with it into a heavy syllable). At the end (of each quarter) there are both *ragaṇa* and a short syllable and (also) a heavy syllable. Its *guru-laghu* arrangement in the example is as follows:

First quarter					**Second quarter**				
1	2	3	4		1	2	3	4	
UIIU	UIU	I	U	= mt[14]	UIIUU	UIU	I	U	= mt[16]
mt[6]	r	l	g	= mt[14]	mt[8]	r	l	g	= mt[16]
Third quarter					**fourth quarter**				
1	2	3	4		1	2	3	4	
IIUII	UIU	I	U	= mt[14]	UUUU	UIU	I	U	= mt[16]
mt[6]	r	l	g	= mt[14]	mt[8]	r	l	g	= mt[16]

Vaitālīya metre

The next is about the features of one of the Vaitālīya-metres namely Aupacchandasika:

पर्यन्ते यौं तथैव शेषमौपच्छन्दसिकं सुधीभिरुक्तम्॥ १३॥

paryante ryau tathaiva śeṣamaupacchandasikaṁ sudhībhiruktam||13||

If each quarter ends in *ragaṇa* and *yagaṇa* and the rest (bearing) the same (features) are as in the previous (metre), then that metre is called 'Aupacchandasika' by the wise. Its *guru-laghu* collocation is as follows:

First quarter				**Second quarter**			
1	2	3		1	2	3	
UUU	UIU	IUU,	= mt^{16}	UUUII	UIU	IUU	= mt^{18}
mt^{6}	r	y	= mt^{16}	mt^{8}	r	y	= mt^{18}

Aupacchandasika metre

The features of another one of the Vaitālīya-metres, i.e. Āpātalikā are shown:

आपातलिकाकथितेयं भाद्गुरुकावथ पूर्ववदन्यत्॥ १४ ॥

āpātalikākathiteyaṁbhādgurukāvathapūrvavadanyat||14||

If there are two heavy syllables after *bhagaṇa* (preceded by six morae in the odd quarters and by eight morae in the even quarters) and the rest (remaining) as before, (then) this (metre) is known as 'Āpātalikā'. Its *guru-laghu* arrangement is as follows:

First quarter					**Second quarter**				
1	2	3	4		1	2	3	4	
UUII	UII	U	U	= mt^{14}	UIIUI I	UII	U	U	= mt^{16}
mt^{6}	b	g	g	= mt^{14}	mt^{8}	b	g	g	= mt^{16}

Āpātalikā metre

Here are the features of one of the Vaitālīya-metres, Dakṣiṇāntikā:

तृतीययुग्दक्षिणान्तिका समस्तपादेषु द्वितीयलः ॥ १५ ॥

tṛtīyayugdakṣiṇāntikāsamastapādeṣudvitīyalaḥ||15||

When the second mora in all the quarters is combined with the third mora (to make a heavy syllable) that

metre is called 'Dakṣiṇāntikā'. Its *guru-laghu* collocation is as follows:

First quarter					**Second quarter**				
1	2	3	4		1	2	3	4	
IU̲IU	UIU	I	U	= mt^{14}	IU̲IUU	UIU	I	U	= mt^{16}
mt^{6}	r	l	g	= mt^{14}	mt^{8}	r	l	g	= mt^{16}

Dakṣiṇāntikā metre

The features of the Vaitālīya-metre, Udīcyavṛtti are presented:

उदीच्यवृत्तिर्द्वितीयलः सक्तोऽग्रेण भवेदयुग्मयोः ॥ १६ ॥

udīcyavṛttirdvitīyalaḥsakto'greṇabhavedayugmayoḥ||16||

That (moraic metre) in which the second mora of the odd *pāda*s comes into contact with the front (= next or third) mora (to make a heavy syllable), is called 'Udīcyavṛtti'. Its *guru-laghu* arrangement is as follows:

First quarter					**Second quarter**				
1	2	3	4		1	2	3	4	
I<u>U</u>I U	UIU	I	U	= mt^{14}	UUUI I	UIU	I	U	= mt^{16}
mt^{6}	r	l	g	= mt^{14}	mt^{8}	r	l	g	= mt^{16}

Udīcyavṛtti metre

Here are the features of Prācyavṛtti, another kind of the The Vaitālīya-metres:

पूर्वेण युतोऽथ पञ्चमः प्राच्यवृत्तिरुदितैव युग्मयोः ॥ १७ ॥

pūrveṇa yuto'tha pañcamaḥ prācyavṛttiruditaiva yugmayoḥ||17||

That (moric metre) in which the fifth mora of the even *pāda*s is bound with the previous (or fourth) mora (making a heavy syllable), is declared as 'Prācyavṛtti'. The structure of its *guru-laghu*s is as follows:

First quarter					**Second quarter**				
1	2	3	4		1	2	3	4	
UUII	UIU	I	U	= mt^{14}	UIU̲I II	UI U	I	U	= mt^{16}
mt^{6}	r	l	g	= mt^{14}	mt^{8}	r	l	g	= mt^{16}

Prācyavṛtti metre

This is about the features of the metre, Pravṛttaka, one of the Vaitālīya-metres:

यदा समावोजयुग्मकौ पूर्वयोर्भवति तत् प्रवृत्तकम्॥ १८ ॥

yadā samāvojayugmakau pūrvayorbhavati tat pravṛttakam||18||

When both the odd and the even *pāda*s are (respectively) similar to the previous two (Udīcyavṛtti and Prācyavṛtti metres), (then) that (metre) is called 'Pravṛttaka'. The following is its *guru-laghu* configuration:

First quarter					Second quarter				
1	2	3	4		1	2	3	4	
I<u>U</u>IU	UIU	I	U	= mt^{14}	UI<u>U</u> III	UI U	I	U	= mt^{16}
mt^{6}	r	l	g	= mt^{14}	mt^{8}	r	l	g	= mt^{16}

Pravṛttaka metre

The features of the Aparāntikā, one of the Vaitālīya-metres are pointed out:

अस्य युग्मरचिताऽपरान्तिका ॥ १९ ॥

asya yugmaracitā'parāntikā||19||

That (metre), formed with the even *pāda*s of the Pravṛttaka is called 'Aparāntikā'. The arrangement of its *guru-laghu*s in a one quarter is as follows:

First quarter				
1	2	3	4	
UI<u>U</u>III	UIU	I	U	= mt^{16}
mt^{8}	r	l	g	= mt^{16}

Aparāntikā metre

The features of the metre, Cāruhāsinī, the last one of the Vaitālīya-metres are displayed:

अयुग्भवा चारुहासिनी ॥ २० ॥

ayugbhavā cāruhāsinī||20||

That (metre), born of the odd pādas of Prāvṛttaka, is called 'Cāruhāsinī'. The collocation of its *guru-laghu*s in a one quarter is as follows:

First quarter				
1	2	3	4	
I<u>U</u>IU	UIU	I	U	= mt^{14}
mt^{6}	r	l	g	= mt^{14}

Cāruhāsinī metre

Although the Vr. provides nine Vaitālīya varieties, there are some other Vaitālīya-metres which are not mentioned here. Only their names together with basic features are too presented in the following table:

	Name	Feature
1	Anyadakṣiṇāntikā	When the four quarters are composed by the even quarters of the Vaitālīya
2	Uttarāntikā	When the four quarters are composed by the odd quarters of the Vaitālīya
3	Ardhāpātalikā	When the four quarters are composed by the odd quarters of the Āpātalikāprācyavṛtti
4	Seven Aupacchandasikas[5]	When an extra *guru* is added to the end of the seven metres: Āpātalikā, Dakṣiṇāntikā, Udīcyavṛtti, Prācyavṛtti, Pravṛttaka, Aparāntikā and Cāruhāsinī, there are seven Aupacchandasikas such as Āpātalikaupacchandasika, Dakṣiṇāntikaupacchandasika, Udīcyavṛttyaupacchandasika, Prācyavṛttyaupacchandasika, Pravṛttakaaupacchandasika, Aparāntikaupacchandasika, Cāruhāsinyaupacchandasika

Names of other Vaitālīya-metres with their basic features

In this manner there are thirty-five types of the Vaitālīya metres.

[5] आपातलिकादिषु चेदेको गुरुरधिको भवति प्रतिपादान्ते। आपातलिकादिकसंज्ञायगौपच्छन्दसिकं तदाभिप्रेतम्॥ – SVVR. p. 52

The general features of the genus of Vaktra is expressed:

वक्रं नाद्यान्नसौ स्यातामब्धेर्योऽनुष्टुभि ख्यातम्॥ २१॥

vaktraṁ nādyānnasau syātāmabdheryo'nuṣṭubhi khyātam||21||

If [in one quarter] there are no *nagaṇa* or the *sagaṇa* after the first syllable and (only) one *yagaṇa* occurs after (the first) four syllables, that metre is designated as 'Vaktra' which was explained [in the Chandaśśāstra by Piṅgala] in the category of Anuṣṭubh-*chandas*. The configuration of *guru-laghu*s of the example is as follows:

First quarter					**Second quarter**				
1-2	2-6	3-1	4-2		1-2	2-6	3-1	4-2	
U	UU U	IU U	U	= v^8	U	UU U	IU U	U	= v^8
g	m	y	g	= v^8	g	m	y	g	= v^8

Vaktra metre

The features of the Pathyāvaktra metre are shown as follows:

युजोर्जेन सरिद्भर्तुः पथ्यावक्त्रं प्रकीर्तितम्॥ २२॥

Yujorjena saridbhartuḥ pathyāvaktraṁ prakīrtitam||22||

That metre in which both even *pāda*s have a *jagaṇa* after four syllables, is called 'Pathyāvaktra'.

The following is the *guru-laghu* collocation of the example:

First quarter					**Second quarter**				
1-2	2-6	3-1	4-2		1-2	2-6	3-1	4-2	
I	UUI	IUU	U	= v^8	U	UUU	<u>IUI</u>	U	= v^8
l	t	y	g	= v^8	g	m	j	g	= v^8

Pathyāvaktra metre

This is how the characteristics of Viparītapathyāvaktra metre are presented:

अयुजोर्जेन वारिधेस्तदेव विपरीतादि ॥ २३ ॥

ayujorjena vāridhestadeva viparītādi||23||

When the same metre (Pathyāvaktra) has a *jagaṇa* after four syllables in both odd *pāda*s, it is called by that name preceded by 'Viparīta' (or 'Viparītapathyāvaktra'). The following is the *guru-laghu* structure of the example:

First quarter					**Second quarter**				
1-2	2-6	3-1	4-2		1-2	2-6	3-1	4-2	
I	IU U	IUI	U	= v^8	I	UII	IU U	U	= v^8
l	y	j	g	= v^8	l	b	y	g	= v^8

Viparītapathyāvaktra metre

The metre Capalāvaktra is thus presented:

चपलावक्त्रमयुजोर्नकारश्चेत् पयोराशेः ॥ २४ ॥

capalāvaktramayujornakāraścet payorāśeḥ||24||

If there is a *nagaṇa* after four syllables in both odd *pāda*s, then it is 'Capalāvaktra'.

The following is the *guru-laghu* arrangement of the example:

First quarter					**Second quarter**				
1-2	2-6	3-1	4-2		1-2	2-6	3-1	4-2	
I	IUU	III	U	= v^8	I	UU U	IU U	U	= v^8
l	y	n	g	= v^8	l	m	y	g	= v^8

Capalāvaktra metre

The metre Yugmavipulā is introduced:

यस्यां लः सप्तमो युग्मे सा युग्मविपुला मता ॥ २५ ॥

yasyāṁ laḥ saptamo yugme sā yugmavipulā matā||25||

If in any category of Anuṣṭubh the seventh is a short syllable in the even *pāda*s (then) she is known as

'Yugmavipulā'. The *guru-laghu* collocation of the example is as follows:

First quarter					**Second quarter**				
1-2	2-6	3-1	4-2		1-2	2-6	3-4	4-2	
U	UUU	IUU	U	= v^8	U	UII	IU<u>I</u>	U	= v^8
g	m	y	g	= v^8	g	b	j	g	= v^8

Yugmavipulā metre

This is the opinion of the prosodic teacher named Saitava about the features of the (Yugma-)Vipulā metre:

सैतवस्याखिलेष्वपि ॥ २६ ॥

saitavasyākhileṣvapi ||26||

In the opinion of the teacher (prosodist) named Saitava, if the seventh syllable is short in all *pāda*s, she is also considered to be '(Yugma-)Vipulā'. The following is the *guru-laghu* arrangement of the example:

First quarter				
1-2	2-6	3-4	4-2	
U	IUU	IU<u>I</u>	U	= v^8
g	y	j	g	= v^8

(Yugma-)Vipulā metre

Here is about another metre named Bhavipulā:

भेनाब्धितो भाद्विपुला ॥ २७ ॥

bhenābdhito bhādvipulā||27||

Because of the reason that there is a *bhagaṇa* after the four syllables, that (metre) is (also called) 'Vipulā', preceded by '*bha*' (or 'Bhavipulā'). The following is the *guru-laghu* collocation of the example:

First quarter				
1-2	2-6	3-1	4-2	
U	UIU	<u>UII</u>	U	= v^8
g	r	b	g	= v^8

Bhavipulā metre

This is about the Ravipulā:

इत्थमन्या रश्चतुर्थात्॥ २८॥

itthamanyā raścaturthāt||28||

In this manner (like Bhavipulā) if there is one *ragaṇa* after four syllables, that (metre) is (also called) another type (of 'Vipulā' preceded by 'Ra' or 'Ravipulā'). The *guru-laghu* configuration of the example is as follows:

First quarter				
1-2	2-6	3-1	4-2	
U	IUU	UIU	U	= v^8
g	y	r	g	= v^8

Ravipulā metre

This is about the Navipulā:

नोऽम्बुधेश्चेन्नविपुला॥ २९॥

no'mbudheścennavipulā||29||

If there is a *nagaṇa* after four syllables, that (metre) is (called) 'Navipulā'). The following is its *guru-laghu* collocation:

First quarter				
1-2	2-6	3-1	4-2	
U	IUU	III	U	= v^8
g	y	n	g	= v^8

Navipulā metre

This is about the Tavipulā:

तोऽब्धेस्तत्पूर्वान्या भवेत्॥ ३०॥

to'bdhestatpūrvānyā bhavet||30||

If there is one *tagaṇa* after four syllables, that (metre) is (called) another types of 'Vipulā' preceded by 'Ta' (or 'Tavipulā'). The structure of the *guru-laghu*s of the example is as follows:

First quarter				
1-2	2-6	3-1	4-2	
U	UUU	UUI	U	= v^8
g	m	t	g	= v^8

Tavipulā metre

This is about the metre Acaladṛti:

द्विकगुणितवसुलघुरचलधृतिरिह ॥ ३१ ॥

dvikaguṇitavasulaghuracaladhṛtiriha||31||

Here (in this category) the metre that has eight short syllables multiplied by two (i.e., sixteen short syllables in all four quarters) is (called) 'Acaladṛti'. The *guru-laghu* configuration of its example is as follows:

First quarter	
IIIIIIIIIIIIIII	= mt^{16}
l^{16}	= mt^{16}

Acaladṛti metre

This is about the metre Mātrāsamaka:

मात्रासमकं नवमो लगान्त्यः ॥ ३२ ॥

mātrāsamakaṁ navamo lgāntyaḥ||32||

The metre in which the ninth mora is a short syllable, and which ends with a heavy syllable (or has a heavy

syllable at the end) is 'Mātrāsamaka'. The *guru-laghu* arrangement of its example is as follows:

First quarter				
UU	IIU	I̲IU	UU̲	= mt[16]
1-4	**2-3**	**3-1**	**4-2**	

Mātrāsamaka metre

This is about the metre Viśloka:

जोन्लावथाम्बुधेर्विश्लोकः ॥ ३३ ॥

jonlāvathāmbudherviślokaḥ||33||

If after four morae there is either a *jagaṇa* or (else) both a *nagaṇa* and a short syllable, (then) that metre is (termed as) 'Viśloka'. The following is its *guru-laghu* structure of the example:

First quarter				
UU	I̲UI̲	UU	UU	= mt[16]
1-4	2-2	3-2	4-2	

Viśloka metre

This is about the metre Vānavāsikā:

तद्युगलाद्वानवासिका स्यात्॥ ३४॥

tadyugalādvānavāsikā syāt||34||

If after a couple of four (or eight) morae (there is a *jagaṇa* or both a *nagaṇa* and a *laghu*, then) that metre is (named as) 'Vānavāsikā'. Its *guru-laghu* arrangement is as follows:

First quarter				
UII	UU	IUI	UU	= mt^{16}
1-4	2-3	3-2	4-2	

Vānavāsikā metre

This is about the metre Citrā:

बाणाष्टनवसु यदि लश्चित्रा॥ ३५॥

tadyugalādvānavāsikā syāt||34||

If there is a short syllable in (the places such as) the fifth, eighth and ninth mora, then that metre is called 'Citrā'. Its *guru-laghu* stucture is as follows:

First quarter				
UU	I̲III̲	I̲IU	UU	= mt[16]
1-4	2-2	3-2	4-2	

Citrā metre

This is about the metre Upacitrā:

अब्धियुगाद्भश्चेदुपचित्रा ॥ ३६ ॥

abdhiyugādbhaścedupacitrā||36||

If after a couple of four morae there is a *bhagaṇa*, (then) that metre is (designated as) 'Upacitrā'. The arrangement of its *guru-laghu*s is as follows:

First quarter				
UII	UU	U̲II̲	UU	= mt[16]
1-4	2-3	3-1	4-2	

Upacitrā metre

This is about the metre Pādākulaka:

यदतीतकृतविविधलक्ष्मयुतैर्मात्रासमादिपादैः कलितम्।
अनियतवृत्तपरिमाणसहितं प्रथितं जगत्सु पादाकुलकम्॥ ३७ ॥

yadatītakṛtavividhalakṣmayutairmātrāsamādipādaiḥ kalitam|

aniyatavṛttaparimāṇasahitaṁ prathitaṁ jagatsu pādākulakam||37||

Any metre formed with the *pāda*s of the metres such as Mātrāsamaka and so forth, which possesses the various features mentioned earlier, and having metres of uncertain form and length is, among the people, well known as 'Pādākulaka'. The collocation of its *guru-laghu*s is as follows:

Quarter	**Collocation**				**Morae**	**Metre**
First quarter	IIU	IIII	IIU	IIU	= mt[16]	Mātrāsamaka Viśloka Citrā
	1-4	2-3	3-1	4-2		
Second quarter	UU	IUI	UU	IIU	= mt[16]	Viśloka Upacitrā
	1-4	2-2	3-2	4-2		
Third quarter	IIII	UII	IUI	IIU	= mt[16]	Mātrāsamaka Vānavāsikā
	1-4	2-3	3-2	4-2		
Fourth quarter	IIU	IUI	UU	IIU	= mt[16]	Viśloka Upacitrā
	1-4	2-3	3-2	4-2		

Pādākulaka metre

A specific rule is now given about the device of computing the numbers of *guru*s, *laghu*s, morae and syllables of metres:

वृत्तस्य ला विनावर्णैर्गा वर्णा गुरुभिस्तथा। गुरवो लैर्दले नित्यं प्रमाणमिति निश्चितम्॥ ३८॥

vṛttasya lā vināvarṇairgā varṇā gurubhistathā|

guravo lairdale nityaṁ pramāṇamiti niścitam||38||

Morae of a metre minus the syllables (letters) become heavy syllables (in other words, the total number of heavy syllables can obtain when the sum of letters subtracted from the sum of morae.) In the same way, morae minus the heavy syllables are the (total number of) syllables (or letters of the metre). When (the sum of) morae minus of the short syllables is divided by two make the (total number of) the heavy syllables (in a metre). In this manner, the (total) number (or quantity) of heavy syllables and other details can be decided upon.

In metres, the number of morae minus the number of syllables is equal to the number of *guru*s in the verse. Similarly, the number of morae minus the number of *guru*s is equal to the number of syllables. Again, the number of more minus the number of *laghu*s divided by two is equal to the number of *guru*s. The following is the total number of morae that each moraic metre possesses:

Metre	**Sum of morae**
Āryā, Pathyā, Vipulā, Capalā	57
Gīti	60
Upagīti	54
Āryāgīti	64
Vaitālīya	60
Vaktra	60
Mātrāsamaka	64

Total number of morae of all moraic metres

This method can be applied not only in verse compositions but in prose compositions too (तेन पादस्यार्धस्य पद्यस्य गद्यस्य वा इत्यर्थः ।).[6] But in the prose which does not have the fixed number of morae their number should be given when asking about the number of *guru* or *varṇa* or *laghu.*

This is about the metre Śikhā:

शिखिगुणितदशलघुरचितमपगतलघुयुगलमपरमिदमखिलम् ।

सगुरु शकलयुगलकमपि सुपरिघटितललितपदवितति भवति शिखा ॥ ३९ ॥

śikhiguṇitadaśalaghuracitamapagatalaghuyugalamaparamidamakhilam|

saguru śakalayugalakamapisuparighaṭitalalitapadavitatibhavatiśikhā||39||

If (the first hemistich) consists of ten multiplied by three short syllables minus two short syllables and the other (that is, the second hemistich) contains the same (number of

[6] VRKB. pp. 117-119; *vide.* VRP. p. 25; VRSN. pp. 34, 35; VRPT. pp. 72-75; VRRP. pp. 40, 41; VRBBV. pp. 68-70; VRCV. pp. 44, 45; SVVR. pp. 61-63

syllables, that is, thirty) and the two hemistiches (*ardha*s) have an additional heavy syllable at the end, and also if there is a collection of graceful words quite well (or systematically) arranged, that (metre) is called 'Śikhā'. Its *guru-laghu* arrangement is as follows:

First half of Śikhā		
IIIIIIIIIIIIIIIIIIIIIIIIIIII	U	= mt^{30}; v^{29}
l^{28}	g	= mt^{30}; v^{29}
Second half of Śikhā		
IIIIIIIIIIIIIIIIIIIIIIIIIIIII	U	= mt^{32}; v^{31}
l^{30}	g	= mt^{32}; v^{31}

Śikhā metre

This is about the metre Khañjā:

विनिमयविहितशकलयुगललघुललितपदवितिरचितगणनिचया ।

श्रुतिसुखकृदियमपि जगति ञि जशिर उपगतवति सति भवति खजा ॥ ४० ॥

vinimayavihitaśakalayugalalaghulalitapadavitatiracitag uṇanicayā|

śrutisukhakṛdiyamapi jagati ñi jaśira upagatavati sati bhavati khajā||40||

If the two hemistiches are interchanged and there is a collection of poetic merits (such as Saukumārya or tenderness) and a multitude of charming words, pervaded by short syllables and pleasing to the ear, that metre is known in the world as 'Khajā' with '*ñ*' superimposed on '*j*' (that is, Khañjā). The following is its *guru-laghu* collocation:

First half of Khañjā		
IIIIIIIIIIIIIIIIIIIIIIIIIIII	U	= mt^{32}; v^{31}
l^{30}	g	= mt^{32}; v^{31}
Second half of Khañjā		
IIIIIIIIIIIIIIIIIIIIIIIII	U	= mt^{30}; v^{29}
l^{28}	g	= mt^{30}; v^{29}

Khañjā metre

This is about the Anaṅgakrīḍā metre.

अष्टावर्धे गा द्वयस्ता यस्याः साऽनङ्गक्रीडोक्ता।

छलमपरमपि वसुगुणितसलिलनिधिलघुकविरचितपदवितति भवति ॥ ४१ ॥

aṣṭāvardhe gā dvyabhyastā yasyāḥ sā'naṅgakrīḍoktā|

dalamaparamapi vasuguṇitasalilanidhilaghukaviracitapadavitati bhavati||41||

If the first hemistich has eight multiplied by two heavy syllables (that is, sixteen heavy syllables), and the other too, has four multiplied by eight short syllables (totally thirty-two light syllables), she (that metre) is (then) called 'Anaṅgakrīḍā'. Its *guru-laghu* configuration is as follows:

First half of Anaṅgakrīḍā	
UUUUUUUUUUUUUUUU	$g^{16} = mt^{32}; v^{16}$
Second half of Anaṅgakrīḍā	
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	$l^{32} = mt^{32}; v^{32}$

Anaṅgakrīḍā metre

This is about the Atirucirā metre:

त्रिगुणनवलघुरवसितिगुरुरिति दलयुगकृततनुरतिरुचिरा ॥ ४२

triguṇanavalaghuravasitigururiti
dalayugakṛtatanuratirucirā||42||

If there are three times nine short syllables (totally twenty-seven short syllables) ending with a heavy syllable at the end, that metre, thus having its body made of two halves (in such manner) is 'Atirucirā'. The following is its *guru-laghu* arrangement:

First half of Atirucirā		
IIIIIIIIIIIIIIIIIIIIIIIII	U	= mt^{29}; v^{28}
l^{27}	g	= mt^{29}; v^{28}
Second half of Atirucirā		
IIIIIIIIIIIIIIIIIIIIIIIII	U	= mt^{29}; v^{28}
l^{27}	g	= mt^{29}; v^{28}

Atirucirā metre

Findings

The Āryā-group which goes by the general class name of *jāti* is also regarded as *gaṇa-chandas* due to its use

of four moraic footed *gaṇa*s. The minor changes in the format of Āryā metre create other nine varieties of Āryā like Pathyā, Vipulā, etc. So, this Āryā and its derivatives are treated as pure moraic metres.[7] The Vaitālīya class belongs to moraic half-even metrical category. But it is good to consider them as *miśra-vṛtta*s since the second part of the quarters of every metre has the fixed order of its short and long letters.[8] The fundamental format of Vaitālīya metre primarily remains in other varieties of the class. The seven metres like Vaitālīya, Aupacchandasika, Āpātalikā, Dakṣiṇāntikā, Udīcyavṛtti, Prācyavṛtti and Pravṛttaka are completely regarded as moraic half-even metres because of the clarity of their features. But, the two metres, Aparāntikā and Cāruhāsinī in the same class as each of them takes four quarters of equal length, display the characteristics of moraic even metres. The main format of Vaktra metre is applied in other varieties of the class with certain minor changes. This class can be regarded as belonging to moraic uneven

[7] TSC. p. 386; CSPYK. p. 164
[8] TSC. p. 386; CSPYK. p. 164

metrical category for there are various possible occurances in the places of four lines of each metre. This class has a great deal of freedom allowed in the choice of short and long letters, with which their lines of equal length are composed. The uneven nature of this group is only seen in the structure of the lines of metres, yet, not in their length.[9] However, the class of Vaktra, as its metres are counted by syllable wise and limitted to 8 syllables like Anuṣṭubh *chandas* and also they take syllabic *gaṇa*s with certain exceptions, is regarded as syllabic metres, though it has been inserted to moraic metrical category. The reason for that class to be included there is that, though its metres are similar to Anuṣṭubh *chandas* by the number of syllables, there is no any constancy of the arrangement of *guru-laghu*s in all the places of this class like in that of Anuṣṭubh. Mātrāsama metre and its derivatives like Acaladhṛti, Viśloka, Vānavāsikā, Citrā, Upacitrā and Pādākulaka are purely moraic even metres. The metre, Pādākulaka is the mixture of previous metres of the

[9] TSC. p. 386; CSPYK. p. 164

same class. A mathematical device for finding the number of moraic and other metres is introduced at the end of this class. The main feature of the class of Dvipāt metres is that each of them has only two quarters or *pāda*s. That is why the group has been named as Dvipāt (two footed). But, some commentators like Rāmachandra Kavibhārati have added another half whle giving examplory verses, finding them to be four footed. If so, those metres can be put into the category of half-even metres. Though they are treated as moraic metres, the features of these metres are counted according to the number of *guru*s and *laghu*s. In order to show the employment of a *laghu* or *guru* or *gaṇa* as a specific feature in a particular place of a line after any number of syllables, symbolic words have been used in the chapter. However, the most popular moraic metres have been described in the second chapter and among 40 moraic metres, Śikhā and Khañjā are considered as two new metres invented by Kedāra. The particular methods of finding the total value of *guru*s, *laghu*s and syllables

specially occurred in moraic metres like Āryā, Pathyā, etc. have been presented in the form of formulae.

Conclusion

This comprehensive study with regard to moraic metres giving illustrations as mentioned in the text of Vr facilitates the possibility for learners to distinguish rules of theories of moraic metres in the simplest manner to solve any queries pertaining to moraic chandas and metres and to have all secrets regarding them and throughout prosody, and etc.

This effort will be a supplementary and desideratum for making the scope familiar to learners, raising their interest of in the field, and enhancing the popularity of the subject followed by its uplift.

Abbreviations

Books:

CHŚPH. Chandaḥśāstra of Piṅgala by Halāyudha

CSPYK. Classical Sanskrit Prosody of K. Yedukondalu

SVVR. Saralā Vyākhyā of **V**ṛttaratnākara

VRBBV. *Vṛttaratnākara of Bhaṭṭa Kedāra with Bhaṭṭīya Sanskrit Commentary of Bhaṭṭa Nārāyaṇa and Manimayī Hindi commentary of Śrī Kedāra Nātha Śarmā*. 2008. Ed. Śrī Kedāra Nātha Śarmā. Varanasi: Chaukhamba Prakashan.

VRCV. *Vṛttaratnākara of Śrī Kedāra Bhaṭṭa with 'Candrikā' Sanskrit and Hindi Commentaries*. 2015. Ed. Baladev Upadhyay. Varanasi: Chaukhamba Surabharati Prakashan.

VRKB. Vṛttaratnākara of Sri Kedāra Bhaṭṭa with Four commentaries

VRP. Vṛttaratnākara of Kedārabhaṭṭa with the commentary 'Pañcikā'VRPT.

VRRP. *Vṛttaratnākara of Kedāra Bhaṭṭa with Ratnaprabhāvyākhyā* of *Nṛsiṁhadeva Śāstrī.* 1926. New Delhi: Meharacandra Lachamanadas.

VRSN. *Vṛttaratnākara of Kedāra Bhaṭṭa with Sanskrit Subodhinīṭīkā and Prakrit Saralāṭīkā of Ñārasarāma Śāstrī.* 1929. Mumbai: Malika Lakshmi Venkateshvar Press.

TSC. Pataskar, Bhagyalata. Ed. 2012. *The Studies in Chandaḥśāstra.* N. Delhi: Adarsha Sanskrit Shodha Samstha, Rashtriya Sanskrit Samsthan.

Terms:

b	*bhagaṇa*
Ed.	Editor
g	*guru*
gṇ	*gaṇa*
j	*jagaṇa*
l	*laghu*
m	*magaṇa*
mt	*mātrā*
n	*nagaṇa*
nl	*nagaṇalaghu*
p.	Page

pp.	Pages
r	*ragaṇa*
t	*tagaṇa*
v	*varṇa*
Vr	Vṛttaratnākara
y	*yagaṇa*

References

Primary Sources

Aryendra, S. (ed.). (1969). *Vṛttaratnākara of Kedāra Bhaṭṭa*, Hyderabad: Sanskrit Academy.

Kavi, M. R. (ed.). (1934). *Nāṭyaśāstra with commentary of Abhinavagupta. In Four Volumes Vol. II*, Baroda: Oriental Institute.

Kavibhāratī, R. (ed.). Śīlaskandha Mahāsthavira, C. A. (1936). *Vṛttaratnākara of Kedārabhaṭṭa with the commentary Pañcikā* (1858 *Śakābda*), Bombey: Nirṇayasāgara Press.

Satyanarayan, S. K. (ed.). Tr. Parameshwardin P. (2011). *Chandomañjarī of Gaṅgādās with*

'Sudhā' Sanskrit Hindi Commentaries, Varanasi: Chowkhamba Krishnadas Academy.

Sharma, A., Deshpande, S.K., & Padhye, S. D. G. (eds). (1969). *Vṛttaratnākara of Sri Kedara Bhaṭṭa with Four commentaries*, Hyderabad: Sanskrit Academy, Osmania University.

Seelaskandha Mahasthavira. (ed.). (1936). *Vṛttaratnākara*, Bombay: N.S. Press.

Sītārāmaśarma. (ed.). (1985.). *Śṛtabodha of Kālidāsa*, Kāśī: Śrīharikṛṣṇa Nibandhabhavana.

Śrī Halāyudha Bhaṭṭa. (ed.). (2002). *Chandaśśāstra of Śrī Piṅgalācārya with the Commentary Mṛtasañjīvanī*, Varanasi: Chowkhambha Publishers.

Śrutabodha of Kālidāsa with Vṛttaratnākara of Bhaṭṭa Kedāra. (1936). Bombay: Venkatesh Press.

Śīlaskandha Mahāsthavira, C. A. (ed.). (1915) *Vṛttaratnākara and Vṛttaratnākaraparišiṣṭa titled Vṛttālaṅkāra* of Kedārabhaṭṭa. (2458 *Buddhābda* or 1837 *Śakābda*, Aluthgama: Vidyāviśruta Press.

Śarmā, Ś. K. N. (ed.). (2008). *Vṛttaratnākara of Bhaṭṭa Kedāra with Bhaṭṭīya Sanskrit Commentary of Bhaṭṭa Nārāyaṇa and Manimayī Hindi commentary of Śrī Kedāra Nātha Śarmā* (VRBBV), Varanasi: Chaukhamba Prakashan.

Śāstrī, N. (ed.). *(*1926). *Vṛttaratnākara of Kedāra Bhaṭṭa with Ratnaprabhāvyākhyā of Nṛsiṁhadeva Śāstrī,* New Delhi: Meharacandra Lachamanadas.

Śāstrī, N. (ed.). *(*1929). *Vṛttaratnākara of Kedāra Bhaṭṭa with Sanskrit Subodhinīṭīkā and Prakrit Saralāṭīkā of Ñārasarāma Śāstrī,* Mumbai: Malika Lakshmi Venkateshvar Press.

Śāstri, Ś. (ed.). (1966). *Vṛttaratnākara of Śrī Kedāra Bhaṭṭa with Prājñtoṣiṇīvyākhyā of Śrīdharānanda Śāstri*, Varanasi: Motilal Banarasidas.

Upadhyay, B. (ed.) (2015). *Vṛttaratnākara of Śrī Kedāra Bhaṭṭa with 'Candrikā' Sanskrit and Hindi Commentaries*, Varanasi: Chaukhamba Surabharati Prakashan.

*Vṛttaratnākara of Kedāra Bhaṭṭa with commentary of Tārānātha Tarkavācaspati Baṭṭācārya and Chandomañjarī of Gaṅgādāsa with commentary of Śrī Jīvānanda Vidyāsāgara Baṭṭācārya. (*1893). Calcutta: Sarasvati Press.

Secondary Sources

Arnold, V. (1967). *Vedic Metre in its historical development.* Delhi: Motilal Banarasidas.

Arnold, V. (1905). *Vedic Metre In its historical development.* Cambridge: University Press.

Battacaryya, Siva Prasad. (1963). *Jottings On Sanskrit Metrics*. Calcutta: Sanskrit College.

Brown, Charles Philip. (1869). *Sanskrit Prosody and Numerical Symbols Explained.* London: Trubner and Co., 60, Paternoster Row.

Deepankara Sthavira, Welipatanwila. Ed. (1925). *The Vuttodaya of Saṁgharakkhita Mahāthera with Vṛttadīpikā Vyākhyā*. Aluthgama: Saddharmaprakasha Press.

Dvivedi, Kapil Deva and Singh, Shyam Lal. Tr. (2013). *The Prosody of Piṅgala. A Treatise of Vedic and Sanskrit Metrics with applications of Vedic Mathematics with Hindi and English Translation* (Second revised edition). Varanasi: Vishvavidyalaya Prakashan.

Geethakumary, K. K. (2008). *Metre in Sanskrit, A Study with Special Reference to Vṛttavārtika of Rāmapāṇivāda.* University of Calicut: Publication Division.

Martin, Demian. Tr. (2013). *Rādhā Dāmodara Goswami's Chandaḥ Kaustubha, The Jewel of Prosody with the commentary of Baladeva Vidyābhūṣaṇa translated from the original in Sanskrit* (First edition). Varanasi: Chowkhamba Sanskrit Series Office.

Mishra, S. (2011). *Chandovallarī, A Handbook of Sanskrit Prosody*. Puducherry: Sri Aurobindo Society.

Mitra, A. (1989). *Origin and Development of Sanskrit Metrics*. Calcutta: The Asiatic Society.

Mukherji, A. (1976). *Sanskrit Prosody: Its Evolution*. Calcutta: Saraswat Library.

Pataskar, B. (ed.). (2012). *The Studies in Chandaḥśāstra*. N. Delhi: Adarsha Sanskrit Shodha Samstha, Rashtriya Sanskrit Samsthan.

Pemananda Thero, M. (ed.). (2020). *Kedārabhaṭṭa's Vṛttaratnākara Part I*, Gangodawila.

Sorata Sthavira, Velivitiye. (ed.). (1945). *Saralā Vyākhyā of Vṛttaratnākara*. Colombo: Mahābodhi Press.

Velankar, H. D. (ed.). (1949). *Jayadāman*. Bombay: Haritoṣamālā.

Yedukondalu, K. (2014). *Classical Sanskrit Prosody*. Tirupati – 517507 (A.P.): Rashtriya Sanskrit Vidyapeetha.

Dictionaries

Apte, Vaman Shivram. (1993). *The Student's Sanskrit – English Dictionary.* Delhi: Motilal Benarasidass Publishers Private Limited.

Chappler, Carl. (1982). *A Sanskrit – English Dictionary.* Tokyo: Meicho-Fukyu-Kai

Publishing Co. Ltd. The Association for Publishing Academic Masterpeices.

Tarkavachaspati, Sri Taranatha. (1962). *Vācaspatyam (A Comparative Sanskrit Dictionary).* Vol.4. Varanasi: The Chowkhamba Sanskrit Series Office.

Tarkavachaspati, Sri Taranatha. (1962). *Vācaspatyam (A Comparative Sanskrit Dictionary).* Vol.6. Varanasi: The Chowkhamba Sanskrit Series Office.

Williams, M. Monier. (1960). *A Sanskrit – English Dictionary.* Oxford: At the University Press.

Web Sources

http://www.scribd.com/doc/95599117/Vritta-Ratnakara-Kedara-Bhatta-Skt-Hindi-1942.

https://archive.org/details/VrittaRatnakaraKedaraBhattaSktHindi1942.

https://archive.org/stream/ChhandaSutra-Pingala/chhanda_sutram_-_pingala?ui=embed#page/n0/mode/1up.

https://books.google.co.in/books/about/Vritta_ratnakara.html.

https://docslide.net/documents/vritta-ratnakara-1954-pandit-sri-kedarnath-sharma.html.

https://en.wikipedia.org/wiki/Binary_code.

https://en.wikipedia.org/wiki/Pingala.

https://groups.google.com/forum/#!topic/bvparishat/D5bTvYywTFo.

https://www.amazon.com/Textbook-Translation-Skills-Peter-Newmark/dp/0139125930.

https://www.exoticindiaart.com/book/details/vritta-ratnakara-deepika-book-on-chhanda-question-and-answer-NZJ816/.

https://www.google.com/search?q=vritta+ratnakara&oq=vrittaratnaka.

https://www.scribd.com/document/95599117/Vritta-Ratnakara-Kedara-Bhatta-Skt-Hindi-1942.

www.sanskritebooks.org.

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