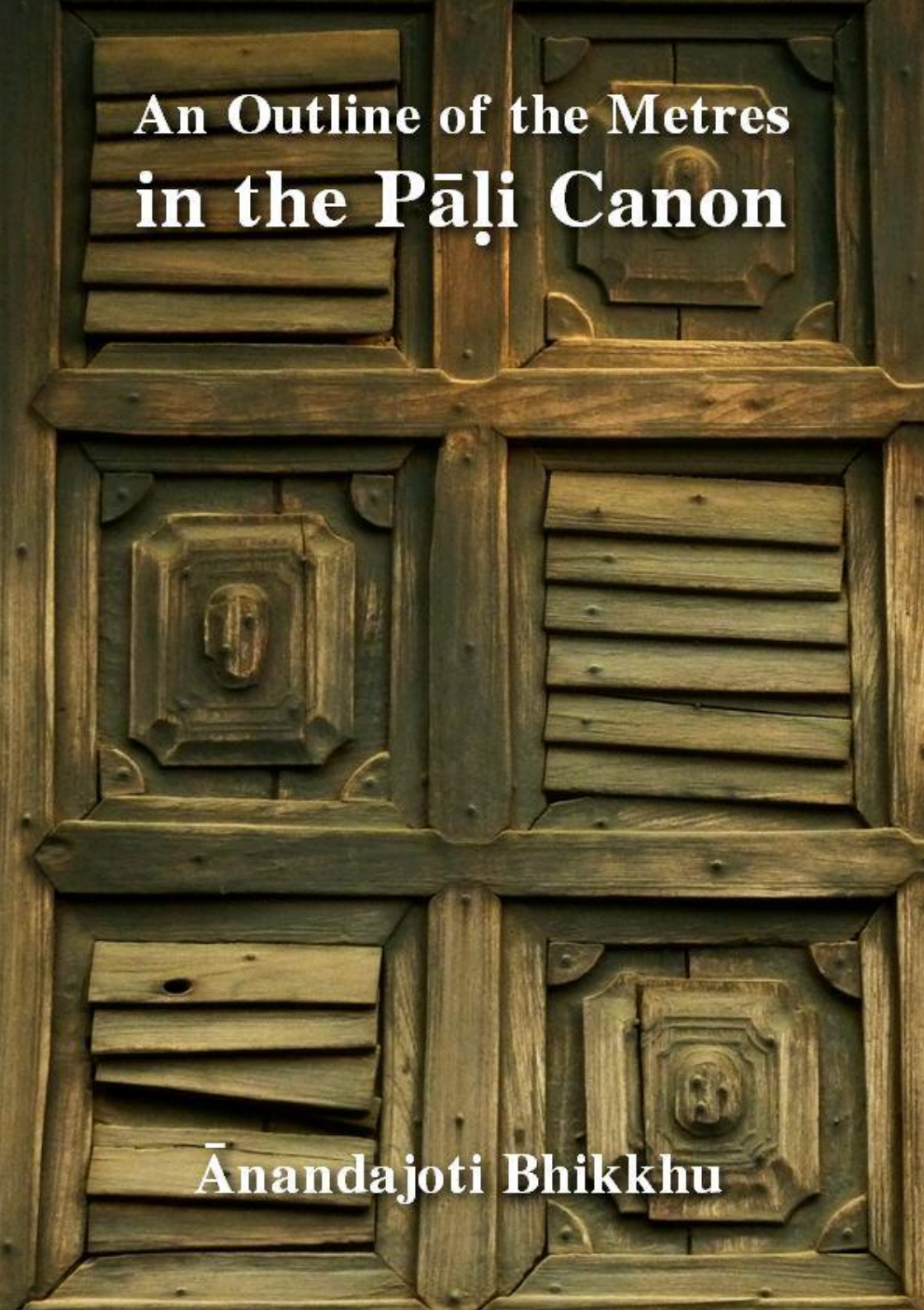
An Outline of the Metres in the Pāḷi Canon



Ānandajoti Bhikkhu

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by

(version 3.6, September 2013)

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Acknowledgements

The idea for this book arose out of a talk I had with the English bhikkhu Ven. Paññānanda, in which we discussed the struggle we had both been through at the beginning of our studies owing to the lack of a simple, comprehensive guide to Pāḷi metrical composition.

Two monks who have very good knowledge of Pāḷi and especially the verse texts, Ven. Paññānanda and Ven. Medhaṅkara, have very much helped me in preparing this work by reading it through and making a number of corrections and suggestions for improvement which have helped to clarify the presentation - without their generosity this book would be so much the poorer.

An earlier version of this work was published by Indologica Taurinensia, Official Organ of the International Association of Sanskrit Studies, Volume XXXVI. Torino (Italy), 2000.

Ānandajoti Bhikkhu

Preface to the 2nd Edition (December, 2003)

In the light of the research that has gone into the work on the Medieval prosody Vuttodaya, I have made a number of significant changes in the 2nd edition of this work, mainly concerning the terminology that has been employed, which I will enumerate here:

1) I now think that the metre I previously identified as Vatta (following Warder, PM), is perhaps better identified as Siloka, which is the term used by the Buddha himself in Mahāsamayasuttanta, D. 20.

2) Following Warder in the first edition I also referred to the variations to the Siloka as Vipulā 1, Vipulā 2, etc., but I now prefer to identify them as Navipulā, Bhavipulā, etc. This is the normal way they are referred to in Indian works on the subject, and anyone interested in prosody will have to learn this terminology anyway, so it seems redundant to use a secondary set of terms.

3) In the terminology used in the 1st edition I referred to both vowels and syllables as being short & long. This risks confusion, of course, and also goes against the useful distinction made in the prosodies, where vowels are identified as short (rassa) & long (dīgha); but syllables are distinguished as light (lahu) & heavy (garu). In this edition I have therefore introduced this distinction. This also entails speaking about the weight of the syllables, rather than their length.

4) A rule in regard to the weight of the syllables was accidently omitted in the 1st edition, this is that the syllables at the end of a line should always be marked as heavy, no matter what their natural weight is. I have added this rule in here and employed it in the descriptions of the metres, and the examples.

5) In the 1st edition (again following Warder, PM), I identified the syllabic metres as akkharacchandas; I now prefer to use the term vaṇṇacchandas, which is more commonly found in the prosodies.

6) The metre class, following Warder, I named as aḍḍhasamavutta, has here been renamed as addhasamavutta, which is the form it normally has in the medieval prosodies.

7) The metre I named as Vegavatī in the 1st edition, I now think should be called Āpātalikā, which is the name found in the prosodies; Vegavatī is a fixed metre derived from Āpātalikā.

8) A correction has been made to the description of the gaṇa system in the gaṇacchandas metres in the Index & Glossary.

Ānandajoti Bhikkhu

Preface to the 3rd Edition (May, 2004)

In this edition I have introduced a further refinement to the description of the metres, which is to mark the final syllable as × (rather than as ⏑̲, as in previous editions); this sign indicates that although the syllable may be of light or heavy weight naturally, it is nevertheless taken as heavy, and is normally pronounced as such (a light syllable being slightly drawn out at the end of a line).

(I have also made one or two small corrections, additions, and clarifications to the work further corrections, etc. were included while preparing the .pdf version of this work in February 2005).

Ānandajoti Bhikkhu

Introduction

Chando nidānaṁ gāthānaṁ
Metre forms the foundation for the verses (Devatāsaṁyutta, 202)

An understanding of the basic principles underlying Pāḷi metrical composition is not hard to acquire and will certainly enhance any reader's appreciation of the texts of Early Buddhism. Some of the most important and inspiring of these texts are written either wholly or mainly in verse, and even in the prose collections verse abounds. Below is a table giving estimates of the verse numbers in some of the most important collections in the Sutta Piṭaka, from which we can see that that collection alone contains well over 20,000 verses (numbers are based on PTS editions except where stated, and in some cases are approximate only):

Dīghanikāya	280+
Majjhimanikāya	230+
Saṁyuttanikāya	1000+ (945 in Sagāthavagga)
Aṅguttaranikāya	570+
Khuddhakapāṭha	72
Dhammapada	423
Udāna	77
Itivuttaka	263
Suttanipāta	1149
Vimānavatthu	1291 (Ce)
Petavatthu	823 (Ce)
Theragāthā	1279
Therīgāthā	522
Jātaka	6905 (Ce)
Apadāna	5228 (Ce)
Buddhavaṁsa	960+
Cariyāpiṭaka	372 (Ce)

In the West in recent times much scholarly work has been produced in this field, so that it is now possible to outline the prosody of these texts with some degree of accuracy. However the difficulty the interested student faces at this point is that the studies that have been

done are either too detailed for the beginner, or too narrow, being based on only one metre, or one type of metre.

In the Theravāda countries a study of Pāḷi prosody has nearly always been based on the Medieval work Vuttodaya, which describes the Classical prosody fairly well, but is no guide at all to the Canonical prosody, as there are metres in the Canon that are not found in that work on the one hand; and on the other hand the ones that are described generally have different parametres.

This book therefore is an attempt to summarise, within a relatively short compass, and hopefully in a fairly straightforward way, what is so far understood about Pāḷi verse composition during the canonical period. As such it relies very much on the work of previous scholars in this field such as Smith, Warder, and Norman, whose tables on usage have been consulted at every stage. However, I have also re-scanned a number of works wherever it seemed necessary to check descriptions and standardise terminology. I have also attempted to summarise the results of monographs written by Alsdorf, Bollee, Bechert, and others.

It should be understood that this is a general study only, I have made detailed studies, which are for the more advanced student elsewhere. Significantly, it appears that even writing about "Canonical Pāḷi prosody" may be slightly misleading, as the detailed studies tend to show that there was a development in the prosody even during the short period in which the material was being recited and collected; and that the various recitation (bhāṇaka) traditions may have allowed slightly different parametres to the metres.

In this book I have preferred to use the Pāḷi names of the metres rather than their Sanskrit equivalents, as is the more common practice in recent works on the literature. Although verse composition in Pāḷi is intimately related to that of its cultural environment, it nevertheless represents a definite stage in the development of Indian verse composition. It seems reasonable then, that if our intention is to describe the metres as they appear in the Pāḷi sources, that we should also designate them by their Pāḷi names,

and understand from the outset that these metres differ somewhat from their usage in other, or later, cultural contexts.

At the time of the composition of these verses, of course, there was nothing like the Sanskrit hegemony in cultural matters that emerged after the Canon was closed. In fact, it appears that in the period under discussion it was the vernacular cultures, of which Pāḷi forms a part, that were in the forefront of cultural evolution, adopting popular or folk forms into their compositions, which were still quite fluid in structure, and which were only later classified and organised by writers on Sanskrit aesthetics. However, for the convenience of the student, in preparing this book I have provided Sanskrit equivalents for the metres (and occasionally other words) at relevant places in the book, and these and others are also noted in the glossary.

This book is divided into 4 sections: the first deals with the rules for scansion, and the exceptions that have to be taken into consideration; the second presents a description of the metres themselves; the third considers briefly the important subject of the mixing of metres; and the fourth an index and glossary, which provides definitions of all the most important terms used in the literature, and seeks to disentangle some of the confusion that exists in the terminology. In an appendix there is an attempt to trace the evolution of the two most important metres in Pāḷi against the wider background of the development of Indian metrics as a whole.

For students who are new to the subject it is recommended that they first read through sections 1.1-2; 2.1-3; 2.6; 2.8-17; 2.20; & 3.1 in order to get an overview of the subject, and then try scanning some verses themselves following the examples given in the text, before re-reading in more depth in order to understand the exceptions, variations, and so on that exist.

One: Scansion and Related Matters

1.1 Scansion

In analysing Pāḷi verse a syllable is considered to be light or heavy metrically. Through the alternation of light and heavy syllables it is possible to build up rhythmic structures just as it is in music.

In order to define what is a light syllable and what is a heavy syllable there are two sets of variables that have to be taken into consideration, which is whether the syllable is open or closed; and whether the vowel is short or long.

> 1) An open syllable is one in which a vowel is followed by another vowel, or by not more than one consonant; a closed syllable is one in which a vowel is followed by a conjunct, or by the niggahīta (*ṁ*).
>
> 2) *a*, *i*, & *u*, are naturally short (*rassa*) vowels; *ā*, *ī*, & *ū*, are naturally long (*dīgha*) vowels. *e* & *o* are long in open syllables and short in closed syllables. In either case the syllables are heavy.

An open syllable with a short vowel is light metrically.
A closed syllable, or a syllable with a long vowel, is heavy metrically.

There is an additional rule that the last syllable in a line, no matter what its natural weight, is always marked as heavy; therefore the last syllable in line a below is marked as heavy in the example.

In analysis 2 signs are used to indicate weight: ⏑ = light; – = heavy.

SYLLABLES

		open	closed
	short		
V	a i u	⏑	–
O			
W	variable		
E	e o	–	–
L			
S	long		
	ā ī ū	–	(–)

Here is a verse from Mangalasutta of Khuddakapāṭha (5: 1) together with its analysis:

1 2 3 4 5 6 7 8 ‖ 1 2 3 4 5 6 7 8
⏑ – – – ¦ ⏑ – – – ¦¦ – ⏑ – ⏑ ¦ ⏑ – ⏑ –
a & b Bahū devā manussā ca, ~ mangalāni acintayuṁ,
1 2 3 4 5 6 7 8 ‖ 1 2 3 4 5 6 7 8
– – ⏑ – ¦ – – – – ¦¦ – ⏑ – ⏑ ¦ ⏑ – ⏑ –
c & d Ākankhamānā sotthānaṁ, ~ brūhi mangalam-uttamaṁ.

In this verse nearly all the principles outlined in the rule can be seen:

1) a short vowel followed by another vowel = ⏑ , b 4
2) a short vowel followed by a single consonant = ⏑ , a 1, 5; b 2, 5, 7; c 3; d 2, 4, 5, 7
3) a short vowel followed by a conjunct consonant = – , a 6; b 1, 6; c 2; d 3, 6
4) a short vowel followed by niggahīta = – , b 8; c 8; d 8
5) a variable vowel followed by a single consonant = – , a 3
6) a variable vowel followed by a conjunct consonant = – , c 6
7) a long vowel followed by a single consonant = – , a 2, 4, 7; b 3; c 1, 4, 5, 7; d 1
8) the last vowel in line a, despite its natural weight, is taken as heavy

Because of the tendency in Pāḷi for all syllables to be no longer than 2 measures (⏑ = 1 measure; – = 2 measures), a long vowel followed by a conjunct consonant is rare, and doesn't occur in our example. Note however that there are some words that do have a long vowel followed by a conjunct consonant, like *svākkhāta* & *brāhmaṇa*, and they do occur in verse, where they are counted as 2 morae as with a long vowel or a syllable containing a conjunct consonant.

1.2 Digraphs

In presenting Pāḷi in Roman letters aspirates are indicated by digraphs (*kh*, *gh*, *ch*, *jh*, etc.) These are not to be taken as conjunct consonants, as they represent but a single sound, and are to be counted as single letters are elsewhere (indeed, in the Sinhalese, Burmese, Thai & Indian scripts in general they are normally represented by single letters). Note that *ḷh* is also an aspirate, even though it is written with two characters in the above scripts.

1.3 Conventions

As stated above two signs are used to indicate syllabic weight, they are:

⏑ = light (*lahu*)
– = heavy (*garu*)

This is the convention that is normally used in Europe, and the one employed here. However it should be noted that in Indian works on the subject just the opposite convention normally prevails, as a straight line indicates the light syllable, and a bent one the heavy, therefore we sometimes see that ⏑ = heavy,[1] – = light! To avoid confusion when consulting works on metre care must be excercised to find out which convention is being employed.

[1] Sometimes written upside down in Sinhala letter editions. Note that in Devanāgarī works S = heavy, and | = light.

1.4 Exceptions

Occasionally we come across exceptions to the normal rules of scansion:

1) Some conjuncts do not make position (i.e. they fail to make the preceding syllable heavy as expected).

2) Occasionally partial vowels (*sarabhatti*) are written, but have to be ignored when scanning a verse.

1.5 Conjuncts not making position

The most common conjunct that does not make position is "*br*", which regularly fails in this regard in the following words: "*brāhmaṇ-*", "*brahma-*", "*brūti*" (and its present declension), & "*anubrūhaye*". This last is particularly interesting because elsewhere "*br*" regularly does make position medially.

Other words that sometimes fail to make position are "*tvaṁ*", "*dvāra*", & "*nhātaka*".

"*by*" (or, alternatively "*vy*") quite often fails in this regard also. Other cases must remain doubtful.

1.6 *Sarabhatti* (*svarabhakti*), "broken", or partial vowels

Some words contain partial vowels that normally have to be ignored when scanning a verse. They usually involve the separation of two semi-vowels; or of a semi-vowel from the aspirate, the nasal, or the sibilant. Some of the more common words containing sarabhatti are listed here (with the sarabhatti vowel in superscript):

ar^{i}ya (normally to be scanned as (– ⏑)
ir^{i}yati (– ⏑ ⏑)
car^{i}ya (– ⏑)
vir^{i}ya (– ⏑)

ar^{a}ha (– ⏑)
kay^{i}ra (– ⏑)

In illustration of sarabhatti, there is this verse from Mangalasutta (Khp 5: 10):

⏑ – ⏑ – ¦ ⏑ – – – ¦¦ – ⏑ – ⏑ ¦ ⏑ – ⏑ –
Tapo ca brahmacar^{i}yañ-ca, ar^{i}yasaccāna' dassanaṁ, [1]
– – ⏑ – ¦ ⏑ – – – ¦¦ – – – ⏑ ¦ ⏑ – ⏑ –
nibbānasacchikir^{i}yā ca - etaṁ mangalam-uttamaṁ.

Note that sometimes these vowels must be scanned as though they were indeed full vowels, but as it is not possible to discern any rule about this, we must presume that it is due to metrical considerations (m.c. = metri causa).

From the Lakkhaṇasuttanta (D. 30. 2. 9), a line in Rucirā metre[2] where *kariya* must be scanned as containing 3 syllables:

⏑ – ⏑ – ¦ ⏑ ⏑ ⏑ ¦ – ⏑ – ⏑ –
Sukhapphalaṁ kariya sukhāni vindati.

Occasionally we come across a line where the same vowel occurring in different positions must be scanned one time as sarabhatti, and the other as a full short vowel, as in Dhp 313:

– – – ⏑ ¦ ⏑ ⏑ – – ¦¦ ⏑ – – – ¦ ⏑ – ⏑ –
Kay^{i}rañ-ce kayirath' enaṁ ~ daḷhaṁ enaṁ parakkame.

1.7 Fluidity

In verse composition it was always considered possible to use alternate forms of words according to the needs of the metre. For that reason we sometimes find unusual forms in verse e.g. *daṭṭhu* (for *disvā*), *ghātvā* (for *ghāyitvā*). In the nominal inflection we sometimes

[1] For the loss of *niggahīta* m.c. in line b, see 1.11 below
[2] For the parametres of this metre see 2.8 below

find forms have alternative quantities e.g. in the masculine dative & genitive plural *-ĭ̄naṁ*, and the feminine ablative singular *-ĭ̄to* etc. As these alternatives were available in the language, they were simply employed according to convenience.

1.8 Metrical licence

Besides these though, we also find many instances where words have been altered in certain ways in order to meet the needs of the metre, these can be summarised as follows:

1) Lengthening or shortening of vowels
2) Doubling or simplifying of consonants
3) Employing or dropping the niggahīta

It should be pointed out that these changes cannot occur arbitarily, but only in certain positions in words, which we may summarise thus:

1) End syllables are the ones most likely to be changed
2) Medial syllables only change where there is junction (either between words in compound, or between stem and affix)
3) Rarely, initial syllables may be changed also.

1.9 Vowel changes

We quite often find in verse composition that the vowels *ă̆*, *ĭ̆*, and *ŭ̆*, have been either lengthened or shortened m.c. End vowels are often subject to these changes, and end vowels in *ĭ̆* in particular, indeed the lengthening of this vowel m.c. far exceeds all other cases. Occasionally vowels in medial position also undergo change, this being more common than the doubling or simplifying of consonants (which obtains the same result metrically).

The vowels *e* & *o* are variable in length, being normally long in open syllables (e.g. *upēkhā*), and short in closed syllables (e.g. *upĕkkhā*). Occasionally in verse we find that these vowels must be scanned as short even in open syllables, and, as with the other vowels, this seems to occur particularly when they stand at the end of a word.

Example from Ratanasutta (Khp 6. 10f), where the last syllable in *abhabbo* must be scanned as light:

⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – –
Cha chābhiṭhānāni abhabbŏ kātuṁ

1.10 Consonant changes

The change of niggahīta to labial *-m* at the end of a word (*-ṁ* > *-m*) is probably the most frequent in occurence in the texts of all changes that take place with the metre as the cause, but it cannot readily be illustrated as the same change also takes place in prose, where metrical considerations are not relevant, and it is therefore impossible to distiguish where the change has happened solely by reason of the metre.

Another way to change the weight of a syllable is by doubling or simplifying consonants. When a conjunct consonant is simplified it leaves an open syllable, which, provided the vowel is short, is light metrically. When a single consonant is doubled it closes the previous syllable, which then has to be scanned as heavy metrically.

In the example from Ratanasutta quoted above we can see that the double consonant in *abhiṭṭhānāni* has been simplified to meet the requirements of the metre.

1.11 *Niggahīta*

As can be seen in 1.1 above, a short vowel followed by niggahīta -ṁ is heavy metrically, while if it is followed by labial *-m* (and then a vowel) it is light metrically. The retention of niggahīta, or the change to labial *-m* before a vowel was somewhat fluid even in prose in the canon. In line with our discussion in 1.8 above these alternatives may be applied according to the needs of the metre. Occasionally in verse we find that niggahīta is dropped altogether from the end of a word so as to leave the last syllable open and light. Example from Dhammapada (vs 183d):

– – – – ¦ ⏑ – ⏑ –

Etaṁ Buddhāna' sāsanaṁ (= Etaṁ Buddhānaṁ sāsanaṁ).

1.12 Verses that do not scan correctly

It may come as a surprise that when so many changes are considered to be permissible, quite often the expected change does not in fact take place, even in cases where it appears to be easy to do so, and the metre is simply left "wrong" according to the norms that otherwise prevail.

1.13 *The quotation marker* and the recitor's remarks

It should be noted here that the quotation marker "*ti*", when it occurs at the end of a verse is normally considered as outside the metre (cases where it may need to be counted as inside the metre metri causa in order to make a line scan remain doubtful). Note however that *ti* sometimes occurs as an integral part of a verse, and the syllables are then counted as normal.

A similar phenomenon is the case of the so-called "recitor's remarks" (e.g. "*iti Dhaniyo Gopo*", Sn 1:2 vs 1 (vs 18), and see GD II, pg 137 for references), which are also outside the metre, and are presumed to have been added in by the recitor in order to clarify the context.

1.14 Syllabic equivalence

In canonical Pāḷi metrics it is clear that an equivalence was felt in the relationship between light and heavy syllables, so that to all intents and purposes 2 light syllables = 1 heavy (i.e. ⏑⏑ = –). This has given rise to two complimentary phenomena which may be seen in composition:

1) the resolution of one heavy (or presumed heavy) syllable into two light syllables: – > ⏑⏑

2) the replacement of two light (or presumed light) syllables by one heavy one: ⏑⏑ > –

1.15 Resolution

The resolution of a heavy (or presumed heavy), syllable into two light syllables is a common feature of verse composition. The first syllable of any line is particularly susceptible to this treatment, but resolution is found mid-line also.

It appears however that resolution is only allowed in regard to the first two syllables of a word (including words that appear as the second half of a compound, or after a prefix). The only exception to this seems to exist in regard to the negative particle "*na*", which sometimes forms the first half of a resolved syllable, perhaps because of the close syntactical relationship it has to the word it modifies.

This "rule of resolution", as we may call it, can help in identifying the underlying structure in lines of verse that are hypermetric (i.e. lines in which there are syllables additional to the normal metre), and we can thereby correctly identify the variation in a Siloka prior line, or the gaṇa structure in the bar metres (this will be illustrated later in the book, see 2.4 & 2.15). It may be noted here that the author of Buddhavaṁsa seems to have been a master of the art of resolution, as that text abounds in this particular feature.

1st example from Buddhavaṁsa Sumedhakathā vs 46 (A Siloka verse - normally 8 syllables long - showing resolution of the 4th syllable in line c, resolution of the 6th in line e, and resolution of the 1st in line f):

⏑ – ⏑ – ¦ ⏑ – – – ¦¦ – – ⏑ – ¦ ⏑ – ⏑ –
ab Aniṭṭhite mamokāse, Dīpaṅkaro Mahāmuni,

⏑ – ⏑ ⏑⏑ ¦ ⏑ – – – ¦¦ ⏑⏑ – – ¦ ⏑ – ⏑ –
cd Catūhi satasahassehi jaḷabhiññehi tādihi,

– – ⏑ – ¦ ⏑ ⏑⏑ – – ¦¦ ⏑⏑ – ⏑ – ¦ ⏑ – ⏑ –
ef Khīṇāsavehi vimalehi paṭipajji añjasaṁ jino.

Further example from the Vatthugāthā to Pārāyanavagga (Sn 995, a Tuṭṭhubha line), where it will be seen that resolution sometimes can occur twice within the same line:

⏑⏑ – ⏑ – ¦ ⏑⏑ ⏑ – ¦ – ⏑ – –
katamamhi vā janapade lokanātho ?

1.16 Replacement

The compliment to resolution is when two light (or presumed light) syllables are replaced by one heavy one. This is seen much less frequently though than resolution. It should be noticed that there is a compliment to the rule of resolution when replacement takes place, as it always occurs *after* a word break, which shows that it is the first two syllables of a word that are presumed to be light. I call this the rule of replacement.

Example from Pārāyanavagga of Suttanipāta, (1068cd) [1] (Tuṭṭhubha lines, normally 11 syllables to the line, the (presumed) light 6th & 7th syllables in both lines have been replaced by one heavy one):

[1] Verse numbers when quoted in this form refer to the PTS editions of the texts as these are the ones most likely to be available to readers of this book, but the text of the verses may not always correspond to those editions, as many of the texts quoted herein have been established by the present author by comparing the Sinhalese, Burmese, Thai, and European editions.

– – ⏑ – ¦ –, – ¦ – ⏑ – –
Etaṁ viditvā sango ti loke,
⏑ – ⏑ – ¦ ⏑, – ¦ – ⏑ – –
bhavābhavāya mā kāsi taṇhan-ti.[1]

1.17 Symbols

In the descriptions that follow these conventions are used:

⏑ = a light syllable
– = a heavy syllable
⏒ = light or heavy
× = the syllable may be naturally light or heavy, but it is always taken as heavy
⏑⏑ = one heavy or two light syllables
⏒⏑ = one light or one heavy or two light syllables
⏑–⏑ = one light, one heavy & one light, or two heavy syllables
⏒⏑⏑ = two light syllables & one heavy, or one heavy & two light syllables

Sarabhatti vowels are normally written in superscript e.g. *ar^{i}ya*

Resolution is indicated by underlining thus: ⏑⏑

A single vertical line ¦ marks off the main structural segments within a line (the opening, the break, & the cadence). [2]

In the metrical markings above the verses in the Siloka metre the pādas (lines) are separated by a double vertical line thus: ¦¦ .

[1] Note that the quotation marker at the end of the line is outside of the metre, as discussed in 1.13 above.
[2] Note that sometimes in the literature on the subject segments and pādayugas are separated by the use of a comma.

Two: Description of the Metres

2.1 The types of metre

In most metres a verse (gāthā) is made up of 4 lines (pāda), though sometimes we find verses with 6 lines, or more rarely 5. Pāḷi metres are constructed according to the amount of syllables or measures there are in the line, and the patterns that are made through the alternation of the light and heavy syllables.

The metres can be divided into two main types according to their method of construction, in outline they are:

1) The syllabic metres (*vaṇṇacchandas*)
2) The measure metres (*mattāchandas*)

We can usefully divide these into two further groups, according to the specific basis for their construction, numbers 1 and 4 below are syllabic metres, further divided according to whether their syllables are flexible or fixed; numbers 2 and 3 are types of measure metres, according to whether they have been further organized into bars or not.[1] We then have four main groups:

1) The flexible syllabic metres, e.g. Siloka, Tuṭṭhubha, Jagatī
2) The measure metres, e.g. Vetālīya, Opacchandasaka, & Āpātalikā
3) The bar metres, e.g. Gīti, Ariyā, Gubbinī
4) The fixed syllabic metres, e.g. Upajāti, Rathoddhatā, Uggatā

In the flexible syllabic metres it is the number of syllables that make up a line that is the organizing principle, e.g. Siloka has 8 syllables to the line, Tuṭṭhubha 11, & Jagatī 12. Variations are allowed in regard to the weight of a numbers of the syllables in these metres (the various patterns that can occur are discussed in the descriptions that follow).

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[1] The metre types are listed in order of their historical emergence.

In the measure metres the syllables may vary in amount, but the total amount of measures should remain fixed (⏑ = 1 measure, – = 2 measures), e.g. Vetālīya has 14 measures (mattā) in the 1st & 3rd lines, and 16 in the 2nd & 4th; Opacchandasaka 16 in the 1st & 3rd, 18 in the 2nd & 4th; Āpātalikā has the same mattā count as Vetālīya, but the cadence is different.

In the bar metres a secondary organising principle is employed over and above that of counting the measures, which is to organize the syllables into bars (gaṇas), normally of 4 measures to the bar. e.g. Ariya has 16 bars, with 30 measures in its 1st line, and 27 in the second; Gīti has 16 bars, with 30 measures in both lines (how these figures are arrived at will be explained below).

In the fixed metres virtually all of the syllables in the lines are of fixed quantity, with normally only the weight of the beginning and end syllables being variable, e.g. Upajāti is a fixed form of the Tuṭṭhubha metre, having 11 syllables to the line; Vaṁsaṭṭhā is a fixed form of Jagatī, having 12 syllables to the line.

After this brief outline of the different structural principles involved we can examine the metres in more depth.

2.2 The flexible syllabic metres, *vaṇṇacchandas* (*varṇacchandas*) type 1 (a.k.a. *akkharacchandas* [Skt: *akṣaracchandas*])

In these the line length is determined by the number of syllables there are in a line, e.g. Siloka normally has 8; Tuṭṭhubha 11; Jagatī 12. These metres have a more or less fixed cadence (i.e. the closing rhythm of a line), but allow a greater freedom in the rest of the line, in which they differ from vaṇṇacchandas type 2. The syllabic metres are the most common type found in the canon.

2.3 *Siloka* (*Śloka*) a.k.a. *Vatta* (*Vaktra*) & *Anuṭṭhubha* (*Anuṣṭubh*)

The most important and prevalent metre in canonical Pāḷi is the Siloka, which has a great deal of flexibility, and seems to be equally well adapted to aphorism, question & answer, narrative, and epic.

A Siloka verse normally consists of 4 lines (sometimes 6, rarely 5) with 8 syllables to the line, organised in dissimilar pairs which are repeated to make up a verse (note that owing to resolution sometimes a Siloka line may contain 9 syllables).

Here is an analysis of the pathyā structure of the Siloka:

Odd (prior) line: ⏑⏑⏑⏑¦⏑ – – ×
Even (posterior) line: ⏑⏑⏑⏑¦⏑ – ⏑ × (x 2)

In the 2nd & 3rd positions two successive light syllables ⏑⏑ are normally avoided, as we can see through occasional changes of syllabic weight in words that occur in these positions. However, there appear to be texts (e.g. Dhammapada) in which this rule is not always applied.

2.4 Variations

The cadence at the end of the even lines ⏑ – ⏑ × is very well established and normally adhered to, but occasionally other patterns show up in this position, like ⏑ – – ×, which may be a *pathyā* odd line in even position. Others cadences are probably always corrupt.

In the odd lines 7 variations (*vipulā*) occur, besides the normal structure, they are:

		a.k.a.
javipulā	⏕⏓⏓⏓¦⏑–⏑×	Anuṭṭhubha
navipulā	⏕–⏓–¦⏑⏑⏑×	1st vipulā
bhavipulā	⏕–⏓–¦–⏑⏑×	2nd vipulā
mavipulā	⏕–⏓–¦–––×	3rd vipulā
ravipulā	⏕⏓⏓⏓¦–⏑–×	4th vipulā
savipulā	⏕⏓⏓⏓¦⏑⏑–×	5th vipulā
tavipulā	⏕–⏑–¦––⏑×	6th vipulā (very sporadic)

There is normally a diaeresis (word break) after the fifth syllable in the mavipulā, and after the fourth syllable in the ravipulā.

Occasionally other patterns show up in the opening of the na - and bha-vipulās such as ⏓⏑––, but only rarely. As can be seen in the descriptions above, resolution of the first syllable is quite common and acceptable. The 6th & 4th are occasionally resolved, and apparently the 3rd, 5th, & 7th can be also, but not the 2nd or the 8th. By applying the rule of resolution described in 1.15 above, it is possible to help identify the underlying structure of a vipulā, take the case of an odd line showing the following structure:

⏓–⏑–⏑⏑⏑–×

if the diaeresis occurs after the fourth syllable, it is ravipulā:

⏓–⏑–,¦⏑⏑⏑–×

if the diaeresis occurs after the 5th syllable, it is pathyā:

⏓–⏑–¦⏑,⏑⏑–×

2.5 *Siloka* periods

The Siloka metre in the Canon can be divided roughly into two periods, the early and the late, according to whether the Anuṭṭhubha variation occurs in the prior lines, or whether it is normally avoided. In the early period the pathyā accounts for about 60% or more of the

prior lines, and the Anuṭṭhubha at that time is the most important variation accounting for about 15%. As the metre comes closer to its Classical form in the later part of the Canon the Anuṭṭhubha occurs only sporadically, and the pathyā greatly predominates, sometimes accounting for as much as 85% of all the lines (for more on the development of the Siloka, see the Appendix).

An interesting comparison is afforded between the early Siloka of the questions and answers in Pārāyanavagga of Suttanipāta, and the late Siloka of the Introductory Verses (*Vatthugāthā*). We may note here that in Hemakamāṇavāpucchā (Sn V:8) (vs 1084 ff) we may have a case of the Anuṭṭhubha being used as an independent metre in the Canon, but as it is only 4 vs long it is too short to be sure.

Early Siloka from Jatukaṇṇīmāṇavapucchā (Sn V: 12) (vs 1098-99):

– – ◡◡¦◡◡– –¦¦– – – –¦◡– ◡ – savipulā
Kāmesu vinaya gedhaṁ, nekkhammaṁ daṭṭhu khemato,
– ◡ – –¦◡– – –¦¦– – – –¦◡– ◡ – Pathyā
uggahītaṁ nirattaṁ vā mā te vijjittha kiñcanaṁ.

– – – –¦◡– – –¦¦– – – –¦◡– ◡ – Pathyā
Yaṁ pubbe taṁ visosehi, pacchā te māhu kiñcanaṁ.
– – – –¦◡– ◡ –¦¦◡◡– –¦◡– ◡ – Anuṭṭhubha
Majjhe ce no gahessasi upasanto carissasi.

Late Siloka (Sn V vs 1-3) (vs 976-978), narrative style:

– ◡ – –¦◡– – –¦¦◡◡– –¦◡– ◡ – Pathyā
Kosalānaṁ purā rammā agamā Dakkhiṇāpathaṁ
– – – –¦– ◡ – –¦¦– ◡ – –¦◡– ◡ – ravipulā
ākiñcaññaṁ patthayāno, brāhmaṇo mantapāragū.

– – ◡ –¦◡◡◡ –¦¦◡◡ – ◡¦◡– ◡ – navipulā
So Assakassa visaye, Aḷakassa samāsane,
◡ – – –¦◡– – –¦¦– – ◡◡¦◡– ◡ – Pathyā
vasī Godhāvarīkūle uñchena ca phalena ca.

– – ◡◡¦◡ – – – ¦¦ – – ◡◡¦◡ – ◡ – Pathyā
Tasseva upanissāya gāmo ca vipulo ahū,
◡ – – – ¦◡ – – – ¦¦◡ – – ◡◡¦◡ – ◡ – Pathyā
tato jātena āyena mahāyaññam-akappayi.

2.6 Tuṭṭhubha (*Triṣṭubh*), & *Jagatī*

Tuṭṭhubha in the Canon occurs in basically three forms. In the early period Tuṭṭhubha verses are used in the main independently. Only occasionally do we find Jagatī lines in the early verses, and then only as an expedient, as it were. [1] Later in the middle period we find that these two metres are frequently intermixed in composition, and at that point we might better describe the metre as being Tuṭṭhubha-Jagatī. Later still these metres are replaced by their Classical counterparts Upajāti and Vaṁsaṭṭhā (described in 2.8 below).

As the variations that occur in the one also occur in the other, we can take the two metres together for description.

Tuṭṭhubha normally has 11 syllables to the line, and is defined thus:

◡◡ – ◡ – ¦ ◡◡ ¦ – ◡ – ×

Jagatī is similar, but has an extra light syllable in penultimate position, giving a line of 12 syllables, thus:

◡◡ – ◡ – ¦ ◡◡ ¦ – ◡ – ◡ ×

[1] The last two sections of Suttanipāta are considered to contain some of the earliest texts in the canon. And in the first of these books, Aṭṭhakavagga (Sn IV), there are only 4 Jagatī lines among nearly 400 lines of Tuṭṭhubha (there is also one Jagatī verse, no 836). In Pārāyanavagga (Sn V), the Jagatī lines amount to approx 7% of the lines in the Tuṭṭhubha verses.

2.7 Variations

The normal opening in both metres is described as being ⏑ – ⏑ – , but there are a significant number of occasions when variations are seen (especially in the early period), the most common being ⏑ – – – (the so-called Vedic opening), but also we come across ⏑ – ⏑⏑, ⏑⏑ – – & – ⏑⏑ –. Others occur only very rarely.

In the break (syllables 5-7) the pattern – ⏑⏑ prevails (85% approx), with resolution occasionally giving ,⏑⏑⏑⏑. Other patterns that occur in this position are ⏑⏑ –, – ⏑ –, & ⏑⏑⏑. Rarely we also find the patterns – – ⏑ and ⏑ – ⏑, so that the 6th syllable, though normally regarded as light, may occasionally be heavy.

Sometimes an extended form is produced by resolution at the first syllable, which then gives a line of 12 (13) syllables - note that the pattern of the cadence will help identify the metre in these cases.

Another extended form may be produced by a line having a diaeresis at the 5th syllable, and restarting from the same syllable, giving the line:

5 & 5
⏑ – ⏑ – ¦ –,⏑⏑⏑ ⏑⏑ ¦ – ⏑ – (⏑) ×

Occasionally replacement takes place, whereby two light syllables are presumed in the 6th & 7th positions, and replaced by one heavy one. The line then has one syllable less than expected (see 1: 16 above for an example):

6 & 7
⏑⏑ – ⏑ – ¦ – – ¦ – ⏑ – (⏑) ×

Examples: early Tuṭṭhubha, Khaggavisāṇasutta Sn I:3; the "Aṭṭhaka" suttas Sn IV:2-5; and the Tuṭṭhubha verses in Pārāyanavagga Sn V. The second of the extended forms described above is used extensively in the Vatthugāthā to Nālakasutta Sn III:11 (vs 679ff). Late Tuṭṭhubha tends to conform to the fixed patterns that emerged

during this time and which are described below (for more on the development of the Tuṭṭhubha, see the Appendix).

Example of early Tuṭṭhubha from Guhaṭṭhakasutta (Sn IV: 2) (vs 776-779):

– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
Passāmi loke pariphandamānaṁ,
ᴗ – ᴗ – ¦ – – ᴗ ¦ – ᴗ – –
pajaṁ imaṁ taṇhāgataṁ bhavesu,
– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
hīnā narā maccumukhe lapanti -
ᴗ – ᴗ – ¦ – – ᴗ ¦ – ᴗ – –
avītataṇhāse bhavābhavesu.

ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
Mamāyite passatha phandamāne,
– – ᴗ – ¦ – ᴗ – ¦ – ᴗ – –
macche va appodake khīṇasote,
– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
etam-pi disvā amamo careyya,
ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
bhavesu āsattim-akubbamāno.

ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
Ubhosu antesu vineyya chandaṁ,
– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
phassaṁ pariññāya anānugiddho,
ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
yad-attagar[a]hī tad-akubbamāno:
ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
na lippatī diṭṭhasutesu dhīro.

– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – –
Saññaṁ pariññā vitareyya oghaṁ,
ᴗ – ᴗ – ¦ ᴗᴗᴗ ¦ – ᴗ – –
pariggahesu muni nopalitto,

– – ᴗ – ¦ – ᴗ – ¦ – ᴗ – –
abbūḷhasallo caraṁ appamatto,
– – ᴗ – ¦ – – ᴗ ¦ – ᴗ – –
nāsiṁsatī lokaṁ imaṁ parañ-cā ti.

Mixed Tuṭṭhubhajagatī, from Ratanasutta (Khp 6:8):

ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – ᴗ – Jagatī
Yathindakhīlo paṭhaviṁ sito siyā
ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – ᴗ – Jagatī
catubbhi vātehi asampakampiyo,
ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – – Tuṭṭhubha
tathūpamaṁ sappurisaṁ vadāmi,
– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – ᴗ – Jagatī
yo ar[i]yasaccāni avecca passati -
ᴗ – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – – Tuṭṭhubha
idam-pi Sanghe ratanaṁ paṇītaṁ:
– – ᴗ – ¦ – ᴗᴗ ¦ – ᴗ – – Tuṭṭhubha
etena saccena suvatthi hotu!

Extended Tuṭṭhubha, from Nālakasutta (Sn III: 11) (vs 679-680):

– – ᴗ – ¦ – ,ᴗᴗᴗᴗ ¦ – ᴗ – –
Ānandajāte tidasagaṇe patīte
– – ᴗ – ¦ – ,ᴗᴗᴗᴗ ¦ – ᴗ – –
sakkacca Indaṁ sucivasane ca deve,
– – ᴗ – ¦ – ,ᴗᴗᴗᴗ ¦ – ᴗ – –
dussaṁ gahetvā atiriva thomayante
ᴗᴗ – ᴗᴗ ¦ – – ᴗᴗ ¦ – ᴗ – –
Asito isi addassa divāvihāre. [1]

– – ᴗ – ¦ – ,ᴗᴗᴗᴗ ¦ – ᴗ – –
Disvāna deve muditamane udagge,
– – ᴗ – ¦ – ,ᴗᴗᴗ – ¦ – ᴗ – –
cittiṁkaritvā idam-avocāsi tattha: [2]

---

[1] 1st syllable is resolved, 4th syllable is short, we might have expected to find a reading *isī*.

[2] Perhaps we should understand *avŏcāsi* m.c.

– – ᴗ –¦–,ᴗᴗᴗᴗ¦–ᴗ – –
Kiṁ devasangho atiriva kalyarūpo?
– – ᴗ –¦–,ᴗᴗᴗᴗ¦–ᴗ – –
Dussaṁ gahetvā bhamayatha kiṁ paṭicca?

2.8 *Upajāti*, *Vaṁsaṭṭhā* (*Vaṁśasthā*), and *Rucirā*

These are the fixed metres in the Canon that have been derived from Tuṭṭhubha and Jagatī, their profile looks like this:

i) **Upajāti** (from Tuṭṭhubha):

⏑ – ᴗ –¦– ᴗᴗ¦– ᴗ – ×

ii) **Vaṁsaṭṭhā** (from Jagatī):

⏑ – ᴗ –¦– ᴗᴗ¦– ᴗ – ᴗ ×

As can be seen these are the "normal" forms of their respective metres, but now allowing only little flexibility.

iii) **Rucirā** (from Jagatī, with resolution of the 5th syllable, giving a 13 syllable line):

⏑ – ᴗ –¦ᴗᴗᴗᴗ¦– ᴗ – ᴗ ×

Examples: Upajāti and Vaṁsaṭṭhā are used to great effect, both mixed and independently in Tālaputta's gāthās Th 1091-1145. Vaṁsaṭṭhā and Rucirā both appear as independent metres in Lakkhaṇasuttanta DN.30 (see 2.24)

Example Upajāti/Vaṁsaṭṭhā, Th 1091-2:

ᴗ – ᴗ –¦– ᴗᴗ¦– ᴗ – – Upajāti
Kadā nuhaṁ pabbatakandarāsu,
– – ᴗ –¦– ᴗᴗ¦– ᴗ – – Upajāti
ekākiyo addutiyo vihassaṁ,

⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
aniccato sabbabhavaṁ vipassaṁ,
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Vaṁsaṭṭhā
taṁ me idaṁ taṁ nu kadā bhavissati?

⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Vaṁsaṭṭhā
Kadā nuhaṁ bhinnapaṭandharo muni,
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Vaṁsaṭṭhā
kāsāvavattho amamo nirāsayo,
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
rāgañ-ca dosañ-ca tatheva mohaṁ
– – ⏑ – ¦ ⏑⏑ ⏑⏑ ¦ – ⏑ – – Upajāti
hantvā, sukhī pavanagato vihassaṁ? [1]

Rucirā from Lakkhaṇasuttanta (D. 30. 2. 9):

⏑ – ⏑ – , ¦ ⏑⏑⏑⏑ ¦ – ⏑ – ⏑ –
Na pāṇinā na ca pana daṇḍaleḍḍunā,
– – ⏑ – , ¦ ⏑⏑⏑⏑ ¦ – ⏑ – ⏑ –
satthena vā maraṇavadhena vā puna,
– – ⏑ – ¦ – , ⏑⏑ ¦ – ⏑ – ⏑ –
ubbādhanāyā paritajjanāya vā, [2]
⏑ – ⏑ – , ¦ ⏑⏑⏑⏑ ¦ – ⏑ – ⏑ –
na heṭhayī janatam-aheṭhako ahu.
– – ⏑ – , ¦ ⏑⏑⏑⏑ ¦ – ⏑ – ⏑ –
Teneva so sugatim-upecca modati
⏑ – ⏑ – , ¦ ⏑⏑⏑⏑ ¦ – ⏑ – ⏑ –
sukhapphalaṁ kariya[3] sukhāni vindati.

[1] Showing resolution of the 5th syllable
[2] This is an Indavaṁsā line
[3] Reading *kariya* as having 3 syllables

2.9 The measure metres, *mattāchandas* (*mātrācchandas*)

These metres have a different method of organising the line: not by counting the syllables, but according to the total number of measures (*mattā*) there are in a line. In these metres a light syllable is counted as one measure, and a heavy one as two, and it is therefore possible to determine the exact amount of measures there are in a line. When this is done of course the syllabic count will vary.

What distinguishes the various metres that exist in this class is two things: the number of measures, and the pattern of the cadence. The openings are variable, but come in groups of 2 mattās. The odd lines having 3 such groups (i.e ⏑⏑⏑⏑⏑⏑), the even 4 (i.e. ⏑⏑⏑⏑⏑⏑⏑⏑). The most common forms are outlined below.

Note that a syllable at the end of the line is normally counted as two mattā whether it is heavy or not, a light syllable counted in this way is called *pādantagaru*.

2.10 *Vetālīya* and *Opacchandasaka* (*Vaitālīya* and *Aupacchandasaka*)

The first of these metres, **Vetālīya**, has 14 measures in the odd lines, and 16 in the even, with the cadence at the end of each line being ¦–⏑–⏑×.

Opacchandasaka, the second of the metres, has 16 measures in the odd lines, and 18 in the even. The cadence is similar to Vetālīya, but with an extra heavy syllable in penultimate position ¦–⏑–⏑–×.

The most common forms of the odd lines are:

––⏑⏑¦–⏑–⏑(–)×
⏑⏑–⏑⏑¦–⏑–⏑(–)×
–⏑⏑–¦–⏑–⏑(–)×

The most common forms of the even lines:

– – – ᴗ ᴗ ¦ – ᴗ – ᴗ (–) ×
ᴗ ᴗ – – ᴗ ᴗ ¦ – ᴗ – ᴗ (–) ×
– ᴗ ᴗ – ᴗ ᴗ ¦ – ᴗ – ᴗ (–) ×

with occasional resolution of a heavy syllable giving rise to other patterns in the opening. Through syncopation of syllables in adjacent groups we occasionally find different patterns in the opening of the prior lines, so that sometimes:

– – ᴗ ᴗ > – ᴗ – ᴗ
ᴗ ᴗ – ᴗ ᴗ > ᴗ – ᴗ ᴗ ᴗ
ᴗ ᴗ – – > ᴗ – ᴗ – etc.

Occasionally we find a light syllable at the beginning of the line, which must be counted as heavy in order to complete the mattā count (this we may call *pādādigaru*, in compliment to *pādantagaru*).

Examples: Vetālīya, Dhp 15-18, 235-238; Subhā Jīvakambavanikā's gāthās Thī 367-399; Jarāsutta Sn IV:6

Opacchandasaka, Uragasutta Sn I:1; Cundasutta Sn 1:5; Kātiyāna's gāthās Th 411- 416.

Vetālīya example from Jarāsutta (Sn IV:6) (vs 804):

– – ᴗ ᴗ ¦ – ᴗ – ᴗ –
Appaṁ vata jīvitaṁ idaṁ,
– – – ᴗ ᴗ ¦ – ᴗ – ᴗ –
oraṁ vassasatā pi miyyati,
– – ᴗ ᴗ ¦ – ᴗ – ᴗ –
yo ce pi aticca jīvati
ᴗ ᴗ – – ᴗ ᴗ ¦ – ᴗ – ᴗ –
atha kho so jarasā pi miyyati.

Opacchandasaka example from Kātiyāna's gāthā (Th 412):

⏑⏑ – ⏑⏑ ¦ – ⏑ – ⏑ – –
Sayathā pi mahāsamuddavego
– – – ⏑⏑ ¦ – ⏑ – ⏑ – –
evaṁ jātijarātivattate taṁ,
⏑⏑ – ⏑⏑ ¦ – ⏑ – ⏑ – –
sŏ karohi sudīpam-attano tvaṁ, [1]
⏑⏑ – – ⏑⏑ ¦ – ⏑ – ⏑ – –
na hi tāṇaṁ tava vijjateva aññaṁ.

2.11 *Mattāchandas* Periods

It should be noted that in the early texts the most common opening of the odd lines in Vetālīya is – – ⏑⏑. In the later period this falls back considerably with the other variations, notably ⏑⏑ – ⏑⏑ showing a marked increase; also in the later period the syncopated forms almost come to an end, and runs of light syllables start to appear.

2.12 *Rathoddhatā* and *Pupphitaggā* (*Puṣpitāgrā*)

These are the two fixed metres derived from the above.

Rathoddhatā (a Vetālīya even pāda):

⏑ ⏑ – ⏑ ⏑ ⏑ ¦ – ⏑ – ⏑ × (x4)

Similarly **Pupphitaggā** (from Opacchandasaka) in the Canon is still somewhat flexible:

⏑ ⏑ ⏑ ⏑ ¦ – ⏑ – ⏑ – ×
⏑ ⏑ – ⏑ ⏑ ¦ – ⏑ – ⏑ – × (x2)

with occasional resolution of a heavy syllable elsewhere. In its post-canonical form the opening of the first line was fixed as ⏑⏑⏑⏑⏑ and the second as ⏑⏑⏑⏑ – ⏑⏑.

[1] Reading *sŏ* as short to give the correct opening

In both of these metres the fixed forms have unusual variations in the openings, the latter especially showing the Classical period's fondness for runs of light syllables.

Examples: Rathoddhatā, early: Gotama's gāthās Th 258-260; Ambapālī's gāthās Thī 252-270; late: Kuṇāla Jātaka Ja 536. Both metres are used independently in Lakkhaṇasuttanta D.30.

Rathoddhatā example Ambapālī's gāthā (Thī 256):

– ◡ – ◡ ◡ ◡ ¦ – ◡ – ◡ –
Cittakārasukatā va lekhitā,
– ◡ – ◡ ◡ ◡ ¦ – ◡ – ◡ –
sobhate su bhamukā pure mama,
– ◡ – ◡ ◡ ◡ ¦ – ◡ – ◡ –
tā jarāya valihī palambitā,
– ◡ – ◡ ◡ ◡ ¦ – ◡ – ◡ –
saccavādivacanaṁ anaññathā.

Pupphitaggā example from Lakkhaṇasuttanta (D. 30. 1. 12):

◡ ◡ ◡ ◡ ◡ ◡ ¦ – ◡ – ◡ – –
Tihi purisavaraggalakkhaṇehi[1]
◡ ◡ ◡ ◡ – ◡ ◡ ¦ – ◡ – ◡ – –
cirayapanāya kumāram-ādisanti.
◡ ◡ ◡ ◡ ◡ ◡ ¦ – ◡ – ◡ – –
Bhavati yadi gihī ciraṁ yapeti,
◡ ◡ ◡ ◡ – ◡ ◡ ¦ – ◡ – ◡ – –
ciratarapabbajatī yadī tato hi,
– ◡ ◡ ◡ ◡ ¦ – ◡ – ◡ – –
yāpayati vasiddhibhāvanāya,
◡ ◡ – – ◡ ◡ ¦ – ◡ – ◡ – –
iti dīghāyukatāya tan-nimittan-ti

[1] The text here is based on K.R.Norman's reconstruction in The metres of the Lakkhaṇa-suttanta (II). *CP IV*, pgs 36ff.

2.13 *Āpātalikā* (a.k.a. *Vegavatī*)

This metre has 14 measures in the odd lines, and 16 in the even, as with Vetālīya, but with a different cadence: – ◡ ◡ – ×. In the Canon the most common forms of the odd lines:

◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – ×
– – ◡ ◡ ¦ – ◡ ◡ – ×

the even lines:

– ◡ ◡ – – ¦ – ◡ ◡ – ×
– ◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – ×

We sometimes find syncopation producing different patterns in the opening of these lines.

When it attains to its Classical form, it is then known as Vegavatī, and is restricted to:

◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – ×
– ◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – × (x2)

Examples: Kokāliyasutta (part) Sn III:10; Vangīsa's gāthās (pt) Th 1214 - 1222, the latter gāthās being mixed with Vetālīya.

Example from Kokāliyasutta (Sn III:10) (vs 673):

◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – –
Asipattavanaṁ pana tiṇhaṁ,
– ◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – –
taṁ pavisanti samacchidagattā,
– – ◡ ◡ ¦ – ◡ ◡ – –
jivhaṁ baḷisena gahetvā,
– ◡ ◡ – ◡ ◡ ¦ – ◡ ◡ – –
āracayāracayā vihananti.

2.14 Svāgatā

In the Canon this metre has two dissimilar lines repeated to make up a verse, and the structure was still quite fluid:

Svāgatā odd lines:

– ◡ – ◡ ¦ – – ⏑⏑ ×
– ◡◡ – ¦ – – ⏑⏑ ×

Svāgatā even lines:

– ◡ – ◡ – ¦ – ⏑⏑ – ×
– ◡◡ – – ¦ – ⏑⏑ – ×

Note how close this is to Āpātalikā at this stage. In the later period however the even line is fixed and repeated four times, so that the structure is then defined as:

– ◡ – ◡⏑⏑ ¦ – ◡◡ – × (x 4)

Examples: early, Mahāsamayasuttanta DN. 20 vs 3 (quoted below as the example); late: Jātakanidānakathā vs 291:

– – ◡ – ¦ – – ◡◡ –
"Chetvā[1] khilaṁ chetvā palighaṁ,
– ◡ – ◡ – ¦ – ◡◡ – –
indakhīlam-ūhacca-m-anejā,
– ◡ – ◡ ¦ – – ◡◡ –
te caranti suddhā vimalā,
– ◡◡ – – ¦ – ◡◡ – –
Cakkhumatā dantā susunāgā" ti.

[1] For this line to scan correctly we need to read Chetva here.

2.15 The bar metres (gaṇacchandas)

Once a measure count was established, it was not long before a second structural principle was introduced, which was to organise the lines into bars, or gaṇas, normally having 4 measures to the bar, which may therefore take one of the following forms:

– – or ᴗ – ᴗ or ᴗᴗ – or – ᴗᴗ or ᴗᴗᴗᴗ

The rhythm of these metres is defined by the alternation of two rhythmic structures:

⏑⏑ – ¦ ᴗ – ᴗ

In the descriptions that follow it should be borne in mind that resolution of a heavy syllable was always deemed acceptable, which means that any of the first three alternatives outlined above may appear as ᴗᴗᴗᴗ. By applying the rule of resolution discussed in 1.15 above it is possible to identify the underlying structure, thus: ᴗ,ᴗᴗ ᴗ = ᴗ – ᴗ with resolution; ,ᴗᴗᴗᴗ = – ᴗᴗ ; ᴗᴗ,ᴗᴗ = ᴗᴗ –. (Of course there would have to be double resolution for it to equal – –).

2.16 Old Gīti

This appears to be the earliest of the bar metres, and indeed, is most probably a transitional metre between mattācchandas and gaṇacchandas metres. There are two structures to the metre: the first is the normal form; the second is an extended form, which after the word break, restarts with a full gaṇa, thus:

Normal structure:

⏑⏑ – ¦ ᴗ – ⏑ ¦ ⏑⏑ – ¦ ⏒, – ⏒ ¦ ⏑⏑ – ¦ ᴗ – ⏑ ¦ ⏑⏑ – ¦ × (x 2)

Extended structure:

⏑⏑ – ¦ ᴗ – ⏑ ¦ ⏑⏑ – ¦ ⏒, ⏑⏑ – ¦ ⏑⏑ – ¦ ᴗ – ⏑ ¦ ⏑⏑ – ¦ × (x 2)

In the 2nd and 6th gaṇas the pattern ⏔– sometimes occurs, but –⏑⏑ is very rare in any gaṇa. The opening gaṇa quite frequently looks like this: ⏑– ; in this case we have to count the initial syllable as heavy (pādādigaru) to make up the mattā count (cf. 2.10 above). In the normal form we sometimes find that the 4th gaṇa looks like this: ⏑,– ; in this case we have to count the light syllable, which occurs at the end of the first half of the pādayuga as heavy (pādantagaru), as in the measure metres. With the extended form cf. the extended Tuṭṭhubha, 2.7 above.

Examples: Mettāsutta Khp 9; Tuvaṭakasutta Sn IV:14; Vangīsa's gāthās (part) Th 1242-1245; Upālisutta MN:56

Example from Tuvaṭakasutta (vs 922-3):

––¦⏑–⏑¦––¦–,–¦⏑⏑–¦⏑–⏑¦⏑⏑–¦– pādantagaru
"Cakkhūhi neva lolassa, gāmakathāya āvarayĕ sotaṁ,
––¦⏑–⏑¦––¦⏑,⏑⏑⏑¦––¦⏑–⏑¦––¦– pādādigaru + resolution
rase ca nānugijjheyya, na ca mamāyetha kiñci lokasmiṁ.
––¦⏑⏑–¦––¦⏑,⏑⏑–¦––¦⏑⏑⏑⏑¦⏑⏑–¦– extended + resolution
Phassena yadā phuṭṭhassa paridevaṁ bhikkhu na karĕyya kuhiñci,
––¦⏑–⏑¦––¦⏑,–⏑¦–⏑⏑¦⏑–⏑¦––¦– pādādigaru + normal break
bhavañ-ca nābhijappeyya, bheravesu ca na sampavedheyya.

2.17 Gīti, Ariyā (Āryā), and their derivatives

In the gaṇacchandas metres in the Pāḷi canon, there are two structures to the pādayuga (pair of lines), they are:

Gaṇacchandas 1st pādayuga:

1 2 3 4 5 6 7 8
⏔⏔¦⏑––⏑¦⏔⏔¦⏑––⏑¦⏔⏔¦⏑––⏑¦⏔⏔¦×

Gaṇacchandas 2nd pādayuga:

1 2 3 4 5 6 7 8
⏔⏔¦⏑––⏑¦⏔⏔¦⏑––⏑¦⏔⏔¦⏑¦⏔⏔¦×

Note that – ◡◡ is very rarely found in any gaṇa.

The only difference between the two pādayugas lies in the 6th gaṇa.

Ariyā, which is the most common metre in this class, has the first pādayuga described above followed by the second, this gives a mattā count of 30 + 27.

Examples: Isidāsī's gāthās Thī 400 - 447, and Sumedhā's gāthās Thī 448 -522

Example Thī 458-9:

– ◡◡ ¦ ◡ – ◡ ¦ ◡◡ – ¦ ◡ – ◡ ,¦ – ◡◡ ¦ ◡ – ◡ ¦ – – ¦ –
Kiṁ bhavagatena abhinanditena, kāyakalinā asārena? [1]
◡◡ – ¦ – ◡◡ ¦ – – ¦¦ ◡◡ – ¦ ◡◡ – ¦ ◡ ¦ – – ¦ –
Bhavataṇhāya nirodhā, anujānatha pabbajissāmi.

– – ¦ – – ¦ – – ¦¦ ◡ – ◡ ¦ – – ¦ ◡ – ◡ ¦ – – ¦ –
Buddhānaṁ uppādo, vivajjito akkhaṇo khaṇo laddho,
– – ¦ ◡ – ◡ ¦ – – ¦¦ – – ¦ – – ¦ ◡ ¦ – – ¦ –
sīlāni brahmacar¦yaṁ yāvajjīvaṁ na dūseyyaṁ.

The next three metres are much less common:

Gīti has the first pādayuga repeated to make up a verse,
mattā = 30 + 30.

Example: Paripuṇṇaka's gāthā Th 91:

◡◡ – ¦ ◡ – ◡ ¦ ◡◡ – ¦¦ – – ¦ – – ¦ ◡ – ◡ ¦ ◡◡ – ¦ –
Na tathāmataṁ satarasaṁ suddhannaṁ yaṁ mayajja paribhuttaṁ,
◡◡ ◡◡ ¦ – – ¦ ◡◡ – ¦ ◡ – ◡ ,¦ – – ¦ ◡ – ◡ ¦ – – ¦ –
aparimitādassina Gotamena Buddhena desito Dhammo. [2]

---

[1] Note that this pādayuga is a variation (vipulā), lacking the expected word break after the 3rd gaṇa.
[2] Again this line is a variation.

Uggīti has the second pādayuga followed by the first, mattā = 27 + 30.

Example: the last of Vijitasena's gāthās Th 359:

⏑⏑ – – ⏑ – – – ‖ ⏑⏑ – ⏑ – – ⏑ – – ⏑ – – ⏑ –
Satiyā taṁ nibhandhissaṁ,[1] payatatto vo damessāmi,
– ⏑⏑ ⏑ – ⏑ – – ‖ ⏑⏑ – ⏑ – – ⏑ – ⏑ – – ⏑ –
virᵢyadhuraniggahīto, na-y-ito dūraṁ gamissase citta!

Upagīti has the second pādayuga repeated, mattā = 27 + 27.

Example: Gotama's gāthās 587, 588, & 591, the latter being mixed with Siloka:

– – ⏑ ⏑ – ⏑ – – ‖ – – ⏑ ⏑ – ⏑ ⏑ – – ⏑ –
Mittaṁ idha kalyāṇaṁ, sikkhāvipulaṁ samādānaṁ,
– – ⏑ – ⏑ ⏑ ⏑ – – ‖ – – ⏑ ⏑ – ⏑ ⏑ ⏑ ⏑ – ⏑ –
sussāsā ca garūnaṁ: etaṁ samaṇassa paṭirūpaṁ. (Th 588)

Other gaṇacchandas variations, including pādayugas with a full last gaṇa (giving a mattā count of 32), are not found in the canon.

2.18 Jagaṇa (amphibrachys)

In these metres the gaṇa pattern ⏑ – ⏑ is normally found only in the even gaṇas, and occurs in roughly half of the 2nd & 4th gaṇas, and virtually always in the 6th (where appropriate), so that its inclusion there appears to be the rule.

[1] This line as it stands reads as Siloka, a not uncommon phenomena in gaṇacchandas verses. If we read *Satiyā ta' nibhandhissaṁ*, that would give a correct Uggīti line.

2.19 Hypermetres, Veḍha & Gubbinī

Only two examples of gaṇacchandas hypermetre have been found in the Canon so far, they are Veḍha and Gubbinī. The structure of both is similar and can be defined as follows:

Opening: ⏑–⏑¦ ⏒⏒ ¦⏑–⏑
Middle: ⏒⏒¦ ⏑–⏑ ¦
End: ⏒⏒¦ ⏑–⏑ ¦⏒×

The middle gaṇas can be repeated a flexible number of times. The end normally finishes with a full gaṇa as described above but may finish with a half gaṇa ⏑ . Note that in these metres the pattern ⏑ – ⏑ is supposed to occur only in the odd gaṇas (in contradistinction to the Ariyā class of metres).

The **Veḍha** metre is normally composed of descriptive compounds (*vaṇṇakas*) of varying length. The only examples discovered so far are in the Kuṇāla-jātaka Ja 536. Sometimes there are only four gaṇas in the compound, then the structure looks like this:

⏒⏒¦⏑–⏑¦⏒⏒¦– ×

but the text of these compounds now is very corrupt, and they sometimes have only three gaṇas (lacking the first).

As the example here is a 6 gaṇa compound:

– –¦⏑⏑–¦⏑⏑⏑⏑¦–⏑⏑¦⏑–⏑¦– –
Vijjādharasiddhasamaṇatāpasagaṇādhivutthe

Gubbinī has the same structure, but need not consist solely of compounds. The only known example is the frequently repeated praise of the Three Treasures beginning "Iti pi so...":

⏑⏑¦–⏑⏑¦–⏑⏑¦– –¦– –¦– –
Iti pi so Bhagavā Arahaṁ Sammāsambuddho, [1]
– –¦⏑⏑⏑¦– –¦–⏑⏑¦– –¦⏑⏑–
vijjācaraṇasampanno[2] Sugato lokavidū,
⏑–⏑¦–⏑⏑¦⏑–⏑¦–⏑⏑
anuttaro purisadammasārathi,
– –¦–⏑⏑¦– –¦– –¦–⏑⏑¦–
satthā devamanussānaṁ Buddho Bhagavā ti.

2.20 The fixed syllabic metres: vaṇṇacchandas (varṇacchandas) type 2 (a.k.a. akkharacchandas [Skt: akṣaracchandas])

These metres can be divided into 3 kinds according to their verse structure:

1) Samavutta, has the same line repeated four times.
2) Addhasamavutta, has two dissimilar lines repeated.
3) Visamavutta, has four dissimilar lines.

2.21 Samavutta (Samavṛtta)

The more popular of these fixed metres, Upajāti, Vaṁsaṭṭhā, Rucirā, and Rathoddhatā, and Svāgatā have been described in 2.8, 2.12, & 2.14 above.

Some others occur, which we may outline here:

Pamitakkharā (from gaṇacchandas):

⏑⏑–¦⏑–⏑¦⏑⏑–¦⏑⏑× x4

[1] We must take the 1st syllable as pādādigaru.

[2] The 2nd gaṇa is short as it stands, we could read *caraṇaṁ* to correct the metre.

Example: Lakkhaṇasuttanta (DN. 30. 2. 15):

⏑⏑–¦⏑–⏑¦⏑⏑–¦⏑⏑–
Atha ce pi pabbajati so manujo,
––¦⏑–⏑¦⏑⏑–¦⏑⏑–
dhammesu hoti paguṇo visavī
––¦⏑–⏑¦⏑⏑–¦⏑⏑–
tassānusāsaniguṇābhirato,
––¦⏑–⏑¦⏑⏑–¦⏑⏑–
anvāyiko bahujano bhavati.

Upaṭṭhitā:

––⏑⏑–⏑⏑–⏑× (x 4)

Example: Ja 125 20-21[1]

Dodhaka (an Āpātalikā even line repeated):

–⏑⏑–⏑⏑¦–⏑⏑–× (x 4)

Example: the last two verses of Kokāliyasutta (Sn III:10) (vs 677-8):

–⏑⏑–⏑⏑¦–⏑⏑––
Te gaṇitā viduhī tilavāhā,
–⏑⏑–⏑⏑¦–⏑⏑––
ye Padume niraye upanītā
⏑⏑–⏑⏑–⏑⏑¦–⏑⏑––
nahutāni hi koṭiyŏ pañca bhavanti, [2]
–⏑⏑–⏑⏑¦–⏑⏑––
dvādasa koṭisatāni punaññā. (Sn 677)

[1] This is Warder's reference, given on page 221 of Pāli Metre, I have been unable to trace it.

[2] This line is irregular, we should exclude *koṭiyo* m.c., which then gives a normal line.

Other Metres: there are 3 others which have not been named:

⏑⏑⏑– – × (x 4) (Th 381)

⏑ – ⏑ – ⏑ – ⏑ – ⏑ – (x 4) (SN 1:14)

– – – – – ⏑⏑⏑⏑ – – × (x 4) (Th 111)

2.22 Addhasamavutta (Ardhasamavṛtta)

Āpātalikā, which in its Classical form belongs to this class, has been described in 15 above. Pupphitaggā was described in 2.12.

Aparavatta, which is derived from Vetālīya, shows the following structure:

⏑⏑⏑⏑⏑¦– ⏑ – ⏑ ×
⏑⏑⏑⏑ – ⏑⏑¦– ⏑ – ⏑ × (x 2)

Example: Bhallāṭiya Jātaka Ja 504 vs 25:

⏑⏑⏑⏑⏑¦– ⏑ – ⏑ –
Vividham-adhimanā suṇomahaṁ,
⏑⏑⏑⏑ – ⏑⏑¦– ⏑ – ⏑ –
vacanapathaṁ tava-m-atthasaṁhitaṁ,
⏑⏑⏑⏑⏑¦– ⏑ – ⏑ –
muñca giri nudaseva me daraṁ,[1]
⏑⏑⏑⏑ – ⏑⏑¦– ⏑ – ⏑ –
samaṇa sukhāvaha jīva me ciran-ti.

[1] This line has *pādādilahu*.

2.23 Visamavutta (Visamavṛtta)

In Lakkhaṇasuttanta DN. 30 we find two metres belonging to this class, which has four dissimilar lines to the verse. The first is derived from mattāchandas:

Upaṭṭhitappacupita:

⏑⏑ – – ⏑⏑ – ⏑ – , ⏑ – ⏑⏑ – ×
⏑⏑ – ⏑⏑ ⏑⏑ – ⏑ – ⏑ – ×
⏑⏑⏑⏑⏑ , ⏑⏑⏑ ×
⏑⏑⏑⏑⏑⏑⏑ , ⏑⏑⏑ – ⏑⏑ – ×

Example from Lakkhaṇasuttanta, (D. 30. 1. 30): [1]

– – – ⏑⏑ – ⏑ – , ⏑ – ⏑⏑ – –
Akkhodañ-ca adhiṭṭhahī adāsi ca dānaṁ,
– – ⏑⏑⏑⏑ – ⏑ – ⏑ – –
vatthāni ca sukhumāni succhavīnī,
⏑⏑⏑⏑⏑ , ⏑⏑⏑ –
purimatarabhavĕ ṭhito,
⏑⏑⏑⏑⏑⏑⏑ , ⏑⏑⏑ – ⏑⏑ – –
abhivisaji mahim-iva suro abhivassaṁ

Uggatā (from gaṇacchandas):

⏑⏑ – ⏑ – ⏑⏑⏑ – ×
⏑⏑⏑⏑⏑ – ⏑ – ⏑ ×
⏑⏑ ⏑⏑ ⏑⏑⏑ – ⏑⏑ ×
⏑⏑ – ⏑ – ⏑⏑⏑ – ⏑ – ⏑ ×

Example from Lakkhaṇasuttanta, (D. 30. 2.12):

[1] The text here is based on K.R.Norman's reconstruction in The metres of the Lakkhaṇa-suttanta (I). *CP III*, pgs 45ff.

⏑⏑–⏑–⏑⏑⏑––
Sugatīsu so phalavipākaṁ,
⏑⏑⏑⏑⏑–⏑–⏑–
anubhavati tattha modati,
⏑⏑⏑⏑⏑⏑⏑⏑–⏑⏑–
idha ca pana bhavati gopakhumo,
⏑⏑–⏑–⏑⏑⏑–⏑–⏑–
abhinīlanettanayano sudassano.

2.24 Lakkhaṇasuttanta DN 30

As can be seen from the references supplied to the fixed metres above, the late Lakkhaṇasuttanta of the Dīghanikāya supplies us with a number of metres which are either rare or not otherwise found in canonical Pāli. For easy reference the metres are listed below, giving the bhāṇavāra and paragraph number of the PTS edition in brackets:

1	(1.6)	Vaṁsaṭṭhā	5 vs	
2	(1.9)	Vaṁsaṭṭhā	6 vs	
3	(1.12)	Pupphitaggā	4 vs	
4	(1.15)	Rathoddhatā	3 vs	
5	(1.18)	Pupphitaggā	4 vs	
6	(1.21)	Rathoddhatā	5 vs	(total 8 vs)
7	(1.24)	Vaṁsaṭṭhā	4 vs	
8	(1.27)	Vaṁsaṭṭhā	4 vs	
9	(1.30)	Upaṭṭhitappacupita	4 vs	
10	(1.33)	Vaṁsaṭṭhā	4 vs	
11	(2.3)	Pupphitaggā	4 vs	(total 12 vs)
12	(2.6)	Vaṁsaṭṭhā	4 vs	
13	(2.9)	Rucirā	3 vs	
14	(2.12)	Uggatā	4 vs	
15	(2.15)	Pamitakkharā	4 vs	
16	(2.18)	Vaṁsaṭṭhā	4 vs	(total 31 vs)
17	(2.21)	Pamitakkharā	4 vs	
18	(2.24)	Pamitakkharā	4 vs	(total 12 vs)
19	(2.27	Upaṭṭhitappacupita	4 vs	
20	(2.31)	Upaṭṭhitappacupita	7 vs	(total 15 vs)

Three: The Mixing of Metres

3.1 Introduction

As we have seen from the description of the metres presented above, one of the main features of Pāḷi verse composition in the Canon is its flexibility. Even the fixed Classical metres which were just beginning to emerge towards the end of this period were somewhat fluid in structure, and there was still some room within which composition could take place.

Another way in which this shows itself is in the flexibility allowed to move between metres as and when required. This is evident both in the freedom with which different metres may be employed within a composition, and even the allowance to change metres within the verse itself, if that proved to be convenient for expression.

In what follows we will be concerned with what may be considered the more extreme case of metre mixing within the limits of a verse, but this will also serve to provide examples of the ability to move between metres in the composition as a whole.

3.2 Tuṭṭhubha, Jagatī and their derivatives

We saw in 2.6 above that although both Tuṭṭhubha and Jagatī exist as independent metres in their own right, and are used as such frequently, nevertheless the metres are commonly mixed, as a line in Jagatī metre was generally considered acceptable in what is otherwise a Tuṭṭhubha verse (and visa versa). For a good example of this see Ratanasutta Sn II:1 (see 2.7 above).

This characteristic continues even when the metres have achieved their fixed forms as Upajāti and Vaṁsaṭṭhā, as can be seen e.g. in Tālaputta's gāthas Th 1091-1145, where the metres are used both independently and in combination.

Example from Agāriyavimānaṁ (Vv 65, vs 1-2):

⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Vaṁsaṭṭhā
Yathā vanaṁ Cittalataṁ pabhāsati,
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Vaṁsaṭṭhā
uyyānaseṭṭhaṁ tidasānam-uttamaṁ,
⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
tathūpamaṁ tuyham-idaṁ vimānaṁ
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
obhāsayaṁ tiṭṭhati antalikkhe.

– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
Deviddhipattosi mahānubhāvo,
⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
manussabhūto kim-akāsi puññaṁ?
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Upajāti
Kenāsi evaṁ jalitānubhāvo
– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Vaṁsaṭṭhā
vaṇṇo ca te sabbadisā pabhāsatī? ti

Rarely we find Tuṭṭhubha mixed with Mattāchandas lines. Examples: Sn 1:2 vs 18, 19; Ud II:6:

– – ⏑ – ¦ ⏑⏑ ⏑ – ¦ – ⏑ – – Tuṭṭhubha
Akkhodano vigatakhīloham-asmi, (iti Bhagavā,) [1]
⏑⏑ – – ⏑⏑ ¦ – ⏑ – ⏑ – – Opacchandasaka
anutīre Mahiyekarattivāso,
⏑⏑ – ⏑⏑ ¦ – ⏑ – ⏑ – Vetālīya
vivaṭā kuṭi nibbuto gini,
⏑⏑ – – ⏑⏑ ¦ – ⏑ – ⏑ – – Opacchandasaka
atha ce patthayasī pavassa deva! (Sn 19)

3.3 Vetālīya, Opacchandasaka, & Āpātalikā

These metres, being built around the same structural principle, are quite frequently mixed, though with the first two it seems that the rule is that Vetālīya should appear in the odd lines, and Opacchandasaka in the even (though there may be one or two

[1] For the recitor's remarks, which are hypermetrical, see 1.13 above.

counter-examples to this cf. Dhp 344 & Sn 527). With Vetālīya and Āpātalikā there appears to be no particular rule about line order, perhaps because their mattā count is the same.

Examples: Vetālīya & Opacchandasaka - Dhaniyasutta Sn I:2; Sabhiyasutta Sn III:6 (part: 510-540); Vetālīya & Āpātalikā from Vangīsa's gāthās Th 1214-1222.

3.4 Siloka and other metres

So far we have mainly been considering the mixing of metres that employ similar structural principles, and that may account for the ease with which it was felt to be possible to move between the metres. However, when we come to Siloka, we have a syllabic metre with an Addhasamavutta structure. None of the other metres have this particular combination of characteristics of course, but still we frequently find Siloka lines appearing alongside other metres, perhaps because it was by far the most common and familiar of the metres employed.

Normally the situation appears to be that account has been taken of the structure of the Siloka in mixing, and we usually find Siloka odd and even lines appearing in their expected positions in the verse. Below we will see that various combinations can be illustrated:

Siloka & Tuṭṭhubha

Th. 1253 = Tuṭṭhubha, a - Siloka, bcd etc.
Dhp. 330 = Siloka, ab - Tuṭṭhubha, cd
Sn. 1061 = Tuṭṭhubha, ab - Siloka, cd
Sn. 1055 = Siloka, a - Tuṭṭhubha, bcd
Sn. 423 = Siloka, abd - Tuṭṭhubha, c
Sn. 482 = Tuṭṭhubha, abc - Siloka, d
Sn. 995 = Tuṭṭhubha, abd - Siloka, ef (Jagatī, c):

– – ⏑ – ¦ – ⏑ ⏑ ¦ – ⏑ – – Tuṭṭhubha
So Bāvarī attamano udaggo,

– – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – – Tuṭṭhubha
taṁ devataṁ pucchati vedajāto:
⏑⏑ – ⏑ – ¦ – ⏑⏑ ¦ – ⏑ – ⏑ – Jagatī
katamamhi gāme nigamamhi vā pana,
⏑⏑ – ⏑ – ¦ ⏑⏑ ⏑ – ¦ – ⏑ – – Tuṭṭhubha
katamamhi vā janapade lokanātho ?
– ⏑ – – ¦ ⏑ – – – ¦¦ – – – ⏑ ¦ ⏑ – ⏑ – Siloka
Yattha gantvā namassemu Sambuddhaṁ dipaduttamaṁ? (Sn 995)

Siloka & Jagatī

Th 306 = Siloka, ab - Jagatī, cd
Th 1089 = Siloka, abc - Jagatī, def

Siloka & Mattāchandas

Th 1 = Op, acd - Siloka, b
Th 551 = Siloka, a - Vetālīya, bcd
Th 1004 = Āpātalikā, ab - Vetālīya, c - Siloka, d!:

⏑⏑ – ⏑⏑ ¦ – ⏑⏑⏑ – – Āpātalikā
Ubhayena-m-idaṁ maraṇam-eva, [1]
– ⏑⏑ – – ¦ – ⏑⏑ – – Āpātalikā
nāmaraṇaṁ pacchā va pure vā,
⏑⏑ – ⏑⏑ ¦ – ⏑ – ⏑ – Vetālīya
paṭipajjatha mā vinassatha,
⏑ – – – ¦ ⏑ – ⏑ – Siloka
khaṇo ve mā upaccagā! (Th 1004)

Siloka & Gaṇacchandas

Siloka lines appear in gaṇacchandas verses a surprising number of times. It seems to be the rule that when the two metres share a pādayuga, Siloka takes the odd line. Gotama's gāthās Th 587-596 provide a good example of the mixing of Siloka lines in what are otherwise gaṇacchandas verses:

[1] The line has an extra syllable in the cadence, we could think of reading *maraṇaṁ va* to correct the metre.

– – ◡ – ¦ ◡ – – – Siloka
Ācāragocare yutto
– – ¦ – – ¦ ◡ – ◡ ¦ – – ¦ – Gīti
ājīvo sodhito agārayho
– – ¦ ◡ ◡ – ¦ ◡ ◡ – Ariyā
cittassa ca saṇṭhapanaṁ:
– – ¦ ◡ ◡ – ¦ ◡ ¦ ◡ ◡ – ¦ – Ariyā
etaṁ samaṇassa paṭirūpaṁ.

– – – ◡ ¦ ◡ – – – Siloka
Cārittaṁ atha vārittaṁ,
– – ¦ ◡ ◡ – ¦ ◡ ¦ – ◡ ◡ ¦ – Ariyā
irʲyāpathiyaṁ pasādaniyaṁ
◡ ◡ – – ¦ ◡ – – – Siloka
adhicitte ca āyogo:
– – ¦ ◡ ◡ – ¦ ◡ ¦ ◡ ◡ – ¦ – Ariyā
etaṁ samaṇassa paṭirūpaṁ. (Th 590-1)

Conclusion

This then concludes our outline of the metres in the Pāḷi Canon and their usage, but that is far from the end of the work that remains to be done in this field. We still do not have comprehensive analyses of all the metrical texts, particularly in regard to the later compositions like Vv, Pv, Ap, Bv, & Cp. And upto now we know very little about Pāḷi verse composition in post-canonical times, where we can find a whole library of works composed in verse according to Classical norms. These include the various Chronicles pertaining to the history of the Sāsana; the verse Summaries of the Vinaya, Dhamma, & Abhidhamma composed by Ven. Buddhadatta and others; and the late Medieval lives of the Buddha, composed in a mixture of ornate metres.

The student who is interested in the Pāḷi language and its development can be assured therefore that there is still much yet to discover and contribute in this area, and there is still much room for original research to be carried out in the area of Pāḷi metrical composition.

Four: Index and Glossary
(Roman order of letters)

Addhasamavutta (ardhasamavṛtta)
a metre having two dissimilar lines repeated to make up a verse e.g. Siloka, Vetālīya, see also 2.20ff

akkharacchandas (akṣaracchandas), see vaṇṇacchandas

anacrusis
one or two extra syllables at the beginning of a line, before the metre proper begins.

anceps ⏑
indicates that the syllable may be heavy or light in the stated position. In the Pāḷi canonical period the last syllable in a line is nearly always considered to be heavy, and sometimes the first syllable too, see pādādigaru & pādantagaru.

Anuṭṭhubha (Anuṣṭubh), see 2.3ff

1) this is a Vedic metre originally having a samavutta structure ⏑ – ⏑ – ¦ ⏑ – ⏑ × (x 4). Over time variations from this basic pattern started to emerge, which eventually gave rise to a new metre having two dissimilar lines, the Siloka. As this was a gradual evolution at which point we should declare the metre to have gone over from Anuṭṭhubha to Siloka is a moot point. But the general position is that in the Pāḷi canonical period we find that we are dealing with the new metre, which has an Addhasamavutta structure (see the Appendix for more details).

2) The name is also used when describing a variation that occurs in the odd lines of Siloka metre, which shows the same structure as the line illustrated above, and which is therefore the same as the Siloka even line.

3) Also used as a generic name applied to any metre having 8 syllables to the line.

anusvara, see niggahīta

Aparavatta (Aparavaktra) 2.22

Āpātalikā 2.13

Ariyā (Āryā) 2.17

1) a gaṇacchandas metre having two dissimilar lines with a matta count of 30 + 27

2) sometimes the name is used generically to refer to any gaṇacchandas metre.

assimilation
euphonic change whereby one consonant takes the form of another which follows or precedes it e.g. ud + ghāta > ugghāta

br, see 1.5

Brahatī, generic name for metres having 9 syllables to the line

bar metres, see gaṇacchandas

break
the middle part of the Tuṭṭhubha and other similar metres, see 2.6ff

brevis in longo
a light syllable that is counted as heavy, see pādādigaru and pādantagaru below.

cadence
the closing rhythm of a line, or pair of lines

diaeresis, see yati

catalectic
having an incomplete number of syllables or mattā (opp: acatalectic, complete).

chandas

1) prosody, metre

2) sometimes is used loosely to indicate merely the number of syllables in a line

cheda, pause, see also yati

closed syllable see 1.1

conjunct consonants
two (or more) consonants which are not separated by a vowel e.g. *-tt-* in mettā, *-ndr-* in *indriya*

contraction
change from original two short vowels (usually separated by a semivowel) to one long one e.g. *aya* > *e*, *ava* > *o*. This sometimes makes sense of otherwise metrically 'wrong' verses.

Dodhaka 2.21

dīgha (dīrgha)
used to refer to a naturally long vowel, not to be confused with garu (heavy) which refers to metrical weight

digraphs
two letters that indicate but one sound, see 1.2

elision
the loss of a syllable, or part of a syllable, at the beginning or end of a word (which sometimes happens m.c.)

epenthesis
the insertion of a vowel between two consonants for euphonic reasons, see sarabhatti

euphony
ease of pronounciation, see also sandhi

even line = posterior line = the second line in a pādayuga

fixed metre
vaṇṇacchandas type 2, see 2.20ff

foot
a division of a line of poetry, usually consisting of 3 syllables, see also gaṇa

gaṇa, a bar or section

1) in the gaṇacchandas metres this refers to a bar which seems to be derived from musical structure. These gaṇas accurately reflect the rythmic structure of the metres. There are five such gaṇas, which are given here with their Sanskrit and Greek names.

jagaṇa	⏑ – ⏑	amphibrachys
bhagaṇa	– ⏑ ⏑	dactylus
sagaṇa	⏑ ⏑ –	anapæst
sabbagaru	– –	spondee
sabbalahu	⏑ ⏑ ⏑ ⏑	proceleusmaticus

2) a division consisting of 3 syllables which is a kind of shorthand used to describe the vaṇṇacchandas metres. There are 8 such gaṇas which are used in Classical Indian theory:

jagaṇa	⏑ – ⏑	amphibrachys
bhagaṇa	– ⏑ ⏑	dactylus
sagaṇa	⏑ ⏑ –	anapæst
yagaṇa	⏑ – –	bacchius
ragaṇa	– ⏑ –	cretius, amphimacer
tagaṇa	– – ⏑	palimbacchius
magaṇa	– – –	molossus
nagaṇa	⏑ ⏑ ⏑	tribrachys

in the descriptions that occur in the Indian prosodies these are normally indicated as *ja*, *bha*, *sa*, etc.

la(hu) ⏑ and ga(ru) – are used to describe the end syllable(s); (note: ⏑ – = iambus; – ⏑ = trochee; – – = spondee; ⏑ ⏑ = pyrrhic)

Although these signs can be used to describe the alternation of heavy and light syllables quite accurately, they often disguise the underlying structure of the metres, so that e.g. Indavajirā is described as being *ta ta ja ga ga*, which when written out gives the pattern:

– – ⏑ ¦ – – ⏑ ¦ ⏑ – ⏑ ¦ – –,

this gives the impression that there are rhythmic patterns in the metre which do not, in fact, appear. The structure is better defined like this:

– – ⏑ – ¦ – ⏑ ⏑ ¦ – ⏑ – –,

which better reflects the rhythm.

gaṇacchandas
name of a class of metres built around the first of the gaṇa principles outlined above, there are about 450 gaṇacchandas verses in the canon, see 2.15ff

garu
a heavy syllable metrically, see 1.1ff

gāthā
variously translated as verse, stanza, or strophe. A gāthā normally consists of 4 lines, sometimes 6, though occasionally we come across a verse which is defective in this regard

geyya
literally singable, in the tradition signifies a type of composition of mixed prose and verse, some of which at least may have been 'performed' to illustrate points of Buddhist doctrine or folklore. Sagāthavagga of Saṁyuttanikāya contains many examples of geyya

Gīti
literally song 2.17ff cf. also Old Gīti 2.16

Gubbinī (Gurviṇi)
a gaṇacchandas hypermetre 2.19

half-verse (or half-stanza etc.) see pādayuga

haplography
omission of a syllable by accident when it appears twice in a word

hiatus

1) a gap

2) two vowels in succession without an intervening consonant

hypermetre

1) a class of metres composed using extendable forms, see 2.19

2) having a syllable, or syllables additional to the normal metre (even a line showing syllabic resolution may be referred to as hypermetric)

ictus
in metre a syllable that is stressed or emphasized (ictus strictly speaking does not apply to Pāḷi verse composition, but it is sometimes mentioned in the literature).

Jagatī

1) a syllabic metre 2.6ff

2) a generic name for any metre having 12 syllables to the line

Jāti

1) another name for the measure metres

2) another name for Upajāti

junction, see sandhi

kabba (kāvya), literature

lahu (laghu)
a light syllable metrically, see 1.1ff

Māgadhikā (a.k.a. Māgadhī)
another name for Vetālīya (2.10), presumably because Magadhi is where the metre originated

mattā (mātrā)
literally a measure, light syllables are counted as one mattā, heavy ones as two

mattāchandas (mātrāchandas), measure metre 2.9ff
there are about 400 verses in mattāchandas metre in the canon

measure metre, see mattāchandas above

metathesis
exchange of syllabic position e.g. kariyā > kayirā

metrical licence, see 1.8ff

metri causa, the metre is the cause (of a change in word form)

mora = mattā = a measure

musical metres
refers to the mattāchandas and gaṇacchandas metres which have been derived under the influence of musical structures

new metres
refers to the mattāchandas, gaṇacchandas, and fixed vaṇṇacchandas metres

niggahīta
the pure nasal sound. Only occurs normally after a short vowel (i.e as *aṁ*, *iṁ*, & *uṁ*), but then makes that syllable heavy metrically, sometimes also referred to as anusvara (the Sanskrit name for this sound), see 1.1 & 1.11

odd line = prior line = the first line in a pādayuga

Old Gīti (a.k.a. **Old Āryā**)
the earliest form of gaṇacchandas metre 2.16

Opacchandasaka (Aupacchandasaka) 2.10

opening
the beginning section of a line, may be followed by a break and cadence as in Tuṭṭhubha and related metres, or simply by a cadence as in Siloka and the mattāchandas metres

open syllable, see 1.1

pāda
a line of verse

pādādigaru
a light syllable that is counted as heavy (see *brevis in longo*) because it stands at the beginning of a line (this is sometimes seen in early gaṇacchandas verses)

pādantagaru
a light syllable that is counted as heavy (see *brevis in longo*) because it stands at the end of a line, see 2.9

pādayuga

1) a pair of lines

2) sometimes loosely used to refer to a line in gaṇacchandas verse

pajja (padya)
verse (as opposed to gajja [gadya], prose)

Pamitakkharā (Pramitākṣarā) 2.21

Panti (Pāṅkti), generic name for metres having 10 syllables to the line

partial vowels, see sarabhatti

pathyā
the normal structure of a line (as opposed to vipulā, variation), see 2.3

pause, cheda (see also yati)

position
for syllables not making position see 1.5

posterior pāda = even line = the second line in a pādayuga

prior pāda = odd line = the first line in a pādayuga

Pupphitaggā (Puṣpitāgrā) 2.12

rassa
a naturally short vowel, not to be confused with lahu, which refers to metrical weight

Rathoddhatā 2.12

recitor's remarks 1.13

redundant syllable
a syllable extra to the metre

replacement, see 1.14ff

resolution, see 1.14, 1.15; 2.4; 2.15

Rucirā 2.8

samavutta (samavṛtta)
a metre having the same line repeated (normally four times) to make up a verse e.g. Tuṭṭhubha, Rucirā, Pamitakkharā, see also 2.20ff

samprasāna, reduction
a phonetic change whereby a semi-vowel is reduced to its vowel equivalent e.g. *ya* > *ī*; *va* > *ū*

sandhi
refers to the junction between words, and the euphonic changes that take place accordingly

sara (svara), vowel; (vyañjana, consonant)

sarabhatti (svarabhakti)
literally a broken vowel, an anaptyctic or epenthetic vowel, see 1.6

scansion
metrical analysis, see 1.1ff

Siloka (Śloka)
see 2.3ff

stanza, see gāthā

strophe, see gāthā

Svāgatā 2. 14

syllable
can be defined as a word, or a part of a word, which can be uttered with a single effort of the voice

syllabic metres, vaṇṇacchandas type 1, see 2.1ff

syncopation
a change in the order of syllables, which produces a different rhythm e.g. – – ◡◡ > – ◡ – ◡ see 2.10

ti
quotation marker 1.13

Tuṭṭhubha (Triṣṭubh) 2.6ff
also sometimes used as a generic name for any metre having 11 syllables to the line

Uggatā (Udgatā) 2.23

Uggīti (Udgīti) 2.17

Upagīti 2.17

Upajāti 2.8
sometimes loosely referred to as Tuṭṭhubha

Upaṭṭhitā 2.21

Upaṭṭhitappacupita (Upasthitapracupita) 2.23

Vaṁsaṭṭhā (Vaṁśasthā) 2.8
sometimes loosely referred to as Jagatī

vaṇṇacchandas (varṇacchandas), the syllablic metres, there are two types:

1) the flexible syllabic metres e.g. Siloka, Tuṭṭhubha, in which the syllabic patterns are still somewhat variable, see 2.1ff

2) the fixed syllabic metres, in which all, or nearly all, of the syllables are of fixed quantity e.g. Vaṁsaṭṭhā, Uggatā, see 2.20ff

vaṛṇaka
a descriptive compound having an extendable metrical structure, see 2.19

Veḍha 2.19

Vegavatī, see Āpātalikā 2.13

Vetālīya (Vaitālīya) 2.10

vipulā, variation (as opposed to pathyā, normal) 2.4

visamavutta (visamavṛtta)
a verse with 4 dissimilar lines 2.23ff

vutta (vṛtta)
a fixed syllablic metre, vaṇṇacchandas type 2

vutti
the weight of a syllable

yati, diaeresis
a word break (not a pause as sometimes stated). Occasionally the word break is hidden or concealed (avyakata) in a compound

Appendix: The Evolution of Siloka & Tuṭṭhubha

In order to give a broader perspective on the nature of Pāḷi verse composition a sketch is presented here of the development of two of the metres in their Vedic, Pāli, and Classical forms. The Vedic period probably starts around 2500 - 2000 B.C.; the Pāḷi canonical period begins around the turn of the 6th century B.C. and continues until the 2nd century B.C.; which is when the Epic and Classical period roughly begins. There is some overlap, but nevertheless we can broadly distinguish these three periods, and point out how the metres were developing.

1) Anuṣṭubh / Siloka / Śloka

In the early part of the Ṛg Veda the Anuṣṭubh was a samavṛtta metre showing the following structure:

⏑ – ⏑ – ¦ ⏑ – ⏑ × (x 4)

sometimes light syllables are found in the 2nd, 4th & 6th positions, though 2 successive light syllables in the 2nd & 3rd position was normally avoided (as it was in the other periods also). Interestingly enough, in the light of later developments, the cadence ⏑ – – ×, which became the pathyā (normal) form almost never occurs.

Over time variations from this basic pattern started to emerge, which eventually gave rise to a new metre having two dissimilar lines, which we may describe thus:

Odd line: ⏑ – ⏑ – ¦ ⏑ – ⏑ ×
Even line: ⏑ ⏑ – ⏑ ¦ ⏑ – ⏑ × (x 2)

By the time of the Pāḷi Canon the samavṛtta Anuṣṭubh as an independent metre has more or less fallen into disuse, and the Siloka has emerged as a definite Addhasamavutta metre, the normal pattern of which can be described thus:

Odd line: ⏑⏑⏑⏑⏑¦⏑ – – ×
Even line: ⏑⏑⏑⏑⏑¦⏑ – ⏑ × (x 2)

as shown in the main body of the book (2.4), in the early period there were 7 variations allowed in the prior line, including the Anuṭṭhubha. By the end of the canonical perod, the Anuṭṭhubha variation was normally avoided.

In the Classical period (which includes post-canonical Pāḷi works), not only the Anuṭṭhubha, but the 5th & 6th vipulās had also fallen into disuse. Other changes that have taken place are the normal avoidance of resolution; and also of the pattern – ⏑ – in the 2nd, 3rd & 4th syllables of the even line.

In the Classical Śloka the pathyā structure accounts for 85% - 95% of all odd lines, and the metre then can be described thus:

Odd line: ⏑⏑⏑⏑¦⏑ – – ×
Even line: ⏑⏑⏑⏑¦⏑ – ⏑ × (x 2)

with only 4 variations occasionally appearing in the prior line.

2) Triṣṭubh / Tuṭṭhubha / Upajāti

The Triṣtubh is the most popular metre in the Ṛg Veda, accounting for approximately 2/3 of all the lines in that collection (of about 10,000 verses). In the Vedas there are two main forms of the metre distinguished by the position of the diaeresis:

1) ⏑ – ⏑ –,¦⏑⏑ – ¦ – ⏑ – × (x 4)

2) ⏑ – ⏑ – ¦⏑,⏑⏑¦ – ⏑ – × (x 4)

Note that the diaeresis, whether it occurs after the 4th or the 5th syllable, is normally followed by two light syllables. The openings occasionally appear as ⏑⏑ – –, and the break sometimes shows other patterns: with the early diaeresis: ,– ⏑ – ,⏑ – ⏑ ,⏑⏑⏑ ; with the later diaeresis: ⏑,– ⏑ are fairly common.

In the early period mixing Jagatī lines into Triṣṭubh verses was normally avoided, but in the late period it is acceptable and quite common.

In the very earliest part of the Pāḷi period also mixing of the two metres was normally avoided, later, as we have seen (2.6ff 3.2), it is normal to find the two metres mixed together in composition, whichever one predominates. The pattern in the early and middle Pāḷi period can be described thus:

⏑⏑ – ⏑̆ – ¦ ⏑ ⏑ ⏑ ¦ – ⏑ – × (x 4)

The most significant changes are the possibility of resolution, particularly of the 1st syllable; the establishment of the break – ⏑ ⏑ as the dominant form, the loss of the two distinct forms, and with that the loss in the significance of the diaeresis.

Even in the late part of the Canon the Tuṭṭhubha has been replaced by the Classical Upajāti, which is more restricted than its earlier counterparts, having the normal pattern:

⏑ – ⏑ – ¦ – ⏑ ⏑ ¦ – ⏑ – × (x 4)

Bibliography and Guide to Further Study
(with abbreviations, and method of quoting)

The following books and articles contain further information on the gāthās and metres of the Pāḷi Canon (all volumes are as published by PTS, unless otherwise stated):

Texts:

DN: Dīghanikāya - each volume has a gāthā index (quoted by sutta name, number, bhāṇavāra [where appropriate], and paragraph number)

MN: Majjhimanikāya - volume 3 contains a very incomplete gāthā index (quoted by sutta name, number, bhāṇavāra [where appropriate], and paragraph number)

SN: Saṁyuttanikāya - each volume has a gāthā index, and the index volume (no 6) collates these (quoted by Saṁyutta name, and sutta number)

Sg: Sagāthavagga (new edition, 1998) - the metre of all the gāthās are identified (quoted by verse number)

AN: Anguttaranikāya - each volume has a gāthā index, and the index volume (no 6) collates these (quoted by nipāta number, and sutta number)

Khp: Khuddakapāṭha - has a gāthā index and an analysis of the metres (quoted by sutta name and verse number)

Dhp: Dhammapada - index volume contains a pāda index (quoted by verse number)

Ud: Udāna - includes udāna index (quoted by vagga & sutta number)

It: Itivuttaka - includes gāthā index (quoted by vagga & sutta number)

Sn: Suttanipāta - the gāthā index and metre analysis are contained in Vol 3 of the commentary Paramatthajotikā, (quoted by sutta name, vagga and sutta number, and/or verse number)

Vv: Vimānavatthu - (quoted by Vimāna name and line number)

Pv: Petavatthu - (quoted by Peta name and line number)

Th: Theragāthā - 2nd edition (1966) contains Alsdorf's reconstruction of the gaṇacchandas metres in Appendix 2 (quoted by Thera name and verse number)

Thī: Therīgāthā - as Th above (quoted by Therī name and verse number)

Ja: Jātaka - (quoted by Jātaka name and verse number)

KJa: Kuṇālajātaka - contains metre analysis, including a commentary on the lines in Veḍha metre

Ap: Apadāna - Buddha Jayanti edition (quoted by verse number)

Bv: Buddhavaṁsa - (quoted by book and line number)

Cp: Cariyāpiṭaka - (quoted by book and line number)

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Warder, A. K: Introduction to Pāli, chapter 30 contains an all-too-brief outline of Pāḷi metre (Intro)

Warder, A. K: Pāḷi Metre, the most comprehensive book on the subject studying the development of Pāḷi metre against its historical background, contains many useful tables on usage (PM)

Other Abbreviations occuring in the literature

AMg: Ardhamāgadhī, the language of the Jaina Canon

Apa: Apabrahṁsa, a late Prākrit language

Be: Text in Burmese characters, usually refers to the relevant Chaṭṭha Saṅgāyana text

BHS: Buddhist Hybrid Sanskrit

Ce: Text in Sinhalese characters, usually refers to the relevant Buddha Jayanti Tripitaka text

Ee: Text in Roman characters, usually refers to the relevant PTS edition; or to the Harvard Oriental Series

m.c.: metri causa, the metre is the cause (of a change in word form)

MIA: Middle Indo-Āryan = Pāḷi & Prākrit

OIA: Old Indo-Āryan = Vedic & Classical Sanskrit

Pkt: Prākrit

Se: Text in Thai characters, usually refers to the relevant Royal Thai edition of the text

Skt: Sanskrit

v.l.: variant reading (in the manuscripts)

v.r.: variant reading (in the commentaries, grammarians, etc.)