

**Metre and Euphony (sandhi) in  
the Nīlamatapurāṇa**

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# **Metre and Euphony (sandhi) in the Nīlamatapurāṇa**

*For the late Prof. Yutaka OJIHARA*

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1. PRELIMINARY REMARKS.
2. SUSPENSION OF SANDHI AND IRREGULAR SANDHI.
3. ALTERATIONS OF MORPHOLOGICAL VALUE IN THE NOUN.
4. METRICAL LICENCES.
5. DISTRIBUTION OF METRES AND PRATYAYA PROCEDURES.
6. CONCLUSIONS.

## **1. PRELIMINARY REMARKS<sup>1</sup>.**

- 1.1. Our aim.
- 1.2. Four stages of textual transmission.
- 1.3. Sections of NM.

### **1.1 Our aim.**

The objective of this essay is to present a more or less exhaustive account of the nature of the metre and the euphony witnessed by the Nīlamatapurāṇa (=NM), a verse narrative relating the origin of the country and Hindu rituals of Kaśmīr. Naturally, this investigation cannot be carried out independently of other philological investigations, such as those concerned with palaeography, phonology, morphology, of the NM and studies on the textual transmission of it as well as of works allied with it. First we will briefly glance at these subjects insofar as they seem useful for our investigations, then proceed to examine the sandhi and metre of the NM.

\* \* \*

One important point must be clarified first off: which text are we to analyse? There exist two critical editions of the NM, that edited by K. de Vreese and that by Ved Kumari. Which edition are we to choose?

To answer this, we can postulate the question in other words: What is the final aim of our analysis? It seems to me that there were and are, roughly speaking, two extreme attitudes an editor can take in editing a Skt text. One is

to choose the most grammatically regular forms of words from many manuscripts and versions and to establish the most grammatically refined text. The other approach is to select the most irregular forms in order to obtain the 'real' text transmitted among people who were not so literate as grammarians. If, however, we apply automatically either one of these principles in editing a text, we are sure to get only a radically refined or barbarous text, one that has never existed before.

Now we are of course aware of the fact that nobody could have been such a grammarian or so illiterate as supposed by these two principles. Rather, in each epoch or region in every religious group there existed a common linguistic norm shared by those who constituted the group. Our object is, consequently, to discover these norms, which might have been changing according to the epoch, the region or even the social category or literary genre. We should not refuse a word form or metrical form simply because it is more or less grammatical or irregular, but trace every phase of the transmission of our text from the chronological and geographical point of view, taking into account, at the same time, its literary genre. Only after such an analysis will we be able to relate with more or less certainty the real linguistic knowledge of the people who made the text through their own, their manner of transmission of the text—in short, the real linguistic state of the text.<sup>2</sup>

#### 1.2. Four stages of the textual transmission.

As other contributors of this volume have pointed out from various angles the formation and the transmission of the NM and allied works, at least theoretically the following four stages can be distinguished:

- (1) The creation of myths and rituals in the forms which will be incorporated in the NM. One such source was the original text (or source) of the first Khaṇḍa of the *Viṣṇudharmottara-purāṇa*.
- (2) The redaction of the original NM from various sources, with such additions as the description of the local tīrtha seen in the *Vitastāmahātmya*, probably to meet the religious as well as the social needs of the age. The version of the NM on which the *Kṛtyakalpataru* and the *Kṛtyaratnākara* were based seems to have been situated nearer to this stage than to the next stage described below.
- (3) The version of the NM as reconstructed from all the extant manuscripts. Unfortunately, it does not seem possibly to go back much beyond the date assigned to the oldest manuscripts, that is, the beginning of the 17th century,

because all the manuscripts extant seem to derive from one and the same copy.<sup>3</sup>

(4) The mss belonging to the longer recension (RL). This version was established by Paṇḍit Sāhib Rām in the middle of the last century.

The following investigations will be made taking into consideration, as far as possible, these four stages of textual transmission, our final object being to get a clearer idea of the original redaction of the NM (stage 2) through metrical and euphonic analysis.

### 1.3. Section of the NM.

Another point to be considered is the fact that the NM can be divided into five parts according to the topics which are treated; we may call them:

- (1) Section of Myth (abbreviation Myth)      verses 1~357.
- (2) Section of Ritual (do. Ritual)      verses 358~877.
- (3) Section of Nāga names (do. Nāga)      verses 878~956.
- (4) Section of Tīrtha (do. Tīrtha)      verses 957~1277.
- (5) Section of Tīrtha in Kaśmīr summarized (do. Summary)      verses 1278~1396.

As will be seen in the following analysis of metre, these Sections each have to some extent their own metrical characteristics. Their differences are also observed in other linguistic features as well. These facts suggest that the NM was not uniform in its composition, but probably composite. Even if it was not redacted by different hands, its sources may have been multiple at least for some of these parts. As we will see, there are clear patterns to be discovered here.<sup>4</sup>

## 2. SUSPENSION OF SANDHI AND IRREGULAR SANDHI.

- 2.1. Sandhi suspended (asandhi).
- 2.2. Other irregular sandhi.
- 2.3. Conditions of irregular sandhi.
- 2.4. *hi* and *tu* as hiatus bridgers.
- 2.5. Particularities of the Sections in the NM.
  - 2.5.1. Purāṇic tradition and 'classicization'.
  - 2.5.2. The Buddhist tradition.

### 2.1. Sandhi suspended (asandhi).

As the results of our investigation summarized in the list below show, the

suspension of sandhi (asandhi) between two vowels in one and the same pāda is not a rare phenomenon in the NM (15 cases). E.g.:

583a Kadrūḥ Krodhā Irā Prāvā (pathyā).

On the other hand, the suspension of sandhi takes place more frequently (30 cases) between two vowels, one at the end of an odd pāda and the other at the beginning of the following even pāda. The notion of pause (avasāna) is normally applied, it is true, to the end of every hemistich (two pādas) of a Śloka,<sup>5</sup> but it is also applied, though sporadically, to the end of the first pāda of a hemistich, especially in the case of vowel sandhi.<sup>6</sup> So it is in itself by no means astonishing to find the same kind of treatment in the NM. For example:

608ab Dharo Dhruvaś ca Bhojaś ca Āpaś caivĀnilĀnalau.

In the following list, a hiatus between pādas is indicated with an inserted slash (/).

**List of suspended sandhi.**

-a a-

1261b ca Atasīsaraha.

139cd caiva / Antargiri°.

923cd ca / Amaraś.

929cd ca / Aṭaḥ.

-a ā-

608ab ca / Āpaś ca.

724cd ca / Ājyapāś ca.

760cd ca / ādrakeṇa (0225, 0226, H, RL, KKR, KR); dadhyannena (A);  
adhātena (B, D, E, F).

-ā a-

238b Gaṅgā / Aditir.

1212ab ātmā / avyaktaṃ.

-a i-

589d caiva Ilāvṛtaḥ.

620ab ca / Ihāḍṛk.

623ab caiva / itihāsaṁvidāś (C1600 tv iti°).

-ā i-

583a Kadrūḥ Krodhā Irā Prāvā.

670a yadā jātā Irā devī.

-a u-

815cd ca / uttareṇa (saumyena ca RL).

1002ab ca / Utañkeśaṁ (Sutañkeśaṁ ACEFH).

-a ū-

820cd cāsya / ūrū.

-a ṛ-\*

30d ca ṛtu-trayaṁ (tad ṛtutrayaṁ RL).

142d sva-ṛddhyaiva (°śaktyā RL etc.).

619a ṛtaś ca ṛtavān.

1263c tīrthaṁ Saptarṣiṁ nāma.

1264d śreyān Saptarṣeḥ caruḥ.

1343c tīrthaṁ Saptarṣiṇāṁ ca (Sapta-rṣiṇāṁ tu tīrthe vai A).

1380a ca ṛṣibhir.

132ab uttīrya / ṛṣir (munir RL).

185cd tatra / ṛṣayaś (munayaś RL).

203ab uvācātha / ṛṣiḥ.

614cd ca / ṛtuḥ.

\*Cf. -a ṛ- > -a r-

1159c Saptarṣiṇāṁ.

1329b Saptarṣayo.

-ā ṛ-

1097b Brahmanā ṛṣibhiḥ.

233ab jātā / ṛṣer (=L3018; jātā / deśe 'smin pāpanāśinī MSS, RL).

539ab kaśmīrā / ṛtu-snātā.

1121cd tathā / ṛṣayas.

-a e-

- 693ab dvijaśreṣṭha ekādaśyāṃ.  
1082cd mahābhāga / etan (tatra C1556, K).  
1332cd viśeṣeṇa / evaṃ.

-i ā-

- 127cd tīrthāni / āsamudra° (cāsamudra° RL, C1600).

-i i-

- 673cd °baddhāni / Irāpuṣpāṇi.

-ī i-

- 670ab devī / Irā°.

-ī u-

- 12a devī Umā (devī tayā O225, O226, G; deva Umā A).  
110a devī Umā.  
1235a devī Umā.

-u ā-

- 1226ab tu / ānītā (sānītā B, RL).

-u u-

- 1351cd tu / Utaṅkasvāminaṃ.

-e u-

- 1101cd bhadraṃ te / uttiṣṭha.

-e e-

- 660ab madhyāhne / ekaikasya.

-as a-

- 724ab Barhiṣadaḥ / Agniṣvāttās.

\* \* \*

As we see from the above list, the hiatus occurs very frequently with the initial vowel of a *proper name* (22 cases). The phenomenon has been known since the earlier epic or even more anciently.<sup>7</sup>

In fact, for example, in the following verse, a parallel passage from the MBh seems to attest the original form, which the mss of NM have all transmitted but

with a later scribal error (Bhoja- for Soma-):

MBh 12.549.1ab	Dharo Dhruvaś ca Somaś ca	Āpaś caivĀnilo 'nalaḥ.
VDh 1.119.3-4	Dharo Dhruvaś ca Somaś ca	Āpaś caivĀnilĀnalau.
NM 608ab	Dharo Dhruvaś ca Bhojaś ca	Āpaś caivĀnilĀnalau.

To the same kind of asandhi belongs the cliché *devī Umā* which is seen used three times.

As to *ātmā*, though involved only one in hiatus in the NM (1212a), it is subject to asandhi in three cases in the *Muṇḍaka Upaniṣad*.<sup>8</sup> The case in the NM may possibly be a heritage of the same kind of treatment.

There also exist other elements which are known to be frequently exempted from sandhi or used parenthetically: a *vocative* noun (693a *dvijaśreṣṭha*, 1082c *mahābhāga*) or an *address of salutation* (1101c *bhadraṃ te*).<sup>9</sup>

Also remarkable is the fact that hiatuses with the *second vowel* *ṛ* are not rare. These are, in fact, by far the most numerous, if we classify the hiatuses occurring in the NM by the second vowel<sup>10</sup>: eight out of fifteen of the hiatuses within the *pāda* and seven out of thirty-one of those between *pādas* are of this type. This might be rather natural, since the treatment was so anciently known that Pāṇini himself reported it as recognized by Śākalya: P.vi.1.128. *ṛtyakaḥ*. It is nonetheless striking, if not astonishing, that this ancient tendency still existed in such a later and popular manuscript tradition as that of the NM. This might mean that the redactors of the NM were well versed in such minor opinions reported in the *Aṣṭādhyāyī* as optional because Pāṇini was a good authority for them. It is also possible, however, that the traditional treatment was actually living at least till the epoch of the redaction of the NM.

\* \* \*

On the other hand, in the NM, the hiatus occurs frequently also after the particle *ca* (13 cases) or particles *caiva* (three cases). Although this has not yet drawn the full attention of scholars who have made euphonic analyses, it is not at all a rare phenomenon. If we glance at the examples of asandhi from the *Bhagavadgītā* or other parts of the MBh given in Hopkins 1906 pp. 197–199 or at those from the *Rāmāyaṇa* listed in Vrat 1964 pp. 181–192, *ca* proves to be the most common word found as the first of the two words between which an asandhi takes place. According to Vrat, for example, *ca* is found in 23 cases and *caiva* in five cases out of 205 cases of asandhi between *pādas*.<sup>11</sup>



## 2.2. Other irregular sandhi.

Besides the suspension of sandhi examined so far, other instances of irregular sandhi are found in the mss of the NM:

### List of other irregular sandhi:

- e i→-e-:<sup>12</sup> 962b teha (RL, C1600 te 'tra).  
-as a→-a a-: 621ab Bhīma / Abhiyuktaḥ (RL bhīmaś cābhi°, C1600 bhīmas tv abhi°, VDh: bhīmo hy abhi°).  
-as u→-o-:<sup>13</sup> 132a tato'ttiryā (E tatrottiiryā, D tatra cottiryā, H tathottīrya, RL tatas tīrtvā)  
141d sarottamam (RL saro varam)  
338c sopasarpya  
1177a karmaṇogrān nivartasva (karmaṇo 'smān RL, karmaṇogreṇa nivartya A).  
-ās a→-ā-:<sup>14</sup> 310d snatāpsū (RL ye 'psu snanti).  
-t ṣ→-c ch-: 953d madhyāc chaḍaṅgulāḥ.<sup>15</sup>

All these cases but one (953) concern vowel sandhi.<sup>16</sup> Among these, all but one (621) are instances of so-called “*double sandhi*” which, as pointed out by L. Renou, took place sporadically in all periods.<sup>17</sup> In the Purāṇa also double sandhi seems fairly common.<sup>18</sup>

It is probably not accidental that all the three kinds of double sandhi found here are the only types of double sandhi of which, in Rām, examples are “fairly numerous” (-e i→-e-), “very frequent” (-as u→-o-), or “numerous” (-ās a→-ā-); see above n. 18.

As regards the nominative singular of *tad* (= *sas*), Pāṇini admitted this sandhi for metri causa: *so 'ci lope cet pādapūraṇam* (P. vi.1.134). The gloss of ms K on *sopasarpya* (338c) refers in fact to this sūtra of Pāṇini. It is interesting also to note that, among the irregular vocalic sandhi listed here, this is the only one that the RL seems to have accepted without trying to correct it.

The only remaining irregular sandhi (621) is found between two pādas and in the enumeration of proper names.

### 2.3. Conditions of irregular sandhi in the NM.

To conclude the above observed occurrences of irregular sandhi in the NM, we may safely say:

- (1) Irregular sandhi is admitted, where necessary, for *proper names, vocative*

nouns, or in an *address of salutation*, as it was admitted in the epic or in more ancient texts.<sup>19</sup>

(2) Mainly it takes place *between the two pādas* (i.e., at the end of the odd and the beginning of the first pādas), except *with r*, to which even Pāṇini bears witness.

(3) Irregularities in sandhi other than the suspension of sandhi consist almost only in so-called *double sandhi*, which is attested since a more ancient period and is found in other Purāṇas too. Further, the three most frequent double sandhi noted here are the only ones that are found frequently in Rām.

(4) The particles *ca* or *caiva* or even *tu* (two cases) or *atha* (one case) are often found as the first word of two between which occurs a suspension of sandhi. It is probable, therefore, that they gave a sufficient impression of pause so that the asandhi would not sound incongruous to the ear of the audience. Attested only rarely in the MBh or even in the Rām, this phenomenon seems to be more (post-)purāṇic than the other cases mentioned above.

(5) In short, the asandhi and other irregular sandhi in the NM do not take place at random, but under limited and in most cases traditional conditions as stated above under (1), (2), (3). Some of them are cases already attested or admitted even by Pāṇini; see above (2), (3). However, they are used with much more frequency in the NM than in the more ancient texts.

The case with *ca* (4) is not an innovation of the NM, either. But limited even in the later epic such as the Rām, the use can be regarded as more purāṇic than the others.<sup>20</sup>

#### 2.4. *hi* and *tu* as hiatus bridgers.

In this connection, another artifice can be noted: the particle *hi* (or once *tu*), almost deprived of sense, seems to be sporadically inserted at as unnatural a place as the beginning of the even pāda, probably only to avoid the hiatus which would occur without it, e.g.:

638cd yathoktās tu namasyanti      *hy* upāsanti stuvanti ca.

Following are the other examples:

40cd bhūpālā *hy* avijānatām.

121ab tīrthāni *hy* āsamudra-.

182ab bhāge *hy* Anantas.

- 257ab kṛtaghnena hy antardhānaṃ.  
358cd viprendra hy athithis tvam.  
370cd vicitrāṇi hy uvāsa.  
391cd ca hy ākrośadbhis.  
393ab tasya hy aparāhne.  
526cd Śasāṅkasya hy Aryamaṇś ca.  
560ab prāpya hy antyām.  
579cd Svāhā hy Anasūyā.  
700ab pūjanīyas tv aṣṭamiṣu.

## 2.5. Particularities of the Sections in the NM.

The tables below show the distribution of the so far observed occurrences of suspension of sandhi and of hiatus bridgers according to the Sections of the NM.

As to the suspension of sandhi, the ratio of occurrence per verse is not so different from one Section to another (3.1%~3.5%), except that of the Nāga Section (2.5%) which consists almost exclusively of the list of the Nāgas. Yet it is remarkable that the hiatuses between two pādas and those within the pāda are in the ratio 2 : 1 in the Myth Section and 3 : 1 in the Ritual, while in the Tirtha and the Summary they are in 1 : 1.

As for the hiatus bridgers *hi* and *tu*, their use is practically limited to the first two Sections: there are four cases in the Myth Section and nine in the Ritual, that is to say, in the two above mentioned Sections where the ratios of the asandhi between pādas are higher.

### 2.5.1. The Purāṇic tradition and ‘classicization’.

The concomitance of these two devices in the two first Sections, of Myth and of Ritual, may appear, at first glance, contradictory. The relatively high ratio of asandhi between pādas would indicate that a sort of pause was eventually admitted there, while that of the use of *hi* between pādas might suggest that the application of sandhi was rigid there and the insertion of *hi* was felt more obligatory than in the other Sections.

Nevertheless, this was not the case. Close examination of these cases will show that suspension of sandhi takes place under limited, i.e. traditionally admitted, or at least commonly attested, conditions, while the hiatus bridgers generally are not used under these conditions.

In fact, of 14 examples of *hi* (or *tu*) listed above as hiatus bridgers, only three (182, 526, 579) are found with proper names, and no example is attested with the initial *r* of the second word. This marks an obvious difference from the cases of

Metre and Euphony (sandhi) in the Nīlamatapūrāṇa

Table 1. Synoptical table of asandhi.

Sections: Number of verses: Asandhi	<u>Myth</u> 357 v.	<u>Ritual</u> 520 v.	<u>Nāga</u> 79 v.	<u>Tīrtha</u> 321 v.	<u>Summary</u> 118 v.	<u>Total</u> 1395 v.
-a a-	(139cd)*		(923cd, 929cd)	1261b**		1
-a ā-		(3) (608ab, 724cd, 760cd)				(3)
-ā a-	(238ab)			(1212ab)		(4)
-a i-		589d (620ab, 632ab)				1 (2)
-ā i-		583a, 670a				(2)
-a ū-		(815cd)		(1002ab)		(2)
-a ū-		(820cd)				(1)
-a ṛ-	30d, 142d (132ab, 185cd, 203ab)	619a (614cd)		1263c, 1264d	1343c, 1380a	7 (4)
[†-a ṛ->-a r-				†1159c	†1329b	†2]
-ā ṛ-	(233ab)	(539ab)		1097b (1121cd)		1 (3)
-a e-		(693ab)		(1082cd)	(1332cd)	(2)
-i ā-	(127cd)					(1)
-i i-		(673cd)				(1)
-ī i-		(670ab)				(1)
-ī u-	12a, 110a			1235a		2
-u ā-				(1226ab)		(1)
-u u-					(1351cd)	(1)
-e u-				(1101cd)		(1)
-e e-		(660ab)				(1)
-aḥ a-		(724ab)				(1)
Total	4 ( 7) 3.1%	4 (14) 3.5%	0 ( 2) 2.5%	5 ( 6) 3.4%	2 ( 2) 3.4%	15 (31) 3.3%

\* The verse numbers of cases in which the asandhi occurs between pādas are given between parentheses.

\*\* A dotted line is drawn under the verse numbers in which the asandhi occurs with ca.

† Normal sandhi.

Table 2. *hi*, *tu* as hiatus bridgers.

	<u>Myth</u>	<u>Ritual</u>	<u>Nāga</u>	<u>Tīrtha</u>	<u>Summary</u>
hi:	40cd, 121ab, 182b, 257ab	358cd, 370cd, 391cd, 393ab, 526cd, 560ab, 579cd, 638cd			1335ef
tu:		700ab.			

the asandhi between pādas, where 12 of 21 cases are with proper names, besides seven cases with *ṛ*, known even to Pāṇini. The difference is even more salient

with the particle *ca*; in the above list, this particle is found only once before *hy* (391), but nine times among 21 cases in asandhi between pādas (except those with *r*).

In other words, *hi* (or *tu*) can be considered as inserted, in most cases, to avoid a suspension of sandhi which would occur outside the conditions described above. This artifice thus corroborates the conclusion formed by us concerning the conditions of irregular sandhi.<sup>21</sup> There is, therefore, no contradiction between the two phenomena, asandhi between pādas and insertion of *hi* or *tu* at the beginning of the even pāda, even when attested in one and the same Section.

The above stated distribution of the two phenomena suggests accordingly the composite character of the NM, whether it may have resulted from the source, or from the edition: the first two Sections belong to one group and the last two Sections to the other (the Nāga Section may go with the first group, in view of the cases with *ca* and no case of asandhi in the pāda).

Furthermore, of the first two Sections, the Myth (first Section) seems to be situated nearer to the remaining three Sections than the Ritual: in the Myth Section, the ratio of asandhi between two pādas is lower and the occurrence of the hiatus bridger is rarer.

Another indication: as the following table shows, asandhi with *ca* between pādas is also limited to the Ritual and the Nāga Sections, except the one case where many mss present a variant which does not involve a hiatus (1002 ACEFH: *ca Sutankeśaṃ* for *ca Utankeśaṃ*). The Ritual Section especially prefers this usage (seven cases out of ten in total).

Table 3. Asandhi with *ca*.

Sections:	<u>Myth</u>	<u>Ritual</u>	<u>Nāga</u>	<u>Tīrtha</u>	<u>Summary</u>	<u>Total</u>
In the pāda:	1	0	0	1	1	3
Between pādas:	(0)	(7)	(2)	(1*)	(0)	(10)

\*In this case (1002ab), the mss A, C, E, F, H read *Sutankeśa-* for *Utankeśa-*.

All things considered, the described phenomena probably indicate that the composer(s) or editor(s) of the first two Sections was (were) well versed in the highly purāṇic styles of composition, such as suspended sandhi between pādas, especially with *ca*, and use of the hiatus bridger *hi* etc., while the redactor(s) of the last two Sections showed hesitation towards these, to his (their) eyes, relaxed styles of composition. The redactor of the last two Sections is fairly willing to 'classicize' the Skt of the text, so much so that, in place of the traditional form *Saptaṛṣi-* with the asandhi of *r* attested even by Pāṇini, he used, in composing two verses (1159c, 1329b, of. table above), the 'correct' form *Saptaṛṣi-*, which the

redactor of the first Sections never used.<sup>21a</sup> It is true that the redactor of the last Sections also accepted the traditional devices such as suspension of sandhi with a proper noun or between pādas etc., but he only imitated them in such a way that he dismissed the delicate conditions traditionally ruling those irregularities in sandhi: in this regard notice the relatively high ratio of asandhi within the pāda in the last two Sections, or the use of *Saptarṣi-* side by side with *Saptarṣi-*.

Of the first two Sections, the Ritual shows greater familiarity with the purāṇic tradition of euphony, using traditional devices in a more natural and delicate manner.

### 2.5.2. The Buddhist tradition.

It is probably not useless to have a look here at the evidence of Buddhist materials. In fact, we can now trace, at least in two texts, the *Smṛtyupasthāna-sūtra* (= *Dharmasamuccaya*) and the *Udānavarga*, a metrical development which took place nearly in the same period as that of the redaction and transmission of the NM. As our knowledge of the metres of various materials in different epochs and regions remains meagre, we cannot for the time being elucidate exactly the relation of this Buddhist evidence to that of the NM. Nonetheless, it is interesting to notice, as we will see below, a compatibility of the two sets of evidence.

As to the manuscript tradition of the *Udānavarga*, irregular sandhi, including irregular hiatus in the pāda, sporadically occurs in the oldest ms (dating to about 300 AD and discovered at Subaṣi in the outskirts of Kučā),<sup>22</sup> while in the later mss (dated principally to the 7th century and on and discovered at Kučā, Turfan etc.), it almost disappears, having been “corrected”.<sup>23</sup>

On the other hand, the insertion of *hi* or *tu* at the beginning of the even pāda as a hiatus bridger was quite rare in the Subaṣi ms,<sup>24</sup> while in the later mss it came into full vogue: Of the 1050 verses of the *Udānavarga* edited by F. Bernhard and based on the later mss, we find this use of *hi* in 70 verses, and of *tu* in 20 verses.<sup>25</sup> The ratios are even higher than that of the first two Sections of NM in which 874 verses provide only 13 occurrences of *hi* and one of *tu*.

This situation of the manuscript transmission of the *Udānavarga* in the oases at the northern borders of the Taklamakan desert fairly accurately reflects, we believe, the situation in North-West India (Gandhāra or Kaśmīr), because Buddhist missionaries moved from the latter to Eastern Turkestan and the relationship between the two regional Buddhist communities was from that time on very close.<sup>25a</sup> Though we do not know much about the connection made eventually between Hindus and Buddhists of Kaśmīr, it is of interest to note that

the use of *hi* and *tu* in this manner was rare before the fourth century, and came into vogue mainly from the 7th century onward in the Buddhist verse tradition of the North-West.

Another datable Buddhist verse tradition is that of the anthology named *Dharmasamuccaya*, known from mss discovered in Nepal and from Chinese translations, both dating from the 11th century. The anthology was made by a Buddhist monk named Avalokitasimha, who extracted verses from the encyclopaedic Buddhist text, *Smṛtyupasthāna-sūtra*, itself translated into Chinese only in the sixth century but composed probably as anciently as the second century.<sup>26</sup> It is interesting to find that the only suspension of sandhi attested in the verses of the first six chapters of the anthology is ‘*tu rtau*’ (V. 79c), once more with *r̥*.<sup>27</sup> Asandhi between pādas is also sporadically attested in this text.

### 3. ALTERATIONS OF MORPHOLOGICAL VALUE IN THE NOUN

- 3.1. Sandhi Consonant -m-?
- 3.2. Fusion of neuter and masculine.
- 3.3. Fusion of nominative and accusative.
- 3.4. The Buddhist tradition.

#### 3.1. Sandhi Consonant -m-?

Another device used to avoid a hiatus is the ‘inorganic’ *m* not infrequently found especially in the two first Sections of the NM. Following are some of the examples:<sup>28</sup>

341cd nāgendra bhogendra ivāambarastho dhyānena vidvadbhir ivāmṛ-  
tākhyah.

“O king of the nāgas! Through meditation, (you are seen) by learned (gods), as it were, king of snakes remaining in the sky and called immortal.”

While the RL reads as above, the mss of RB present a grammatically incorrect variant: *bhogendra-m-iva*<sup>o</sup>. In the following case, the two recensions preserve the same reading.

1189cd tasmād adūre Puṇyodā-m- Anantasya mahātmanah

1190a bhavanaṃ nāgendrasya ...

“Not far from there (is found) the river Puṇyodā, dwelling of the noble-minded Ananta, king of nāgas ...”

### 3.2. Fusion of neuter and masculine.

Whether these examples are to be regarded as simply evidencing the ‘sandhi consonant *m*’, used with the sole phonetic aim of avoiding a hiatus, or as a real but incorrect nominal ending, is a question delicate enough not to allow a hasty conclusion. In fact, in the NM, especially in the first two Sections, we often find the incorrect use of the nominal ending with regard to gender. Some examples (not exhaustive) are as follow.

- a) Neuter for masculine.
  - ācārāṇi (373a/RL).<sup>29</sup>
  - utsavaṃ (703d, 841c/RL).
  - karīndrāṇi (384c/RL).
  - kāmaṃ (292c/RL).
  - jalāśayam (955b/RL).
  - dārāṇi (965c/RL).
  - dharmaṃ (292b).
  - mantrāṇi (809c).
  - yajñāni (1081d/RL).
  - samudram (955d/RL).
- b) Masculine for neuter.
  - priyaṃguṃ (423c/RL/KK, KP).
  - śrāddhas (725d).

In the light of these and other examples, cases which might be considered as involving the sandhi consonant *m* sometimes turn out to involve rather a confusion of gender, as, for example, in the following case:

- 955    *ṭṛtīyasya tu yad dattaṃ tatra jātaṃ jalāśayam,*  
          *yojanāyānavistāraṃ samudram iva cāparam.*  
          “*At (the place of Śaḍaṅgula), which was given to the third*  
          *(Mahāpadma), was created a lake one yojana by one, a second ocean*  
          *as it were.*”

In the Purāṇa in general, the confusion of masculine and neuter stems in *-i* and *-u* in declension is not rare.<sup>30</sup>

### 3.3. Fusion of nominative and accusative.

Not all cases, however, can be explained by the misuse of ending due to the



confusion of gender. For example, in the above quoted case of *Puṇyodā-m-Anatasya* (1189c), ms A reads *Puṇyodāṃ tv Anatasya*. The insertion of *tu* at the beginning of the even pāda to avoid the hiatus is, it is true, a device used in the NM (see above 2.4.). But here an anusvāra is clearly written, which suggests a confusion of nominative and accusative ending rather than that of gender.

The same kind of confusion is found elsewhere:

250ab śūlamārgeṇa yāsyāmi yāvat sindhur mahānadaḥ.

“I shall go the way made with spit as far as the great river Sindhu.”

Since *yāvat* is attended normally by the accusative (sometimes by the ablative), the variant of RL *yāvat sindhum mahānadam* is grammatically correct. But the mss of RB are unanimous in preserving the former reading.

Or, in the following verse, the nominative plural is used for accusative:

1272ab tatra snātvā samabhyarcya devatāḥ pitaras tathā.

“After having bathed therein and having worshipped the gods and the ancestors, ...”

Here also RL has a ‘correct’ reading: *devatās ca pitṛṃs tathā*.

\* \* \*

This being so, everything leads us to believe that the Skt of the original redaction of the NM deteriorated partially in its nominal system, tending to lose the distinctions between neuter and masculine as well as between nominative and accusative,<sup>31</sup> while some of the mss and the longer recension (RL) show generally a quite later attempt to recover these distinctions and establish a more grammatically correct version.

It is true that in the following verse in which the daughters of Dakṣa are enumerated, we find a typical example of the sandhi consonant *-d-*:

NM Aditir Ditir Danuḥ Kālā-d-Anāyuḥ Siṃhikā Muniḥ (582cd)

MBh Aditir Ditir Danuḥ Kālā Anāyuḥ Siṃhikā Muniḥ (1.59.12ab).<sup>32</sup>

We cannot therefore a priori deny the similar use of *-m-* in the NM. It seems to me, nevertheless, in most cases unnecessary to recognize a sandhi consonant *m*, in light of the relaxed situation of nominal case and gender assignment. This does not mean of course that the neuter or accusative form was never used to avoid hiatus. But the form itself should not be considered

*irregular*, since the morphological system already was a little different from classical Skt: confusion, or rather *partial fusion* of neuter and masculine as well as of nominative and accusative.<sup>33</sup>

### 3.4. The Buddhist tradition.

With regard to the sandhi consonant *-m-*, a look into the evidence of the two Buddhist texts is of interest. In the *Udānavarga* tradition, this device was used only once in the oldest ms,<sup>34</sup> but frequently in the later mss.<sup>35</sup> The difference from the above mentioned cases of the NM is that in the later mss of the *Udānavarga* cases in which the pure phonetic value of *-m-* is clear are much more frequent than in the NM, as for example: *abhinandanti-m-āgatam* (V. 20d).

In the *Smṛtyupasthāna-Dharmasamuccaya* tradition also the use is well attested,<sup>36</sup> but, contrary to cases in the later mss of the *Udānavarga*, in a manner fairly similar to that of the NM. A clear case found in the original sūtra was once effaced in the later anthology: *pramādasya-m-ime 'ñkurāḥ > pramādasya viṣāṅkurāḥ* (VI. 192d).

After all, in the Buddhist tradition also the accusative-neuter-like use of *-m-* is frequent in later (from the seventh, eighth century onwards) mss.

## 4. METRICAL LICENCE

### 4.1. Śloka.

#### 4.1.1. Piṅgala's prohibition 1: ◡◡◡◡.

#### 4.1.2. Piṅgala's prohibition 2: ◡—◡—.

#### 4.1.3. Pāda with initial resolution.

#### 4.1.4. Consonant clusters not making position.

#### 4.1.5. Hemistich with a word on the junction of two pādas.

#### 4.1.6. Other irregularities in odd pādas.

#### 4.1.7. Other irregularities in even pādas.

### 4.2. Triṣṭubh.

### 4.3. Aupacchandasaṅgā.

### 4.4. Vasantatilakā.

Through the investigation of euphony and orthography in the preceding sections we are now aware of the fact that in the NM hiatus or other non-classical sandhi, or confusion of nominal gender or case ending is eventually admitted and is in general faithfully written as such in the mss. Found under limited conditions, the use of these irregularities appears rather 'natural' (i.e. traditional),

and later corrections seem to be limited. This allows us to expect that a metrical analysis on the basis purely of the orthography of the (older) mss will provide us with probative evidence.

In the NM, four metres are used: Śloka (1356 verses), Triṣṭubh (38 verses, with one jagatī pāda), Aupacchandāsaka (one verse) and Vasantatilakā (one verse). Metrical licence in the NM is comparatively rare. Except transgressions of Piṅgala's first prescription of the Śloka (prohibition of ॐॐॐॐ in the first half of a pāda), which are found almost exclusively in the last two Sections of the NM, licence occurs everywhere in the NM. The instances are either inherited from older sources, as in the case of the initial resolution in 582c, or the invention of the NM, as in the case of the transgression of Piṅgala's second prohibition in 899b, or of the irregular Vipulā 3 in 609c. Varieties in the break of the Triṣṭubh as well as the initial resolutions of the Śloka are scarce. In total, the metre in the NM is fairly fixed, having almost lost the ample ancient varieties occasioned by the purely oral transmission in gatherings such as those of the old Buddhist or Jaina communities (which gave rise to collections of verses such as the *Dhammapada*, *Uttarajjhāyā*, etc.).

On the other hand, nevertheless, the older mss of the NM still preserve the particular habit of versification established generally in the purāṇic literature, which comes to be effaced in modern mss, especially in the longer recension (RL) of the NM.

#### 4.1. Śloka.

##### 4.1.1. Piṅgala's prohibition 1: ॐॐॐॐ .

Piṅgala prescribes in his *Chandaḥsūtra* two prohibited metres for the first half of the pāda. The first prescription runs as follows: *na prathamāt snau* "After the first syllable (in a pāda) must follow neither an anapaest (sa) nor a tribrach (na)" (5.10.). That is, a sequence of two short syllables must not occur in the 2nd and 3rd syllables of a pāda, i.e., ॐॐॐॐ is prohibited.<sup>37</sup>

Following are the pādas of which the metre is incompatible with this prescription:

- 93c Ikṣumatīm saraṭṭhām.
- 1047c Haramukuṭam iti khyātam.
- 1118c Haramukuṭam iti khyātam.
- 1170c Madhumatī nadī (RL, L3018, C1600, A nadī madhumatī  
ॐ—ॐॐ ॐ—--).
- 1289c Brāhmaṇakuṇḍikāyām.

1367c sa praśaśāsa vasudhām.

As the list above shows, there are few examples of metrical licence in the NM. It is all the same noteworthy that all but one are in the final two Sections on the one hand, and that all but one occur with proper names on the other. The latter fact suggests that even the redactor of the last two Sections knew the prohibition. See, furthermore, pāda 1241a where even a Tīrtha's name is divided into two elements to avoid the sequence of two shorts: *Uttare mānase snātvā* (but elsewhere, 1244d *bhavati Uttaramānase*). We should therefore say: the redactor of the NM knew the prohibition, but eventually he took liberties with proper names especially in the last two Sections.

#### 4.1.2. Piṅgala's prohibition 2: ◡-◡-.

The second prohibition of Piṅgala reads as follows: *dvitīya-caturthayo raś ca* "Neither may there be a cretic (ra) in the second or fourth pāda." That is, for even pādas, ◡◡-◡- is prohibited.<sup>38</sup> In the following verses, the prescription is transgressed.

- 122b devaṃ ca Chāgaleśvaraṃ (RL Chagal°, while in 1226, Chāgal° even in RL).
- 146b vayaṃ śaṭhasya<sup>39</sup> nigrahe (RL drāk tasya, C1600 caitasya, C1556 vā tasya).
- 734b tribhāgam antyam eva vā (RL tribhāgaṃ cāntyaṃ eva vā).
- 899b nāgaś ca Pūraṇas tathā (A nāgaḥ Pūraṇakas tathā).
- 920d Subhadra-Bhadravālīśau.
- 1203b prasannam agrataḥ sthitam (RL, L3018, B, C, E, F, prasannaṃ purataḥ sthitam).
- 1224b svārcām Anantakūṭayoḥ (A, G=RL svārcām ananta-kūṭayoḥ).
- 1225d Mahendra-parvataṃ gataḥ (RL=G Mahendra-girim āyayau / L3018, B, E Mahendraṃ parvataṃ gataḥ)

The transgressions occur in all Sections, with proper names as well as otherwise, which marks a clear contrast with those against the first prohibition. This fact probably suggests that the second prohibition was little known,<sup>40</sup> at least, to the redactor of the first three Sections, since the different treatment of these two prohibitions is quite clear in these Sections (one transgression with proper names against the first prohibition to five against the second). The same kind of different treatment is attested in the Subaśi ms of the *Udānavarga*, in

which the transgression against the second prohibition is much more frequent and well accepted than that against the first.<sup>41</sup> The fact may suggest, again, that the layers of the first three Sections and of the last two are different, and that the treatment in the first three Sections belongs to the more ancient tradition.

In this connection, it is interesting to notice that the later recension (RL) tries to emend the metre here almost constantly, while it admits in principle, as we saw above, the transgression against the preceding prohibition—an attitude quite opposite to the traditional one.

Pāda 899b has a parallel in the MBh: *nāgaś cĀpūraṇas tathā* (1.31.6b). The *nāga* name *Āpūraṇa* is well attested in the MBh. This metrically regular reading is probably the original form, from which the one in the NM arose. The variant found in ms A must be a secondary attempted to save the metre.

#### 4.1.3. Pāda with initial resolution.

582c Aditir Ditir Danuḥ Kālā ॐ—ॐ— ॐ—, .

As is attested by the parallel verse in the MBh (1.59.12a *Aditir Ditir Danuḥ Kālā*), the initial resolution of this verse is old. It is all the same noteworthy that the NM accepted this licence as such.

1047c Haramukuṭam iti khyātam ॐॐॐॐ ॐ— (C1600, A ity ākhyātam).

1118c Haramukuṭam iti khyātam (all mss).

The metre is irregular not only with the initial resolution, but also with the sequence of two shorts in the first half of the pāda (against the first prohibition of Piṅgala, cf. 4.1.1. above).

1152c Vinatārcāyām saṃnihitam ॐॐ— —ॐ— (BEF vinatāyām, C vainatāyām).

The initial resolution of the Śloka pāda is an old device fully attested since the oldest Buddhist and Jaina as well as epic versification, while the NM admits this licence only in the few cases listed above which all are with a proper name at the beginning of a line. In addition, the resolution in the NM occurs only in the initial of the pāda, while that of the Buddhist verses often takes place in the sixth, fourth or seventh syllable as well as at the beginning.<sup>42</sup>

#### 4.1.4. Consonant clusters not making position.

a) In even pādas.

kl 1134d dvija kliśyasi (K kliśyasi dvija).

kṣ 1168b kecit tu kṣatriyāḥ (no variant).

dv 774b yadi cet syāt tu dvādaśī (RL dvādaśī viprasattama; A, C1600 yadi vā syāc ca dvādaśī; B yadi cet sā caturdaśī (metrical); E yadi syāj jātadvādaśī).

hy 119b RL yāvat tīrthaṃ Guhyeśvaram (O225, C1556 guheśvaram).

b) In odd pādas.

kr (?) 871c Nīlavākyaṃ na kriyata (RL kriyate no cet tad vākyaṃ).

The metre is irregular, if it is a bha vipulā. RL seems to try to emend it, by making an (irregular!) ma vipulā.

jy (?) 617a Ekajyotir Dvijyotiś ca (no variant).

The VDh (1.12.22) has a parallel pāda: *Ekajyotiś ca Dvijyotis*, which makes an (irregular) ma vipulā.

1110c pūrvotpannaḥ sa jyeṣṭheśas.

The cases in the odd pādas are not as clear as those in the even pādas. We cannot a priori deny the possibility of not making position in these cases, in light of the cases in the even pādas.<sup>43</sup>

4.1.5. Hemistich with a word on the junction of two pādas.

198ab deva-rṣi-nāga-mukhyeṣv adhiṣṭhiteṣv atha Kāśyapaḥ.

--o- o--o /-o-oo-o-

-mukhyeṣu ni(or dhi)ṣṭhiteṣv atha

--o/-o-oo

The reading adopted by de Vreese has the metrical segment of the pāda after the initial *a-* of *adhiṣṭhita-*, which is quite anomalous in the ancient Śloka. Though similar cases occur sporadically in the RL (1110c, L14, L20, L250 in the Appendix of the edition de Vreese), they seem hardly to have been in the original redaction of the NM. In fact, here the context prefers the verb *ni-ṣṭhā* (to be) to *adhi-ṣṭhā* (to arrive at): “When the principal gods, sages and Nāgas were ensconced, Kāśyapa (said to Viṣṇu ...)”.<sup>44</sup> On the other hand, however, *dhi-ṣṭhā*, a quite irregular form of *adhi-ṣṭhā*, is attested in the *Matsya Purāṇa* and the *Rāmāyaṇa*.<sup>45</sup> We cannot decide which of the two, *ni-ṣṭhā* or *dhi-ṣṭhā*, was in the original. It is nevertheless probable that originally the text had one of these, and that the metrical oddity was not there.

4.1.6. Irregularities in odd pādas.

a) Vipulā 2.

--o-- --oo- 822c sarvapuṣpaiḥ sarvaphalair (no var.).

Or, does rv of sarva not make position?

oo---- --oo- 1152c vinatārcāyāṃ saṃnihitaṃ (B, E, F vinatāyāṃ, C

vainatāyāṃ).

With initial resolution.

b) Vipulā 3.

— — — — — 609c Ajaikapāc cĀhirbudhnyo (all mss).

The original reading of the pāda was certainly the following conserved in the MBh: *Ajaikapād Ahirubudhnyo* (pathyā; MBh 1.60.2; 1.114.5; 12.201.18; 13. App. 9.58; 13. App. 18.27). The same reading is found in the VDh 2.2.43, while in 1.128.41 the VDh reads: *AjaikapādĀhirbudhnya-* (irregular ma vipulā), with the thematized *Ajaikapāda*. If the redactor of the NM had received the former reading in pathyā in his source document, he wouldn't have changed it. But if he had received the latter with *Ajaikapāda*, he could feel the formal irregularity in it and change it into the reading attested in the actual mss of the NM.<sup>46</sup> In any case, the attempt of the NM was not totally successful, as long as the metrical irregularity remained.

— — — — — 798c anuliptena snātena (KK anuliptena vidhivat; RL snātena sâṅgarāgeṇa).

The variant readings in regular metres of KK and of RL are certainly later emendations.

— — — — — 1110c pūrvotkpannaḥ sa Jyeṣṭheśas (RL ca yaj Jyeṣṭheśākhyam līṅgam mama dvija).

The RL presents a variant in pathyā, but with a word on the juncture of the two pādas (cf. above 4.1.5.)

— — — — — 51c GaruḍĀruṇau vijñeyau (RL Garuḍas cĀruṇo)

The two sons of Vinatā.

— — — — — 185c cakrur āśramaṃ svaṃ tatra (C1600 te cakrur āśramaṃ tatra; RL cakruḥ svasvāśramāṃs tatra).

c) Vipulā 4

— — — — — 805a saṃvatsarasyātha kāryo (RL pratisaṃvatsaram kāryo).

— — — — — 424a sarvauśadhyāḥ sarvagandhāḥ (C, G sarvauśadhī sarvagandhaiḥ).

d) Vipulā 5

— — — — — 933a Akadhro Bahukaṣaś ca (H Bahukeśaś ca; O226, RL, G bahukaṣaś ca; L3018 Bahurūpaś ca; C1600 Bahukacaś ca; A ho Vahukaśvaḥ).

Nāgas' name.

e) Ta vipulā

— — — — — 896a Aparājitaḥ Paṇḍitaḥ.

In the enumeration of the names of Nāgas.

#### 4.1.7. Irregularities in even pādas.

.... 000—

- 786d O225 mālyair vastrādibhir api.  
 A vastrair mālyādibhis tathā.  
 BDEF mālyair vastrādibhir dvija.  
 Āp mālya-vastrānulepanaiḥ.  
 KR upoṣitair vastra-dhūpa-mālya-ratnānulepanaiḥ.  
 KK uṣitair vastra-dhūpaiś ca mālyai ratnānulepanaiḥ.

The metrically anomalous reading preserved by the oldest ms (O225) seems to be the original one from which all the others resulted, as the latter converge into the former.

- 932b Gallullullo Jalulusaḥ  
 C1556 Lalallusaḥ  
 O 227, K Jalallusaḥ  
 A Jalālasaḥ

#### 4.2. Triṣṭubh.

The Triṣṭubh in the NM is in fairly fixed form. The variations in the older versification, especially attested in the break, are no more found there.<sup>47</sup> Only a few remnants of them remain.

##### a) Opening

- 00— 275b madhv amṛtādhy(am) (no variant).

##### b) Break

- 00 293b svastyāyu(taṃ) / —00 C1556 svastyayanaṃ; RL, C, A svasti-  
 tyutaṃ; F svāsthyayutaṃ.  
 —0— 64d śubhāśubhaṃ rakṣa mām Ādideva.  
 D, F rakṣaṇam Ādideva.  
 A, H rakṣa mamādya deva.  
 000 261b namo 'stu tubhyam ṛṣivaryajuṣṭe (no variant).

#### 4.3. Aupacchandāsaka.

One verse in the NM (65) is in Aupacchandāsaka. On the verses of the same metre in the other Purāṇas, cf. the list of Aupacchandāsika in various Purāṇa in Hohenberger 1965. The example of this metre in the NM is regular.

#### 4.4. Vasantatilakā.

Two pādas in the NM (62) are in Vasantatilakā, a fairly popular metre even in the Purāṇa: cf. the list of the verses in Vasantatilakā in various Purāṇa in



Hohenberger 1965. The example of this metre in the NM is regular.

## 5. DISTRIBUTION OF METRES AND PRATYAYA PROCEDURES.

### 5.1. Varieties and irregularities of Metres in the NM.

#### 5.2. Śloka.

##### 5.2.1. The First half of Pathyā (odd) pādas.

##### 5.2.1.1. The arrangement called ‘Prastāra’ and the arrangement used in Lagakriyā.

##### 5.2.1.2. Particularities of Sections.

##### 5.2.1.3. Consistency of the use of metres in the Ritual Section.

##### 5.2.2. The first half of even pādas.

##### 5.2.3. Evaluation of facts.

##### 5.2.4. Vipulā.

#### 5.3. Other metres.

The NM is composed mostly in Śloka, especially in Pathyā of the Śloka, as are most other Purāṇas in verse. It contains also about 10% Triṣṭubh and a few Aupacchandāsaka, Vasantatilakā and Jagatī pādas.

We have discovered a particularly interesting fact attested in the first half of Pathyā pādas and of even pādas of Śloka, i.e. in the metrically ‘free’ parts of the Śloka. Once these metres are arranged according to their frequency, the arrangement turns out to be governed by a fixed principle, which coincides with that of a Pratyaya called *Prastāra* and that used in another Pratyaya, *Lagakriyā*, in treatises on Sanskrit metrics. The arrangement thus ascertained in the frequency of metres in NM reveals an inner metrical idea possessed implicitly or unconsciously by users of the Śloka metres.

### 5.1. Varieties and irregularities of Metres in the NM.

The following table shows the numbers of pādas of different metres used in the NM (and their percentages indicated between parentheses) in each Section. The ratios of Pathyā are relatively higher in the Tīrtha and Summary Sections (91%) than in the remaining Sections of the NM (83~86%). Here again, we remark the division of the NM into the same two parts (the first three Sections and last two).

For RL, we examine only the verses in the Appendix of de Vreese’s edition which have no parallels with those in RB, to bring out the characteristics proper to RL.

Table 4. Metres in the NM, RL, ĀP.

	Myth	Ritual	Nāga	Tirtha	Summary	Total	RL	ĀP
Verse	1–357	358–874	875–953	954–1277	1278–1396			
No. of verses	357	517	79	324	118	1395	462	260
No. of pādas	786	1058	155	649	255	2903		
Śloka (Odd pā.)	654(100)	1058(100)	155(100)	649(100)	223(100)	2739(100)	472(100)	263(100)
Pathyā	549( 83)	912( 86)	131( 85)	588( 91)	202( 91)	2382( 87)	409( 87)	206( 78)
Vipulā	105	146	24	61	21	357	63	57
Vipulā 1	35(5.3)	41(3.8)	4(2.6)	10(1.5)	6(2.7)	96(3.5)	21(4.4)	23(8.7)
Vipulā 2	24(3.6)	24(2.3)	6(3.9)	14(2.2)	3(1.3)	71(2.6)	15(3.2)	8(3.0)
Vipulā 3	34(5.1)	58(5.5)	3(1.9)	24(3.7)	9(4.0)	128(4.7)	20(4.2)	21(8.0)
Vipulā 4	12(1.8)	22(2.1)	9(5.8)	12(1.8)	2(0.9)	57(2.1)	5(1.1)	5(1.9)
Sa-vipulā		1	1	1	1	4		
Ta-vipulā		1			1	1		
Triṣṭubh	114				32	146		
Jagatī	1					1		
Aupacchandāsaka	4					4		
Vasantatilakā	2					2		

For ĀP also, only about one third of the verses are analysed. Still, the examined verses are, I believe, representative enough to draw an approximate conclusion.

To complete the preceding table (Table 4), the following (Table 5) indicates the verse numbers in which a metrical irregularities occur. Here we consider as irregular either quite rare metres or scansion prohibited by Piṅgala. It seems to me that the demarcations between regular and irregular metres are fairly obvious, as the occurrence of irregular metres is distinctively lower than that of regular ones. Detailed discussions of these metres will be given in the following sections.

## 5.2. Śloka.

### 5.2.1. The First half of Pathyā (odd) pādas.

We can begin by analysing the Pathyā (odd) pādas, which are by far the commonest metres used in the NM (82% of the total pādas). Except for one restriction (the prohibition of two shorts in the middle : ◡◡◡◡), the first four syllables of Pathyā pādas are free. But being free does not mean that disorder may prevail there. In fact, it is in this part of the pāda that we discover a most interesting phenomenon: the following table (Table 6) can be obtained, if we regard as forming one group the two types of metres in which only the quantity of the first syllable differs (the quantity of the last (eighth) syllable can be regarded

Table 5. Irregularities in the NM.

Verse No. of pādas	Myth 1–357 786	Ritual 358–874 1058	Nāga 875–953 155	Tirtha 954–1277 649	Summary 1278–1396 255
• Piṅgala I (not ˘˘˘˘˘)	93c		932b	1047c, 1118c 1170c	1289c, 1367c
• Piṅgala II (not ˘˘˘˘˘ in even pāda)	122b	734b	899b, 920d	1203b, 1224b 1225d	
<Odd pāda>					
• ˘˘˘˘˘ ˘˘˘˘˘	10c	822c, 871c*			
˘˘˘˘˘	278a	590a			
• ˘˘˘˘˘, ˘˘˘˘˘		617a*		1110c*	
˘˘˘˘˘					
˘˘˘˘˘					
˘˘˘˘˘		798c			
˘˘˘˘˘					
˘˘˘˘˘	185c				
˘˘˘˘˘	51c				
˘˘˘˘˘ ˘˘˘˘˘, ˘˘˘˘˘		609c			
• ˘˘˘˘˘ ˘˘˘˘˘, ˘˘˘˘˘		805a			
• ˘˘˘˘˘ ˘˘˘˘˘					1318c
˘˘˘˘˘		736c			
˘˘˘˘˘			933a		
˘˘˘˘˘				1089a	
• ˘˘˘˘˘ ˘˘˘˘˘			896a		
<Even pāda>					
˘˘˘˘˘ ˘˘˘˘˘			932b		
˘˘˘˘˘ ˘˘˘˘˘	119b*	774b*		1134d*, 1168b*	
<Initial resolution>		582c	1047c, 1118c 1152c		
<Clusters not making position>					
kr		[871c]			
kl				1134d	
kṣ				1168b	
jy		[617a]		[1110c]	
dv		774b			
hy	119b				

\* The irregular metre of pādas with an asterisk can be improved by supposing a consonant cluster not making position. In the list of clusters not making position, those found in odd pādas are indicated between square brackets.

as optional and so is also not relevant): For example, ˘˘˘˘˘ ˘˘˘˘˘ forms one group with ˘˘˘˘˘ ˘˘˘˘˘. In other words, in this arrangement we regard as optimal the quantity not only of the eighth but also of the first syllable of a pāda; we may call it an “arrangement with optimal first syllable”. The groups thus formed are arranged in the table in decreasing order of their total occurrences in the NM: the numbers of pādas of each group are: 595, 516, 396, 377, 311, 186.

Table 6. First half of Pathyā pādas (arrangement with optimal first syllable).

	Myth	Ritual	Nāga	Tīrtha	Summary	Total	RL	ĀP
Verse	1-357	358-874	875-953	954-1277	1278-1396			
pathyā pādas	560	911	131	588	202	2392(100)	409(100)	206(100)
---- ◡---◡	72	188	17	77	28	382	65	43
◡---	46	82	7	47	21	213	40	21
-◡--	79	167	21	85	32	384	43	30
◡◡--	29	43	12	34	14	132	29	18
--◡-	65	90	18	76	15	264	37	25
◡-◡-	36	56	2	31	7	132	38	10
--◡-	56	69	22	61	27	235	34	13
◡-◡-	38	44	9	37	14	142	26	11
-◡-◡	55	78	14	64	28	239	29	12
◡◡-◡	21	23	2	21	5	72	13	7
--◡◡	36	40	6	32	5	119	21	10
◡-◡◡	16	21	1	23	6	67	34	6

Quite surprisingly, we can recognize in the metres thus arranged a simple and mathematical principle: the most frequently attested metre is that with molossus (---) containing no short syllable in the three syllables from the second to the fourth. Next in frequency come three metres with one short syllable each: a bacchic (◡--), a cretic (-◡-) and a palimbacchic (--◡), which arrange themselves according to the position of the short syllable, with the most frequent form having the short in the second syllable, and so forth. Least frequent are two metres containing two shorts, an amphibrach (◡-◡) and a dactyl (-◡◡), which also arrange themselves according to the position of the two shorts, with the form having shorts in the second and fourth more common than that with shorts in the third and fourth syllables. The reason for the absence of the anapaest (◡◡-) and the tribrach (◡◡◡), which would be found, on this principle, to be more frequent than the amphibrach and the dactyl, respectively, is simple: they are forbidden by metrical treatises (the prohibition of Piṅgala 1).

No other arrangement of the metres in the NM exhibits such a mathematical order:

For example, rather than treating the initial syllabic position as free (◡) as we have done, we might try to arrange the pādas in decreasing order of frequency of all four syllables. That is, rather than treating ◡--- and ---- as one unit, we would list them separately. Below, we see that this ordering shows us virtual

no pattern of interest:

a) Arrangement by four syllables:

— — — —	384	— — — —	142
— — — —	382	— — — —	132
— — — —	264	— — — —	132
— — — —	239	— — — —	119
— — — —	235	— — — —	72
— — — —	213	— — — —	67

I attempted to list the frequency of metres with optional syllables in the second, third and fourth positions also, but gained no results of interest. As an example, I present here only the chart based on the frequency of the free syllable in the fourth position. As we see, no systematic order of metre can be recognized:

b) Arrangement with optional fourth syllable:

Verse	Myth	Ritual	Nāga	Tirtha	Summary	Total
1-357	358-874	875-953	954-1277	1278-1396		
pathyā pādas	560	911	131	588	202	2392(100)
— — — —	79	167	21	85	32	384
— — — —	55	78	14	64	28	239
— — — —	72	188	17	77	28	382
— — — —	56	69	22	61	27	235
— — — —	65	90	18	76	15	264
— — — —	36	40	6	32	5	119
— — — —	46	92	7	47	21	213
— — — —	38	44	9	37	14	142
— — — —	29	43	12	34	14	132
— — — —	21	23	2	21	5	72
— — — —	36	56	2	31	7	132
— — — —	16	21	1	23	6	67

#### 5.2.1.1. The arrangement called “Prastāra” and the arrangement used in Lagakriyā.

The student of Sanskrit metre cannot but recollect here the Prastāra method often prescribed at the end of metrical treatises. In fact, Prastāra forms, with several other techniques, a particular group of procedures called “Pratyaya”,<sup>48</sup> invented to answer the following two basic questions about metre:

- 1) How many different metres can theoretically be formed with a given number of syllables?
- 2) What is the logical arrangement of these metres, which would enable us to find the form of a metre from its sequential position in the table or, on the contrary, the sequential position of a metre from its form, without figuring the whole table of arrangement?<sup>49</sup>

The first Pratyaya, Prastāra, consists of a set of rules prescribing the systematic generation of metres, through which metrical possibilities are successively produced by basing each step upon the results of the previous step. Thus:

- 1) In the case of one syllable (2 possibilities):
  1. —
  2. ∪
- 2) In the case of 2 syllables (4 possibilities):
  1. 

—
---

 —
  2. 

∪
---

 —
  3. 

—
---

 ∪
  4. 

∪
---

 ∪
- 3) In the case of 3 syllables (8 possibilities):
  1. 

—	—
---	---

 —
  2. 

∪	—
---	---

 —
  3. 

—	∪
---	---

 —
  4. 

∪	∪
---	---

 —
  5. 

—	—
---	---

 ∪
  6. 

∪	—
---	---

 ∪
  7. 

—	∪
---	---

 ∪
  8. 

∪	∪
---	---

 ∪
- 4) In the case of 4 syllables (16 possibilities):
 

<ol style="list-style-type: none"> <li>1. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>—</td><td>—</td></tr></table> —</li> <li>2. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>—</td><td>—</td></tr></table> —</li> <li>3. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>∪</td><td>—</td></tr></table> —</li> <li>4. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>∪</td><td>—</td></tr></table> —</li> <li>5. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>—</td><td>∪</td></tr></table> —</li> <li>6. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>—</td><td>∪</td></tr></table> —</li> <li>7. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>∪</td><td>∪</td></tr></table> —</li> <li>8. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>∪</td><td>∪</td></tr></table> —</li> </ol>	—	—	—	∪	—	—	—	∪	—	∪	∪	—	—	—	∪	∪	—	∪	—	∪	∪	∪	∪	∪	<ol style="list-style-type: none"> <li>9. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>—</td><td>—</td></tr></table> ∪</li> <li>10. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>—</td><td>—</td></tr></table> ∪</li> <li>11. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>∪</td><td>—</td></tr></table> ∪</li> <li>12. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>∪</td><td>—</td></tr></table> ∪</li> <li>13. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>—</td><td>∪</td></tr></table> ∪</li> <li>14. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>—</td><td>∪</td></tr></table> ∪</li> <li>15. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>—</td><td>∪</td><td>∪</td></tr></table> ∪</li> <li>16. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>∪</td><td>∪</td><td>∪</td></tr></table> ∪</li> </ol>	—	—	—	∪	—	—	—	∪	—	∪	∪	—	—	—	∪	∪	—	∪	—	∪	∪	∪	∪	∪
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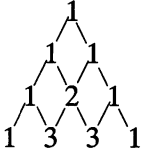
The method is: In the case of one syllable, we figure a column of one long above and one short beneath. Then, in the case of two syllables, the column is doubled vertically and two longs and two shorts are added to this column. The

procedure is repeated successively and each time the number of syllables augments.

The arrangement thus obtained in the case of four syllables coincides with what we have just provided in the Table 6, except for the metres prohibited by Piṅgala (metres 7, 8, 15, 16 of the Prastāra with four syllables, which are indicated between parentheses in the above table).

\* \* \*

Another arrangement, though less explicit, is also employed in the fourth Pratyaya called “Lagakriyā” or “Laghukriyā”, the aim of which is to give the total number of possible metres with a given number of syllables.<sup>50</sup> The procedure is essentially identical with the so-called arithmetical triangle of Pascal.

Pascal's Triangle.	No. of syllables.	No. of metres.
	0	1
	1	$1+1=2$
	2	$1+2+1=4$
	3	$1+3+3+1=8$

The arrangement of metres in this procedure is different from that of the Prastāra. For example, in the case of metres with three syllables, first comes one metre with no short (---); next come three metres with one short (υ--, -υ-, --υ); next come three metres with two shorts (υυ-, υ-υ, -υυ); and finally comes one metre with three shorts (υυυ). Thus, in total, we have  $(1+3+3+1=)$  eight metres. This principle of arrangement is what we called “simple and mathematical” in 5.2.1. above, and not that of the Prastāra as we will see in the following collation table:

Lagakriyā arrangement	Prastāra
1. ---	1. ---
2. υ--	2. υ--
3. -υ-	3. -υ-
4. --υ	(4. υυ-)
(5. υυ-)	5. ---υ
6. υ-υ	6. υ-υ
7. -υυ	7. -υυ
(8. υυυ)	(8. υυυ)

If we admit the optional value of the first syllable of a Pathyā pāda, the attested order of frequency of metres in the following three syllables is consistent with

both of these systematic arrangements. This is because the only difference in order between the two concerns the order of the anapaest (◡◡–) which, prohibited by Piṅgala, is practically negligible (in the table above, the prohibited metres are indicated between parentheses).

The four syllable Prastāra also generates an ordering which corresponds to the actual order of frequencies in the NM, as we saw above.

#### 5.2.1.2. Particularities of Sections.

In looking into the distribution of metres in each Section (see Table 6), we recognize that systematic ordering of the metres by frequency is disturbed in some Sections. In the Nāga Section, bacchic metres (◡––) are more numerous than molossus (–––) and palimbacchic (––◡) more numerous than than cretic (–◡–). In the Summary Section, the palimbacchic is more common than the cretic. The number of these metres not following our proposed order of frequency are underscored with a wavy line in the Table 6.

In each group of two metres, the frequency of the metre with the long first syllable is always higher, except in one case (of the dactyl (–◡◡) in the Summary Section, the case being underscored with doubled lines in the table).

If we compare only the metres with a long first syllable, the decreasing order of occurrence is disturbed only in the underlined cases in the table. Similarly, in the metres with a short first syllable, the order is disturbed in the cases underscored with a dotted line.

The fact that these disturbances are often observed in the Nāga Section is understandable: it is short (155 pādas) and full of enumerations of Nāgas' names. The same reasons may be applied to the Summary Section. Yet, in general the disturbance occurs more frequently in the last two Sections than in the first two.

On the other hand, parallel distributions of metres in the Myth and Tirtha Sections (21–19–18–17–14–9 in the former; 21–20–18–17–14–9 in the latter) are remarkable, though the inner distributions of two metres in each group are different.

#### 5.2.1.3. Consistency of the use of metres in the Ritual Section.

To estimate the degree of consistency in the use of metres in a single Section, we can make a sample survey, dividing the longest Section, Ritual, into two parts, a first half (verses 358–620) and a second half (621–874); we obtain the following results:

The parallelism observed between the two halves in the use of metres is impressive: the only remarkable difference is the occurrence of cretic metres



Table 7. Two halves of the Ritual Section.

Verse pathyā pādas	1st half 358–620 474	2nd half 621–874 427	Ritual 358–874 911(100)	Total 1–1396 2392(100)
---- ॐ----	73	63		
ॐ---	22	30	188	382
--ॐ	95	93	270(30)	595(25)
} 132		138		
---- ॐ----	27	36		
ॐ---	10	9	82	213
--ॐ	37	45		
} 109		101		
---- ॐ----	55	53	167	384
ॐ---	32	27	210(23)	516(22)
--ॐ	87	80		
} 109		101		
---- ॐ----	12	15		
ॐ---	10	6	43	132
--ॐ	22	21		
} 93		53		
---- ॐ----	38	20	90	264
ॐ---	19	13	146(16)	396(17)
--ॐ	57	33		
} 93		53		
---- ॐ----	24	18		
ॐ---	12	2	56	132
--ॐ	36	20		
} 60		53		
---- ॐ----	27	23	69	235
ॐ---	11	8	113(12)	377(16)
--ॐ	38	31		
} 60		53		
---- ॐ----	18	18		
ॐ---	4	4	44	142
--ॐ	22	22		
} 51		50		
---- ॐ----	27	25	78	239
ॐ---	11	15	101(11)	311(13)
--ॐ	38	40		
} 51		50		
---- ॐ----	9	7		
ॐ---	4	3	23	72
--ॐ	13	10		
} 13		10		
---- ॐ----	13	15	40	119
ॐ---	3	9	61( 7)	186( 8)
--ॐ	16	24		
} 29		32		
---- ॐ----	10	8		
ॐ---	3	0	21	67
--ॐ	13	8		
} 13		8		

(ॐ--ॐ-; 93 pādas in the 1st half against 53 in the second half). Apart from this, their uses are parallel even in detail. This forms contrast to the uses of metres in the other Sections. In this regard, we are probably allowed to presume that the use of metres thus ascertained has a certain significance for the estimation of redactors or editors or of sources of the text.

### 5.2.2. The first half of even pādas.

The same phenomenon observed in the first half of the Pathyā (odd) pādas can be seen in the first half of even pādas. Here, another metrical restriction being prescribed (the prohibition of  $\underline{\cup}-\cup-$ , of Piṅgala 2), the groups of two metres are five in number, while for Pathyā they are six. But apart from this, the order of frequency is the same as that for the first half of the Pathyā, as we can see in the following table (Table 8).

The numbers or percentages disturbing the decreasing order are underscored in the same way as in Table 6 (see 5.2.1.1. above). The patterns of disturbance in the last two Sections are quite similar to each other; in addition, that of Myth is also fairly similar to them, as it is also in the case of the Pathyā.

From another point of view (see Table 9), however, the parallelism of the first three Sections (Myth, Ritual, Nāga) is remarkable. There the commonest metre (molossus) occurs in percentages between 29%~31%, the second commonest (bacchic) between 25%~30%, the third commonest (palimbacchic) between 19%~23%, the fourth (amphibrach) between 12~15%, and the fifth between 7~12%. On the other hand, in the Tīrtha and Summary Sections, the percentages of molossus are relatively low (25% and 21%), and those of amphibrach are relatively high (21% and 23%). Between the Tīrtha and

Table 8. First half of even pādas.

Verses	Myth	Ritual	Nāga	Tīrtha	Summary	Total
Nos of pādas	1-357	358-874	875-953	954-1277	1278-1396	
	650(100)	535 526 1061(100)	153(100)	653(100)	225(100)	2742(100)
----	109(17)*	101 100 201(19)	27(18)	94(14)	24(11)	455(17)
	(29)	(31)	(29)	(25)	(21)	(29)
⊃----	80(12)	67 60 127(12)	17(11)	71(11)	22(10)	317(12)
-⊃---	114(18)	115 114 229(21)	22(14)	105(16)	55(24)	525(19)
	(25)	(30)	(27)	(22)	(31)	(27)
⊃⊃---	44( 7)	50 41 91( 9)	20(13)	41( 6)	16( 7)	212( 8)
---⊃	63(10)	62 69 131(12)	27(18)	74(11)	20( 9)	315(11)
	(20)	(19)	(23)	(21)	(19)	(19)
⊃---⊃	64(10)	40 30 70( 7)	8( 5)	64(10)	21(10)	227( 8)
-⊃-⊃	67(10)	48 50 98( 9)	14( 9)	84(13)	35(16)	298(11)
	(15)	(12)	(14)	(21)	(23)	(16)
⊃⊃-⊃	27( 4)	18 17 35( 3)	7( 5)	50( 8)	16( 7)	135( 5)
--⊃⊃	53( 8)	19 24 43( 4)	9( 6)	40( 6)	7( 3)	152( 6)
	(12)	( 7)	( 7)	(11)	( 7)	(10)
⊃-⊃⊃	29( 4)	15 21 36( 3)	2( 1)	30( 5)	9( 4)	106( 4)
--⊃-	1		1	1		
⊃-⊃-		1	1	2		

\* The number between parentheses is the percentage of pādas among those in each Section.

Table 9. Percentages of metres in first half of even pādas.

Verses Nos of pādas	Myth 1-357 650(100)	Ritual 358-874 1061(100)	Nāga 875-953 153(100)	Tirtha 954-1277 653(100)	Summary 1278-1396 225(100)	Total 2742(100)
{ --- u---	[29]	[31]	[29]	[25]	[21]	[29]
{ -u- uu--	[25]	[30]	[27]	[22]	[31]	[27]
{ ---u u--u	[20]	[19]	[23]	[21]	[19]	[19]
{ -u-u uu-u	[15]	[12]	[14]	[21]	[23]	[16]
{ --u-u u--u	[12]	7	7	11	7	10

[xx] = 25~31%; xx = 19~23%; x = 12~16%.

Summary Sections there is a large difference in bacchic usage (22% and 31%).

\* \* \*

To ascertain that the arrangement by frequency with optional fourth syllable in the even pādas produces no systematic order of metres, we present here Table 10.

Table 10. Arrangement with optional fourth syllable of even pādas.

Verses Nos of pādas	Myth 1-357 650(100)	Ritual 358-874 535 526 1061(100)	Nāga 875-953 153(100)	Tirtha 954-1277 653(100)	Summary 1278-1396 225(100)	Total 2742(100)
{ -u--	114(18)	115 114 229(21)	22(14)	105(16)	55(24)	525(19)
{ -u-u	67(10)	48 50 98( 9)	14( 9)	84(13)	35(16)	298(11)
{ ----	109(17)	101 100 201(19)	27(18)	94(14)	24(11)	455(17)
{ ----u	63(10)	62 69 131(12)	27(18)	74(11)	20( 9)	315(11)
{ u---	80(12)	67 60 127(12)	17(11)	71(11)	22(10)	317(12)
{ u--u	64(10)	40 30 70( 7)	8( 5)	64(10)	21(10)	227( 8)
{ uu--	44( 7)	50 41 91( 9)	20(13)	41( 6)	16( 7)	212( 8)
{ --uu	53( 8)	19 24 43( 4)	9( 6)	40( 6)	7( 3)	152( 6)
{ u--u	29( 4)	15 21 36( 3)	2( 1)	30( 5)	9( 4)	106( 4)

### 5.2.3. Evaluation.

To sum up the observed phenomenon: if we assume an optional quantity of the first syllable of Pathyā (odd) and even pādas, a mathematical order of the frequency of occurrence of metrical structures of the second, third and fourth

syllables is found.

Minor disturbances in this mathematical order are discernible in some Sections. However, the pattern of these disturbances for the Pathyā in one Section is fairly parallel with that for even pādas in the same Section.

And what is more, if we divide one Section into two parts, the pattern of frequency between the two parts is quite parallel.

These facts seem to me to suggest that the redactor of the NM considered the second, third and fourth syllables of a pāda to be a metrical unit separated from the first syllable (which is optional). The redactor may have had a sense of the metrical integrity of this unit of the Śloka, a sense which corresponds to the ordering described in the Pratyaya procedures.

It should perhaps be stressed here that it is not a question of a single use of particular metres, but of the frequency of metres in the metrically less restricted position. These patterns must have resulted, therefore, from a more or less unconscious metrical norm felt by the redactors. If the hypothesis about this semi-unconsciousness is correct, we would expect it to appear differently from one redactor to another. An investigation of such a feature may therefore help us decide the authorship or the source of a text much more directly than investigations of features which can be consciously controlled will allow.

The degree to which this criterion can reveal an underlying metrical norm is still to be tested in other texts. What we can say for the moment is that it seems to work fairly well for the analysis of NM, if we take into account the consistency of usage ascertained in one and the same Section and the minor variations corresponding to other linguistic and metrical features observed in Sections of the NM. In any case, interesting results may be obtained if it is applied to other texts.

#### 5.2.4. Vipulā.

The following table (table 11) shows the use of the Vipulā in the five Sections of NM. The ratios of the Vipulā are relatively higher in the first three Sections (Myth: 17%; Ritual: 14%; Nāga: 15%) than in the rest (Tīrtha: 9%; Summary: 9%). We are probably allowed to regard as irregular the metres marked by #, as their occurrences are distinctively lower than those of the others (the verse numbers of irregular metres are given in the Table 5 in 5.1. above).

The coincidence of the frequency of metres with the patterns generated mathematically (coinciding with Pratyayas) can also be discerned here, though much less obviously, for the first Vipulā; There are forty-five pādas of  $\cup\text{---}\cup\cup\cup\cup$ , twenty-six of  $\cup\cup\text{---}\cup\cup\cup\cup$ , twenty-five of  $\cup\text{---}\cup\text{---}\cup\cup\cup\cup$ .

Table 11. Vipulā pādas in the NM, RL, AP.

Verse	Myth	Ritual	Naga	Tirtha	Summary	Total	RL	AP
	1-357	358-874	875-953	954-1277	1278-1396	2750 (100)	472 (100)	263 (100)
Vipulā pāda	105	146	24	61	21	357	63	57
Vipulā 1	35 (5.3)	41 (3.8)	4 (2.6)	10 (1.5)	6 (2.7)	96 (3.5)	21 (4.4)	23 (8.7)
--- -- --	8   14	13   22	6   7	1   7	2   2	29   45	7   10	4   9
--- -- --	2   10	9   11		1   1	3   4	18   26	4   4	5   8
--- -- --	10   11	5   8	2   4	2   2		15   25	1   7	3   6
Vipulā 2	24 (3.6)	24 (2.3)	6 (3.9)	14 (2.2)	3 (1.3)	71 (2.6)	15 (3.2)	8 (3.0)
--- -- --	15   21	13   21	2   6	5   14	1   3	40   66	7   15	5   8
--- -- --	1   1	2   2			3   3	26   30	8   8	1   1
Vipulā 3	34 (5.1)	58 (5.5)	3 (1.9)	24 (3.7)	9 (4.0)	128 (4.7)	20 (4.2)	21 (8.0)
--- -- --	21   32	33   55	2   3	11   23	5   9	72   122	6   18	15   20
--- -- --	1   1	1   1		1   1	2   2	50   52	12   12	5   5
Vipulā 4	12 (1.8)	22 (2.1)	9 (5.8)	12 (1.8)	2 (0.9)	57 (2.1)	5 (1.1)	5 (1.9)
--- -- --	4   7	8   13	2   2	7   9		21   31	1   4	2   3
--- -- --	2   2	3   5	2   2	1   1		6   11	1   1	1   1
--- -- --	2   2	3   3	2   2	2   2		12   14		1   1
Sa-vipulā	1	1	1	1	1	4		
--- -- --	1	1	1	1	1	1		
Ta-vipulā	1	1	1	1	1	1		
--- -- --	1	1	1	1	1	1		

E. W. Hopkins, in his *The Great Epic of India* (Yale, 1901), made a survey of the use of the Vipulā in the epic. The following table (Table 12) collates his data with ours from the NM. Since Hopkins examined samples of one thousand pādas which he selected from various parts of the MBh and presented his results

Table 12. Vipula pādas in NM, MBh, Rām, Raghuvamśa etc.

NM	Vip I	Vip II	Vip III	Vip IV	Ranking	Irregular	I (— —)
Myth	35(53)	24(36)	34(51)	12(18)	2	1*	3 2* 4
Ritual	41(38)	24(23)	58(55)	22(21)	4	2	3 1 4
Nāga	4(26)	6(39)	3(19)	9(58)	9	3*	2 4* 1
Tirtha	10(15)	14(22)	24(37)	12(18)	6	4*	2* 1 3*
Summary	6(27)	3(13)	9(40)	2(9)	2	2	3* 1 4*
Total	96(35)	71(26)	128(47)	57(21)	23	2	3 1 4 25(9)
RL	21(44)	15(32)	20(42)	5(11)	0	1*	3 2* 4
AP	23(87)	8(30)	21(80)	5(19)	0	1*	3 2* 4
Epic	38	29	11	22	1	2	4 3 12
Gīta (830-1, 382)	80	50	32	15[13]	1	2	3 4
Nārāyaṇa in Śānti (343-351)	43	33	18	11[4]	1	2	3 4
Bhūrīśvara-jayadratha(vii. 141-146)	50	31	29	3[1]	1	2*	3* 4 2
Śānti P. (311 ff.)	55	30	47	21	1	3	2 4 6
Droṇa (51-71)	40	x	x+1	4			1
Droṇa (72-84)	44	14	37	13[8]	1	3*	2 4* 0
Droṇa (92-100)	74	27	34	5	1	3	2 4
Aśvamedhika P. (59-77)	91	33	50	10	1	3	2 4
Nala	55	25	46	10	1	3	2 4
Udyoga (Nahua-Indra)	54	30	35	8	1	3	2 4
Saupitika	48	23	39	13[8]	1	3	2 4
Udyoga (119-133)	30	28	43	9[2]	2*	3*	1 4 0
Death of Droṇa (vii. 190-198=8695-9195)	42	24	52	6[5]	2	3	1 4 3
Kīcaka (325-825)				36[9]			13
Sabha (ii. 50 ff)	62	20	34	2	1	3	2 4
Rāmāyaṇa (iv. 1-11)	60	33	31	1	1	2*	3* 4
Rāmāyaṇa (iii. 1-16)	33	17	26	0	1	3	2 4
Raghuvamśa	33	17	26	0	1	3	2 4
Purāṇa	33	51	50	57	3	4	2 1
Vāyu Purāṇa	41	26	50	57	3	4	2 1
Agni Purāṇa	(25)						
(33)							

by the number of Vipula pādas per one thousand pādas, we add the percentages for NM between parentheses. The numbers added between brackets are the number of pādas which consist mainly of proper names. The column 'Ranking' shows the frequency of the four Vipulas in each Section. If a position is marked with an asterisk, the numbers of pādas separating that position from the other position similarly marked differs by less than two occurrences. The last column shows the percentages of the use of — — — in the first Vipula (i.e. percentage of — — — — — in the first Vipula pādas).

The following points are noteworthy:

- The ratio of Vipulā III is lower in the older parts (Gītā etc.) and higher in the later (Death of Droṇa, Kīcaka). In NM, the ratio of Vipulā III is the highest of the four Vipulās.
- Except the use of Vipulā IV, the frequency of use of Vipulā is in the order III, I, II both in the Agni Purāṇa (50, 41, 26) and in NM (47, 35, 26).
- The ratio of Vipulā IV is relatively high in NM, which also is a common characteristic shared by the Agni Purāṇa and Sabhā ii. 50 ff (MBh).
- The high ratios of Vipulā IV and of ॐ-ॐ-ॐॐॐ in the Nāga Section are due to the proper names contained in the pādas in question. The same phenomenon was noticed by Hopkins for many cases in the MBh.

All we can say about the use of Vipulā from the table above is that the NM shares characteristics with the Purāṇas and a few parts of the MBh (Death of Droṇa, Kīcaka, Sabhā), while the uses in the Rāmāyaṇa and in the Raghuvamśa, which are almost “classical”, is quite different.

As to the characteristics of the individual Sections of NM, the use in the Tīrtha Section (with the frequency III, II, IV, I) is remarkable, as is that in the Nāga Section, although for the latter the reason is due, as mentioned, to the preponderance of proper names.

The fact that the ratios of irregular Vipulās are obviously lower in the last two Sections than in the first three is also remarkable; this perhaps suggests the lateness of the redaction of the last two Sections.

### 5.3. Other metres.

As we saw in 4.2. above, the Triṣṭubh in NM generally follow the classical norm. A few variations attested in the break as well as in the opening are all in the Myth Section and not in the Summary, though the latter Section contains 32 Triṣṭubhu pādas (see loc. cit.). This also supports our view about the lateness of the last two Sections.

Other attested metres, one Jagatī pāda, four Aupacchandāsaka pādas and two Vasantatilakā pādas, are all found in the Myth Section.

## 6. CONCLUSIONS.

Through our linguistic examinations of the text of the NM we have observed that the euphonic irregularities occur under limited, in most cases traditionally admitted, conditions: the suspension of sandhi takes place with proper names,

vocative nouns or addresses of salutation, with *ḡ* or with *ca*, especially between pādas, while the other irregular sandhi consists almost only in double sandhi. The fact that some of these phenomena were witnessed even by Pāṇini suggests that an ancient tradition might have been transmitted intact (2.3.). The same thing can be said of the use of *hi* (or *tu*) as a hiatus bridger (2.4.).

The distribution of the above mentioned phenomena in Sections of the NM indicates that there exists a fairly clear demarcation between the two parts of NM, the first three Sections and the last two. The former follow the traditional style of the Purāṇas, while the latter sometimes shows a kind of classicization (2.5.1.), which probably indicates the relative lateness of the redaction of this part. When compared with the manuscript transmission of two Buddhist texts of almost the same epoch (the *Udānavarga* and *Dharmasamuccaya*), some irregularities or peculiarities of the NM turn out to be found in the Buddhist texts as well (2.5.2.).

Close examination of the so-called sandhi consonant *-m-* suggests that, for the most part, this *-m-* may be considered rather to be a result of a confusion of neuter and masculine or of nominative and accusative, a confusion which seems to have taken place in the milieu of those who composed and transmitted the Purāṇa (3.).

Metrical irregularities are rather rare in the NM. The two prohibitions of the Śloka metre prescribed by Piṅgala (the prohibitions of  $\underline{\cup}\cup\cup\underline{\cup}$  and of  $\underline{\cup}\cup\underline{\cup}$ ) are observed more faithfully in the two first Sections than in the last two. Several consonant clusters not making position are also attested. In verse 198, we might have to read *-mukhyeṣu dhiṣṭhiteṣv*, admitting a quite irregular but elsewhere attested form *dhiṣṭhā-* for *adhiṣṭhā-* (4.).

As to the frequency of metres in the metrically 'free' positions of Śloka, we have found a curious fact: metres arranged according to their frequency in this part of the verse arrange themselves in a systematic order:  $\underline{\cup}---$ ,  $\underline{\cup}\cup--$ ,  $\underline{\cup}-\cup-$ ,  $\underline{\cup}--\cup$ ,  $\underline{\cup}\cup-\cup$ ,  $\underline{\cup}-\cup\cup$ . The order coincides with two arrangements employed in the Pratyaya of metrical treatises, an arrangement called Prastāra and the arrangement used in Lagakriyā.

This fact suggests: (1) that the first syllable of a pāda in Śloka was regarded as optional, and (2) that for the following three syllables, the composer of a Śloka verse had a certain tendency corresponding, in the case of NM, to the arrangement of the Pratyayas. Minor varieties in this regard observed in different Sections of NM might serve as a criterion to distinguish strata or sources of the NM. As the motivation for these usages seems to stem from an unconscious tendency of the composer, their analysis seems to be of particular significance (5.2.1~5.2.3.).



The use of Vipulā in NM is also typically Puranic (5.2.4.).

Finally, through our philological investigations, the NM, as attested at present, turns out to preserve fairly well the original linguistic form of the text. This conclusion is all the more interesting as the existent mss of the NM do not go back much beyond the seventeenth century. Various linguistic features of the two parts, the first three Sections and last two, remain rather intact and quite distinct from each other; the first part seems to be more natural and traditional, and so, more ancient than the second part which exhibits sporadically a later tendency to classicism. This makes, in its turn, plausible our linguistic analysis hitherto made.

#### BIBLIOGRAPHY.

- ALLEN, W. Sindney  
1972 *Sandhi*. Mouton, the Hague/Paris.
- ALSDORF, Ludwig  
1933 Die Pratyayas. Ein Beitrag zur indhischen Mathematik. *ZII* 9: 97–157 (= Kl. Schr. 600–660).
- ARNOLD, E. Vernon  
1905 *Vedic Metre, in its historical Development*. Cambridge: Cambridge University Press.
- BERNHARD, Franz  
1965 *Udānavarga*. Band I: Einleitung, Beschreibung der Handschriften, Textausgabe, Bibliographie. Göttingen: Vandenhoeck & Ruprecht.  
1968 *Udānavarga*. Band II: Indices Konkordanzen, Synoptische Tabellen. Göttingen: Vandenhoeck & Ruprecht.
- BLOCH, Jules  
1965 *Indo-Aryan from the Vedas to Modern Times*. English Edition largely revised by the author and translated by A. Master. Paris: Adrien Maisonneuve.
- BÖHTLINGK, O.  
1889 Zur Kritik des Rāmāyaṇa. *ZDMG* 43: 53–68.
- CHATTERJI, Kshitish Chandra  
1964 *Technical Terms and Technique of Sanskrit Grammar*. Calcutta: University of Calcutta.
- EDGERTON, Franklin  
1939 The Epic Triṣṭubh and its Hypermetric Varieties. *JAOS*: 159–174.  
1953 *Buddhist Hybrid Sanskrit Grammar and Dictionary*. New Haven: Yale University Press.
- FÜRST, Alfons  
1916 Der Sprachgebrauch der älteren Upaniṣads verglichen mit dem der früheren vedischen Perioden und dem des klassischen Sanskrit. *KZ* 47: 1–82. (Also published separately, Göttingen 1915).
- GEIGER, Wilhelm  
1916 Pāli Literatur und Sprache. *GIAPA*, Band I, Heft 7, Straßburg.
- GRIERSON, G.  
1894 Indian Epic Poetry. *IA* 23 52–56.
- HAHN, Michael  
1980/81 On the pratyaya rules of Ratnākaraśānti. *Journal of the Oriental Institute*, Baroda, 30: 61–67.

- 1982 Ratnākaraśānti's Chandoratnākara. Kathmandu.
- HINÜBER, Oskar von
- 1980 Remarks on the Problems of Textual Criticism in Editing Anonymous Sanskrit Literature. *Proceedings of the first Smposium of Nepal-German Sanskritists* (1978, Kathamandu).
- 1986 *Das ältere Mittelindisch im Überblick*. Wien: Der Österreichischen Akademie der Wissenschaften.
- 1989 Origin and varieties of Buddhist Sanskrit. *Dialectes dans les Littératures Indo-aryennes*: 341–368. Institut de Civilisation Indienne (Paris).
- HOHENBERGER, Adam
- 1965 Metren der Kunstdichtung in de Purāṇen. WZKSO 9.
- HOLTZMANN, A.
- 1884 *Grammatisches aus dem Mahabharata*. Ein Anhand zu William Dwight Whitney's Indischer Grammatik. Leipzig.
- HOPKINS, E. Washburn
- 1901 *The Great Epic of India*. Yale Bicentennial Publications, Yale University.
- JACOBI, Hermann
- 1879 Über den Śloka im Pāli und Prakṛt. *Zeitschrift für vergleichende Sprachforschung* 24: 610–614.
- 1896 Über den Śloka im Mahābhārata. *Gurupūjākaumudī. Festgabe ... Albrecht Weber*. Leipzig 1896: 50–53.
- KANTAWALA, S. G.
- 1962 Some Linguistic Peculiarities of the Matsya-Purāṇa. *IL* 23: 66–71.
- KEITH, A. BERRIEDALE
- 1914 The Age of the puranas. *JRAS*: 1021–1031.
- KIRFEL, W.
- 1927 *Das Purāṇa Pañcalakṣaṇa*. Versuch einer Textgeschichte. Leiden.
- LEVI, Sylvain
- 1918 Sur l'histoire du Rāmāyaṇa. *JA*.
- MICHELSON, T.
- 1904 Linguistic Archaisms of the Rāmāyaṇa. *JAOS* 25: 89–145.
- MIZUNO, Kogen (水野弘元)
- 1968 正法念処經について (On the Smṛtyupasthānasūtra) *Journal of Indian and Buddhist Studies* 12–1: 38–47.
- NAKATANI, Hideaki (中谷英明)
- 1984 Remarques sur la transmission des Dharmapada. *BEI* 2: 125–141.
- 1988 『スバシ写本の研究—亀茲国致隷藍の「ウダーナヴァルガ」』人文書院(京都) (“*Philological studies on the Subaśi Manuscript of the Udānavarga*”). Kyoto: Jinbunshoin.
- 1990 La sanskritisation des textes bouddhiques en Asie Centrale —le cas du manuscrit de Soubachi de l'Udānavarga—. “*Documents et archives provenant de l'Asie centrale*”. Actes du 5ème Colloque Franco-Japonais, Kyoto 1988: 35–50.
- NORMAN, K. R.
- 1969 *The Elders' Verses I*. London: Pali Text Society.
- 1971 *The Elders' Verses II*. London: Pali Text Society.
- OJIHARA, Yutaka & NAKATANI, Hideaki
- 1981 *Dharmasamuccaya reconsidéré*. Kyoto: Rinsen. 1981.
- OLDENBERG, Hermann
- 1915 Zur Geschichte der Triṣṭubh. *Nachrichten der Akademie der Wissen schaften in Göttingen*: 490–543.

PATHAK, R. A.

1969 Some Linguistic Peculiarities in the Purāṇas. *Purāṇa* 11: 119–126.

PISCHEL, Richard

1900 *Grammatik der Prakrit Sprachen*. GIAPA Band I, Heft 8. Straßburg.

RENOU, Louis

1931 *Grammaire de la langue sanskrite*. (2e éd. 1961). Paris.

ROCHER, Ludo

1986 *The Purāṇas*. A History of Indian Literature, ed. by J. Gonda, vol. 2 fasc. 3. Wiesbaden.

SALOMON, Richard

1981 A Linguistic Analysis of the Muṇḍaka Upaniṣad. *WZKS* 25: 91–105.

1985 On the Original Language of the Rāmāyaṇa. Some Comments on a Recent Study of Vālmiki's Sanskrit. *WZKS* 29: 57–68.

1986 The Viṣṇu Purāṇa as a Specimen of Vernacular Sanskrit. *WZKS* 30: 39–56.

SEN, Nilmadhab

1951 Un-Pāṇinian Sandhi in the Rāmāyaṇa. *Indian Linguistics*, 12 (1–2):

SMITH, Helmer

1981 *Suttanipāṭa Commentary III, being Pramattajotikā II*, 3. Vol. III. Indexes and Appendix. London, Pali Text Society.

1948 *Saddanīti*, I–IV. Lund.

1950 Les deux prosodies du vers bouddhique. *Bulletin de la Société royale des lettres de Lund*, pp. 1–43.

1951 Retractationes rhythmicae. *Studia Orientalia Fennica* 16 (5): 3–37.

1953 *Inventaire rythmique des Pūrva-Mīmāṃsā-sūtra*. Uppsala: Acta Universitatis Upsaliensis.

1954 *Analecta rhythmica*. *Orientalia Suecana d'Upsala* 19 (7): 1–17.

TSUCHIDA, Ryutaro (土田 龍太郎)

1985 Some remarks on the Text of the Śvetāśvatara-Upaniṣad. *Journal of Indian and Buddhist Studies*. 34–1: 460–468.

VRAT, Satya

1964 *The Rāmāyaṇa - A Linguistic Study*. Delhi.

WARDER, A. K.

1967 *Pali Metre*. A Contribution to the History of Indian Literature. London: Pali Text Society.

WEBER, Albrecht

1876 Über die Metrik. *Indische Studien* 8. Berlin.

WITZEL, Michael

1989 *Tracing the Vedic Dialects*. *Dialectes dans les Littératures Indo-Aryenne*. Paris. Publication de l'Institut de Civilisation Indienne, 55: 97–263.

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Notes.

1. Abbreviations:

ĀP=Ādi-purāṇa, KK=Kṛtyakalpataru, KR=Kṛtyaratnākara, MBh=Mahābhārata, ms(s)=manuscript(s), NM=Nīlamata-purāṇa, Rām=Rāmāyaṇa, RB=Shorter recension of the NM, RL=Longer recension of the NM, Skt=sanskrit, TN=Nīlamata, or Teachings of Nīla. Sanskrit Text with Critical Notes, edited by K. De Vreese. Leiden: E. J. Brill, 1936. VDh=Viṣṇudharmottara-purāṇa.

In addition, we use as such the abbreviations of the mss used by the two editions, of de Vreese and of Ved Kumari.

2. See the detailed discussion by von Hinüber who claims, though from a slightly different point of view, the same kind of treatment of the Indian manuscript tradition (von Hinüber 1980).
3. All the extant mss of the NM maintain more or less exactly the trace of the lacunae which had been found in this original ms and were filled up by Sāhib Rām. Furthermore, Ikari has pointed out a misplacing of one leaf in this original ms, which has been followed with ignorant fidelity by all the mss of the NM. On this interesting discovery, see the introduction of this volume.
4. The mss of the NM are written in two scripts, Śāradā and Devanāgarī. As pointed out by de Vreese (TN, p.vx), the text of the Nāgarī copies has invariably to be traced back to mss which were all written in Śāradā. Yet, this does not mean that the text of the Śāradā mss is always older than that of Devanāgarī mss, although the latter have more chances to show mistakes owing to a confusion of Śāradā and Nāgarī characters. On this palaeographical problem, see Witzel's article in this volume.

As a full account is given by M. Witzel in this volume, I dispense with a description of a considerable number of errors which might have occurred in the textual transmission in Kaśmīr, errors owing to scribal as well as phonetic confusion. The following discussions are made taking into account these errors in the course of transmission.

5. On the avasāna ('pause'), see for example, Pāṇini 1.4.110 "virāmo 'vasānam". See also *Nidānasūtra*, 7.1-14 (cf. Weber, 1863 p. 119 ff.) and *Rkprātisākhya*, 18.46-57 (cf. K. C. Chatterji 1964 pp. 297 ff.).
6. See Renou 1931 § 30, quoting Michelson 1904 (p. 99) for Rām and Hopkins 1901 (p. 197) for MBh.
7. See Renou 1931 § 30.
8. According to Salomon 1981 p. 92.
9. See Renou 1931 § 30. In Rām too, *bhadraṃ te* is used without sandhi; see Michelson 1904 p. 99.
10. Michelson 1904, p. 98 "the most frequently occurring case of it (i.e. hiatus within the pāda of the Rām) is the combination -a ṛ-." For the same kind of asandhi in the *Muṇḍaka Upaniṣad*, see Salomon 1981, p. 91, in the *Upaiṣad* in general, see Fürst 1915 pp. 5-6.
11. In the NM, the non-sandhi between pādas with *ca* at the end of the preceding pāda is, in fact, practically limited to the first two Sections, Myth and Ritual; see in this regard, 2.5. below.
12. According to Michelson 1904 p. 101, this type of double sandhi, fairly numerous in Rām, occurs always with the initial *i-* of *iti*, while in MBh, this limitation does not obtain.
13. Examples of this are very frequent in Rām according to Michelson 1904 p. 102.
14. Examples of this are numerous in Rām, loc. cit. p. 102.
15. In 965b too, Ms B reads: *deśāc Chaḍaṅgulaḥ* for *deśāt Ṣaḍ* which all the other mss preserve.
16. Cf. above n. 6.
17. Renou 1931 (p. 45) gives a detailed description with ample bibliography.
18. See for example, Gupta 1962 pp. 285 ff. For the examples in Rām, see Vrat 1964.
19. Seeing that the word *ātman* gives occasion three times to non-sandhi in the *Muṇḍaka Upaniṣad*, the word might also have been considered as fairly independent of other words in a sentence. We do not yet have sufficient examples, however, to reach any conclusion.
20. Later mss and especially the longer recension (RL) make every effort to avoid this non-sandhi. Cf. also Renou 1931 § 30.

21. Böhrtlingk 1889 p. 54 reports in Rām the same kind of usage, though much less frequent, of *hi* and *tu*. See also Sen 1951.  
Another means to avoid the concurrence of two vowels is the so called “sandhi consonant -m-”. It seems to me, however, that this phenomenon must be considered mainly from the morphological point of view (see below 3.).
- 21a. More anciently in the R̥gveda, however, *saptaṛṣī* was scanned as *saptaṛṣi*; see Arnold 1905, p. 73.
22. 18 examples of irregular sandhi are attested in the Subaṣi ms; see Nakatani 1988 §§ 83, 84, 85, 88.
23. A few examples are noted by Bernhard 1965 I § 6.1.
24. Only two examples in the Subaṣi ms, vide Nakatani 1988 § 87.
25. See the very convenient pāda index published by Franz Bernhard: Bernhard 1968 p. 184 and pp. 215–216.
- 25a. On the close relationship between the two Buddhist communities, see Nakatani 1990, 1988 and 1984.
26. Based on the fact that the geographical and historical description of the Jambudvīpa found in the *Smṛtyupasthāna-sūtra* is similar to that found in the Rāmāyaṇa, S. Lévi 1918 (p. 149) placed the composition of this sūtra between the 2nd century B. C. and the 1st century A. D. Yet, on the basis of the doctrinal affinities with the *Abhidharma-amṛta* (阿毘曇甘露味論, Taisho no. 1553) of Ghoṣaka, translated into Chinese in the third century, Mizuno 1967 (pp. 46–47) convincingly argues for the 2nd century. A. D.
27. On the linguistic details of the *Dharmasamuccaya*, see Ojihara-Nakatani 1981 pp. 42 ff.
28. Another example: 342a *yajñeśa-m-ivāsanastho*.
29. In most of these cases, the longer recension (RL) has a variant reading in classically correct form (as marked by /RL in the list): e.g. 373a *ācārās ca* for *ācārāni*. If the RL has no variant, it probably means that it considered the form to be correct: for example, *mantrāni* (809c), which is used, though rarely, as a neuter noun even in classical Skt.
30. See for example, Pathak 1969 p. 123.
31. Concerning the progressive loss of these distinctions in Pāli, Pkt, Middle and New Indo-Aryan and Buddhist hybrid Skt, see respectively: Geiger 1916, Pischel 1900, Bloch 1965 and von Hinüber 1986, Edgerton 1953, Brough 1962 p. 113 ff, Nakatani 1988 § 81.
32. Thus to be read in place of *KālĀnāyuh* as adopted by the Critical Edition. On the metre of this pāda, see below 4.1.3.
33. On examples in other Purāṇas, see Pathak 1969 p. 123.
34. See Nakatani 1988 § 86.
35. Vide Bernhard 1968 p. 88 -m s.v. On the use in Buddhist texts in general, see Edgerton 1953 (BHSD) § 4.59.
36. See Ojihara-Nakatani 1981 pp. 43–44.
37. See Weber 1876 p. 335; Smith 1950 § 3.5; do. 1953 pp. 10–14; do. 1954 §§ 5, 6, 7; Nakatani 1988 § 105.
38. See Weber 1876 and Smith 1950; 1953; 1954 loc. cit; Nakatani 1988 § 106.
39. Ed. de Vreese: *caṭasya*. But read thus: “(We shall go to Naubandhana) to subjugate the wicked one.”
40. The second prohibition of Piṅgala is in fact ignored by the *Vṛttaratnākara* which proclaims only the first restriction. The *Bṛhatsaṃhitā* disregards both the two.
41. See Nakatani 1988 §§ 105, 106.
42. For example, resolution in the fifth syllable: sa vai bhikṣur iti ucyaṭe (*Udānavarga*, ms Subaṣi 515). Resolution in the sixth syllable: yo atta-hetu para-hetu (pathyā, *Suttanipāta* 122a). On resolution in the verses of the MBh, see Jacobi 1896 pp. 51–52; on Pāli examples, see Smith 1948 (*Saddanīti* IV): § 8.1.3.11. ~ § 8.1.3.14.; § 8.1.3.15; § 8.1.3.2; Norman 1969 § 36; do. 1971 § 60; Nakatani 1988 § 104. On Jaina examples, see Jacobi 1879 pp. 611–612.
43. On this phenomenon in Buddhist texts, see Norman 1969 § 50; do. 1971 § 74; Nakatani 1988 §§ 94, 95.

Metre and Euphony (sandhi) in the Nīlamatapūrāṇa

44. In the margin of ms A, *adhi-ṣṭhita-* is corrected into *ni-ṣṭhita-*.
45. See Kantawala 1962 p. 67 n. 5.
46. This is one of the places in which we observe the affinity of the NM with the first Khaṇḍa of VDh. This fact may suggest that one of the sources of the NM was the first Khaṇḍa of the VDh (and not the second or third Khaṇḍa).
47. On the evolution of Triṣṭubh see Oldenberg 1915. See also Smith 1948 § 8.3; do 1950 § 8.3; do. 1954 §§ 2, 3.4; Nakatani 1988 §§ 107 ff; Norman 1969 §§ 26 ff; do. 1971 §§ 49 ff. See also, with bibliography, Warder 1965 §§ 270 ff.
48. Alsdorf 1933 gave a full account of the Pratyaya method.
49. See in detail, Hahn 1982 pp. 4 ff.
50. See the detailed account of Alsdorf 1933 pp. 133 ff.