

# Enriching the digital edition of the *Kāśikāvṛtti* by adding variants from the *Nyāsa* and *Padamañjarī*

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## 1 Introduction

### 1.1 Importance of the present work

As is well-known, the *Kāśikāvṛtti* (*KV.*), written by Jayāditya and Vāmana in the seventh century CE, is the oldest extant complete running commentary on Pāṇini's *Aṣṭādhyāyī* (*A.*). While several complete editions of the text have been published, and a critical edition by Sharma, Deshpande, and Padhye (1969–1970), it is known that the *KV.* has textual problems. Sharma, Deshpande, and Padhye's critical edition is based on only nine manuscripts as well as four previous editions while in the *New Catalogus Catalogorum* Raghavan and Kunjunni Raja (1968: 116b–188a) have noticed more than two hundred manuscripts. Efforts to produce a truly critical edition begun nearly thirty years ago led to the publication of an edition of the pratyāhāra section by Haag and Vergiani (2009). Now with new funding under the direction of Malhar Kulkarni at the Indian Institute of Technology Bombay, a project promises to produce an edition of the first pāda of the first adhyāya.

Manuscripts in India last no more than about five hundred years. The oldest readable manuscript of the *KV.* dates only to the early fifteenth century. Yet several centuries earlier, the *KV.* was commented upon in the *Kāśikāvivarāṇapañjikā* by Jinendrabuddhi in the eighth or ninth century and then in the *Padamañjarī* by Haradatta in the thirteenth century. These commentators provide information about the constitution of the text of *KV.* in several ways: by direct citation and incipits, as well as less directly by discussion on the text. The information provided by commentators hundreds

of years prior to the oldest manuscript is invaluable to reliably establishing the text of the *KV*. It would be extremely helpful for the community of Sanskrit grammarians if an edition supplemented with the readings available in the commentaries of the *KV*. is made available.

The Osmania edition seldom mentions variants reported in the commentaries, and, when it does, occasionally does so erroneously. Kulkarni et al. (2016) include an appendix indicating which readings of the Osmania edition of the *KV*. on the pratyāhāra sūtras are supported by the *Nyāsa* (*NY.*) and *Padamañjarī* (*PM.*). In that appendix, they use various signs to indicate which reading is supported by *NY.*, which is supported by *PM.*, and which is supported by both of them. It is a useful appendix, yet it covers a small fraction of the text and it lacks information concerning readings in commentaries that differ from the Osmania edition, whether the *PM.*, which is a later commentary, is aware of the reading given by the *NY.*, how many readings are regarded as wrong by these commentators, etc. Therefore, there is a need to create an edition that presents this information accurately for the whole text to the community of Sanskrit grammarians in particular and Sanskrit scholars in general.

## 2 Method of data collection

The complex, diffuse, and extensive nature of the data in the commentaries regarding readings in the *KV*. begs for systematic digital methodology. The digital medium provides means to collect and organize complex information reliably, and to present that information in multiple uncomplicated views. The Text-Encoding Initiative (TEI) provides means to indicate supporting and variant readings in a critical apparatus. The digital text of the Osmania edition (1970) of the *KV*. is available from the Sanskrit Library in sandhi-analyzed form in the Sanskrit Library's Phonetic Encoding (SLP1). Hence we choose to undertake production of a digital edition of the sandhi-analyzed *KV*. with critical apparatus tagged in accordance with TEI in SLP1. We proceed in this undertaking despite the fact that the source digital text is not yet reliably proofread and is not yet itself marked up according to TEI. We propose to so mark it up during the course of our work in accordance with the method demonstrated by Scharf (2018).

## 2.1 TEI critical apparatus tags

TEI offers the following elements and attributes to mark up a critical apparatus:

1. The **app** (apparatus) element is used to group together each lemma and all its variations; it has two child elements: **lem** and **rdg**.
2. The **lem** (lemma) element is an optional child of the **app** element. In this context, the term *lemma* signifies the accepted reading in the base text.
3. The **rdg** (reading) element is a required child of the **app** element used to indicate variations from the base text.
4. The **loc** (location) attribute of the **app** element specifies the location of the lemma in the base text.
5. The **wit** (witness) attribute specifies which commentary supports the reading. This attribute is used in both of the elements **lem** and **rdg**.
6. The **type** attribute is used to specify whether the reading is termed occasional, wrong or desired in the apparatus.

At present the **loc** attribute specifies only the canonical number of the sūtra under which the lemma occurs. In a sandhi-analyzed TEI text fully marked as described by Scharf (2018), the location will be specified in addition precisely to the paragraph, sentence, and possibly word.

## 2.2 Sigla

The **wit** attribute's values are sigla that indicate which commentary and variants reported in commentaries witness a particular reading. The following sigla are used:

1. **ny** stands for the reading given by the *Nyāsa*.
2. **pm** stands for the reading given by the *Padamañjarī*.

## 2.3 Types of readings

Four different types of readings are found in each of the two commentaries. We indicate these by the following values of the **type** attribute in SLP1 encoding:

1. **apapAWa** indicates that the reading is considered wrong by the commentator.
2. **kvacit** indicates that the reading is mentioned as a variant found by the commentator somewhere other than in his principal text.
3. **yukta** indicates that the reading in question is not received by the commentator, but suggested by him as the correct reading.
4. **pratIka** indicates that the reading is an incipit that supports but is not identical to the lemma.

## 2.4 Samples

Below are shown three samples of TEI tagging in our critical apparatus. The first shows a lemma supported by both commentaries. The second shows a lemma for which each commentator has given a different reading. The readings are assumed to be found by each commentator in his principal manuscript of the *KV*, since the readings are provided without any comment regarding their source. The third example shows a lemma supported by Jinendrabuddhi's principal text and partially supported by Haradatta's, yet for which Jinendrabuddhi remarks that the reading in another manuscript is incorrect.

```
<app loc='A1.1.1'>
  <lem wit='ny pm'>vfdDiSabdaH</lem>
</app>

<app loc='A1.1.2'>
  <lem>jayanti</lem>
  <rdg wit='ny'>paWanti paWan</rdg>
  <rdg wit='pm'>pacanti jayanti</rdg>
</app>

<app loc='A1.1.30'>
  <lem wit='ny'>tvayakA kftam</lem>
```

```

<rdg wit='ny' type='apapAWa'>tvakayA</rdg>
<rdg wit='pm' type='partial'>tvayakA</rdg>
</app>

```

### 3 Issues

#### 3.1 Data representation

Gathering comments regarding readings from commentaries differs from the collation of manuscripts. When a critical edition is prepared, the assumption is that each manuscript covers the entire span of text edited unless comments to the contrary are made in the manuscript description in the introduction or a comment regarding omission is made in the critical apparatus. Hence only variants are reported in the critical apparatus and it is assumed that silence regarding a witness reports its support for the adopted text. Readings which are identical to the lemma are not reported. In contrast, commentaries on scientific texts, and on grammatical texts in particular, generally do not mention or comment upon every word of their base text. Even the *KV.*, as a commentary on every sūtra of the *Aṣṭādhyāyī*, does not mention every word of every sūtra as there found. Subcommentaries as a rule specifically mention only a small proportion of the words in the base text. Since the full text is not always cited, one cannot assume that silence regarding a reading in the base text indicates support. Therefore, while collecting readings from the commentaries, it is necessary to note explicit comments regarding support along with variants. The notation of positive readings as well as variants has the additional advantage of allowing us to analyze how much of the existing text in the Osmania edition is supported by each of these commentaries.

To compile statistics concerning the percent of text covered, supported, and departed from by the commentaries calls for a consistent unit of enumeration. Traditional accounting of the extent of text in India used the orthographic syllable (अक्षर) as the basic unit. The most accurate modern method would be to use the character. We plan to use characters in the phonetic encoding scheme SLP1. Neither a word nor a reading can accurately serve as such a unit as will become clear shortly; however, tabulating lemmata and calculating the number of characters in each will provide an accurate measure of the extent covered by each commentary.

### 3.2 Omissions

Omissions are recorded in TEI with an empty `rdg` tag and optionally supplied with a `cause` attribute that explains the reason for the deletion of the text. Possible values of the `cause` attribute suggested by the TEI editors include for example the following:

1. `homeoarchy`, which indicates the accidental skipping of a line of text because its beginning is similar to preceding or following lines, and
2. `haplography`, which indicates the inadvertent omission of a repeated written letter or letters.

While such explanations may be relevant for omissions in manuscripts, they are hardly relevant to edited commentaries where presumably editors have corrected such errors. The reason for the absence of a certain word or sentence in any commentary is usually inexplicable. Hence it is not useful to use the `cause` attribute. To represent absence of a segment of the base text in the commentary, an empty `rdg` element is used, for example, as follows:

On A. 1.1.51 `उरगुपरः`, while explaining the importance of the first word `उः` in the *sūtra*, the *KV.* as in the Osmania edition gives two counterexamples, `खेयम्` and `गेयम्`. Both the *NY.* and *PM.* witness and explain the first counterexample. The text of the *NY.* quotes the example and states its derivation as follows: `खेयमिति। ई च खनः इति क्यप्। इकारश्चान्तादेशः। आद्गुणः।`<sup>1</sup> The *PM.* says: `खेयमिति। ई च खनः।` They then both proceed directly to the derivation of the counterexample to the second word in the *sūtra*, `सौधातकिः`, skipping any mention or discussion of the word `गेयम्` given in the Osmania edition. The fact that both commentaries proceed from the explanation of the first example relevant to the first word in the *sūtra* directly to discussion relevant to the second word in the *sūtra* implies that the second counterexample on the first word in the Osmania edition was not in the text of the *KV.* referred to by the *NY.* and *PM.* The omission of the second word by the commentators is represented by an empty `rdg` element as follows:

```
<app loc='A1.1.51'>
  <lem>geyam</lem>
  <rdg wit='ny pm' />
```

<sup>1</sup>We cite the text of the Osmania editions with sandhi as is but drop quotes and references, and use only the *daṇḍa* as punctuation.

&lt;/app&gt;

### 3.3 Problem in lemmatizing words as examples

It is not always appropriate to select individual words as the unit of a lemma. Frequently sentences are used as examples, particularly where interword phonetic changes are demonstrated or where syntax is relevant. Each such example should be understood as a single unit rather than as a series of individual words. For instance, A. 1.1.12 अदसो मात् terms प्रगृह्ण a vowel ई or ऊ preceded by a म् in forms of the demonstrative pronoun अदस्, thereby preventing by A. 6.1.125 sandhi with a following vowel such as would occur by A. 6.1.77. If A. 1.1.12 did not include the word अदस्, then any vowel ई or ऊ preceded by a म् would be termed प्रगृह्ण and not undergo sandhi. The KV. on this rule shows the importance of the word अदस्: by citing two counterexamples: शम्यत्र and दाडिम्यत्र. If each of these counterexamples were represented as a sequence of two individual words with sandhi analyzed शमी अत्र, दाडिमी अत्र, as currently in the sandhi-analyzed digital edition, the significance of the counterexamples would vanish. Hence, sandhi is restored in these and similar cases, and each such example is treated as a single lemma.

### 3.4 Problems in lemmatizing altered sequences of examples

The KV. cites two examples on A. 1.1.51: कर्ता and हर्ता. The order of the examples is significant in establishing the correct text; hence how that order is attested in both manuscripts and commentaries is pertinent. The NY. quotes these examples in the same order as कर्ता।हर्ता इति before further explaining each form. If there were a variant that inserted another example between these two examples, then certainly that variant would be post-NY. It would be possible to represent each of these examples in a separate app element and to represent an addition by an app element between them that pairs a rdg element with an empty lem element. Conversely, it would be possible to represent an omission by an app element that pairs a lem element with an empty rdg element. However, such a method is more cumbersome and generally not adopted in critical editing. Hence, where the sequence of examples is an issue showing some variation in the commentaries, the sequence is represented by tagging those examples in a single app element.

&lt;app loc='A1.1.51'&gt;

```
<lem wit='ny'>kartA hartA</lem>
</app>
```

Similarly, in many cases it is simpler and more comprehensible to annotate variants of a sentence by taking the whole sentence as a single unit rather than its phrases or individual words as units. For example, on A. 1.1.57, the Osmania edition reads तुकि कर्तव्ये न स्थानिवद् भवति। and the NY. reads तुकि न स्थानिवद्भवतीति। Since positive readings are reported as well as variants, there are three ways to report this reading. One way is to tag every word and report the absence of the word कर्तव्ये as an omission. The second way would be to tag the phrase तुकि कर्तव्ये, and the third would be to tag the entire sentence. Under either of the first two methods, we still require **app** elements to represent the support of the manuscripts for the other words or phrase in the sentence. Hence it is simpler to tag the whole sentence as a single unit and to treat the reading available in the NY. as a single variant as follows:

```
<app loc='A1.1.57'>
  <lem>tuki kartavye na sTAnivat Bavati</lem>
  <rdg wit='ny'>tuki na sTAnivat Bavati</rdg>
</app>
```

Moreover, it is often the case that if an edition selects small units such as individual words and represents variants in the form of the omission of those words, the reader requires more effort to understand what the exact reading of the witness is because he has to reconstruct the sentence from fragments. Sanskrit commentators themselves describe such additional effort as prolixity of understanding (प्रतिपत्तिगौरव). Thus, we tag the data on the level of the word, phrase, or sentence according to the demand of the situation. The following are a couple of additional examples of the omission of words handled as variants of phrases or sentences.

Under A. 1.1.47, the Osmania edition reads स्थाने-योग-प्रत्ययपरत्वस्य अयम् अपवादः। The PM. omits the word अयम् and reads स्थानेयोगप्रत्ययपरत्वस्यापवादः। Instead of representing this omission in three **app** elements, the first and third taking स्थानेयोगप्रत्ययपरत्वस्य and अपवादः as lemmata with the PM. as witness, and the second with अयम् as lemma and an empty **rdg** element with the PM. as witness, we treat the whole sentence as a single variant and tag it in a **lem** element under a single **app** element as follows:

```
<app loc='A1.1.47'>
  <lem>sTAneyogapratyayaparatvasya ayam apavAdaH</lem>
```

```
<rdg wit='pmvar'>sTAneyogapratyayaparatvasya apavAdaH</rdg>
</app>
```

On A. 1.1.48 the *KV.* reads: **रै अतिरि। नौ अतिनु।** The *NY.* reads **अतिरि। अतिनु इति।** According to the Osmania edition, the *KV.* supplies the examples **अतिरि** and **अतिनु** with the base words **रै** and **नौ** of the final constituents of the compounds which undergo replacement of their final vowels with a short vowel by A. 1.2.47. Both the *NY.* and *PM.* omit these base words and attest only the examples. This can be represented in three ways: (1) by taking each word individually and representing **रै** and **नौ** as omitted, (2) by taking the set of both examples as a single unit and representing the omission of these two base words as one variant, or (3) by the medial course of taking each set of base word plus example as a unit and representing the omission of the base word in each as a variant consisting of just the example. Here we chose the third course and placed each set of base word and example in a **lem** element under an **app** element and the reading in a **rdg** element witnessed by the *NY.* and *PM.* as follows:

```
<app loc='A1.1.48'>
  <lem>rE atiri</lem>
  <rdg wit='ny pm'>atiri</rdg>
</app>
<app loc='A1.1.48'>
  <lem>n0 atinu</lem>
  <rdg wit='ny pm'>atinu</rdg>
</app>
```

### 3.5 Difference in order

On A. 1.1.47 the Osmania edition has three examples: **विरुणाद्धि, मुञ्चति, and पयांसि.** The *NY.* has the variant **रुणाद्धि** without the preverb **वि** instead of **विरुणाद्धि**, and places this example last in an order different from that of the Osmania edition: **मुञ्चति, पयांसि, and finally रुणाद्धि.** Two differences are relevant: the change in the order of examples, and a variant for one of them. As above, these differences could be represented as an omission and an addition. However, it is simpler to tag all three words in the *KV.* in a single **lem** element under one **app** element, to treat the reading in the *NY.* as a single variant, and to record it in a single **rdg** element.

```
<app loc='A1.1.47'>
  <lem>viruRadDi . muYcati . payAMsi .</lem>
```

```
<rdg wit='ny'>muYcati . payAMsi . ruRadDi</rdg>
</app>
```

### 3.6 Inferring readings from explanations

Jinendrabuddhi and Haradatta often provide explanations that permit one to infer that they had certain readings of the *Kāśikāvṛtti* even though they do not directly cite the reading. For example, the Osmania edition on A. 1.3.63, आम्प्रत्ययवत्कृञो ऽनुप्रयोगस्य, cites two examples: ईक्षाञ्चक्रे and ईहाञ्चक्रे. The *NY*. comments on these examples as follows:

ईक्षाञ्चक्रे इत्यादि। ईक्ष् दर्शने। ईह चेष्टायाम्। ऊह वितर्के। लिट्। इजादेः  
इत्यादिनाऽऽम्। आम्ः इति लेर्लुक्।  
ईक्षाञ्चक्रे etc. After the roots ईक्ष् ‘see’, ईह् ‘strive’, and ऊह् ‘con-  
jecture’, the affix लिट् is introduced (by A. 3.2.115); आम् is in-  
troduced by A. 3.1.36 इजादेश् गुरुमतो ऽनृच्छः; and the affix लिट्  
is deleted by A. 2.4.81 आम्ः.

Here the *NY*. refers to three verbal roots, namely ईक्ष्, ईह्, and ऊह्. The Osmania edition gives only two forms which are derived from the roots ईक्ष् and ईह्. The citation of the additional verbal root ऊह् in the *NY*. is relevant to the form ऊहाञ्चक्रे which must have been an additional example. Hence the text of the *KV*. received by the *NY*. must have had three examples, the third of which the established text in the Osmania edition lacks. We tag such an inferred reading in the same way we tag a direct reading. An addition is tagged conversely to the way an omission is tagged by providing an empty *lem*-element with an associated reading in a separate *app*-element (cf. §3.2). Thus the present case is tagged as follows:

```
<app loc='A1.3.67'>
  <lem wit='ny pm'>IkzAYcakre</lem>
</app>
<app loc='A1.3.67'>
  <lem/>
  <rdg wit='ny'>UhAYcakre</rdg>
</app>
```

Similarly, under A. 1.4.20 अयस्मयादीनि छन्दसि, the *KV*. explains the purpose of the rule in the following words: भपदसञ्ज्ञाधिकारे विधानात् तेन मुखेन साधुत्वमयस्मयादीनाम् विधीयते। ‘By means of the inclusion of this rule in the section headed by the terms पद and भ, the fact that the words included in the

list beginning with अयस्मय are correct is provided.’ In this explanation, the Osmania includes the phrase तेन मुखेन. The NY. comments on this sentence as follows: कथं पुनरेषां साधुत्वं विधीयत इत्याह भपदसंज्ञाधिकारे इत्यादि। द्वारम्। मुखम्। उपाय इत्यनर्थोन्तस्म। ‘In answer to the question, “But how is the validity of these words established?” he says, “By means of the inclusion of this rule in the section headed by the terms पद and भ etc.” द्वार ‘door’, मुख ‘mouth’, उपाय ‘means’ — there is no difference in meaning. Because of the fact that the words मुख and उपाय follow the word द्वार, they may serve to explain the latter. In that case, the word मुख would not be a quotation from the base text. Hence, Jinendrabuddhi’s comment may indicate that the word द्वार was read instead of the word मुख in the version of the KV. available to him. The sentence in the reading received by Jinendrabuddhi would then have been the following: भपदसंज्ञाधिकारे विधानात्तेन द्वारेण साधुत्वमयस्मयादीनां विधीयते। The PM. demonstrates that this supposition is correct and that Haradatta received the same reading as Jinendrabuddhi. For Haradatta states यदि संज्ञा विधीयेत आनन्तर्याद्भसंज्ञाविधानद्वारेणैव निपातनं स्यात् ...भपदसंज्ञाधिकारे इत्यादि। द्वारम् उपायः। ‘If this rule provided a term, due to the fact that it occurs just after (the provision of the term भ in A. 1.4.18), mention would be made only of words that occur by the provision of the term भ. The term पद would not occur, nor would the conjunction of the terms भ and पद. ...भपदसंज्ञाधिकारे etc. The word द्वार means उपाय.’ The PM. explicitly mentions the word द्वारेण and does not mention the word मुख at all. Instead it explains the word द्वार by the word उपाय. Hence, the PM. clarifies the statement in the NY. and must be based on the same text that inspired the statement in the NY. Although neither Jinendrabuddhi nor Haradatta refers to the word द्वारेण directly as a citation by using the word इति after it, their comments are a direct indication of a variant of the reading in the Osmania edition. We represent this case as follows:

```
<app loc='A1.4.20'>
  <lem>muKena</lem>
  <rdg wit='ny pm'>dvAreRa</rdg>
</app>
```

The following is another case where Haradatta’s comments imply a variant reading. Under A. 1.4.3 यू स्राख्यौ नदी, the KV. explains the word यू in the sūtra as ई च ऊ च यू. The PM. quotes this statment in the KV. and further says, क्वचित् विभक्त्यन्तमेव पठ्यते ‘But in some places the form is read ending in a nominal termination.’ This statement indicates that the nominative dual

form य्यौ was read in some manuscript available to Haradatta. We represent this inferred reading in the apparatus as follows:

```
<app loc='A1.4.3'>
  <lem wit='ny pm'>I ca U ca yU</lem>
  <rdg wit='pm' type='kvacit'>yv0</rdg>
</app>
```

### 3.7 Mistakes in the editions of the commentaries

Unfortunately the editions of the *NY*. and *PM*. include mistakes. We have discovered errors of mistaken sandhi analysis, mistaken sentence division, and mistaken quotation in our work so far. The following are three examples.

On A. 1.1.39, there is a set of counterexamples: आधये, चिकीर्षवे, and कुम्भकरेभ्यः. The Osmania edition of the *NY*. reads चिकीर्षवः इति। At first glance, it seems that this is a variant for चिकीर्षवे. चिकीर्षवे is the dative singular of the nominal base चिकीर्षु, and चिकीर्षवः is the nominative plural. The description of the form in the *NY*. is of the dative singular. The *NY*. explicitly states that the form is a dative singular of the nominal base चिकीर्षु, formed by applying the fourth-triplet nominal termination डे and the गुण replacement of the final vowel उ by A. 7.3.111 चेडिति. Thus the nominative plural form चिकीर्षवः does not fit the description given by the *NY*., and the correct form is चिकीर्षवे. Hence there is no variant for the word चिकीर्षवे in *KV*. in the text of the *NY*.

How did the erroneous word चिकीर्षवः come to be found in the edition of the *NY*.? The editors of the Osmania editions often analyze sandhi in an attempt to be helpful to readers. Their original manuscripts must all have read चिकीर्षव इति with regular sandhi. In the Osmania edition of the *NY*., the editors regularly analyze sandhi of examples and quotations followed by इति and place them in quotation marks. The sandhi of चिकीर्षव इति can be analyzed in two ways: चिकीर्षवे इति and चिकीर्षवः इति. Thus wrong sandhi dissolution created what appears to be a variant in the *NY*. when in fact the text has no such variant. On the basis of internal evidence, we infer the correct reading and report it as follows:

```
<app loc='A1.1.39'>
  <lem wit='ny pm'>cikIrzave</lem>
</app>
```

The same sandhi error is made by the editors of the Osmania edition of the *NY*. on A. 1.1.67. The Osmania edition of the *KV*. states तस्मात् इति

पञ्चम्यर्थनिर्देश उत्तरस्यैव कार्यं भवति। न पूर्वस्य। Here the Sanskrit library sandhi-analyzed text reads पञ्चम्यर्थनिर्देशे in the locative. The Osmania edition of the *NY.* states तस्मात् इति। पञ्चम्यर्थनिर्देशः इति। First of all there should not be a full-stop after इति in the phrase तस्मात् इति. Moreover the sandhi-dissolution पञ्चम्यर्थनिर्देशः इति is wrong. As in the preceding example, the proper dissolution is पञ्चम्यर्थनिर्देशे as in the Sanskrit Library's sandhi-analyzed text. Hence we do not report this case as a variant, but take it as support for the text of the *KV.* as analyzed in the Sanskrit Library edition and report it as follows:

```
<app loc='A1.1.67'>
  <lem wit='ny pm'>tasmAt iti paYcamyarTanirdeSe</lem>
</app>
```

On A. 1.1.56 the Osmania edition of the *NY.* includes an erroneous sentence break and erroneous indication of a quotation of the base text. The Osmania edition of the *KV.* reads न अल्विधिरनल्विधिः इत्यर्थः। In the Osmania edition of the *NY.*, Jinendrabuddhi's explanation of the compound अनल्विधि is edited as follows: स पुनः समासो मयूरव्यंसकादित्वात् समासं कृत्वा नञ्समासः कृतः। 'न अल्विधिरनल्विधिः' इति । The editors of the *NY.* put a daṇḍa after कृतः and put single quotes around न अल्विधिरनल्विधिः to indicate that it is a quotation from the *KV.* This is a mistake. Careful reading of the text indicates that the दण्ड should be removed and the passage ending with इति read as a single sentence as follows: स पुनः समासो मयूरव्यंसकादित्वात्समासं कृत्वा नञ्समासः कृतो नाल्विधिरनल्विधिरिति । “But that compound, formed because it is included in the list beginning with मयूरव्यंसक, is formed as a negative tatpuruṣa compound (नञ्समासः): न ‘not’ अल्विधि ‘a phonetic operation’ = अनल्विधि.” The cited phrase न अल्विधिरनल्विधिः is not a citation to the *KV.*; it does not refer to the base text. It is a typical compound analysis of a nañtatpuruṣa compound. Such an analysis may have been made originally by a commentator on the *KV.*, even by Jinendrabuddhi himself, rather than by the authors of the *KV.*. Hence without independent support from manuscripts, it should not be adopted in the text of the *KV.* on the basis of the explanation provided in the *NY.*. However, since the editors of the Osmania edition of the *KV.* have adopted the sentence न अल्विधिरनल्विधिः इत्यर्थः। in their base text, the editors of the Osmania edition of the *NY.* marked न अल्विधिः अनल्विधिः as a quotation from the base text. Unfortunately this is misleading. If it were a quotation from the base text it would have included the closing words इत्यर्थः। We do not accept that the

text of the *NY*. supports the reading न अल्विधिरनल्विधिः इत्यर्थः in the *KV*. and hence refrain from including it in our critical apparatus.

### 3.8 Discrepancies in quotations within different sections in the same commentary

There are many occasions where the commentary on the *KV*. on one sūtra cites text from the *KV*. on another sūtra. Both the *NY*. and *PM*. do this. We mark these cases as support or variants of the text they cite just as we do citations to the base text in commentaries on the cited base text under the same sūtra. If the citation does not differ from commentary on the base text on the same sūtra, we make no addition. However, if the citation constitutes a variant that differs from one under the base text on the same sūtra, or a support for the reading of the base that received no support from the commentary on the base text on the same sūtra, we add an additional *rdg* element containing the new reading with a *source* attribute indicating the sūtra under which that reading was found.

For example, on *A*. 2.3.19, the *Osmania* edition of the *KV*. reads पितुस्त्र क्रियादिसम्बन्धः शब्देनोच्यते। पुत्रस्य तु प्रतीयमान इति तस्याप्राधान्यम्। On *A*. 1.1.56, the *NY*. quotes the text exactly as given in the *KV*. on *A*. 2.3.19. However, while commenting on *A*. 2.3.19, instead of पुत्रस्य तु प्रतीयमान इति तस्याप्राधान्यम्, the *NY*. quotes पुत्रस्य तु प्रतीयमानत्वादप्राधान्यम्, adding the affix त्वात् and omitting इति तस्य. Thus the *NY*. gives two different readings for the same base text at two different places. We report both of these readings as follows:

```
<app loc='A2.3.19'>
  <lem wit='ny' source='A1.1.56'>pituH atra kriyAdisambanDaH Sabdena ucyate.
    putrasya tu pratIyamAnaH iti tasya aprADAnyam</lem>
  <rdg wit='ny'>putrasya tu pratIyamAnatvAt aprADAnyam</rdg>
</app>
```

## 4 Sample results

Below we report the results of 578 readings gleaned from the our tagged data of the third quarter of the first chapter of the *Aṣṭādhyāyī* (*A*. 1.3). Indicated is the number of times the commentators agree with or differ from the base text, agree with or differ from each other, report, approve of or disapprove of variants.

1. Only the *NY.* agrees with the base text: 227
2. Only the *PM.* agrees with the base text: 131
3. The *NY.* and the *PM.* share the same reading which agrees with the base text: 155
4. Only the *NY.* differs from the base text: 24
5. Only the *PM.* differs from the base text: 23
6. The *NY.* and the *PM.* share the same reading which differs from the base text: 9
7. The *NY.* and the *PM.* each mention a reading which differs from the reading of the other: 6
8. The *PM.* is aware of variants: 9
9. The *PM.* received a different reading for which it suggests a better option: 1

Ten percent (10%) of the readings gleaned from the commentators in *A.* 1.3 support a change in the base text of the *KV.* The project of collecting readings from commentators therefore promises to contribute significantly to the establishment of a more correct text of the *KV.*

## 5 Conclusion

The issues discussed demonstrate the depth of understanding required to determine what each commentator must have read and the care required to represent that information accurately. The method of preparing a critical apparatus of readings of the *KV.* attested in the *NY.* and *PM.* described above provides a reliable and well-structured database of valuable information about the text of the *KV.* and its historical transmission that is both human and machine-readable. This database will serve as a valuable resource for producing a critical edition of the *KV.* The results of this project will also reveal the textual history of the *KV.* between when Jinendrabuddhi wrote his commentary in the eighth or ninth century, Haradatta wrote his in the thirteenth century, and the more recent dates of the extant manuscripts of the text. The database will permit one to determine systematically how

much of the text of the *KV.* was known to each of the commentators. It will reveal how many variations occurred in transmission of the text and how many readings have been lost to us in the course of time. The methods used in this project are applicable to similar philological work to prepare an edition and determine the textual history of any Sanskrit text with commentaries or indeed of any commented text extant in the form of manuscripts.

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