

<https://bit.ly/neelesh-critique-on-in-panini-we-trust>

Mr. Neelesh Bodas's (henceforth, Bodas) critique of my thesis can be accessed through the link given above. First, I will respond to the following sections of his critique. Through these examples, he seeks to prove me wrong, so I will focus on these. In brackets, I have assigned alphabets to them to be able to refer to them easily:

Problems with the DOI approach

- Pattern 1 (a)
- Pattern 2 (b)
- Pattern 3 (c)
- Pattern 4 (d)
- Pattern 5 (e)

Important cases missed out from the DOI technique

- Concept 1 (f)
- Concept 2 (g)
- Concept 3 (h)

Problems with the SOI approach

- Pattern 1 (i)
- Pattern 2 (j)

I have created six groups based on the similarities between some of these examples:

Group 1: a, b, c

Group 2: d

Group 3: e

Group 4: f, g

Group 5: h

Group 6: i, j

Group 1

All three examples of this group involve one of the following two rules: 6.1.68 *halñyābbhyo dīrghāt sutisyapṛktaṁ hal* and 6.1.69 *eñhrasvāt sambuddheḥ*. Notice the placement of these rules in the *Aṣṭādhyāyī*:

6.1.66 *lopo vyor vali*

6.1.67 *verapṛktasya*

6.1.68 *halñyābbhyo dīrghāt sutisyapṛktaṁ hal*

6.1.69 *eñhrasvāt sambuddheḥ*

Notice that:

- a. The item undergoing *lopa* should be in the genitive, as it is in 6.1.66, 6.1.67, and 6.1.69. But *sutisi apr̥ktam* in 6.1.68 is in the nominative. This is odd.
- b. The presence of the term *apr̥kta* in 6.1.68 should ring alarm bells. *apr̥ktasya* from 6.1.67 should have become *anuvṛtta* into 6.1.68. There was no need for *apr̥kta* to be mentioned again in 6.1.68.

This tells us two things: one, that someone has possibly edited 6.1.68 and two, that they may have tried to move 6.1.68 from its original position to its current position perhaps in an attempt to put the two *sūtras* teaching *apr̥kta lopa* together (but they forgot to delete *apr̥kta* from 6.1.68).

In his *bhāṣya* on 6.1.68, Patañjali discusses 6.1.68 in the context of some rules from the *asiddha* section – such as 8.2.7 *nalopaḥ prātipadikāntasya* and 8.2.23 *saṃyogāntasya lopaḥ*, which also deal with deletion of word final consonants. It is likely that the original position of 6.1.68 and 6.1.69 was also somewhere in the *asiddha* section, and likely right after 8.2.2 *nalopa supsvaratugvidhiṣu* (so *lopa* could become *anuvṛtta* from 8.2.2 into these two rules).

Putting these two rules in this position in the *asiddha* section (which starts with 8.2.1 *pūrvatrāsiddham*) allows us to correctly derive all three kinds of examples that Bodas mentions in a, b, and c (because there is no longer any scope for simultaneous applicability of these rules with rules that lie outside the *asiddha* section) and also ensures that forms like *rājā* (nominative singular of *rājan*) can still be correctly derived.

I am not suggesting that we should change the order of the rules of the *Aṣṭādhyāyī* for my convenience. I am not arguing for any such reordering at all. I am simply saying that clearly someone has fiddled with both the contents and the position of 6.1.68, 6.1.69 (and 6.1.70) in the *Aṣṭādhyāyī*, so it is not surprising that their current position is creating the derivational problems listed by Bodas in a, b, and c.

## Group 2

In d, Bodas discusses the rules 7.2.117 *taddhiteṣv acāmādeḥ* and 7.2.116 *ata upadhāyāḥ*. He claims this is a case of DOI. It is not. Here's why.

In the *Aṣṭādhyāyī*, most *vidhi sūtras* (operational rules) are governed by *paribhāṣā sūtras* and there can also be conflicts between *paribhāṣā* rules. For example, 7.2.101 *jarāyā jaras anyatarasyām* can be governed by two *paribhāṣās* potentially, namely 1.1.52 *alo'ntyasya* and 1.1.55 *anekālsīt sarvasya*. We choose the latter because it is specifically taught for substitutes made up of more than one sounds / marked with Ś.

However, there are also some rules which themselves play the role of both the *vidhi sūtra* and the *paribhāṣā sūtra* (for want of a better word). Or put differently, they do not need a separate *paribhāṣā sūtra* to govern them. 7.2.116 and 7.2.117 are such rules. I say this because, in these rules, both the operation, i.e., *vṛddhi*, and the exact sound(s) undergoing the operation i.e., first vowel or penultimate sound which is a vowel (which in the case of 7.2.101 is clarified by the *paribhāṣā sūtra* 1.1.55) have been mentioned. The operation in both 7.2.116 and 7.2.117 is exactly the same: *vṛddhi*. So, the only decision to be made is: which sound of the *aṅga* undergoes this operation. The real

conflict is between the ‘*paribhāṣā*’ components (for want of a better word) and not the ‘*vidhi*’ components. Or put differently, all that needs to be decided now is which vowel will undergo the operation and not what the operation should be.

Here, I list the conditions under which each of these rules are applicable and then compare the two relevant conditions which are highlighted in bold. (Please read my thesis p. 67 onwards to understand how I identify the more specific rule)

7.2.116

**-an *a* undergoes *vrddhi* when followed by *ñit* or *ṇit***

7.2.117

**-an *a* undergoes *vrddhi* when followed by *ñit* or *ṇit* (in *TADDHITA*)**

-any other vowel undergoes *vrddhi* when followed by *ñit* or *ṇit* (in *TADDHITA*)

7.2.117 is more specific because it is relevant for *taddhita* constructions alone. It wins, so the first vowel undergoes *vrddhi* and we get the correct form.

### Group 3

About e, Bodas writes:

“The sutra [6.1.63](#) पद्त्रोमास्त्विशसन्धोषन्यकञ्चक्रुदन्नासञ्चस्प्रभृतिषु gives optional आदेश to words like पाद, दन्त, मास etc in presence of शस् and other विभक्तिप्रत्ययः. These आदेशs happen on the LHS and thus the DOI technique would end up in generating a wrong form. For example, to generate the तृतीया, चतुर्थी, पञ्चमी, षष्ठी एकवचन of पाद, in an initial state of पाद + टा / डे / डसिँ / डस्, the sutras [7.1.12](#) टाडसिङ्सामिनात्स्याः and [7.1.13](#) डेर्यः will force the conversion of टा / डे / डसिँ and डस् to (respectively) इन्, य, आत् and स्य, after which even if पाद gets converted to पद् using [6.1.63](#) पद्त्रोमास्.., that would generate incorrect forms like पदेन etc.”

Like the tradition, Bodas interprets 6.1.63 as a rule teaching *ādeśa*. However, I do not think this is an *ādeśa* rule. The *sthānin* (substituendum) is mentioned in the genitive in *ādeśa* rules. No such genitive form has been mentioned in this rule – either explicitly or by *anuvṛtti*.

In my opinion, this rule simply teaches that the listed bases should be included in the *upadeśa* (note that *upadeśe* is *anuvṛtta* from 6.1.45) and are (only) used before certain declensional affixes. The problems Bodas discusses simply do not arise if this rule is correctly understood.

Then Bodas writes:

“This pattern is applicable for words like पाद, दन्त, नासिका, मास, हृदय, निशा, यूष, दोष, उदक आस्य, जरा (ref. [7.2.101](#) जराया जरसन्धतरस्याम् etc).”

When speaking of 7.2.101, I assume he is talking about examples like *nirjara + Tā*, which it is not possible to consider without accepting post-Pāṇinian *paribhāṣās* such as *ekadeśavikṛtamananyavat* which I do not accept. So, I don’t treat this as a Pāṇinian derivation in the first place.

### Group 4

In f and g, Bodas discusses issues involving the choice of the correct affix. In all these examples (namely *pārṣṇitra*, *kuṇḍā*, *bhavya*) the problem revolves around the choice of the correct affix. I will simply respond to the last one because the same argument applies to the rest.

He writes:

“For example, 2.4.35 आर्धधातुके is विषयसप्तमी, and hence in case of adding a यत् / ण्यत् / क्यप् प्रत्यय to अस्, we must first do 2.4.52 अस्तेभूः, and then apply यत् प्रत्यय using 3.1.97 अचो यत्. However, in the DOI technique, without a “look-ahead” we will be forced to apply ण्यत् by 3.1.124 ऋहलोर्ण्यत् giving an incorrect form. Ample such examples can be found out.”

Like any machine, Pāṇini’s machine needs to be fed an input, namely the initial string, so that it might be able to produce an output. The input has to be both correct and semantically sufficient, failing which the machine will not be able to produce the grammatically correct output. What do I mean by ‘correct’? You cannot give the machine the wrong affix (e.g., *ṇyat* instead of *yat*, for example) and then expect it to give you the grammatically correct output. And what do I mean by semantically sufficient? I mean that each meaning-bearing part of the word being derived must find representation in the initial string being fed as the input to Pāṇini’s machine.

So, for example, you cannot just give the machine the root *bhū* and expect it to derive *bhavya* or *bhavanti* or any such form for us. To derive *bhavanti*, we need to give the machine both the root *bhū* which means ‘to be’ and the suffix *tip* which indicates that we are deriving a third person singular form.<sup>1</sup> Similarly, to derive the potential passive participle *bhavya*, we need to give the machine a root which means ‘to be’ and also a *kṛtya* affix which can make it a potential passive participle.

The derivation of the word begins only after the correct and semantically sufficient input is provided to the machine. So, in this case, before we have *bhū + yat*, the derivation cannot begin. And before the derivation begins, DOI cannot arise and 1.4.2, as I interpret it, cannot be applied either. It is for this reason that such derivations have not been included as examples of DOI in my thesis. In sum, this is not a valid counterexample of my interpretation of 1.4.2.

But the question remains: how then do we derive the correct form *bhavya* if we wish to derive this using the root *as*, since Pāṇini does permit this? First, we have to work towards getting our input for the Pāṇinian machine ready. To do this we must go to the *Dhātupāṭha* to pick our root. We pick *as*. We must also have before us all the affixes which can potentially be added to any root to construct a potential passive participle, as we have to pick one of them. To get our root ready, we must check the *Aṣṭādhyāyī* for applicable rules. We know that irrespective of which suffix we choose from amongst those available for constructing the potential passive participle of *as*, it is going to be an *ārdhadhātuka* suffix. So, we must write: *as + <ārdhadhātuka affix>*. We must then apply 2.4.52 *aster bhūḥ (ārdhadhātuke)*. With the base ready, we pick the correct affix *yat*. Now that we have the correct initial string *bhū + yat*, we can use it as the input. Once we enter this input into the Pāṇinian machine, it performs the derivation and gives us the correct output *bhavya*.

## Group 5

While discussing h, Bodas says:

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<sup>1</sup> We also need to tell the machine the voice, tense etc. of the form we wish to derive but that is not the focus of this discussion.

“the shastra recognizes a विप्रतिषेध between [1.4.36](#) स्पृहेरीप्सितः and [1.4.49](#) कर्तुरीप्सिततमं कर्म, and lets us choose the later occurring sutra, [1.4.49](#) कर्तुरीप्सिततमं कर्म in case of the conflict.”

I don’t agree with this position – which is the tradition’s position and also Bodas’s position. There is no conflict here whatsoever, in my opinion. Whether the speaker says *puṣpāṇi spr̥hayati* or *puṣpebhyaḥ spr̥hayati* is entirely up to him or her. In fact, both are correct. It depends on whether the speaker wants to convey the sense of *īpsitaḥ* or that of *kartur īpsitatamaṁ*.

Bodas says: “As another example, the tradition accepts the विप्रतिषेध between [1.1.54](#) आदेः परस्य and [1.1.55](#) अनेकाल् शित् सर्वस्य and selects [1.1.55](#) अनेकाल् शित्सर्वस्य on the account of परत्व. But when it comes to Dr. Rishi’s approach, it is not clear how to compare these sutras. If we consider this as SOI, then it is not clear which one would win, and why.”

I have discussed this issue in appendix A of my thesis. Let me say again, the general exception framework takes care of all SOI conflicts, and also conflicts between pairs of *saṁjñā* and *paribhāṣā* rules. The general exception framework is an inherent part of the *sūtra* style and thus Pāṇini does not deem it necessary to explicitly say that the exception (more specific rule) beats the general rule.

## Group 6

In both i and j, we see examples of SOI.

In i, Bodas talks about the conflict between 6.4.77 *aci śnudhātubhruvām yvor iyaṇuvaṇau* and 7.3.84 *sārvadhātukārdhadhātukayoḥ*. Here are the conditions in which the two rules are applicable. The relevant conditions are highlighted in bold. Note that the *paribhāṣā* 1.1.5 *kniti ca* is relevant here as it restricts the domain of application of 7.3.84.

6.4.77

- ***i/u of śnu/any dhātu + vowel***

*bhrū + vowel*

7.3.84

- ***i/u of śnu/any dhātu + vowel (affix not marked with K, G, Ṇ)***

-all other cases where this rule is applicable (affix not marked with K, G, Ṇ)

7.3.84 is more specific because it is only applicable if the affix is not marked with K, G, Ṇ and thus wins. To understand such examples better, see p. 162 of my thesis.

Now let us look at j which involves SOI between 7.1.58 *idito num dhātoḥ* and 6.1.75 *dīrghāt*. In this case, Bodas himself admits: “it isn’t very clear to me which of the two would be considered more specific”. Let’s compare the two.

7.1.58

**Any long vowel + *ch* (in a root marked with *l*)**

Any other situation (in a root marked with *l*)

6.1.75

### Any long vowel + *ch*

Compare the two conditions in bold. 7.1.58 is more specific and thus wins.

Now, onto Bodas's rhetoric. He writes:

"I sincerely wish Dr. Rishi was more careful with his words in his media interactions, and was extra-cautious while talking about the tradition, which is deeply respected by millions of Sanskrit lovers, including myself."

My goal is not to attack the tradition but to examine what traditional scholars have said dispassionately. Disagreement is not tantamount to disrespect. I respect the tradition and want to keep its legacy of spirited disagreement alive.

He writes:

"I do not support, believe, or encourage statements like "2500 year old puzzle solved" or "Katyayana chose wrong interpretation" and so on."

Why is it considered heretical / blasphemous to say that Kātyāyana chose the wrong interpretation? It is unfortunate that in some Indian circles such a narrative is being promoted. Furthermore, Bodas goes on to call the tradition divine and explains why this is the case:

"I received multiple queries on why the tradition is being called divine. The answer is simple - The tradition considers व्याकरणशास्त्र not just as a method of separating the right forms from the wrong forms, but also as a दर्शन (something that shows the road of eternal freedom and happiness), and moreover one of the easiest tools to achieve the मोक्ष. Quoting Bhartruhari's words - इयं सा मोक्षमाणानाम् अजिह्मा राजपद्धतिः. Therefore in my view, both (व्याकरणशास्त्र, and the tradition that shapes it) are none less than divine."

I sure hope Bodas gets *mokṣa* by performing grammatical derivations. Whilst I do worship certain Hindu deities, I don't worship Kātyāyana, and even if I did, I would still disagree with him if the evidence led me to do so. Our personal, spiritual endeavours should not interfere with our scholarship. Instead, they must aid it.

Bodas also writes:

"Dr. Rishi's new interpretation of the परे word has too many flaws, which I will enumerate in the next section. The technique will need a significant reshaping and would need more exhaustive testing (at least 100,000 more examples, possibly using automated systems), before it can be called as "sound"."

He adds:

"For every new approach that you suggest, do an exhaustive testing, at least for 100,000 forms. Unless we do such a testing, it is not correct to even think that your approach is correct."

I wonder if Bodas has tried to teach the entire *Aṣṭādhyāyī* to the computer using the traditional method. Has he tested the traditional method using 100,000 examples? If not, then why has he accepted it as correct? Is it simply because it is hundreds of years old? That does seem to be the case, because he says: "it is not immediately clear to me why his SOI technique is better than the traditional उत्सर्ग/अपवाद techniques (which have been well tested over the last 1000+ years)". He does not bother to explain how it has been tested. Just because something is old, that itself does not mean it is inherently good – or bad, for that matter.

The fact is, if one is to follow the traditional method, then one would need to teach hundreds of *vārttikas*, *bhāṣyas*, and *paribhāṣās* to the computer in addition to the rules of the *Aṣṭādhyāyī* to help it resolve conflicts. I would go so far as to say that it is impossible to teach the *Aṣṭādhyāyī* as a whole to the computer using the traditional method since it relies so heavily on very complicated post-Pāṇinian *paribhāṣās*.

I can only say in conclusion that it is understandable that scholars who have spent decades internalizing the traditional method of understanding Pāṇini's grammar will find it difficult to accept a new interpretation. I invite scholars to consider the evidence I have presented with an open mind. We may disagree on certain things, but we must remember that all of us share a common goal: the advancement of our knowledge of the workings of Pāṇini's grammar.