THREE MYTHS IN MODERN PĀṆINIAN STUDIES

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> *Man muss ... die Hoffnung aufgegeben haben,*
> *diesen Widerstreit ... damit zu beendigen,*
> *dass irgend eine einzelne Ansicht der andern*
> *absolut Meister werden, ein System das andere unterjochen könne.*
> F.W.J. Schelling, Erlanger Vorlesungen, IX 210.

1. Introduction[1]

1.1

The western discovery of Pāṇini's grammar, "the earliest grammatical treatise extant on any Indo-european language, and the earliest scientific work in any Indo-european language" (Robins 1979:144), gave an important impulse to the development of linguistics in the nineteenth and twentieth centuries.

From the beginning, Pāṇini's system made a deep impression on western scholars, but its richness in information and the subtleties in the grammatical procedures it presupposes came to be appreciated only in the course of the twentieth century, with the publication of studies such as Paul Thieme's *Pāṇini and the Veda* (1935), Herman Buiskool's *The Tripādī* (1939), and challenging comparative studies such as Paul Kiparsky's and Frits Staal's "Syntactic and semantic relations in Pāṇini" (1969). The study of Pāṇini's grammar and its tradition came to be widely acknowledged as being not just of cultural and historical importance, but also of considerable scientific significance, especially against the background of the developments in generative grammar in the latter half of the twentieth century.[2]

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2   Cf. now Seuren 1998 for a historical introduction to Western linguistics with critical attention for the episode of Chomskyan linguistics, and Searle 2002 for observations on three decades of research after "Chomsky's Revolution in Linguistics".

The growing number of highly specialized publications on Pāṇini and his
tradition made the entrance into the field ever more difficult, to serious students
of Sanskrit as much as to serious students of linguistics. Cardona's *Pāṇini: A
Survey of Research* (1976), giving a bibliographic overview plus a systematic
and critical discussion of major research done up to 1975, was therefore greatly
welcomed by beginning students as well as advanced specialists. Its biblio-
graphic part (pp. 3-136) is nearly complete within the limits the author had set
for himself, while the systematic part (pp. 139-371, the Survey proper) can serve
as an excellent introduction to the field, the achievements up to 1975, the major
issues of scholarly discussion, the principal views on these issues as defended by
various scholars, and the evidence on which they based themselves. Cardona's
Survey of Research has become exemplary also to scholars in other fields of
Indological research. Thus, Harry Falk (1993) introduces his overview of re-
search on "Script and Writing in ancient India" with a reference to Cardona's
Survey, and remarks that research on many aspects of Indian culture would profit
from similar careful surveys, as these would help scholars to avoid repeating old
arguments without stating anything new.

Cardona's *Survey* now has a successor: *Recent Research in Pāṇinian
Studies* (RRiPS) (Delhi: Motilal Banarsidass, 1999). It consists of a biblio-
graphic part, pp. 3-93, and a Survey, pp. 97-322. In addition, RRiPS contains
three indices: one of author names and one of primary sources in the present
volume, and a third one of primary sources in the previous volume, the *Survey of
Research* (SoR). The survey or text part of RRiPS is understandably different in
character from that in the SoR, as the focus is on new publications since 1975.
However, the critical discussion of these publications is throughout linked to the
systematic overview in SoR. A new division into paragraphs is employed in
RRiPS, but the corresponding paragraphs in SoR are given in brackets. More
than in SoR, the author dives into specific issues and argues elaborately for the
position which he has taken in often longstanding controversies. The tone of
discussion remains relatively balanced,[3] that is, polemic discussion is less

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3   While scholarly polemics may serve a useful purpose by stimulating discussants to make all
     their arguments explicit, a discussion may also get stuck in polemics which contributes no
     new arguments or valuable insights to the issue. A sample of a passage in RRiPS where the
     author has slipped into a style with polemic but no informative value is found on p. 175. I
     will briefly analyse this passage because the unalerted reader may take it for a passage of
     strictly argumentative character. Cardona writes: "He [i.e., Kiparsky, JH] says (1991a:337),
     'To both supply these roots with diacritic *Ī* and list them in rule 7.2.57 is a pointless compli-
     cation. And crucially, it is not a complication which could have arisen as well-intentioned
     improvement in the normal course of textual transmission, since it creates an anomaly

dominant than in an earlier, "preliminary" successor to the SoR, the article "Pāṇinian Studies" (Cardona 1989), which received a polemic answer from Kiparsky (1991). The bibliographical data dealt with in "Pāṇinian Studies" have found their way to the RRiPS, while the major topics discussed there return as elaborately discussed issues.[4]

1.2

As their location in RRiPS is not immediately clear from the table of contents or the first two indices,[5] I will list the topics which have given occasion to elaborate (more than five-page) critical discussion of the views of others.

(a) Pp. 113-140: in almost 27 pages the author discusses the view propounded by S.D. Joshi and J.A.F. Roodbergen (1983), and later on defended by P. Kiparsky (1991), that "Pāṇini's original grammar dealt only with the formation of padas in utterances," while "the sections of rules dealing with taddhita

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which commentators are at a loss to explain.' Precisely what Kiparsky means by 'which commentators are at a loss to explain' is not clear. He could mean that commentators were aware of the issue but could not come to a reasonable solution. On the other hand, he does not refer to any of the pertinent commentatorial statements, so that he could also mean that commentators were unaware of the issue. Or it could be that Kiparsky himself is unaware of what the commentators have said."

At first sight, Cardona seems to investigate three logically possible interpretations of Kiparsky's statement 'which commentators are at a loss to explain'. In fact, however, only the first possibility can have been sincerely intended by someone writing this statement. The second and third possibility amount in different ways to one and the same rather serious accusation: Kiparsky suggested familiarity with the commentators' arguments, although he had in fact no idea of what they had to say on the issue. If we adopt a more generous attitude and accept Kiparsky's statement as sincere and authentic even in the absence of an explicit proof that he studied the commentaries in sufficient detail, the controversy on this point amounts to the following: the way commentators have dealt with the problem under discussion is fully satisfactory to Cardona, but their solutions are unconvincing for Kiparsky. Whether or not we ultimately agree with Cardona's view, his representation of this issue is highly biased and polemical, and not in harmony with the avowed aim of the book, viz., "to inform readers of work that has been done and of trends in the field," and to deal "with points of view and evidence" when "reporting on controversies" (RRiPS, Preface, v).

4   References to other surveys and bibliographic overviews relevant to Pāṇinian grammar are given at RRiPS p. 104-105. For the omission of P.C. Verhagen's 1994 survey of material and research on Sanskrit grammarians (including Pāṇinians) in Tibet see below.

5   Sections in the table of contents covering a larger number of pages usually betray the elaborate discussion of controversial issues, but may also indicate that the author refers to a number of publications under a certain heading, as in the case of pp. 189-197 where the author deals with various contributions on Pāṇinian syntax.

affixation and compound formation constitute later additions" (RRiPS p. 113). The author concludes that he considers "a much more conservative approach to be appropriate."

(b) Pp. 155-161: almost six pages are devoted to the controversy on the precise meaning of *siddha* and *asiddha* in Pāṇini's grammar. According to Cardona, a rule in the Tripādī, the last three *pādas* of the Aṣṭādhyāyī, "is suspended *(asiddha)*—that is, treated as non-existent—with respect to a sūtra of the preceding group and within the tripādī a sūtra is suspended with respect to a prior rule" (RRiPS p. 155). If rules "are siddha with respect to each other, this means simply that they exist with respect to each other and are free to interact when the occasion arises" (RRiPS p. 159). The view of Joshi and Kiparsky (1979), amounting to the claim that a rule being *siddha* means that it interacts with another rule *in a particular manner* is rejected.

(c) Pp. 162-179: in ca. 16 pages the author explains his rejection of Kiparsky's thesis that in the Aṣṭādhyāyī the terms *vā, vibhāṣā* and *anyatarasyām* refer to different kinds of option, whose distinctions were already lost sight of in the earliest commentarial tradition.

(d) Pp. 221-229: eight pages dealing with the problem of the *vārttika-bhāṣya* structure of the Mahābhāṣya, the problem of the original *vārttika*s in the first section of the Mahābhāṣya; the views on these problems expressed by Kielhorn, R.G. Bhandarkar, Bronkhorst, Joshi & Roodbergen, Wezler, are critically discussed, and Cardona's own view is set forth.

(e) Pp. 250-265: almost fifteen pages deal with the problem of the authorship of the Vṛtti on Bhartṛhari's Vākyapadīya.

Below, brief comments will be given, mainly on three of these issues: a (section 2.1 [pp. 125-129]), c (section 2.2 [pp. 129-144]) and e (section 2.3 [pp. 144-157]). In the course of my discussion of the issues it will become clear that Cardona's stance, but also that of several of his dialogical partners, involve a cluster of methodological and theoretical choices which are insufficiently subjected to critical reflection. It will hence be appropriate to conclude with an attempt to make explicit the underlying choices and give a brief, critical consideration of three dominant "myths" in modern Pāṇinian studies as reviewed by Cardona in SoR and RRiPS, and as pre-eminently exemplified in his own work.

2. Three issues

2.1 Relations between rules in Pāṇini's Aṣṭādhyāyī: the issue of possible interpolations

The Joshi-Roodbergen theory regarding substantial and systematic interpolations in Pāṇini's Aṣṭādhyāyī (Joshi & Roodbergen 1983) was already critically discussed in Cardona's "Pāṇinian Studies" (Cardona 1989:50-52). There, the author concentrated on the difference in terminology noted by Joshi and Roodbergen between sections dealing with compound and *taddhita* formation (reference is made to the endings or *vibhakti*s) and other parts of the grammar, esp. rules dealing with *kṛt*-formation (reference is made to *kāraka*s). He argued that "the difference in terminology among the rules in question reflects a well wrought and organized system of derivation" (Cardona 1989:52), and concluded that:

> Recent claims of massive interpolation in the received text of the Aṣṭādhyāyī thus not only continue a long-standing tendency (see note 2) to find evidence of such interpolations on a large scale, they also continue to reflect on the part of scholars who insist on finding such interpolations an inability or unwillingness to perceive in the work clear and well conceived principles of organisation. (Cardona 1989:52)

Kiparsky (1991) protested vehemently to Cardona's brief critique of Joshi and Roodbergen's article, especially to Cardona's focus on distinctions in terminology as noticed by Joshi and Roodbergen, and his neglect of more basic reasons for different authorship mentioned by them, such as the underlying distinctions in methodology in the different sections.

Cardona thinks Kiparsky's defence of Joshi and Roodbergen's theory is "without merit" (RRiPS p. 119), but after concluding this he devotes another 21 pages to the issue to explain his position. The discussion contains a number of new and valuable observations in connection with Joshi and Roodbergen's theory. If Kiparsky's protest against Cardona's initial brief critique would have had "no merit" otherwise, then it has at least the merit of having stimulated this elaborate discussion of the issue.

Among the new elements in Cardona's treatment is his discussion of the question: what if the terminology in the sections contrasted by Joshi and Roodbergen were different? In other words: suppose the rules in the compound and *taddhita*-sections would not employ the *vibhakti*-terminology but a *kāraka*-terminology? To ask this question is a step forward compared with Cardona's 1989 criticism where he simply demonstrated that the system as it is works well. Cardona's example in RRiPS is:

A. 2.1.24 says *dvitīyā śrita-atīta-patita-gata-atyasta-prāpta-āpannaiḥ*, and provides for a compound such as *grāma-gata-* "gone to the village". Suppose there would be a rule:

> *A. 2.1.24: *karma śrita-atīta-patita-gata-atyasta-prāpta-āpannaiḥ.*

Would this rule have the same value as the preceding one? As an answer to this, Cardona first asserts that "the terminology which Joshi and Roodbergen see as an indication of interpolation fits perfectly with the system of a single grammarian, Pāṇini" (RRiPS p. 115). Indeed, the terminology does fit well. But then we read: "Moreover, it is not the case that *2.1.24 would be a well formed rule equivalent to A. 2.1.24." Next, he tries to show—not that the rule is not well formed, but—that the postulated rule is not equivalent to the available one:

> For as a pada *grāma-am* refers to a karman, so also does a pada such as *grāma-s₁*, as in *devadattena grāmo gataḥ*. A compound form *grāmagatas* in *devadatto grāmagataḥ* 'Devadatta has gone to the village' alternates with a pair of related padas, as in *devadatto grāmaṁ gataḥ* 'Devadatta has gone to the village', but **devadattena grāmagataḥ* does not alternate with *devadattena grāmo gataḥ*. (RRiPS p. 115)

The argument as presented here, however, suggests that as far as the *kāraka*s are concerned there would be no difference between *grāmam* and *grāmas*. In Pāṇini's system, however, although *grāmaḥ* in *devadattena grāmo gataḥ* does represent the karman, karman is not expressed by *grāmaḥ*. A basic feature in the interface between Pāṇini's *kāraka*s and endings is the principle that a *kāraka* is expressed by a linguistic form (e.g., a nominal ending) only if it is not already expressed (A. 2.3.1, *an-abhihite*) in another form (e.g., a nominal or verbal ending, *kṛt* or *taddhita* affix, or compound). In the example *devadattena grāmo gataḥ*, the affix *ta (kta)* has the capacity to express karman according to A. 3.4.70 *tayor eva kṛtya-kta-khal-arthāḥ* "kṛtya affixes, **kta** and **khal** are introduced to denote these two only (viz. karman and *bhāva*, A. 3.4.69)". Since *grāma* is the karman (what is desired most by the agent, A. 1.4.49) of the action *gam* one could consider giving it the second triplet ending *am* according to A. 2.3.2 "a second triplet ending is introduced to denote karman"; but since karman already finds expression in *ga-ta*, we have to apply instead A. 2.3.46 *prāti-padika-artha-liṅga-vacana-mātre prathamā* "A first triplet ending is introduced to denote only (a) the meaning of the nominal stem, (b) its gender, (c) measure, and (d) its number." There is hence an obvious difference between *grāmaḥ* in *devadattena grāmo gataḥ* and *grāmam* in *devadatto grāmaṁ gataḥ*: karman is expressed in *grāmam* but not in *grāmaḥ*. In a consideration of whether or not a

rule *A. 2.1.24: *karma śrita-atīta-patita-gata-atyasta-prāpta-āpannaiḥ* would have been feasible one would have to take into account the possibility of interpreting *karma* here as *karma* that has actually been expressed *(abhihita)*. An investigation in this direction may or may not lead to accepting *A. 2.1.24: *karma śrita-atīta-patita-gata-atyasta-prāpta-āpannaiḥ* as feasible, but what is important is that the terminology, as often in Pāṇini's system, implies a distinct methodology, and has hence profound systemic implications. That Cardona has now at least asked the question of the feasibility of *A. 2.1.24: *karma śrita-atīta-patita-gata-atyasta-prāpta-āpannaiḥ* is therefore a step forward, as it brings us beyond the initial appreciation of Pāṇini's system to the question whether different methods in definite sections of his grammar would have worked as well, and finally to an evaluation of the system as a whole. To show that a section in the grammar works well (as Cardona did in 1989) is one thing, to show that it works in the best (or only) possible way is quite another. It is this important question which Joshi and Roodbergen had started to ask in their 1983 article, while they had profound mastery of the system as it is—which evidently is an absolute prerequisite before the question can be asked in a meaningful way. Could a *kāraka*-terminology (with all its methodological implications) have replaced the *vibhakti*-terminology (with all its methodological implications) in the compound and *taddhita* sections as available at present? Some adjustments may be necessary, just as Pāṇini's system as we know it is full of adjustments to take away undesired side-effects of certain rules. The question leads to an evaluation rather than just a description of the methodology used by Pāṇini, and Cardona has now at least made a small step in that direction.

Another new element in Cardona's discussion is that he addresses the section A. 1.2.53-57, and is ready to see it as an instance of post-Pāṇinian and pre-Kātyāyana interpolation—against which he argued so vehemently in general terms in 1989, entirely neglecting this specific section although it formed part of the argument in Joshi and Roodbergen's 1983 article. This explicit acknowledgement is a shift also compared to SoR, where he emphasized in general that accepting interpolations should be avoided. There he admitted that there are "recalcitrant cases for which I do not see an immediate solution" (SoR p. 158), but with regard to the already in 1975 much-discussed rules 1.2.53-57 he restricted himself to reporting that these rules have been seen as an interpolation by some whereas others defended their authenticity (SoR p. 159, first five lines, plus notes 69-73 on p. 322), thus *suggesting* the applicability of his general position: do not accept interpolations. It is of course quite acceptable if scholars change or modify their position over time, but if this remains unacknowledged— or if even non-change in position is suggested—it is the reviewer's task to point

it out. This shift (precisely in the direction of what Joshi and Roodbergen stated in 1983) must have occurred between 1989 and 1997, since A. 1.2.53-57 are in Cardona 1997:590-606 (to which reference is made in RRiPS p. 119) discussed as interpolations. What Cardona still objects to in Joshi's and Roodbergen's position is that by accepting A. 1.2.53-57 as interpolated one could suspect also some immediately associated rules (viz., A. 1.2.49-52: the whole section 1.2.49-55 deals with *taddhita*-formations) to be interpolated. Cardona is unwilling to accept A. 1.2.49-52, which do not conflict with other parts of Pāṇini's grammar, as interpolated.

The problem of A. 1.2.53-57 is one of the topics under the heading "internal inconsistency" in Joshi and Roodbergen's 1983 article, which Cardona in RRiPS tries to explain as much as possible in accordance with the view of a text of Pāṇini's grammar which received no major reworkings between Pāṇini and Kātyāyana-Patañjali. The headings of other sections in Joshi and Roodbergen's article addressed by Cardona are "discrepancies regarding the way meaning is indicated", "discrepancy regarding the way in which words are analysed into stems and suffixes", "break of logical order due to the introduction of unrelated topics", "inconsistency in the use of *anubandha*s". Let me here simply note that both Joshi and Roodbergen's challenges and Cardona's defences of the grammar's consistency are important and stimulating.

In the course of the remainder of Cardona's long and valuable discussion (which cannot be dealt with in detail here), it becomes clear that there has been another marked shift in Cardona's attitude and position since his 1989 critique. While in "Pāṇinian Studies" his criticism of Joshi and Roodbergen amounted to the accusation that they had failed to perceive rather obvious principles of organization in Pāṇini's Aṣṭādhyāyī, we find in RRiPS a more profound and appreciative evaluation of Joshi and Roodbergen's arguments. Moreover, in 1989 it was emphasized that the formulation and organization of the rules are entirely justified so that there is "no inconsistency pointing to interpolation"—though 1989 note 9 on p. 75 it is conceded that modifications may have crept into the received text of Pāṇini's Aṣṭādhyāyī, and that it is "wholly possible and indeed probable" that Pāṇini took over technical terms as well as entire sūtras from predecessors (the *pūrvācārya*s, several of them mentioned by name). In RRiPS, however, Cardona concludes his long discussion of the arguments with the admission that there are "certain apparent inconsistencies" with which "we must live". He even characterizes Pāṇini's work as "the work of a vyāsa comparable to the Vyāsa of the Mahābhārata" (RRiPS p. 140). These are quite remarkable statements from the author of the 1989 defence of Pāṇini's Aṣṭādhyāyī exclusively as "a well wrought and organized system of derivation" (1989:52)

not stemming from different authors, where "what is claimed to be inconsistent may well appear to be so only in the limited vision of the scholar putting forth the claim" (1989:50). Characterizing Pānini as a *vyāsa* or (intelligent) arranger of texts clearly opens the door for more systematic heterogenity in the Aṣṭādhyāyī than that caused by the incidental adoption of technical terms and occasional sūtras from previous grammarians.

Indeed, what the arguments of Joshi and Roodbergen basically show is (a) that there is some systematic heterogenity in Pānini's system (one may side with Cardona in not always regarding this as involving full-fledged contradiction). Their subsequent step (b) is to say that this reflects separate authorship of the relevant sections, and their final step (c) that the text as known to Kātyāyana had already undergone major alterations since Pānini.

In RRiPS, Cardona has come close to accepting (a) and (b)—close, in the sense that *systematic* heterogenity is not explicitly accepted by Cardona, though it is suggested in his comparison of Pānini with Vyāsa as "arranger" of the Mahābhārata. As final step (c) Cardona considers Pānini to be the last in a row of authors/redactors with a major impact on the Aṣṭādhyāyī as received by Kātyāyana (apart from some exceptions, esp. regarding the significant passage A. 1.2.53-57).

From this point of view, the controversy between Cardona and Joshi & Roodbergen now amounts to the question whether the Aṣṭādhyāyī as known to Kātyāyana represents (more or less) the final product of a series of authors/ redactors ending with Pānini, or whether this text received significant re-modelling under one or more authors/redactors also after Pānini. In addition, the controversy pertains to the exact nature and extent of the heterogenity and the relation between different rules and sections of rules in Pānini's system. Thus, though he has not acknowledged this, Cardona's position on several points of controversy has shifted considerably since his 1989 discussion.

2.2 *Variation in options?*

With regard to issue (c) mentioned above, viz., Kiparsky's thesis that in the Aṣṭādhyāyī the terms *vā, vibhāṣā* and *anyatarasyām* refer to different kinds of option, whose distinctions were already lost in the earliest commentarial tradition, it may be well to make a few observations on the scholarly reception of the book in which the thesis was first presented. Among the first reviews of Kiparsky's *Pānini as a Variationist* (1979) is the one by Hartmut Scharfe (1981) (not recorded by Cardona in RRiPS). Scharfe finds Kiparsky's work "one of the most stimulating books written on Pānini's grammar." According to him:

It shows the potential benefits to Pāṇinian studies if a modern linguist applies his thinking to old philological conundrums. It is true that there are also potential dangers and pitfalls as anybody knows who has followed the recent discussions on Pāṇini. But this is a moment of satisfaction, when an ancient riddle is solved and our insight into the history of Sanskrit is aided by the recovered perspective of such a competent insider as Pāṇini himself.

With regard to Pāṇini's terminology Kiparsky demonstrated in detail that grammatical terms, leaving apart the optional terms, are generally defined, and that no synonyms are used. According to Scharfe 1981:353, some difference in meaning can be maintained also in the only case of synonymy with a grammatical term which Kiparsky was willing to accept, that of *gotra* (defined in A. 162) and *vṛddha*.

Johannes Bronkhorst (1982) sees as the main aim of Kiparsky's book "to show that the words *vā, vibhāṣā* and *anyatarasyām* in Pāṇini's Aṣṭādhyāyī do not—as has always been supposed—all mean the same thing, viz. just 'optionally', but rather have three different meanings, viz. 'preferably' *(vā)*, 'preferably not' *(vibhāṣā)* and 'either way' *(anyatarasyām)*." Bronkhorst thinks that Kiparsky has established this thesis "beyond reasonable doubt". The strongest support for Kiparsky's thesis is found, according to Bronkhorst, in Pāṇini's Aṣṭādhyāyī itself, "where Kiparsky could find but a single example of the use of a less-favoured form, against forty-three rules which were applied in the text only with the favoured form as predicted, without any exceptions" (p. 55). Kiparsky also tested his thesis against the evidence of Vedic literature and of classical sanskrit, and here the question of Pāṇini's date with relation to Vedic texts starts to play a role, to which issue Bronkhorst devotes the main part of his review.

Rama Nath Sharma (1983) is not convinced by Kiparsky's argument because it pertains only to a subset of the terms used by Pāṇini to express option *(bahulam, ekeṣām,* etc.). Even then, he keeps open the possibility that further research can justify Kiparsky's claim that Pāṇini was not only aware of linguistic variation, but that he also indicated it in his linguistic description.

According to the review of Madhav Deshpande which appeared in *Language* in 1984, "Kiparsky's work is a landmark publication in the field of Sanskrit grammar." Deshpande sees as the central issue of Kiparsky's work "the correspondence between terms and concepts," which normally have a one-to-one relationship, "though a few exceptions are noted." With regard to the main issue in Kiparsky's book, the meaning of *vā, vibhāṣā* and *anyatarasyām*, Deshpande provides some background information in the form of a quotation from the Mahābhāṣya and references to recent pre-Kiparsky statements on Pāṇini's terms for optionality (Joshi & Roodbergen 1971:159 and Deshpande 1978:73). Ac-

cording to Deshpande, "With some 2500 years of Pāninian commentators and their modern followers believing that *vā*, *vibhāṣā* and *anyatarasyām* are synonyms, one must admire K's courage in starting with the hypothesis that each term may denote a different kind of option, and also appreciate his originality in seeking valid methods to prove his hypothesis." Deshpande finds that "K's main arguments come from a systematic comparison of P's optional rules with the attested facts of Sanskrit usage."

> K has compared P's optional rules with preferences found not only in the Vedic literature, but—most importantly and ingeniously—with the Sanskrit usage of Pānini himself, as seen in his own rules. Methodologically speaking, this is K's most significant contribution. Traditionally, it is believed that Sanskrit is an eternal language, and the works of Pānini, Kātyāyana, and Patañjali are held as authoritative sources. Historically, however, P was writing a grammar of the traditional Vedic texts and of his own contemporary Sanskrit. What better way do we have to assess his rules than to check them out against his own usage? In K's Chap. II, 'Pānini and the *Aṣṭādhyāyī*' it is shown convincingly that the preferences shown by P's option rules substantially match those reflected in his own usage. (Deshpande 1984:163)

After a few observations on Kiparsky's chapters dealing with "Pānini and Vedic" and "Pānini and Sanskrit," where the preferences following from a Kiparskyan reading of Pānini's option rules match the forms found in the texts significantly but with some exceptions, Deshpande continues:

> The strength of K's argument lies in several factors. First, his arguments are based on data which others, with effort, can verify. Second, numbers are on his side: though he admits himself that some rules go against his hypothesis, an overwhelming proportion supports his interpretation. This procedure requires some discussion. Traditionally, if a grammarian offered one counter-example to a given interpretation, that was sufficient to demolish the interpretation. But K's claim is of a different order: he claims 'high probability' for his hypothesis, and such probability is fully justified in terms of the number of rules which support his interpretation. Thus, to disprove K's 'high probability', it is not sufficient to point to a few rules where his judgement may be proved wrong; rather, one must prove that a larger proportion of rules goes against his hypothesis. Most Pāninian scholars are unfamiliar with this 'probability' concept; but considering that we are not dealing with a textbook on mathematics, but with an archaic grammar describing the language spoken in northwestern India in the 5th century B.C. (about which our independent knowledge is imperfect), all that one can expect to achieve is a 'high probability' for one's interpretation. This is the real strength of K's book: he might be proved wrong in several individual interpretations; yet his basic claim seems to be better justified than the alternative of blindly clinging to the traditional belief that these terms mean the same. (Deshpande 1984:163)

After this, Deshpande continues with points in Kiparsky's book that "can be improved upon," and "some individual arguments" that "can be rejected outright." Here he discusses especially some problems with "A rule that needs a better treatment than K's", viz. A. 7.2.15 *yasya vibhāṣā*. Deshpande concludes with observing that "Despite such occasional problems, K's main thesis is well established, and can serve as a guiding principle in solving remaining problems."

In the same year 1984 another review appeared of Kiparsky's book, by Pierre-Sylvain Filliozat (overseen by Cardona in RRiPS). Filliozat discusses critically several of the arguments Kiparsky used to support his argument, and finds that "la confrontation des règles optionnelles avec l'emploi" forms his strongest argument. Filliozat draws attention to problems in Kiparsky's treatment of A. 7.1.70, 78-80, and is not convinced by his treatment of A. 2.1.11-12, 18. Drawing attention to the importance of Pāṇini's grammar as modeling factor for subsequent users of Sanskrit in "plus de deux millénaires," he sees limited value in a reconstruction of "une conscience linguistique qui serait propre à Pāṇini et ignorée du reste des utilisateurs du sanskrit," but does not deny that Kiparsky has significantly contributed to such a reconstruction.

In 1986 a review appeared of Kiparsky's book by Rosane Rocher (not recorded in Cardona's RRiPS), who characterized it, just as Deshpande, as a "landmark in Pāṇinian studies." Rocher points out three features which give a priori attractiveness to Kiparsky's thesis of the differentiated meanings of *vā*, *vibhāṣā* and *anyatarasyām*.

> First, it removes a seeming inconsistency in Pāṇini's grammar, viz., the use of three synonyms, which is all the more difficult to accept since one is the object of a formal definition. Second, it makes sense of the definition *na veti vibhāṣā* (1.1.44), in which the negation *na* would be not only redundant, but ununderstandable if *vā* and *vibhāṣā* were synonyms. Kiparsky's interpretation, to the contrary, makes *vā* and *vibhāṣā* antithetical, or complementary: "*vibhāṣā* means 'not *vā*', i.e., 'preferably not'." Third, it gives the three terms technical meanings which are close—though not very close—to their non-technical meanings. (Rocher 1986:862)

Rocher continues with a brief review of how Kiparsky went about to support his thesis with reference to the usage attested in the Aṣṭādhyāyī, in Vedic texts and in Sanskrit texts. She further observes that "If Kiparsky's novel elucidation of Pāṇini's optional rules is right, as it appears to be, an inescapable conclusion is that the entire commentarial tradition, from Kātyāyana onward, is shown not to have a special, direct filiation from Pāṇini's teaching, since it has no inkling of the real state of affairs with regard to optional rules."

Apart from these generally positive or even enthusiastic reactions, there were also less favourable receptions of Kiparsky's thesis, as in Devasthali's 19-page review article "Pāṇini and the Aṣṭādhyāyī—A Critique" (1981),[6] which Cardona curiously fails to mention in his bibliography in spite of its length and pertinence. Devasthali directly addresses and criticizes the employment of evidence by Kiparsky to support his argumentation, and draws attention to the problematic status of some of Kiparsky's examples. He shows that several preferences evinced by Pāṇini that Kiparsky took as indications for Pāṇini's preference for the *vā* option or avoidance of the *vibhāṣā* option, could also be explained as due to Pāṇini's preference of shorter terms over longer ones (to increase the brevity of the grammar).[7] While he neglects the fact that the desire to attain brevity does not in all cases accord with Pāṇini's choice between optional forms,[8] Devasthali does not seem to realize that if it is found that very often Pāṇini's preference for shorter alternatives accords with the alternatives he indicates by *vā*, and his avoidance of longer ones with the alternatives he indicates by *vibhāṣā*, this finally confirms the link between *vā* and preferred alternatives, and *vibhāṣā* and avoided alternatives.[9]

While we saw above that scholars generally think that Kiparsky established his thesis beyond reasonable doubt, the author of "A tale of three terms *(vā, vibhāṣā* and *anyatarasyām)*" (paper presented at a 1981 conference), Yajan Veer, places himself beyond any reasonable argumentation when he asserts: "There is a tradition current in India regarding the Sanskrit grammar which the outsiders do not have and without that tradition it is not possible to understand

6   Devasthali 1983b continues the criticism for Pāṇini's Vedic rules, 1983a focuses on the problem of the interpretation of *vibhāṣā*.

7   "[...] in all cases where PK finds his hypothesis justified, the choice of P. appears to have been guided by *lāghava*, or some such consideration" (Devasthali 1981:203).

8   According to A. 7.1.16 with the *vā* interpreted à la Kiparsky the form *pūrvasmin* (for instance) would be preferred in the language if it is a pronoun. This is the form Pāṇini indeed uses (A. 3.4.4), although he should have preferred the alternatively allowed form *pūrve* if brevity was his motive.

9   Devasthali also thinks that Kiparsky "has been thinking along lines which may be said to be quite foreign in the field of our grammar—I mean the concept of any particular form or construction as such being preferable to another" (1981:211-212). However, the evidence of later statements of, e.g., Yāska and Patañjali need not be straightforwardly applicable to Pāṇini. Moreover, we do find clear expression of preferences in usage, bound to certain regions, as in the well-known phrase of Patañjali *priyataddhitā dākṣiṇātyāḥ* "The southerners (people from the Deccan) are fond of (using) *taddhita*-formations" (MBh vol. 1 p. 8 line 8). See further on traces of an awareness of dialectal and other variations in language Deshpande 1978 and Laddu 1983.

Pāṇini [...][10] The text of the Sūtra has been handed down to us almost intact by the method of oral transmission by which Sanskrit learning through the ages has descended from generation to generation through a succession of teachers and pupils *(guru-śiṣya-pāraṁparya)* instead of being concerned with writing."

Yajan Veer's article should not create the impression that among scholars associating themselves to "the tradition" no-one is willing or able to appreciate Kiparsky's thesis or to take it into serious consideration. This may be illustrated by quoting Pt. Vamanshastri Bhagwat, well-known scholar in the grammatical tradition, who said in his presidential address to an assembly of traditional Pandits:

> The ancient tradition believes that the respectable Pāṇini has recourse to (the terms) *bahulam, anyatarasyām, ubhayathā, vā, ekeṣām,* and to (terms pointing to) practices in the regional areas of teachers, *gālavasya, śākalyasya, senakasya, bhāradvājasya, prācām, udīcām* etc. From the Vārttikakāra (Kātyāyana) onwards, all commentators regard this as authoritative. But why does the author of the Sūtra (Pāṇini), while he strives for brevity with indifference for his own life, give up the very brief term *vā* and create confusion by using quite long linguistic forms such as *anyatarasyām, ekeṣām, ubhayathā* etc.? The desire to know why this is so did not arise with any Indian teacher or student of the ancient tradition, but the present-day student from a different country, Mr. Paul Kiparsky, did get this desire, and in order to satisfy it this eminent person studied the Aṣṭādhyāyī for a long time, with a keen and sharp intellect; he found a subtle distinction in meaning in these (terms) conveying option which the ancient tradition agreed to have only the same meaning, and he established this with evidence. This established distinction in meaning has been published in the form of an independent book named "Pāṇini as a variationist" and has been placed before scholars.[11] (Bhagwat 1993:14)

10   Here a question mark is printed which according to the immediate and larger context must be erroneous.

11   (I give the text as printed in the Journal, with no sandhi applied between words to represent spoken Sanskrit:) bhagavān pāṇiniḥ vikalpaṁ bodhayituṁ, 'bahulaṁ', 'anyatarasyām', 'ubhayathā', 'vā', 'ekeṣām' ācāryadeśaśīlanāni ca 'gālavasya', 'śākalyasya', 'senakasya', 'bhāradvājasya', 'prācām', 'udīcām' ityādīni samāśrayati iti prācīnā praṇālī śraddhate / vārtikakāram ārabhya sarve'pi ṭīkākārāḥ tat pramāṇayanti / paraṁ lāghavārthaṁ jīvita-nirapekṣaṁ prayatamānaḥ sūtrakāraḥ laghiṣṭhaṁ 'vā' parityajya, kuto gariṣṭhāni 'anyatarasyām', 'ekeṣām', 'ubhayathā' ityādīni śabda-rūpāṇi prayujya saṁdehaṁ janayati iti kutobhāva-jijñāsā na kasyāpi bhāratīyasya prācīna-praṇālyādhyāpakasyābhyāsakasya vā samutpannā, kintu deśāntarīyā[a, JH]syādhunikasyābhyāsakasya tatrabhavato pāl kipārskī-mahodayasya samudbhūtā, tāṁ ca śamayituṁ tena mahābhāgena aṣṭādhyāyyāḥ cirāya sūkṣmayāgryayā ca buddhyā vimarśaḥ kṛtaḥ, vikalpa-bodhakeṣu prācīna-paraṁparayā kevalaṁ samānārthakatvenāṅgīkṛteṣu teṣu sūkṣmo'rthabhedaḥ samadhigataḥ, sapramāṇaṁ siddhāntitaś ca / sa cāyaṁ siddhāntito'rthabhedaḥ svatantra-grantha-rūpeṇa 'pāṇini ǽj e vheriesanist'-nāmnā prakāśitaḥ, viduṣāṁ puraḥsthāpitaś ca /

Turning now to the 16 pages which Cardona devotes to the issue of Kiparsky's thesis, we see that after the opening sentence in which he briefly introduces Kiparsky's work as the "most important and influential monograph published recently concerning Pāṇinian terminology", he immediately proceeds to the problems concerning sūtra A. 7.2.15 *yasya vibhāṣā*. While already Kiparsky showed his uncertainty regarding the best way to deal with this rule, its problematic status was further highlighted by Deshpande in the mentioned 1984 review. Five years later also Cardona referred, among other things, briefly to the problems presented by A. 7.2.15 to which Deshpande had drawn attention (Cardona 1989:65). Kiparsky reacted to Cardona in ca. six pages in 1991:334-340. In RRiPS, Cardona starts a reconsideration with the observation that "According to this sūtra [viz., A. 7.2.15, J.H.], if a verb is such that an ārdhadhātuka affix following it takes the initial augment *iṭ* optionally *(vibhāṣā)*, that verb does not condition the addition of this augment to a niṣṭhā [i.e., *kta*, *ktavatu*, J.H.] suffix following it."[12] From this it is clear that the operation prescribed in this rule is not itself optional, but the rule refers to optionality—or marginal optionality under Kiparsky's thesis—as a condition for its own working. It is, in other words, a "second order" application of Kiparsky's thesis. By turning immediately to this problematic case Cardona leaves behind in one big jump all the rules where optionality is directly at play and for which Kiparsky found so much evidence in support,[13] including from the language Pāṇini himself employs in the Aṣṭādhyāyī. To this rule 7.2.15, and to rules to which it may or may not refer depending on one's way of reading and interpreting 7.2.15, Cardona devotes the next discussion almost exclusively, with a brief interruption, pp. 171-173.

Thus, there is the rule 7.2.56 *udito vā*, according to which the affix *ktvā*, when added to a root marked with *u*, is optionally prefixed with *iṭ*. Hence, *dhvaṁsu*, as it is marked with *u*, may give the form *dhvas-tvā* (without *iṭ*) or *dhvas-i-tvā* (with *iṭ*). In the traditional interpretation, 7.2.15 and the denial of *iṭ*

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12   In other words, if *iṭ* is optional—or, with Kiparsky, is marginally allowed—with regard to some endings, then *iṭ* is entirely proscribed if *kta* or *ktavatu* are the endings to be added. In a comparative Indo-european perspective the phenomenon may be seen as the increased acceptance of formations with -*i*- in verbs where this was not original (hence, *iṭ* is optional/marginal). The relatively frequently employed formations in -*ta* and with these also those in -*tavat* are more conservative and do not allow the option (hence, when *iṭ* is optional/marginal elsewhere, it is not allowed before -*ta* and -*tavat*). Cf. Kiparsky 1980: 147.

13   The merit of Devasthali's critique (1981), even if it is not always convincing, is that it does fully address "first order" issues in Kiparsky's thesis.

with *kta* and *ktavatu* (the *niṣṭhā* affixes) would also pertain to the roots referred to in 7.2.56, viz., roots marked with *u*, such as *dhvaṁsu*. Hence, 7.2.15 gives the form *dhvas-ta* and excludes *dhvas-i-ta*. However, if the distinction in meaning of Kiparsky's thesis is accepted, the word *vibhāṣā* in 7.2.15 would have no reference to 7.2.56 where we have the term *vā*. In that case, 7.2.15 does not apply to a root like *dhvaṁsu*, and we may have both *dhvas-ta* and *dhvas-i-ta*.

Kiparsky seeks to avoid the grammar's acknowledgement of forms such as *dhvas-i-ta*—just as the grammer in its traditional interpretation generally does not provide for these forms—but for this he has to make other assumptions which Cardona criticizes in great detail. At the same time, Cardona shows that the traditional interpretation of 7.2.15 and other sūtras involved does lead to predictions of forms as they are attested. Cardona has thus drawn attention to some real problems regarding rules re-interpreted by Kiparsky in order to find a solution for the problems posed by his understanding of A. 7.2.15. Also in other cases, Cardona finds that Kiparsky "has to exert himself to fit the facts into his theory" (footnote 43 to p. 173, see p. 290), where "facts" refers to the predominance versus marginality of forms. With this, the overwhelming support (see some of the reviewers referred to above, and in addition Deshpande 1991) for Kiparsky's thesis in the application of its implications to, especially, the Aṣṭādhyāyī, remains neglected. Even less does Cardona attempt to give an alternative explanation to account for the curious correspondence between predictions ensuing from Kiparsky's thesis and attested usage in the Aṣṭādhyāyī—a correspondence which remains equally remarkable if it turns out to largely harmonize with the grammarians' predilection for brevity (Devasthali 1981)—and in the case of the majority of rules also outside the Aṣṭādhyāyī.

After his own discussion Cardona refers to a contribution of Deshpande (1991), in which we find the proposal of a different way out of the problems posed by A. 7.2.15 under Kiparsky's thesis. While Kiparsky had all the time been trying to find ways to avoid the non-inclusion of rules like 7.2.56 *udito vā* in the domain of 7.2.15 *yasya vibhāṣā*, and Cardona had all the time been explaining that this is best avoided under the traditional, non-Kiparskyan interpretation of Pāṇini's sūtras, Deshpande suggests to follow Kiparsky's thesis more strictly, and simply accept that 7.2.56 *udito vā* (with preferred option) is not included in the domain of 7.2.15 which refers to marginal optionality (*vibhāṣā*). The denial of *iṭ* according to 7.2.15 hence does not apply to roots marked with *u*, and the grammar would allow forms in, e.g., *-i-ta* as much as it allows forms in *-ta*. According to the traditional, non-Kiparskyan interpretation of 7.2.15, however, "a root such as *kramU* can only have a past-participle form without *iṭ*, that is, *krānta*, and the rule prohibits the derivation of *kramita*"

(Deshpande 1991:162). It is true that occasionally a form with *iṭ* occurs, e.g., *dhāvita*, even if the root is marked with *u*. In that case, Pāṇini's grammar as interpreted traditionally has no rule to account for this form, and Pāṇinians feel obliged to declare A. 7.2.15 in a rather ad hoc manner *anitya* and not applicable in this case.

Deshpande points out that by accepting that A. 7.2.15 does not pertain to A. 7.2.56, a set of forms such as *dhāvita* is accounted for, which are not as rare as suggested by Kiparsky and as implicitly accepted by Cardona. Moreover, Deshpande points out that there are clear discrepancies between what is statistically dominant in the classical language and Pāṇini's own Sanskrit. Hence, that forms are statistically not dominant is not a proper ground for denying the possibility that Pāṇini may have preferred these forms. Deshpande mentions two kinds of evidence in support of his suggestion to let A. 7.2.56 be excluded from the domain of 7.2.15. First, a considerable number of forms in *-i-ta* are attested for roots marked with *u* or *ū*. Second, Deshpande has unearthed evidence which shows that the non-Pāṇinian grammarian Kāśakṛtsna, a possibly post-Pāṇinian but pre-Kātyāyana grammarian whose work is largely lost, accepted *-i-ta* forms next to forms in *-ta* for roots marked with *u* and *ū*. Deshpande concludes that

> the above evidence points to a strong possibility that one could accept Kiparsky's new interpretation of Pāṇini's option terms without accepting his interpretation of specific rules. A stricter interpretation of a rule like P. 7.2.56 *(udito vā)*, in accordance with Kiparsky's general thesis and in contrast to his specific interpretation of this rule, keeps the rule beyond the scope of P. 7.2.15 *(yasya vibhāṣā)* and yields forms that may not be statistically dominant in the known classical language but were evidently a common feature of the Sanskrit known to ancient grammarians like Pāṇini and Kāśakṛtsna. A possible dialectal character of these forms certainly needs to be further investigated by looking closely at linguistic evidence. (Deshpande 1991:172-173)

After his own elaborate discussion in 14 pages of the "second order" problems of A. 7.2.15 and related rules, Cardona refers to Deshpande and the two kinds of evidence mentioned by him in support of his significant proposal which directly addresses "first order" problems of Kiparsky's thesis. Now, surprisingly, citing lack of space [!] as the reason, Cardona is not willing to go into one of Deshpande's two kinds of evidence and limits himself to a discussion of the first kind of evidence only. Cardona discusses the list of attested forms given by Deshpande, and concludes that

> the past participles of the bases in question conform quite well to the pattern described by A. 7.2.44, 56, 15 as accepted and interpreted by Pāṇinīyas. The evidence does not support an interpretation such that bases for which sūtras with *vā* apply are not subject to the

negation of *iṭ* provided for in 7.2.15 because of a difference in meaning between *vā* and *vibhāṣā*. (RRiPS p. 179)

However, to begin with, that "the past participles of the bases in question conform quite well to the pattern described by A. 7.2.44, 56, 15 as accepted and interpreted by Pāṇinīyas" was never denied by Deshpande. Moreover, Cardona attempts to do away with most of the 14 roots listed by Deshpande as evidence that the forms in question are not as rare as supposed, but Cardona's disposal of these forms is not as convincing as it may seem at first sight.

Since the issue is the occurrence of forms which Pāṇini may have preferred even if they are not statistically dominant in available texts, it suffices to re-establish the relevant occurrence of only some of the forms listed by Deshpande and criticized by Cardona. To be noted first, however, is that Cardona does not discuss the sixth and fourteenth root mentioned by Deshpande, *śasu* and *vañcu*, which means he probably accepts there are relevant occurrences of *śasita* and *vañcita*, though these past participle forms are not mentioned in Whitney—indeed, Pāṇini's familiarity with *śasita* (c.q. *vi-śasita*) is implied in A. 7.2.19, and *vañcita* is well attested in the Mahābhārata and in Kāvya literature (cf. PW s.v.).

With regard to *dhāvita* from *dhāvu*, which we mentioned above, Cardona remarks that the old form, "from the Sāmaveda on," is *dhauta*,[14] "which accords with Pāṇini's description" (which means, with the rules as traditionally interpreted). Cardona also says that *dhāvita* "is certainly known from later texts," and that it occurs in the commentary Durghaṭavṛtti on A. 7.2.15 *(yasya vibhāṣā)*. What he does not say is why *dhāvita* is at all referred to in this commentary under sūtra 7.2.15, which, as said, provides for the form *dhauta* under the traditional interpretation. The reason was hinted at in Deshpande's article: unless 7.2.15 is declared inapplicable, *dhāvita*, well-established in the meaning "run" in texts from the Mahābhārata and early Kāvya onward, cannot be derived under the traditional interpretation which only provides for *dhauta* which always means "cleansed" (it is to be noted that Dhātupāṭhas postulate a single root *dhāv* in the meanings "run" and "cleanse"—*gati-śuddhyoḥ*—at the basis of forms which modern scholars separate as belonging to two distinct roots, one meaning 'to run', the other 'to cleanse'). Deshpande's proposal of the more-Kiparskyan-than-Kiparsky reading of 7.2.15 can deal comfortably with forms like *dhāvita*

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14   To be noted is that the corresponding verses of the Ṛg-Veda have *dhūtá* at the places where the Sāma-Veda has *dhautá* – cf. SV 2.26d (2.1.1.9.2) and ṚV 9.107.5d, SV 2.85a (2.1.2.8.2) and ṚV 8.2.2a, SV 2.359a (2.3.2.16.2) ṚV 9.62.5a. One may therefore entertain some doubts regarding the status of the form *dhautá* in the early language outside the Sāma-Veda.

and *patita*, which, as we have seen, are problematic for the Pāṇinians (for *patita* already the Kāśikā had to make the special provision that it must be a grammatically underivable, "ready made" *nipātana*-form; and already in the Pada-mañjarī on the Kāśikā we find the proposal to consider 7.2.15 *anitya* in order to avoid problems also with *kṛtī chedane*).

With regard to *śaṁsu* 'praise' and *śāsu* 'instruct', Cardona finds occurrences of *śaṁsita* in Rāmāyaṇa manuscripts whose reading is not accepted in the critical edition, in the Bhāgavata-Purāṇa, and in the Kirātārjunīya; and *śāsita* is found in an early Rāmāyaṇa edition (the 1843-58 edition of G. Gorresio), in the Bhāgavata-Purāṇa, in the Kathāsaritsāgara and some other texts. On this Cardona comments: "Given what has long since been established concerning the language which Pāṇini describes, however, it is not appropriate to grant equal value to usage attested from Saṁhitās, Brāhmaṇas and early sūtra texts on the one hand and texts such as the epics and Purāṇas on the other." Apparently, Cardona has here lost sight of what Deshpande was arguing for: not for granting equal value to the groups of texts distinguished by Cardona but for the statistically possibly marginal occurrence of forms which Pāṇini may have accepted (along with alternative forms whose acceptance and established occurrence no one disputes). Moreover, contrary to what Cardona suggests, Pāṇini's object language is known only by approximation, and this is precisely the starting point of Deshpande. Finally, the form *śaṁsita* does occur in an important older text, viz. in the Paippalāda-Saṁhitā,[15] which we may expect to have been familiar to Pāṇini in some form,[16] while the text is so far still relatively imperfectly known to modern scholars.

15   The form *śaṁsita* (AVP 20.52.3c) was found in the Leiden Computer text prepared in the early 1980'ies under the direction of M. Witzel, which served as starting point for the text in the Titus project (http://titus.uni-frankfurt.de/texte/texte2.htm#ved). The reading was further confirmed by Arlo Griffiths on the basis of manuscripts recently found by him, viz. V/122 an JM (cf. Griffiths forthcoming). It is true that these sources were not or hardly available to Cardona, but already Vishvabandhu in his *Vedic Word Concordance* (vol. I, pt. III, p. 1627, s.v. *deva-śaṁsitā* and note i) surmised that this must have been the correct reading rather than *śasita* which Barret's 1940 edition of this hymn (AVP 20.48.3) reads on the basis of the Kashmir manuscript. This and the general circumstance that we have an imperfect knowledge of the texts with which Pāṇini was familiar should have made Cardona much more careful in speaking of the absence of certain forms in the language with which Pāṇini's was familiar.

16   On Pāṇini's familiarity with texts of the Paippalāda-Saṁhitā in some form, and the "late period of Vedic productivity" (Bloomfield) which gave rise to the text now available, see Thieme 1935:39-41, 66, Bloomfield 1899:2f, and esp. Bronkhorst 1991:100-101.

According to Cardona "The evidence does not support an interpretation such that bases for which sūtras with *vā* apply are not subject to the negation of *iṭ* provided for in 7.2.15 because of a difference in meaning between *vā* and *vibhāṣā*" (RRiPS p. 179). As we have seen, forms proscribed in the traditional interpretation but allowed by Deshpande's more-Kiparskyan-than-Kiparsky's reading of 7.2.15 do occur in old texts, and are in some cases also recognized by Pāṇini in his sūtras. As a bonus, Deshpande's proposal provides an elegant solution to a number of problematic forms for which the later tradition had to find *ad hoc* solutions. This does not mean that Deshpande's proposal leaves us without any problems,[17] but Cardona's objections are without good foundation, as they have been phrased as if the language described by Pāṇini were already known in all details, which is simply not the case—not even for presently available texts of which we know that Pāṇini must have known them *in some form*.

As we have indicated, there is a break in Cardona's discussion of A. 7.2.15 and related rules, viz. on pp. 171-173. Here Cardona points out that Kiparsky assumed in his original monograph "that *vā* meant 'preferably' and that this is a primitive term in this sense" (RRiPS pp. 171-172). Cardona then refers to his earlier objection (1989:65-66 with notes 99, 100) "that *vā* simply means 'or', and that whether the option in question is preferable or not is known from the context of argumentation." To this he adds in RRiPS that he thinks that "Kiparsky's original instinct was obviously right. If indeed *vā* is taken as a primitive for the definition of *vibhāṣā* as having the meaning of *na vā*, then one should be able to point to extensive use in early Sanskrit texts of *vā* meaning 'preferably', which Kiparsky obviously has not done, either in his original work or later."

Cardona's earlier objection, that it is difficult to demonstrate that in early texts or even in later śāstric argumentation *vā* indicates a preferable option, echos an earlier remark by Deshpande 1984:163: "But how does one know that *vā* means 'preferably', and *na vā* 'preferably not'? Despite K's attempts [...] to show that usage supports these meanings, by and large it does not; in fact, this is precisely why the Pāṇinian commentators saw no such meanings in these terms."

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17   Cf. Deshpande's own observation that under his proposed interpretation "P. 7.2.65 and P. 7.2.68 are the only rules that could possibly come under the scope of P. 7.2.15 and also contain the word *vibhāṣā*, but in both cases the purpose of bringing them under the scope of P. 7.2.15 remains unclear" (Deshpande 1991:167). On the basis of the equivalence *na vā = vibhāṣā* more rules could come under the scope of 7.2.15 when *na* and/or *vā* are transported by *anuvṛtti* from previous rules; as pointed out by Deshpande, the traditional application of *anuvṛtti* presents problems of its own in a "variationist" interpretation of Pāṇini's grammar.

However, Cardona, Kiparsky and Deshpande have all overlooked an important observation by Louis Renou. Renou 1942:124, note 2, first places Pāṇini's grammar in the context of texts such as the Prātiśākhyas and Śrauta Sūtras, and next records that commentaries attribute to *vā* meanings such as *avadhāraṇe* 'in the meaning of ascertainment', *pakṣavyāvṛttau* 'in the meaning of excluding a position', *pūrvapakṣanirāsārthe* 'in the meaning of refuting a *pūrvapakṣa*', *vikalpa* 'option'. Such explanations would point to a particle *vā* expressing either a preferred or a neutral alternative. Moreover, his stipulation of the requirement that "one should be able to point to extensive use in early Sanskrit texts of *vā* meaning 'preferably'"[18] shows that Cardona failed to take into account the important distinction between the enclitic *vā* in "early Sanskrit texts" in general, and *vā* with its special syntax (allowing occurrence also at the beginning of sūtras) as it occurs in Pāṇini's grammar. This would speak for a more focused comparison with the Kātyāyana Śrauta Sūtra where a similar syntactical use of *vā* is attested. The meaning of *vā* according to commentators on this text, whether the word is at the beginning or at other places in the sentence, may here again be either neutral or implying the rejection of a previous view.[19]

As for the term *vibhāṣā*,[20] which is quite rare outside Pāṇini's grammar and which Cardona would like to see as "the most general term for option" for which later texts use *vikalpa* (1989:66), an important occurrence of this word in the Nāṭyaśāstra (17[18].48) has been pointed out and discussed by von Hinüber (2001:103). (A brief mention of this occurrence is also found in Sharma 1983:369.) The word refers here to a group of (secondary) Prakrit languages or dialects, just as in a much later occurrence to which PW refers. While the precise system of three optional terms for which Kiparsky argues is not found outside Pāṇini's grammar, we do find that the two terms which Pāṇini linked in rule 1.1.44, *vā* and *vibhāṣā*, occur in certain śāstric texts with meanings or connotations which suit their Kiparskyan interpretation reasonably well.

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18   Cf. also Cardona 1989:83 note 100: "One quite important thing Kiparsky fails to do is to justify his attribution of the meaning 'preferred option' to *vā* which he treats as a primitive, on the basis of any extensive textual investigation of early Sanskrit literature [...]"

19   Cf. KŚS 12.1.28 *vā yathoktaṁ gṛhapateḥ*, 24.7.5 *tantreṇa vā* and the comments of Karka: *vāśabdāt pakṣo viparivartate*, *vāśabdaḥ pakṣavyāvṛttau*. The comparison of Pāṇini's use of *vā* with the use of this term in the Kātyāyana Śrauta Sūtra is important also if the latter text is considered a later text.

20   I thank Herman Tieken for providing me references regarding *vibhāṣā* and related forms in Sanskrit and Prakrit languages.

Next, the point which Cardona adds in RRiPS is also contestable. Pāṇini did use important technical terms such as *sārvadhātuka, ārdhadhātuka, kāraka,* without defining them. The use of *vā* (as in the numerous sūtras starting with *vā*) is syntactically so unusual compared to its use in early Vedic and Sanskrit texts that we have to assume that Pāṇini either followed an existing practice, and in any case is not bound by all features of *vā* in non-technical Sanskrit; or that he developped his own specific employment. The non-attestation of *vā* precisely and exclusively as 'preferably' outside the Aṣṭādhyāyī and apart from the above mentioned cases, in spite of Kiparsky's own statements in 1979, does not speak against Kiparsky's thesis but can provide an explanation why the distinction in meaning between option terms was missed by generations of grammatical commentators.

To conclude our discussion of this issue we have to observe, first of all, that Cardona's analysis of the "second order" problems in Kiparsky's way of dealing with 7.2.15 is fully justified and his explanation of the traditional solutions is convincing. But in its own way also Kiparsky's presentation of the systemic advantages of his thesis is convincing. How is it possible that both Cardona and Kiparsky seem "in some way" right?

By way of analogy we may think of the hypothetical example of an old but for its time technically advanced camera, which has a device for automatic focusing, but which can also be used with manual focus adjustments. Suppose such a camera is found in the attic of a house, together with photographs taken with it and some correspondence stretching over a few decades in which one person explains to others how to use that camera (perhaps a father explaining details of the camera to his son and later to his grandson on holiday). From an investigation of the correspondence it turns out that none of these persons used the device for automatic focusing, they always worked with manual focus only.

This camera is Pāṇini's grammar, the messages on how to use it with manual focus are the texts of the Pāṇinīyas. Here it is Kiparsky who discovers the subtle device which this camera has for automatic focus—the variation in optionality which tells you the degree of desirability of a form—and he can have a rough idea of how it works. But Cardona shows how the camera has always worked perfectly with manual focus—with *ad hoc* adjustments for forms which would otherwise remain out of focus as "un-Pāṇinian" according to, for instance, 7.2.15. He can even prove it with the nice photographs which are found with the

camera—with the correct predictions of linguistic forms which are found in the texts of around Pāṇini's time.[21]

We may next try to adopt a detached "history of science" perspective on the controversy and ask ourselves which position has more theoretical merit and is more promising. We then have to observe that there is relatively little theoretical gain in Cardona's position, except for two important points:

(a) the tradition from Kātyāyana and Patañjali onwards is saved;
(b) the problem regarding A. 7.2.15 does not occur.

There is, however, (c) an important drawback to his position: there is no alternative explanation for the "overwhelming support" in available texts for the forms resulting through a number of rules under Kiparsky's interpretation. Thus, the evidence that remains unexplained in Cardona's position is more extensive than the evidence that is satisfactorily dealt with.[22]

On the other hand, there is considerable theoretical gain in Kiparsky's position:

(a) the occurrence of three different terms within a system which seeks to achieve economy of terms (though not at any cost) is justified in a superior and elegant way (cf. Bhate 1995);
(b) there is an overwhelming, statistically fully convincing, support in the "first order" application of the thesis in rules which are themselves optional: predictions with the new function of the three terms for option are predominantly confirmed in texts which must reflect a usage close to that of Pāṇini; in the language used by Pāṇini in his own grammar the correspondence is nearly total.

There are also drawbacks, especially, (c) serious problems with A. 7.2.15 where optionality is part of the condition for the rule. Here Deshpande made some

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21   A similar pattern can be observed in the controversy between Cardona and Kiparsky on the Śiva Sūtras (RRiPS p. 184-187). While Kiparsky argues there is more systematicity than realized so far, Cardona is unwilling to accept any systematicy beyond what is traditionally accepted and beyond what he himself accepted in his study of the Śiva Sūtras in 1969.

22   Since Cardona gives his own justification for the presence of the sūtra 1.1.44 in Pāṇini's grammar which deviates not only from Kiparsky but also considerably from the discussion devoted to it in the Mahābhāṣya, both positions are equal in this respect. See Cardona 1989: 66 and RRiPS p. 291f note 48. By giving his alternative explanation Cardona *de facto* admits the unsatisfactory nature of the discussion by Kātyāyana and Patañjali.

suggestions for a solution which Cardona was unwilling to investigate to the bottom. Thus, there is extensive evidence in support of this position, while the problems that remain do not seem insoluble.

On the basis of the points and arguments put forth so far we therefore have to conclude that there is more merit in the position that *vā, anyatarasyām* and *vibhāṣā* have intended connotations of variational option, even if some amendments seem necessary in the formulation of this thesis by Kiparsky. The issue is by no means closed and it may be hoped that the present discussion stimulates further multifaceted research and well-founded argumentation on Pāṇini and the language and texts with which he was familiar.

2.3   Comments on commentaries: who wrote the Vākyapadīya-Vṛtti?

Bhartṛhari is without doubt the "central figure of the philosophical development of grammar" (Coward and Kunjunni Raja 1990:121; cf. Houben 1997a:110-123). His main work, the Vākyapadīya[23] or "(work) on the sentence and the word (as linguistic units)," is, in fact, a topical commentary on grammatically and esp. philosophically sensitive issues in Patañjali's Mahābhāṣya—which is itself the "Great Commentary" on Pāṇini's grammar. On the Vākyapadīya, which is written in verses *(kārikās)*, an ancient commentary is available, which is commonly called the Vṛtti. No one doubts the enormous value of the Vṛtti for our understanding of Bhartṛhari. However, no agreement has so far been reached on the identity of the author who wrote this Vṛtti: was it written by Bhartṛhari himself or by someone else?

Whether Bhartṛhari is the author or not of the Vṛtti has consequences for the interpretation of the *kārikā*s, as was admitted both by Biardeau, proponent of separate authorship, and by Iyer, proponent of single authorship (Biardeau

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23   The term has been used in a strict sense as referring to the first two *kāṇḍa*s only (cf. evidence cited by Kielhorn 1883), but it is mainly used with reference to all three books (cf. Iyer 1969:6; Houben 1995a: p. 6 note 8). In 1976:296 Cardona stated that "The term *vākya-padīya* was used to refer to the first two kāṇḍas and the term *trikāṇḍī* to refer to the whole work." In RRiPS p. 249 he refers to points put forward by Upadhyaya 1968 (reprinted in 1985) and revises this view: "Bhartṛhari's treatise was from the outset designated in two ways: *Trikāṇḍī*, referring to the work in terms of its structure of three kāṇḍas, and *Vākyapadīya*, which refers to the same opus in terms of its main topics." This position suits the available statements by commentators and other Sanskrit authors; but it is to be noted that there is no evidence to back up the phrase "from the outset". As Cardona points out (RRiPS p. 249), Wilhelm Rau's edition "is now accepted as the standard critical edition of the Vākyapadīya kārikā text"; to this should be added that there are shortcomings and scope for improvement, as observed in an important review of this edition by Palsule (1979).

1975:472; Iyer 1969:18). While Biardeau in 1964 has exaggerated the distinctive trends between *karikā*s and Vṛtti, some examples of subtle but undeniable distinctiveness have been pointed out by me elsewhere (Houben 1996 and 1997b[24]). The distinctions are such that—in the absence of other arguments which are in fact there (see esp. Houben 1999b and below)—they could even be attributed to one and the same author undergoing some development over time.

In RRiPS, Cardona mentions Bronkhorst 1988 and my at the time of his writing still forthcoming Houben 1998a as the main articles arguing that the Vṛtti is not written by the author who wrote the *karikā*s, and Aklujkar 1993 as the main recent argument for regarding the Vṛtti as written by Bhartṛhari. Next, Cardona focuses on VP 1.46 and the Vṛtti thereon which starts with a sentence which I claimed shows that there was at least a gap between the writing of the Vṛtti and of the *karikā*s, and probably—though not inescapably[25]—difference in authorship. Because there is little use in quibbling over details if the proper context is out of view, because, moreover, my argument was partly misunderstood by Cardona and because in the meantime additional studies bearing on the issue have appeared (Houben 1998b, 1999b), I briefly restate my argument with regard to the Vṛtti on VP 1.46 from my present perspective while adding reactions to the main points made by Cardona.

Kārikā VP 1.46, according to W. Rau's 1977 edition, is as follows:

ātmabhedaṁ tayoḥ ke cid astīty āhuḥ purāṇagāḥ /
buddhibhedād abhinnasya bhedam eke pracakṣate //

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24 The distinction concerns mainly the degree to which the author adopts a perspectivistic attitude on a certain issue. Occasionally, *kārikā* and Vṛtti are in this respect significantly different, as I demonstrated in the mentioned publications. Although one may speak of Bhartṛhari's perspectivism as an *attitude* underlying the complex argumentative structure of his work, it has solid philosophical roots, e.g., in his thought on the relation between the sources of valid knowledge, the *pramāṇa*s (cf. Houben 1995b, 1997b). This point was missed by Cardona when he superficially understood my references to Bhartṛhari's perspectivism as implying that Bhartṛhari should be "granting equality" to various opposing views (Cardona 1999a:95). With regard to numerous issues Bhartṛhari's perspectivism of course allows him to have and defend theoretical preferences—it even allows him, incites him, to adopt the perspective which suits his commitment to the grammarian's tradition, all the time remaining aware that it is a perspective involving theoretical choices. Cf. also RRiPS p. 267, where Cardona rightly observes that with regard to the author's perspectivism the Vākyapadīya is closer to Patañjali's Mahābhāṣya than to the work of later Pāṇinīyas.

25 Hence, one need not attribute "blindness" to Vṛṣabhadeva (as Cardona suggests, RRiPS p. 259) if one observes that he both accepts single authorship for *kārikā*s and Vṛtti and is aware that the Vṛtti discusses two variants of the first word of VP 1.46.

This may be translated as:

> Some followers of the tradition speak of an essential
> difference between the two (viz., the two kinds of "basic"
> linguistic units mentioned in VP 1.44), (saying that this difference)
> "(really) exists".
> Others speak of a differentiation, on account of a difference
> in understanding, of something (which is actually) undivided.

The Vṛtti starts its comments on this verse as follows:

> *ātmabhedasya bruvikarmatve dvitīyā, vākyasvarūpānukaraṇe tu
> prathamā* (VP I:103.3).

A translation is not difficult:

> In case *ātmabheda* ('essential difference') is the object of the verb *brū* 'to
> say' there is the second ("accusative") ending, but if the specific form of
> the sentence is imitated, there is the first ("nominative") ending.

In the light of A. 3.4.84 *bruvaḥ pañcānām ādita āho bruvaḥ* (according to which the verbal root *āh*—plus five perfect endings—may substitute the verbal root *brū*—plus five parasmaipada *laṭ* endings), *bruvi-* (in *bruvikarmatve*) can be comfortably taken as a reference to *āhuḥ* in the Vṛtti sentence. The sentence speaks of two possible endings of the stem *ātmabheda,* the form which happens to occur in *pāda* a, and only in *pāda* a, of the *kārikā*. According to a straightforward interpretation, the first part of the sentence thus refers to the grammatical construction found in the first pāda as we gave it above *(ātmabhedam* object of *āhuḥ,* with *iti*-clause *asti-iti).*[26] The second part, apparently, refers to a

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26   While according to Cardona's final view *pāda* a as encountered by the Vṛtti had only *ātma-bhedas,* he argues that a version of *pādas* a-b with *ātmabhedam* ought to be read as *āhuḥ ke cit purāṇagāḥ ātmabhedam: ([saḥ] tayoḥ asti) iti.* Apart from the fact that this makes the *kārikā* into a meddle of parts which are quoted and which are not quoted *(ātmabhedaṁ TAYOḤ ke cid ASTI-ity āhur purāṇagāḥ),* it is counter the explanation of these *pādas* by Vṛsabhadeva (which, as we will see below, Cardona tries to read differently by neglecting indications in the sentence which do not suit his interpretation of the Vṛtti). My parsing of *pādas* a and b with variant *ātmabhedam,* close to the sequence in the *kārikā* and in accordance with Vṛsabhadeva's analysis, is:
      tayor ātmabhedam (in the *kārikā* inverted for the sake of emphasis) *ke cid purāṇagā ([asti] iti) āhur.*

variant: *ātmabhedas tayoh kecid [...]* [27] Here, the entire sentence said by "some followers of the tradition," viz., *ātmabhedas tayor asti*, is quoted with *iti*, with the peculiarity that *ke cit* 'some', which does not belong to the quoted sentence, is nevertheless inserted.[28] Both in the case of *ātmabhedam* and in the case of

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Vṛsabhadeva referred to *asti-iti* in the *kārikā* with *katham / asti ity anena rūpeṇa*; in another *kārikā*, VP 1.87, where *asti-iti* occurs in a comparable syntactic context, the Vṛtti on this verse refers to it with *astitvena*, and Vṛsabha with *katham ity āha asti iti*. Hence one can say that the commentators attribute an adverbial status to the expression *asti iti*, as, in their view, it is equivalent to *astitvena* and gives answer to the question "how?" Cardona misunderstood my remarks as implying that the phrase *asti iti* has actually become an adverb, a single word similar to, for instance, *kimiti*. His argument on p. 259-261 that it is not an adverb and his analysis of this and other constructions with *iti* is hence largely superfluous. *asti iti* is an *iti*-clause which the commentators interpret as a clause giving answer to the question "how?" In a paraphrase one could render this "quoted *asti*" with an adverbial clause such as "under the assumption that it [namely the essential difference of which this group of thinkers speaks] really exists."

27 Both *ātmabhedas* and *ātmabhedam* are found in the *kārikā*-manuscripts, while for the Vṛtti-manuscripts only *ātmabhedas* is recorded. Among the *kārikā*-manuscripts, those which are highest in Rau's South-Indian branch and all northern manuscripts except one read *ātmabhedam*, whereas two remaining southern manuscripts and one northern manuscript reads *ātmabhedas* (cf. Rau 1977:24-30 and Houben 1998a:184). Regarding the original version of the author of the *kārikā* no independent argument can be built on the basis of the manuscripts only, since either of the two readings may have crept in on the basis of the ancient Vṛtti.

Cardona's statement (RRiPS p. 253-254) "Moreover, a subgroup of kārikā manuscripts—albeit the lowest in Rau's stemma—which comprises two of the manuscripts to which Rau gives greatest weight (1977a:30) has the reading *ātmabhedas tayoh kecid* in 1.46a, as does one northern manuscript" is hardly comprehensible in view of the evidence recorded by Rau and Rau's stemma, and is bound to lead to misunderstanding. In any case, within the subgroup of southern palm-leaf manuscripts (to which Rau attributes greater weight than to the northern paper manuscripts) it is the reading *ātmabhedam* that is supported by the manuscripts (B and C, A being unavailable for the beginning of book 1) which are highest in this branch of the stemma, and also within the northern subgroup the reading *ātmabhedam* is the one supported by the manuscripts which the stemma presents as closest to the archetype.

28 Cardona's proposition that Vṛsabhadeva's opening statement of his comments on VP 1.46 plus Vṛtti, viz., *ātmabheda iti*, implies that Vṛsabhadeva accepts only *ātmabhedas* in the first *pāda* of the *kārikā* (RRiPS p. 262, 265) is incomplete, which makes his "implication" non-compelling. Vṛsabhadeva's opening statement implies either the acceptance of only *ātmabhedas* or its preferal over the other variant which he explains is pointed out in the Vṛtti and said to be equally correct. Vṛsabhadeva may have found either only *ātmabhedas* in his source or sources—or both *ātmabhedam* in some of his sources and *ātmabhedah* in other sources, or even alone *ātmabhedam*, and corrected it to *ātmabhedas* in accordance with his

ātmabhedas the construction is uncommon (the *ātmabhedam*-construction be-
cause of the extremely eliptical *astīti*, the *ātmabhedas*-construction on account
of the insertion into the quoted sentence), though not ungrammatical.

Scholars have generally accepted that the Vṛtti somehow refers to two
variants of the first word of the *kārikā*, implying two alternative constructions of
*pāda*s a and b. Biardeau 1964 and Iyer 1965 translated the Vṛtti-sentence
accordingly, but did not ask why the Vṛtti found it necessary to refer to two
variants, and where the variants came from. The most natural answer would be:
the author of the Vṛtti—whether he is regarded as identical with the original
author of the *kārikā* or not—was aware of, or just thinking of, two alternative
versions of the *kārikā*. This, as said, would imply a certain gap between the
writing of the *kārikā* and the writing of the Vṛtti on it, and probably though not
inescapably also separate authorship. If one does not want to accept separate
authorship one has to argue that the author of the *kārikā* found it somehow
necessary to insert a comment on the proper grammatical construction in his
kārikā; the brief sentence would then point to the second construction as the
preferred one. This is not impossible—authors of philosophical treatises could
be attacked also on the grammatical correctness of their statements—but one
would not expect the grammarian and able writer Bhartṛhari to feel suddenly
forced to use a construction in his *kārikā* which needs his own apologetic expli-
cation in the commentary. (A slightly less unlikely scenario emerges if one
allows a considerable time gap between the writing of the *kārikā* and the Vṛtti.)
Another way to steer away from the consequence of separate authorship is to
consider the problematic sentence a later insertion in the Vṛtti.

In 1998a I argued in detail that the two main options which lead away from
accepting separate authorship for *kārikā* and Vṛtti (two options which were
defended by Aklujkar in 1993) are not very attractive. I also demonstrated that
our first authority after the Vṛtti—Vṛṣabhadeva, author of the Paddhati on both
*kārikā*s and Vṛtti of the first book of the Vākyapadīya—already accepted that the
Vṛtti-sentence under discussion refers to two variants of the first word of the
kārikā implying two different constructions in the first line. Finally, I dealt with
an innovative and very clever reading of the first sentence of the Vṛtti by
Raghunātha Śarmā, author of the excellent modern Sanskrit commentary on the
Vākyapadīya, *Ambākartrī* (Raghunātha Śarmā 1963). According to this reading,
the first part of the sentence, *ātmabhedasya bruvikarmatve dvitīyā* would not
refer to the word *ātmabheda* in the first pāda, its second ending according to one

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understanding of the Vṛtti-sentence where this variant appears as the equally correct but still
preferred reading (cf. *tu* in second part of the sentence).

of the variants, and its relation with the verb *āhuḥ*; instead, it would refer to the second line, and *ātmabheda* with second ending would be a reference to *abhinnasya bhedam* in *pāda*s c-d, while *bruvi-* in the compound *bruvikarmatve* would refer to the verb *pracakṣate* where the root *cakṣ* has a meaning overlapping with *brū*. I argued that it is very unlikely that Raghunātha Śarmā is on the right track with his new reading.[29]

It is this innovative reading which Cardona seeks to defend in his discussion of the problems which the Vṛtti on VP 1.46 presents to someone rejecting separate authorship (as Cardona and Raghunātha Śarmā do). The following points are crucial for Cardona's and Raghunātha Śarmā's reading: (a) *ātmabheda* in the Vṛtti refers both to *ātmabhedas* (which would be the only reading of which the author of the Vṛtti is aware) in *pāda* a, and to *bhedam* in *pāda* d; (b) *bruvi* in *bruvikarmatve* refers both to *āhuḥ* in *pāda* b and to *pracakṣate* in *pāda* d; (c) the uncommon sequence of discussion, the Vṛtti starting with a discussion of *pāda*s cd, is to be tolerated; (d) we have to neglect a small but in grammarians' and philosopher's language usually significant word: *tu*; (e) the author of the Vṛtti finds it important to make a rather trivial observation on the syntax of two parts of the *kārikā*.

For each of these points it can be argued that they are to be rejected (for points a-c see also Houben 1998a, postscript, not always properly taken into account by Cardona).

As for point (a): in 1998a:192-193 I formulated "three strong objections" to this point. In his footnote 184 (RRiPS pp. 317-318), Cardona addresses only my first objection: the *kārikā* contrasts *ātmabheda* 'essential difference or difference in identity' in *pāda* ab with a difference *(bheda)* based on a difference in understanding in *pāda*s cd, hence it is unattractive to let *ātmabheda* refer to both. Let me first quote a statement in Cardona's footnote which must be deemed entirely justified: "Clearly, as we all recognize, the *kārikā* contrasts two views, under which there are either truly two distinct entities or only one which is conceived of as split into two." But then we find Cardona's forced way of making *ātmabheda* in the Vṛtti suitable for expressing the notion central in the

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29 As for the novelty of Raghunātha Śarmā's reading: Charudeva Shastri's 1934 edition of the first *kāṇḍa* of the Vākyapadīya with Vṛtti and with extracts from Vṛṣabhadeva's subcommentary contains the following extract from Vṛṣabhadeva's comments on the Vṛtti sentence: *ātmabhedasya iti / ātmabhedaśabdāt prathamādvitīyayoḥ sādhutvam āha* (see below for the relevant passage in Iyer's edition). Even on the basis of only this statement it must have been clear to Raghunātha Śarmā that his understanding deviates from that of his predecessor, the commentator Vṛṣabhadeva—which is, of course, quite legitimate for someone trying to attain a better understanding of a problematic text.

opposite viewpoint according to which a single entity—*ātman*—is *not* subjected to *bheda*, but is merely conceptualized as plural (cf. also RRiPS pp. 262-264): "The view of those referred to in VP 1.46cd can be paraphrased accurately by *eke 'bhinnasya buddhibhedād āropitam ātmabhedam pracakṣate*." Cardona's paraphrase is clearly quite distant from the wording in the *kārikā*. It is also quite distant from the Vṛtti, with which my second and still fully valid objection is concerned (Houben 1998a:192):

When the Vṛtti explains the view expressed in *pāda*s c-d, it explictly says that a single *ātman* 'entity' is accepted by these thinkers, which is then assumed to be plural on account of a difference in understanding this single entity: *pakṣāntare tv ekasyaivātmanaḥ śakti-dvaya-pravibhāga-rūpa-parigraha-kṛtād buddhy-avacchedān nānātva-kalpanā* (VP I:103.4-5). Since the Vṛtti-author says this view accepts a single *ātman* subjected to the assumption or postulation of plurality, he cannot be expected to think that this view accepts also *ātmabheda*, the term used to refer to the real difference in entities accepted by the thinkers of *pāda*s a-b.

It is of course easy to construct a statement also of the view rejecting an *ātmabheda* by using this very term and inserting words expressing, e.g., "un-reality". However, the parameters of our evaluation of a reformulation or interpretation of a sentence in the Vṛtti must be the wording in the *kārikā* and in the Vṛtti itself. Then, an interpretation which lets *ātmabheda* in the Vṛtti refer only to *ātmabheda* in the *kārikā* and not to *bheda* is superior and by far preferable.

Also my third strong objection is still fully valid: if the Vṛtti-author would have intended to make the basic grammatical observations which Raghunātha Śarmā and now also Cardona make him bring forward, "there would have been a much more natural and less problematic way of referring to both *ātmabhedas* of *pāda* a and *bhedam* of *pāda* d: He could have spoken of *bheda* only." This would have been all the more natural since the Vṛtti-sentence starts, according to Raghunātha Śarmā's and Cardona's interpretation, with the discussion of *pāda* d which has only *bheda*!

With regard to point (b): Raghunātha Śarmā and Cardona want that *bruvi* in *bruvikarmatve* refers to both *āhuḥ* in *pāda* b and to *pracakṣate* in *pāda* d. Already in early Upaniṣads and Brāhmaṇas certain fixed and precise ways were developed to refer to verbs (see e.g. Palsule 1961), among them the addition of *i* to the root. In Pāṇinian grammar this practice is reflected in Kātyāyana's Vārttika no. 2 under 3.3.108: *ikṣtipau dhātunirdeśe* "the affixes *ik* and *śtip* (are used) in a reference to a root." *bruvi* hence properly refers to the root *brū* and its forms, and on account of A. 3.4.84 (see above) also to forms of *āh* which supplement the paradigm of *brū*. On account of a natural metaphor of which we

find awareness already in the Mahābhāṣya[30] and which is clearly stated and investigated in the Vākyapadīya (e.g. VP 3.14.580f[31]), the signifier refers to the signified, here: the verb to the meaning of the verb. This is well known and accepted both by Cardona and myself. Although I pointed it out in 1998a:192, Cardona has apparently remained unaware that his and Raghunātha Śarmā's interpretation in which *bruvikarma* may refer to an object of any *verbum dicendi* implies one further metaphoric shift: having gone from *bruvi* to *bruvi-artha* there is another shift to *bruvi-artha-dhātu*.[32] My objection was not addressed by Cardona and is still fully valid: "such an assumption goes one step further, and for this one would like to see relevant examples cited, especially in the light of

30   Cardona's reference (RRiPS p. 262-263) only to Kātyāyana's Vt. 2 under 3.3.108, where only the function of *ik* and *śtip* as affixes referring to the root is mentioned, and to the observations written almost 2000 years later by Nāgeśa in which their reference also to the meaning of the root is highlighted, could create the erroneous impression that this metaphor started to be understood and taken into account very late in the Pāṇinīya tradition. Mahā-bhāṣya 2:365 lines 2-3 under A. 5.1.118 shows that this is not the case: *arthagrahaṇaṁ kimarthaṁ nopasargāc chandasi dhātāv ity evocyeta / dhātur vai śabdaḥ / śabde kāryasyāsambhavād arthe kāryaṁ vijñāsyate /* "why is the term *artha* employed (in the sūtra, 5.1.118)? Should one not formulate just *upasargāc chandasi dhātau* (instead of [...] *dhātvarthe* as 5.1.118 is actually transmitted)? The *dhātu* 'root' is indeed the linguistic form (and not its meaning). If a grammatical operation is not possible with reference to the linguistic form, one will understand the operation with reference to its meaning."

31   Cf., e.g., VP 3.14.580-582, esp. 580: *pradhānakalpanābhāve guṇaśabdasya darśanāt / upasargād vatau siddhā dhātau dhātvarthakalpanā //* "As a word is seen in its secondary meaning if it cannot be taken in its primary sense, when the suffix *vati* is prescribed after a preverb (in 5.1.118) it is valid to take *dhātu* in the sense *dhātvartha*." Cardona's laborious discussion (RRiPS p. 263) only of places where one must infer from usage that Bhartṛhari refers to the meaning of the root 'to eat' rather than to the root *bhuj* as linguistic form (e.g., VP 2.222) and to the Vṛtti on VP 1.51 where one can again infer that 'to eat' is intended with a reference to the root *bhuj*, could create the impression that Bhartṛhari was naively making use of the metaphor without having come to grips with it conceptually. As the cited VP 3.14.580 shows this is not the case.

32   Cardona's failure to see this is reflected in his statement (p. 263) "I see nothing strange in considering that *bruvikarmatva* in the Vṛtti on VP 1.46 refers to an object of saying." This formulation is confused and confounding: if Cardona's "object" of saying refers to an extra-linguistic object it is not properly expressed by the term *karman* which can only mean (a) a grammatical object, or (b) verbal activity, or (c) activity in general (cf. Abhyankar & Shukla 1977 s.v. *karman*). But if it is the grammatical object it requires *bruvi* to refer to the verb, not to its meaning.

the precision grammarians otherwise display in their discussions of linguistic matters."[33]

With regard to point (c), the uncommon sequence of discussion—the Vṛtti would start with a discussion of *pāda*s cd—Cardona remarks (RRiPS p. 264): "Under the interpretation suggested here, the Vṛtti's *ātmabhedasya bruvi-karmatve dvitīyā vākyasvarūpānukaraṇe tu prathamā* does not concern *pāda* d alone; it concerns the syntax of the entire *kārikā*." In this perspective on the situation it is still awkward that, within this sentence dealing with the syntax of the entire *kārikā*, *pāda*s cd are, without apparent reason, discussed first and *pāda*s ab next.

In addition (d): Cardona and Raghunātha Śarmā fail to attribute an appropriate function to *tu* 'but' in the second part of the Vṛtti-sentence. If the Vṛtti-sentence discusses two variants, whether "thought-of" variants or variants encountered in available sources, *tu* has the natural function of contrasting the two forms of *ātmabheda* and the two constructions connected with these—which are entirely on the same footing in Cardona's and Raghunātha Śarmā's inter-pretation so that there only *ca* would be suitable. If *tu* is taken as expressing merely change of topic ("as for ..."), one would again expect that the *pāda*s are discussed in their sequence of occurrence: first ab, next cd. Symptomatic for the underlying contortions of the wordings of *kārikā* and Vṛtti is the paraphrase of our Vṛtti-sentence by Raghunātha Śarmā, where the latter part of the sentence is paraphrased first (without taking *tu* into account), and the former part last, with *tu* added:

> atra "ātmabhedas tayor asti" iti vākyānukriyamānasya bruvikarmatvād ātmabhedapade kartṛvācake prathamā / [...] / "bhedam eke pracakṣate" ity atra tv ātmabhedasya bruvi-karmatvād dvitīyā /

Raghunātha Śarmā's "reordered" paraphrase confirms our remark under (c) as well.

Finally (e), the observation on the syntax of two parts of a *kārikā* which the author of the Vṛtti makes in Cardona's and Raghunātha Śarmā's interpretation is extremely trivial. The point made in the Vṛtti would be in no way related to the

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33   Houben 1998a: 192. The citation of this statement together with the introductory clause but not with the preceding sentence in RRiPS p. 317 footnote 183 may create the erroneous impression that "such an assumption" refers to my "cases where a reference to a verb is interpreted as a (metaphorical) reference to the meaning of that verb" instead of to the pre-ceding sentence saying "[...] that one could [...] assume that *bruvi-* in the Vṛtti stands for *bruvy-artha-dhātu-* [...]"

wider theme of discussion, and it could in no way lead to any misunderstanding except to absolute beginners in Sanskrit grammar. In other words, Cardona and Raghunātha Śarmā do succeed in avoiding to see a reference to two variants of *pāda* a in the Vṛttikāra's sentence, but they end up with a remark which is neither grammatically nor philosophically of any interest.

Attempts to have a fresh look at a text and proposals for new interpretations must be welcomed in a field where there are so many problematic interpretations. Cardona's courageous attempt and sophisticated proposal are, it is true, unsuccessful, but nevertheless certainly not without value as the investigation of an interpretative possibility.

Problematic, however, is Cardona's subsequent attempt to argue that his and Raghunātha Śarmā's new interpretation were already the view of Vṛsabhadeva. Cardona says:

> What the Paddhati says (see note 166) is that the Vṛtti states the correctness of both a second- and first-triplet ending after the term *ātmabheda*. This must indeed have to do with the Vṛtti's first sentence *ātmabhedasya bruvikarmatve dvitīyā vākyasvarūpānukaraṇe tu prathamā* (see note 164). It does not, however, require that Vṛsabha consider the Vṛtti to speak of a reading *ātmabhedam* in VP 1.46a. It requires only that, according to the Paddhati, the Vṛtti speaks of two possible constructions, such that *ātmabheda-* is followed by one of two endings. As to why the Vṛtti should do so, the points discussed above show that this is not because the Vṛttikāra sees anything unnatural in any reading known to him but because the two possible constructions are indeed exemplified in the Vākyapadīya kārikā upon which he is commenting. (RRiPS pp. 264-265)

This is quite an amazing reading of the words of Vṛsabhadeva, who, according to Iyer's edition (VP I:103.9ff), commented as follows on *kārikā* 1.46 and the Vṛtti on it:

First, Vṛsabhadeva gives straightforward comments directly on the *kārikā*:

> **ātmabheda** iti / svabhāvānyatvam / **tayoḥ** iti nimittapratipādakayoḥ / **purāṇagāḥ** pūrve smartāraḥ / **buddhibhedād** iti / na ca svagato bhedo 'sti, śakti-dvayayogāt tu sa eva bhedena pratyavabhāsate ity apare /

Next, he apparently refers to the Vṛtti-sentence. I first simply reproduce Iyer's text incl. his insertions between brackets, and give then my translation in which solutions for a few textual problems are integrated and interpretational suggestions inserted:

> ātmabhedaśabdāt prathamādvitīyayoḥ sādhutvam āha **ātmabhedasya** iti / yadātmabheda eva bravītikriyayā vyāpyate / **āhuḥ** iti / kim / ātmabhedam / katham / **asti** ity anena rūpeṇa /

vākyasvarūpa iti / yadātmabhedo (astī?) tyetena tadā vākyam purāṇagoktam (anukri-yate[34]?) evam āhur iti / vākyasya karmatve ātmabhedo na karmeti prathamā /
He (the author of the Vṛtti) states the correctness of the first and the second ending after the linguistic form *ātmabheda* (when he says the sentence beginning with) *ātmabhedasya* ... (see above). When the action of saying pertains only to *ātmabheda* "essential difference" (we construe as follows): (quoting the kārikā) **they speak**; (of) what? (of) *ātmabhedam* "an essential difference." How (do they speak of an essential difference)? as endowed with the characteristic "**it exists**." **The specific form of the sentence**: When (the expression "they say) pertains (not just to *ātmabheda*, but) to *ātmabheda asti*, then the sentence which is said by the elders is reproduced: (the kārikā hence says:) "thus they speak." In case the sentence is object (of the verb "to say"), *ātmabheda* is not the grammatical object; hence (it has) the first ending.

In the light of the cited statements of Cardona, there is no disagreement that Vṛsabhadeva's Paddhati refers to the Vṛtti sentence under discussion. Nor is there disagreement that *ātmabhedasya iti* in the Paddhati refers to *ātmabhedasya* at the beginning of the Vṛtti-sentence.

But then: the Paddhati says in the first sentence of this passage what the Vṛtti says. What does the Vṛtti say according to the Paddhati? Obviously, that the first and second ending after the linguistic form *ātmabheda* are correct. What is this *ātmabhedaśabda* "linguistic form *ātmabheda*"? The addition of *śabda* after *ātmabheda* makes it unequivocally clear that the Paddhati lets the Vṛtti say something about the piece of text found at the beginning of the *kārikā*. The Paddhati does not attribute to the Vṛtti a statement about a concept *ātmabheda* which the *kārikā* would have expressed either as *ātmabheda* or as *abhinnasya bheda* (supposing these would be conceptually equivalent, which they are not). In the remainder of the Paddhati-passage, there is continuous reference to the first two pādas of the *kārikā*, through the Vṛtti-sentence under discussion. The formulation with *yadā ... yadā ...* shows that the Paddhati makes the Vṛtti refer to two options, not to two subsequently employed constructions. Again, in the discussion of both options the verb is directly referred to as *āhuḥ*, the form found in the second *pāda*, not in *pāda* d which has *pracakṣate*. Again, the expression with locative of the abstract noun, *vākyasya karmatve* "In case the sentence is the object ..." points to a possible or alternative case, not to one of two actually realized constructions.

How could so many signals in the text have been overlooked or ignored by Cardona? There are other indications that especially for this section Cardona was working in haste and was inserting new references to a largely pre-estab-

34   Iyer notes that three of his four manuscripts, A, C, and D, read *anuṣṭhīyate*; this makes sense, and makes his emendation to *anukriyate* unnecessary.

lished argument.[35] Whatever circumstantial excuses for hasty work, I think we would do well to read quietly and with an open mind what the precious documents of early scholars are saying, rather than reading these with preconceived ideas of what the texts should say and simply skipping or filtering out what is incompatible with this.

In addition, we may ask which underlying motivation gave direction to the haste displayed in Cardona's interpretation. Apparently, as is clear also from my discussion of the previous points, there is a strong wish to show the value and justifiability of the views propounded by ancient scholars in the Pāṇinīya tradition. Here, this works in the reverse, since the starting point is evidently the interpretation of the much respected modern scholar Raghunātha Śarmā, and the reading of Vṛṣabhadeva is such that his statements suit Raghunātha Śarmā's interpretation—even if the contrast between the two is obvious also on the basis of the abridged representation of Vṛṣabhadeva by Charudeva Shastri. The forced attempt to present Raghunātha Śarmā's interpretation as traditional, in other words, is entirely misplaced.

The precise value of the issue of the Vṛtti on VP 1.46 deserves some further comment. According to Cardona (RRiPS p. 252), "If the author of the Vṛtti on this text can be shown to speak of two variant readings in the kārikā, this is strong evidence that the two works stem from different authors. [...] Consequently, I think it appropriate to consider these arguments in some detail." However, while the issue is important on its own it cannot be considered to be decisive either way in the authorship controversy.

My discussion above and in Houben 1998a show that going by the direct evidence an interpretation according to which the Vṛtti reflects on two variants of the first word of the *kārikā* and the distinct constructions they entail is to be

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35   For instance, RRiPS p. 262 we find the announcement of a discussion of "a possibility which Bronkhorst, Aklujkar, and Houben have not taken into account," but in a long footnote to this (177 on p. 316) it becomes clear that Cardona must have become aware of my critical discussion of precisely this possibility—which was first put forward by Raghunātha Śarmā and which is now defended by Cardona—as he mentions the receipt of my postscript to the then still forthcoming article on VP 1.46 of which I had sent a copy to Cardona earlier.

Also probably attributable to work in great haste are several cases of sloppy argumentation, for instance a blatant case of circular reasoning: 257-258 (which I leave to the reader to discover for himself); lack of strict consideration of syntactic possibilities: p. 263 *bhuj-yādikriyā* can very well be *tatpuruṣa*. Finally, often a lack of caution: stating things more certain than they are, suggesting certainty where the sources are vague and uncertain.

greatly preferred to any alternative interpretation.[36] In 1999b I refined my argument and pointed out that, strictly speaking, this interpretation implies only a *considerable gap* between the writing of the *kārikā* and the writing of the Vṛtti. Separate authorship would be a straightforward and convincing explanation of this gap, but one could also imagine, for instance, a *kārikā*-author coming back to his text after it had already circulated for some time, perhaps in slightly different versions, among students and scholars. By that time he or one of his students may have suggested a slightly different version of one of his *kārikā*s, and this was briefly noted, in the peculiar Vṛtti-style, in his comments. Against this background one may attribute a twofold value to the Vṛtti on VP 1.46 in the authorship discussion: first, it points to a considerable gap; second, one of the main arguments which scholars have used to deny separate authorship, viz., that the Vṛtti nowhere discusses an alternative reading,[37] has lost its force.

In the same 1999b article I discussed a number of stylistic arguments which had been used in the controversy on the VP-Vṛtti-authorship issue. I further argued that additional pieces of evidence point not just to a gap between the writing of the *kārikā* and the Vṛtti but also to separate authorship. I mention here only the old argument that the Vṛtti offers occasionally distinct interpretations of a *kārikā*; to this the crucial consideration is to be added that these alternative interpretations do not concern independent grammatical-philosophical issues but were entirely *kārikā*-dependent, and were explicitly attributed to distinct persons.[38] If someone would still argue that this is the concoction of a single person, the outlandishness of this thesis would only add support to the view that the Vṛtti was apparently written by a follower of Bhartṛhari, e.g. a direct pupil of his (Houben 1999b:192): the evidence suggests that this pupil was honest, faithful and well informed, but he did have his own intellectual character which shows in a few diverging trends in the Vṛtti as compared to the *kārikā*s.

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36   This is *de facto* accepted by Aklujkar 1993 who suggests two options to harmonize the "two-variants-of-first-word" interpretation of the Vṛtti sentence with his view that the Vṛtti and *kārikā* are by the same author.

37   Cf. Iyer 1969: 19; Pt. Charudeva Shastri 1934, Upodghātaḥ to his 1934 edition of VP I, p. 17: *etasmin vṛttigranthe naikam api kārikāsu pāṭhāntaram upāttam / tad api nāma balīyaḥ pramāṇam tasya ca kārikāṇāṁ ca samānakartṛkatāyām.*

38   A quite vague and hesitating formulation of this point we find already in Iyer 1969:30, but this point is not taken into explicit consideration when Iyer evaluates the arguments for and against "single authorship" of the Vākyapadīya and the Vṛtti and concludes in favour of the former. The point was overseen by Aklujkar in his defences of "single authorship" (1972 and 1993).

The results of a detailed study of passages in the Mahābhāṣya-Dīpikā and in the Vṛtti referring to a respectable grammarian *(ihabhavān,* c.q. *tatrabhavān)* applied to the concluding verses of the second book of the Vākyapadīya, point again in the direction of distinct authorship of the Vṛtti—which must include the passage known as VP 2.481-490 in view of the distinct attitude evinced there to one's teacher.[39]

3.   Three "myths"

3.1   *Representing Pāṇini and the Pāṇinīyas*

In his selection of issues for shorter and longer discussion Cardona of course shows his own preferences, of which he himself is clearly aware.[40] Since this survey (RRiPS) and its predecessor (SoR), as well as the comprehensive treatment of Pāṇini and Pāṇinian grammar of which one volume has so far appeared (second edition 1997), are likely to remain important standard reference works for many years to come—will represent Pāṇini and the Pāṇinīyas to students and scholars for many years to come—an attempt to characterize Cardona's approach against the background of possible different ones is appropriate, not in order to overly criticize the work of a great scholar, but to alert readers and users of his works to theoretical choices and biases. This is all the more appropriate because, as we could observe above, the arguments put forward by Cardona frequently involve unwarranted definiteness and a lack of strict consideration of logical and interpretative possibilities.

Cardona's favoured approach as evinced in RRiPS and its predecessor (leaving other publications out of consideration for now) is valuable and fruitful,

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39   Symptomatic is that Patañjali and one's direct teacher are here referred to as *guru,* a term not used in this context elsewhere in the VP or in the MBhD. For the substantiation of the distinction I have to refer to Houben 1998b.

40   From his formulation in the Preface it is not clear whether he is also aware that his own statements and representations involve theoretical choices apart from "evidence" and "facts"; "opinion" and "bias" seem to shape only the opponents' views: RRiPS p. v: "It would be improper merely to disagree with other scholars or dismiss their claims without treating the evidence necessary to demonstrate that such disagreement is based on facts and not on mere opinion or bias, all the more so because some very sweeping claims have been made recently on the basis of what I cannot but consider insufficient consideration of evidence. Although I disagree with much of what several major scholars have proposed and although the style of reference requires repeatedly mentioning the names of these scholars, I think that I have met my goal of dealing with points of view and evidence."

but it also has its limitations, including some limitations "from within": the generally undiscussed paradigm or hard core of methodological and theoretical choices implicit in the "research program." Since it is partly on account of such limitations and restrictions that progress in a certain direction is at all possible they are justifiable and even valuable when they apply to a scholar's own research path. However, when insufficiently reflected upon as methodological and theoretical choices they imply the presence of serious blind spots. To emphasize these we are justified to speak of a (scholarly) myth rather than a paradigm or core of a research program. With regard to Cardona's present survey of research (which one may expect to go beyond a scholar's personal research path) and its predecessor, as well as, to various degrees, many Pāṇinian scholars of his generation as represented in his surveys, we can say that they work under the influence of three interrelated myths, viz., (1) the myth of Pāṇini's grammar as a powerful, almost perfect, purely formal system; (2) the myth of a purely descriptive grammar; (3) the myth of the well-defined object-language given in advance.

3.2.1 Pāṇini's grammar as a powerful, purely formal system

Myth no. 1 places emphasis on the grammar as a powerful, purely formal system. Unformalized and unformalizable domains shaping and pervading the system are neglected and remain out of view. While the powerful features of the system are emphasized, implications of systemic choices and possible short-comings in the system are little reflected upon. Moreover, Pāṇini appears as an isolated genius, largely separated from his cultural and historical environment. The value of the environment for better understanding numerous peculiar features in Pāṇini's grammar was convincingly demonstrated by Renou in 1942, and a "trend of studying Pāṇini on the wider socio-cultural background of India" was noticed at a major international seminar on Pāṇini in the early 1980'ies,[41] but we find little reflection of research in this direction in Cardona's RRiPS; a study such as Kelly 1996 which continues to address central questions on the context of Pāṇini and their implications for his grammar has been entirely neglected.

Cardona shares the acceptance of this myth with many other researchers, for instance Kiparsky, of whom Bronkhorst, reviewing his *Pāṇini as a Variationist*, observed (1982:280):

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41   Joshi & Laddu 1983: xiii. The papers that according to their title contributed to this trend
       were however not printed in the proceedings of this seminar.

It is understandable that Kiparsky, and so many others with him, find it hard to think of the *Aṣṭādhyāyī* as contemporaneous with the Brāhmaṇas, those storehouses of magical thought. Pāṇini, they like to believe, had outgrown those archaic modes of thought, and attained to something very close to our modern scientific way of thinking. Kiparsky nowhere says this explicitly, but that this is his view is clear from his characterization of the *Nirukta* as "an archaic work [...] which [is] definitely pre-Pāṇinian in content and approach, though [it] may not antedate Pāṇini in real time as well." (p. 213)

A comparison between Pāṇini's grammar and "a machine" may be useful in demonstrating some of the features and procedures it incorporates, but the comparison has now and then been carried too far, e.g. in the introductions to some of the earlier parts of Joshi's and Roodbergen's translation of the Mahābhāṣya.[42] The myth is illustrated in the following statements (also cited in Houben 1999a), first one of Joshi and Roodbergen[43]:

> We may feel inclined to think that words are produced by acts of speech. However, to Pāṇini, they are produced by grammar. The machinery [of Pāṇini's grammar] consists of rules and technical elements, its input are word-elements, stems and suffixes, its output are any correct Skt words. (Joshi and Roodbergen 1975:i)

In a similar vein, we read in a study by Thieme that Pāṇini's grammar is

> a description of the regular word formation of Sanskrit. As such it is 'perfect'. Not only in the sense that it is (almost) complete, but also as to its quality. It is thoroughly mechanistic, in so far as it does not make, beside its basic assumption, any arbitrary assumption and presents only observable and verifiable facts with strict objectivity. Pāṇini's teaching method approaches the accuracy of a mathematical deduction. (1983:15 [1182])

It is this myth of the perfect mechanistic system of Pāṇini's grammar that is at the basis of irrealistically high expectations regarding "fruitful collaboration between traditional grammarians and engineers" in order to contribute to the solution of "some of the problems of modern technology" (Le Mée 1989:114, approvingly cited by Cardona, RRiPS p. 272). Even when detailed parallels are hard to pin-point,[44] this view harmonizes well with the view on grammar and its

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42   Cf. Deshpande, 1979: 142 and the review to which he refers.

43   Cf. also Roodbergen 1974:ii: "In its derivational aspect Pāṇini's grammar works much like the machine mentioned by N. Chomsky in *Syntactic Structures*" (with a reference to Chomsky 1971:30).

44   While Cardona suggests here he supports the high expectations regarding a "fruitful collaboration between traditional grammarians and engineers," he is elsewhere rightly reticent in accepting detailed parallels between Pāṇini and methods and approaches in modern

purposes dominant in modern linguistics in the past two or three decades: the rules of a grammar should be able "to generate the infinite number of sentences of the language" in such a way that "any speaker, or even a machine, that followed the rules would produce sentences of the language, and if the rules are complete, could produce the potentially infinite number of its sentences" (Searle 2002:33; cf. Chomsky 1965). Apart from his reference to work on "semantics and philosophy of grammar, especially in Bhartṛhari's Vākyapadīya" and a general observation on the liveliness of "scholarship in many areas of Pāṇinian studies," the "expanding use of technology in connection with Indology and particularly the application of computer science methods to Pāṇini" is the only specific research direction mentioned by Cardona in his rather meagre, less-than-one-page concluding section "A summary of trends".

High expectations were placed on this research direction at least since 1985 when the article "Knowledge Representation in Sanskrit and Artificial Intelligence" appeared by Rick Briggs (NASA Ames Research Center), which gave a "flying start" to the episode of studies of Sanskrit and Pāṇini and the computer.[45] A note of caution with regard to this trend and the sometimes extreme expectations and claims, and a reference to critical reactions like those referred to by Dash (see note 45) would not have been out of place. Aspects of Pāṇini's grammar which prevent it from being the "sorcerer's stone" directly solving all crucial problems in modern information technology, e.g. Pāṇini's lack of interest in reducing ambiguity, could have been highlighted. Instead, Cardona limits himself to briefly mentioning a few enthusiastic contributions and to referring esp. to the work of P. Ramanujan (Centre for Development of Advanced Computing, Bangalore) in "developing programs replicating Pāṇinian prakriyā and analysis of strings in terms of Pāṇinian rules" as having "particular merit

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linguistics; cf. SoR p. 232-236 and RRiPS p. 213. Comparisons may be useful and instructive if they highlight both parallels and differences.

45   Cf. Bhate's observation (1996:396): "His article triggered a number of projects in this area which involved research into various techniques of sentence interpretation available in different scholarly traditions such as *Nyāya* (logic) and *Vyākaraṇa* (grammar). Some of the projects in this field are still continuing both in India and in the West. A project of machine translation of the Indian Institute of Technology at Kanpur is concerned with the translation from one Indian language into another and makes use of the Pāṇinian Kāraka-theory in the interlingua." Paul Kiparsky and others are reported to have criticized Briggs' thesis in "A.I., List Digest, 5 Oct. 1984, Vol. 2, Issue 131" (Dash 1992:59 note 27), but I have not succeeded in identifying this publication and getting a copy. According to Dash (1992:50), Briggs' critics "have raised the questions on anaphoric constructions, pronouns, synonyms, homonyms, reflexive constructions, poetry[;] [...] with all these [...] [Sanskrit] cannot be used as an interlingua for Machine Translation in Computers."

and quality." I could not receive information on any concrete results of this project.[46]

According to Cardona, RRiPS p. 201, the Aṣṭādhyāyī "presents a synthetic system, whereby affixes are introduced, under meaning and co-occurrence conditions, to verbal and nominal bases, forming syntactic words *(pada)* that bear particular semantic and syntactic relations with each other." Each part in this statement is in itself correct, yet on its own the statement as a whole amounts to a one-sided and incomplete, and in that sense, also misleading view of Pāṇini's system. If the system is only synthetic, why would so much attention have been paid to the finished utterances of Vedic texts[47] with all their grammatical exceptions? If the system is "synthetic", it must be the abstracted linguistic elements (affixes, verbal and nominal bases) that form the starting point of the synthesis. But then one finds that the system fails entirely in providing guidance to arrive at an acceptable utterance. In fact, in the practice of Pāṇinīyas through the ages up to the present, no-one can ever have produced a correct form through Pāṇini's system that was not already his starting point, or among his starting options. The system clearly requires a user who wants to check and possibly improve a preliminary statement (cf. further Houben 1999a). The system is therefore not well characterized as "synthetic", even if synthetic procedures are central and most visible; rather the system is to be called "reconstitutive"— which implies the presence of a user, a preliminary statement, and the application of both analytic and synthetic procedures to the words in it, with the user keeping in mind the preliminary statement and its purport, and aiming at the best possible, *saṁ-skṛta* form of his preliminary statement. The more comprehensive and more realistic view of Pāṇini's grammar as "reconstitutive" rather than one-sidedly "synthetic" gives an important place to unformalized and fundamentally unformalizable domains, esp. the user and his starting sentence to be checked. Awareness of the all-pervading importance of these unformalizable domains

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46 On the internet I found several references to Dr. Ramanujan's project of "Computational rendering of Pāṇini's grammar" which is reported to have started in 1994, but I have so far not received a reaction on requests for information on publications, software, or other results deriving from the project.

47 We may accept, with Bronkhorst 1991:81-87 and Kelly 1996:105f, that the process of creating texts coming under Pāṇini's category of *chanda*s was probably not yet entirely over in the times of Pāṇini and the Buddha. But compared to the Vedic texts which were ritually employed and transmitted in largely—not yet entirely—fixed forms in Pāṇini's time, linguistic creation in *chanda*s must have been marginal, so that the main referent of the term must still be regarded to be "the (established) Vedic texts".

may put those eager for "computational renderings" of Paṇini's grammar on a more fruitful track than an exclusive emphasis on its formal aspects.[48]

Cardona's strong focus on formal structure in Pāṇini's grammar combines with what must be considered remarkable omissions in a bibliographical survey of recent Pāṇinian studies. A small but significant contribution to placing Pāṇini more solidly in his cultural context was provided by von Hinüber 1989 and Falk 1993.[49] Von Hinüber (1989:34) observed that in the light of developments in the production of coins in the North-West of the Indian subcontinent, ca. 400 B.C.E., Pāṇini's reference to a specific use of the term *rūpya* (A. 5.2.120) points to a date of around 350 B.C.E. Falk (1993:304) links the shift of the term *mudrā* to *rūpa* in connection with coins to a shift from logograms to pictograms on coins, which brings him to place Pāṇini in 350 B.C.E. or in the decades after 350 B.C.E. Since RRiPS contains no section or reference to Pāṇini's absolute date, one could think that Cardona's statement in SoR, p. 268, must be deemed still valid: "evidence available hardly allows one to date Pāṇini later than the early to mid fourth century B.C." In 1997, however Cardona gives without any argumentation and without reference to von Hinüber's and Falk's association of Pāṇini with archeologically attestable cultural developments in the North-West of the Indian subcontinent, the easy estimate "approximately 500 B.C." (1997:1) for Pāṇini's time and place. By neglecting an important contribution which had already attracted the attention of scholars,[50] Cardona not only made an unnecessarily vague and unfounded statement in his own research in 1997, he also failed, in RRiPS, in the purpose of a scholarly survey of research, viz. to inform scholars less familiar with significant recent developments.

With his focus on formal structure in Pāṇini's grammar, Cardona pays no attention to direct contributions to the study of this structure by generations of scholars in the cultural area of Tibet. Thus, he missed out the important work of Verhagen (1994) which gives an overview of Tibetan Pāṇinīyas and gram-

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48 Obviously, the Pāṇini-inspired computer-programmer will have to design quite a different program if he understands Pāṇini's grammar not in terms of a more or less closed mechanistic model creating sentences from lexical items and morphemes, but as a system which throughout requires the input and monitoring of the user who has a preliminary statement in view.

49 Falk's publication is mentioned in Cardona's bibliography, but it is not referred to in connection with its contribution on the date of Pāṇini.

50 For instance, Bronkhorst 1992:723f. Apparently following a subjective preference for early dates and in any case without either taking von Hinüber's argument seriously or trying to refute it, also Werba 1997:137 gives as date for Pāṇini "wohl spätestens um 500 v. Chr."; in a footnote he refers to von Hinüber's argument and the acceptance of his date by some, as well as to some recent free estimates of Pāṇini's date.

marians following other Indian grammarians, and of Tibetan translations of Pāṇinian and other grammatical works including some for which no Sanskrit original is available.[51] Tibetan studies on Pāṇini and other Sanskrit grammarians are of great interest, and their application of Pāṇinian and other techniques in the description of their own, quite different language highlights peculiar aspects of Sanskritic grammatical and linguistic thought and method.[52] For the study of the later Pāṇinīya Bhartṛhari, the more philosophically oriented Buddhist works in Tibetan are also of importance.[53] Whereas Cardona entirely neglected the well-known Indian grammatical system the Tolkāppiyam of Tamil and discussions on relations with Pāṇinian grammar in the section "Comparisons with other Indian systems" in SoR, we do find a reference to three studies and an unpublished monograph on this topic by Indian scholars in RRiPS p. 212.[54] For a broader overview of studies and translations in this area (including studies dealing with the relations with Pāṇinian grammar) we still have to resort to the brief but valuable chapter on "Grammars of the Dravidian languages" in Scharfe's *History of Grammatical Literature* (1977) though this covers only work done up to the mid-seventies of the last century. Surprisingly, a dissertation produced at the University of Pennsylvania giving a detailed comparison of the Aṣṭādhyāyī and other works from the Sanskrit tradition with the Tolkāppiyam (Rajam 1981) is nowhere mentioned in RRiPS.[55]

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51   Not only Verhagen's book on Sanskrit grammatical literature in Tibet was missed by Cardona, but also R.A. Miller's review of the book in the *Journal of the American Oriental Society* (1995): Cardona does mention a book published under the name of N.K. Dash which, as pointed out in Miller's review (1995:344), is but a shameless pirate-version of Dr. Verhagen's thesis (equivalent to Verhagen 1994). Not yet published when Cardona wrote his RRiPS was Verhagen's second volume on *Sanskrit Grammatical Literature in Tibet* (Verhagen 2001), where we find important observations on the competition between Pāṇini's system and the Kātantra and the Cāndra systems as models for Tibetan indigenous grammar which are also illuminating for the systemic choices made by Pāṇini (p. 214ff).

52   For a recent overview and discussion, cf. Verhagen 2001:214f, chapter on "Indic models of description in Tibetan indigenous grammar."

53   For citations of Bhartṛhari in Tibetan works cf. now Unebe 1997, and, too late to have been included in RRiPS, Unebe 1999, 2000, 2001.

54   Of interest in this context is also Kulli 1983 on the adoption not just of grammatical theories and methods but also whole sūtras from Kātantra and Pāṇini in Kannada grammars.

55   Cardona does list other unpublished dissertations in his bibliography: R.R. Bergdahl 1988: Ph.D. dissertation University of Pennsylvania, R.K. Mishra 1996: Master of Philosophy thesis at Jawaharlal Nehru University, K. Suryanarayan 1992: Ph.D. dissertation Univeristy of Poona. While I cannot judge the dravidological component of Rajam's thesis, the whole work, written partly under Cardona's guidance, seems to have been produced with much philological care, good thinking and balanced judgement.

It is also noteworthy that Cardona pays no attention to a revealing critical discussion on the value of Pāṇini's system in comparison with other ancient Indian systems such as Candragomin's grammar: Joshi and Roodbergen claimed that Pāṇini's *kāraka*-system could guide the speaker's intention, and argue that Candragomin's grammar, which does not make use of *kāraka*s, lacked this feature (Joshi and Roodbergen 1975:xvi-xix). However, as Deshpande demonstrated in 1979, the alleged advantage of the *kāraka*-system over Candragomin's grammar does not occur.[56]

In our discussion of issue (a) (section 2.1), we saw an illustration of Cardona's special position within the contours of this myth, when he initially emphasizes the perfect formal structure and its correct representation in the tradition, and later on gradually admits incidental historical influences and even insertions in Pāṇini's grammar. The controversy between Cardona and Kiparsky on issue (c) (section 2.2), with the first emphasizing the system as represented in the tradition, and the latter willing to go beyond that, also remains largely within the contours of this myth.

In more general terms, the subject of the controversy between (1) Cardona and some traditionally oriented Pāṇini scholars, and (2) the majority of modern Pāṇini scholars, may be briefly stated as follows: is Pāṇini's grammar as a powerful, purely formal system to be understood primarily on the basis of a direct study of the grammar and its intricate technicalities, making only preliminary use of the support that the later tradition has to offer (view of 2); or is it to be understood primarily on the basis of the sophisticated explanations and interpretations of the later tradition (view of 1)?[57]

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56   Further on this issue: Deshpande 1990 and Houben 1999a. Verhagen (2001:292) seems to have understood Deshpande 1979 as arguing that in Candragomin's grammar "the *kāraka*s assume the exact same intermediate position allowing for bilateral mapping in (and from) both the semantic and morphological levels" as in Pāṇini's grammar (cf. also Verhagen 1992:838). What Deshpande did say explicitly is that "Candragomin [...] has no independent *kārakā* designations, and hence he takes care of resolving conflicting possibilities at the only stage available to him, i.e. his *vibhakti* 'case ending' rules" (Deshpande 1979:141). Still, Verhagen finds it "conceivable" that "the Tibetan grammarians dispensed with the status of intermediate level for the *kāraka*s" in their Tibetan grammars "as the finesse of introducing the intermediate level serves a clear purpose in the intricate and refined system of Sanskrit *vyākaraṇa*, whereas in the Tibetan indigenous grammar, lacking much of the extreme sophistication of the Indic traditions, it seems dispensable." However, as Verhagen goes on to demonstrate, Tibetan authors did show a clear conceptual understanding of the distinction between *kāraka* and *vibhakti* in Sanskrit grammar (Verhagen 2001:293).

57   An earlier manifestation of this controversy may be recognized in a long-drawn disagreement between Renou, emphasizing the value of the commentarial tradition, and Thieme,

The emphasis on the system as represented in the tradition continues in Cardona's contributions to issues in the later periods of the Pāṇinīya tradition, for instance in issue (e) discussed above. The well-intended attempt to save what is seen as the traditional position, or at least the position defended by modern scholars placing themselves in the tradition, has here ironically led to a severe distortion of the purport of an old traditional commentary.[58]

To both groups it applies that the traditional sources, including the commentarial tradition, are to be studied in detail, and that independent thinking is important even just to grasp the ancient arguments and discussions. What also applies to both groups is that it may be useful at some point to go beyond the system and its grammatical application and see how the grammar and the language stabilized by it functioned in Pāṇini's own time and environment, and how systemic variations in the grammar were formulated and accepted in diverging environments of generations of grammarians (from Brahminical to Buddhist and Jaina) inspired by Pāṇini.

3.2.2 Pāṇini's grammar as a purely descriptive grammar

According to Cardona in his SoR, p. 182, "Pāṇini's grammar is descriptive, not prescriptive" (with a reference to Staal 1965:109). In RRiPS this view has not been modified. But then: can it be reasonably denied that Pāṇini's grammar had a strong prescriptive value from the beginning for all those who had doubts whether their language was in accordance with the highest standard? The accepted view, however, is that only later generations started to use Pāṇini's grammar prescriptively, while Pāṇini himself wrote it purely as a descriptive work.

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emphasizing the modern scholar's obligation to attempt to go beyond what the commentators offer and grasp the system of the grammar in an effort of one's own (cf. Thieme 1956). Whatever one may think of current discussions, it is to be admitted that both positions are now being defended with much more sophistication and on the basis of better and more editions of primary sources (also of non-grammatical, e.g. Vedic, texts).

58 Similarly, in order to prevent the acceptance of Kiparsky's thesis which would imply a serious discontinuity early on in the grammatical tradition, Cardona was ready to formulate a hypothesis for the purpose of A. 1.1.44 *na veti vibhāṣā*—Cardona 1989:66 and RRiPS p. 291f note 48: the rule should make the user construe a term for option with a supplied verb form—which has no support in the elaborate discussion in the Mahābhāṣya on the purpose of this rule. (Another opponent of Kiparsky, Devasthali 1983a, does try to defend the Mahabhāṣya suggestion for an interpretation.) In his sophisticated traditionalism, Cardona seems to hold that innovation and reinterpretation are permitted to the extent they can prevent a more consequential innovation.

Problems in the now more or less orthodox position of the exclusively descriptive purpose of Pāṇini's grammar surface in the second edition of Cardona's *Pāṇini: His Work and its Tradition*, vol. 1 (1997). In a section on the status and purposes of grammar (Cardona 1997:543-556), we see that prescriptive aspects of Pāṇini's grammar are to an uncertain degree accepted and denied in circumstantial formulations. On p. 554, for instance, we read: "It is clear from what I have pointed out that Pāṇinīyas grammar served more than a purely descriptive purpose." Next, Cardona acknowledges with Patañjali and later Pāṇinians that the grammar is prescriptive on religious or spiritual considerations, but straightforward sociolinguistic prescriptiveness remains out of view. In the last paragraph on p. 554 we read: "This does not mean, however, that within the domain it treats, the Aṣṭādhyāyī is fully prescriptive. In fact, with respect to this domain there is nothing particularly prescriptive about the Aṣṭadhyāyī. By granting status to various dialectal features [...] Pāṇini recognizes that the language he describes is not fixed. He does not legislate that the usage of one dialect area alone, even the much praised northern speech [...] shall alone be deemed acceptable." (Incidentally, here Cardona mixes up or confuses "prescriptive" and "prescriptive of a single dialect." Pāṇini's *inclusive* choices are acknowledged, but not those which *exclude* forms, styles, dialects and sociolects.) Concluding his discussion of the issue on p. 556 he remarks: "In brief, so far as the immediate purpose of the Aṣṭadhyāyī is concerned, it cannot be deemed strictly prescriptive." This contrasts with the final paragraph of his conclusion: "Later on, when Sanskrit had ceased to be truly a current language, the Aṣṭadhyāyī could indeed serve as a restrictive and prescriptive guide [...]"

We may add here that according to current understanding, the idea that Pāṇini's grammar is descriptive goes back to the oldest Pāṇinīyas. Thus, Cardona remarked in SoR, p. 182: "These rules [...] are also called *lakṣaṇa* 'characteristic, that by which [...] is characterized' in that they serve as means to characterize, that is, to explain by derivation, the forms of correct usage. These correct forms are, accordingly, called *lakṣya* 'that which is to be characterized.'" While this interpretation is in accordance with the meaning attributed to the root *lakṣ* in dictionaries, it is to be noted that this root has a connotation of "to aim at" from the beginning (on the basis of available sources it has been posited as a denominative from Vedic *lakṣá*[59]). *lakṣya* is then the thing at which one should aim, that is, the target, the high standard language which one should strive to

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59   The word *lakṣá* occurs in ṚV 2.12.4 in the context of a prize to be won in a game, and has been variously interpreted as "characteristic mark" or "stake" (cf. Mayrhofer 1996 s.v. *lakṣá* for some references).

employ; and *lakṣaṇa* is "characterization" in the sense of something instrumental in aiming at something. This amended interpretation of the two terms suits more convincingly the sociolinguistic situation in which Pāṇini's grammar was produced and reproduced, and takes into account the fact, never straightforwardly acknowledged by Cardona and others, that the grammar is not only descriptive but also (socio-linguistically) prescriptive in its very description and definition of the high standard language. Description of a norm implies prescription for those committed to attain that norm (cf. also Al-George 1978). This was the situation in which Pāṇini's grammar and its predecessors were rooted. It gives Pāṇini's grammar a prescriptive status right from the beginning: even before the grammar was written, so to speak, it had full-fledged prescriptive status, as it took shape in an existing tradition which was reproduced by certain communities for definite aims. This simple point has significant entailments, especially with regard to the object-language which is the subject of myth no. 3.

3.2.3 A well-defined object language is given in advance

Together with the preceding myth, myth no. 3 of the "well-defined object-language given in advance" has been very useful in giving Pāṇini a "purely scientific" status (according to certain views of science in general and linguistics in particular) and hence to stimulate valuable research into his system; but they are not a good basis for a balanced history of "science" (in a broad sense—with attention for social context—and not limited to Europe) nor do they allow a proper evaluation of Pāṇinian grammar in its cultural and historical setting.[60]

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60   Cardona's lack of interest for these important broader questions shows also in his complete neglect of Itkonen's *Universal History of Linguistics* (1991). One may disagree with the theoretical direction of Itkonen's book, and find his aim overly ambitious, but the issues raised by him are of such importance that they deserve scholarly discussion, especially by those more thoroughly familiar with the primary sources of the four traditions dealt with, the Indian, the Chinese, Arabian and European (Itkonen claims to have read Sanskrit, Greek and Latin sources directly).

As for the Sanskrit tradition, it can be seen that Itkonen has been quite sensitive to the three myths identified by me as underlying much current research. The first myth, for instance, we find implicit in statements such as: "Pāṇini's grammar is a derivational system that moves from meaning to sound" (1991: 39); and "Thus it is not just the case that Pāṇini is both the oldest and the best in his own tradition (as far as there is a historical record of it). It is also the case that, at least until the late 1960's, Western linguistics has not been able to equal Pāṇini's achievement. Considering the central role of linguistics in the Indian education, we are now in a position to refute the traditional view about the 'static' or 'stationary' character of the Indian civilisation: the reason why this civilisation could not move ahead is simply that its starting point was too good to be surpassed" (1991: 84). Pāṇini's

Especially under issue (c) (on the optional terms in Pāṇini), we saw a number of problems arise directly from Cardona's tendency to regard the language aimed at in Pāṇini's grammar as one that is fixed and given in advance. In general, it can be said that in this issue Cardona tries to argue for his position partly by insisting on a precision which is unwarranted, (1) in view of the unavoidable deviation between a possible "object language" of Pāṇini and the texts available to us, and (2) because in the socio-linguistic situation of Pāṇini the "object language" itself cannot have been the well-defined, finished object which is presupposed in Cardona's discussion.

In the Sanskrit scholarly tradition, the "object language" treated in Pāṇini's grammar was under continuous construction for centuries, starting with the work of Kātyāyana and Patañjali. There is hence no good basis to take Pāṇini's comprehensive "correctness" and non-bias for granted. The succesful construction of Pāṇini's absolute authoritativeness was only achieved in the 17th century with Bhaṭṭoji Dīkṣita's Siddhāntakaumudī and Prauḍha-manoramā; before Bhaṭṭoji Dīkṣita Sanskrit scholars (grammarians, Kāvya-commentators etc.) that were mainly drawing on Pāṇini quite commonly also invoked non-Pāṇinian rules to account for forms which were generally accepted as correct.[61] By skillfully using all interpretative devices to explain problematic forms, and by rejecting a small number of forms which were till then regarded as correct (cf. Bali 1976:123f), Bhaṭṭoji Dīkṣita finally, some 20 centuries after Pāṇini, succeeded in moulding Pāṇini's grammar and its object-language into a perfect description and a matching perfect object of description.

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grammar may have remained unequalled, but its purpose as a "reconstitutive" device to attain *saṁskṛta* utterances was quite different from the purpose of current or ancient grammars in the Western tradition. Since Itkonen limits himself strictly to the grammatical tradition of Pāṇini (even while speaking of linguistics of India), he unavoidably arrives at the conclusion that linguistics in India "is just one big continuous present which, as it were, coils around Pāṇini. Nothing could tell that the voices of the individual Indian linguists, from Pāṇini to Joshi, are separated by hundreds and thousands of years" (1991:83). Of course, as long as, and to the extent that, Pāṇini's grammar is accepted as the basic text, linguistics has to coil around Pāṇini (though even here irreversible developments took place that separate, for instance, Bhartṛhari from Nāgeśa). But the Indian tradition saw also the creation of a grammar like Jainendra Vyākaraṇa, which surpasses Pāṇini in several technical respects; and in a quite different, pedagogical direction, Candragomin's grammar and the Kātantra must be regarded as advances over Pāṇini.

61   Such forms were collected and their correctness defended in a work of Nārāyaṇa Bhaṭṭa (16th/17th century), the Apāṇinīyapramāṇatā.

4. Conclusion

Cardona has again obliged all serious students of Pāṇini and the Pāṇinīyas by offering them another important research tool. The RRiPS is a worthy successor to the SoR, although its character is necessarily somewhat different on account of the different balance between introductory sections and discussions with other scholars. Although the author did not intend to be exhaustive, one will miss the references to a number of noteworthy contributions in the past decades to the study of Pāṇinian grammar.[62] He apparently did not go out of his way to collect data for his bibliography. To be praised, on the other hand, is that, for a Western scholar, Cardona pays considerable attention to contributions produced in India, whether in English, Sanskrit or a regional language, thus contributing to a global scholarly exchange of ideas in the field of Pāṇinian studies.

Current issues are addressed in stimulating discussions, where the author attempts to prove his being right with elaborate and forceful arguments which are not always convincing.[63] If long-standing controversies are addressed Cardona's basic theoretical choices are often insufficiently reflected upon, and the argumentative presentation of his own view may hide a mainly polemical motivation. Even then the discussions are to be appreciated as challenging contributions to important issues—challenging usually in the sense of questioning what are perceived as overly innovative interpretations. As a bibliographic survey and discussion of recent contributions to a broad field of research Cardona's work is valuable and important, though, as we have seen, occasionally somewhat myopic.[64]

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62 Under References and Abbreviations publications which supplement Cardona's survey, including recent ones which could not have been known to him, are marked with *. With the restrictions already adopted, Cardona finds it also superfluous to "list editions" of Bhaṭṭoji Dīkṣita's Siddhāntakaumudī which belongs to the core of the field he is trying to cover (RRiPS p. 246). Bali 1976 (published version of thesis referred to in SoR) remains unmentioned.

63 When his own being right or wrong is not directly at stake, the evaluation of other scholars' work seems sometimes whimsical: on p. 145 of RRiPS he writes on Wujastyk's translation of the *Paribhāṣāvṛtti* ascribed to Vyāsa (Wujastyk 1993): "I do not consider the translation itself very successful." In his review of Wujastyk's work (Cardona 1998) announced as forthcoming in RRiPS, he writes: "He [Wujastyk, J.H.] has produced a very smooth translation, which in most instances, with the help of the accompanying notes, serves a student well" (p. 241), and at the end: "I congratulate him [Wujastyk, J.H.] on carrying out his work with much success" (p. 244).

64 Some minor additional observations on the presentation of the work may here be appended. The few printing errors (e.g. Skodvensis instead of Skovdensis on p. 3, *saṃskṛbhāṣe* instead

References and Abbreviations

In order to enable the reader of RRiPS and its predecessor SoR to supplement the bibliographical data provided there I mark a relevant publication that is not appearing in RRiPS or SoR with *. Those published before 1998 or 1997 *could* have been included in RRiPS, but it is to be noted that Cardona does not claim comprehensiveness for his bibliographical survey. Several of the omissions are nevertheless quite surprising.

A.   Pāṇini's Aṣṭādhyāyī.

ABHYANKAR, K.V. and J.M. SHUKLA

1977   *A Dictionary of Sanskrit Grammar.* Vadodara: University of Baroda. Reprint 1986.

AKLUJKAR, Ashok N.

1972   The authorship of the Vākyapadīya-vṛtti. In: *Wiener Zeitschrift für die Kunde Süd- und Ostasiens* 16:181-198.

1993   Once again on the authorship of the Trikāṇḍī-Vṛtti. In: *Asiatische Studien / Études Asiatiques* 47.1:45-57. [Repr. in Bhate and Bronkhorst 1994:45-57.]

AL-GEORGE

1978   Are Pāṇini's Sūtras Descriptive or Prescriptive Sentences. In: *Annals of the Bhandarkar Oriental Research Institute* 58-59:27-36.

AV   Atharva-Veda

AVP   Atharva-Veda, Paippalāda-Saṁhitā

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of *saṁskṛtabhāṣe* on p. 15 s.v. Bhate 1990, *ādeślakṣaṇabhāva* instead of *ādeśalakṣaṇa-bhāva*) are generally self-correcting. One may wonder why the author takes so much effort to quote other authors in such a way that *their* self-correcting printing errors are emphatically reproduced even if a quotation glossing over the error would have been easier—e.g. the quotation from footnote 72 in Joshi & Roodbergen 1986, RRiPS p. 305 note 110, where in the same paragraph the publication date of K.C. Chatterji's frequently referred to translation of the Paspaśāhnika (fourth edition) is two times given correctly as 1972, once incorrectly as 1272. So far not yet self-correcting to me were some mistakes in the indices when they point to places where the item under discussion is not found (Dash, Narendra Kumar does not appear in note 102 nor in immediately preceding or following notes, Filliozat, Pierre-Sylvain is not mentioned on p. 146 nor on the immediately preceding or following page).

BALI, Suryakant

*1976   *Bhaṭṭoji Dīkṣita: His Contribution to Sanskrit Grammar.* New Delhi: Munshiram Manoharlal. [The author's 1971 University of Delhi thesis on which this book is based is mentioned in Cardona 1976.]

BARRRET, L.C.

1940   *The Kashmirian Atharva Veda, Books nineteen and twenty.* New Haven: The American Oriental Society.

BHAGWAT, Pt. Vamanshastri

*1993   *Paṇḍita-pariṣadadhyakṣīyopanyāsaḥ* (presidential address at the assembly of Paṇḍits). In: *Śāradā* (Pune), year 34, no. 14:12-15.

BHATE, Saroja

*1995   Pāṇini, the economist par excellence. In: *Cracow Indological Studies Vol.1, International Conference on Sanskrit and Related Studies* (ed. by C. Galewicz et al.): 65-72. Cracow: Institute of Oriental Philology, Jagiellonian University.

*1996   Position of Sanskrit in Public Education and Scientific Research in Modern India. In: *Ideology and Status of Sanskrit: Contributions to the History of the Sanskrit Language* (ed. J. Houben): 383-400. Leiden: E.J. Brill.

BHATE, Saroja and Johannes BRONKHORST (eds.)

1994   *Bhartṛhari, the Philosopher and Grammarian: Proceedings of the First International Conference on Bhartṛhari* (University of Poona, January 6-8, 1992). Delhi: Motilal Banarsidass.

BIARDEAU, Madeleine

1964   *Bhartṛhari, Vākyapadīya Brahmakāṇḍa, avec la Vṛtti de Harivṛṣabha.* Traduction, introduction et notes. Paris: Éditions E. de Boccard.

1975   Review of K.A. Subramania Iyer's edition of the Vākyapadīya and commentaries, his translation of the Vākyapadīya, and Iyer 1969. In: *Journal Asiatique* 263:470=472.

BLOOMFIELD, Maurice

1899   *The Atharvaveda and the Gopatha Brāhmaṇa.* Strassburg: Karl J. Truebner.

BRIGGS, Rick

1985   Knowledge Representation in Sanskrit and Artificial Intelligence. In: *The AI-Magazine* (American Assoc. for Artificial Intelligence), vol. 6.1:32-39.

BRONKHORST, Johannes

1982   The Variationist Pāṇini and Vedic: a review article. (Review article of Kiparsky 1979.) In: *Indo-Iranian Journal* 24:273-282.

1988   Études sur Bhartṛhari, 1: L'auteur et la date de la Vṛtti. In: *Bulletin d'Études Indiennes* 6:105-143.

1991   Pāṇini and the Veda Reconsidered. In: *Pāṇinian Studies: Professor S.D. Joshi Felicitation Volume* (ed. M.M. Deshpande and S. Bhate): 75-121. Ann Arbor: The University of Michigan Center for South and Southeast Asian Studies.

1992   Review of Coward and Raja 1990. In: *Asiatische Studien / Études Asiatiques* 46:718-725.

BUISKOOL, Herman

1939   *The Tripādī. Being an abridged English recast of Pūrvatrāsiddham (an analytical-synthetical inquiry into the system of the last three chapters of Pāṇini's Aṣṭādhyāyī)*. [Abridged English recast of dissertation Amsterdam 1934.] Leiden: E.J. Brill.

CARDONA, George

1976   *Pāṇini: A Survey of Research*. The Hague: Mouton. (SoR)

1989   Pāṇinian Studies. In: *New Horizons of Research in Indology* (ed. V.N. Jha): 49-84. Pune: University of Poona.

1997   *Pāṇini: His Work and its Traditions. Volume One: Background and Introduction*. Second Edition, Revised and Enlarged. Delhi: Motilal Banarsidass.

1998   A new edition of Vyāḍi's *Paribhāṣāvṛtti*. (Review article of Wujastyk 1993.) In: *Journal of the American Oriental Society* 118.2:239-244.

1999a   Approaching the Vākyapadīya. (Review article of Houben 1995a.) In: *Journal of the American Oriental Society* 119.1:88-125.

1999b   *Recent Research in Pāṇinian Studies*. Delhi: Motilal Banarsidass. (RRiPS)

CHARUDEVA Shastri

1934   *Bhagavad-bhartṛhari-viracitaṁ Vākyapadīyam, tatra haryyupajña-vṛtti-sanāthaṁ vṛsabhadeva-ṭīkā-saṁkṣepa-saṁyutam prathamaṁ Kāṇḍam*. Lavapure (Lahore): Ram Lal Kapoor Trust, vikr. 1991.

CHOMSKY, Noam

1965   *Aspects of the Theory of Syntax*. Cambridge: M.I.T. Press.

1971   *Selected Readings*. Ed. by J.P.B. Allen and P. van Buren. Oxford Univ. Press.

COWARD, Harold and Kunjunni RAJA

1990   *Encyclopedia of Indian Philosophies: The Philosophy of the Grammarians*. Delhi: Motilal Banarsidass.

DESHPANDE, Madhav M.

1978   Pāṇinian grammarians on dialectal variations in Sanskrit. In: *Adyar Library Bulletin* 42:61-114.

1979   Candragomin's Syntactic Rules: Some Misconceptions. In: *Indian Linguistics* 40:133-145.

1984   Review of Kiparsky 1979. In: *Language* 60:161-164.

1990   Semantics of kārakas in Pāṇini: an exploration of philosophical and linguistic issues. In: *Sanskrit and Related Studies: Contemporary Researches and Reflections* (eds. B.K. Matilal and P. Bilimoria): 33-57. Delhi: Sri Satguru Publications.

1991   Pāṇini 7.2.15 (yasya vibhāṣā): a reconsideration. In: *Pāṇinian Studies: Professor S.D. Joshi Felicitation Volume* (ed. M.M. Deshpande and S. Bhate): 161-176. Ann Arbor: The University of Michigan Center for South and Southeast Asian Studies.

DEVASTHALI, G.V.

*1981   Pāṇini and the Aṣṭādhyāyī—A Critique. In: *Annals of the Bhandarkar Oriental Research Institute* 62:193-212.

1983a   Apropos of *Vibhāṣā*. In: *Proceedings of the International Seminar on Studies in the Aṣṭādhyāyī* (ed. S.D. Joshi and S.D. Laddu): 157-165. Pune: University of Poona.

1983b   Pāṇini and Vedic—A Critique. In: *Annals of the Bhandarkar Oriental Research Institute* 64:193-212.

FALK, Harry

1993   *Schrift im alten Indien: ein Forschungsbericht mit Anmerkungen.* Tübingen: Gunter Narr Verlag.

FILLIOZAT, Pierre-Sylvain

*1984   Review of Kiparsky 1979. In: *Orientalistische Literaturzeitung* 79.5: 497-499.

GRIFFITHS, Arlo

forthc.   The Orissa Manuscripts of the Paippalāda Saṁhitā. In: *Zeitschrift der Deutschen Morgenländischen Gesellschaft.*

HINÜBER, Oskar von

*1989   *Der Beginn der Schrift und frühe Schriftlichkeit in Indien.* Wiesbaden & Stuttgart: Franz Steiner.

*2001   *Das ältere Mittelindisch im Überblick.* (2., erweiterte Auflage) Wien: Verlag der Österreichischen Akademie der Wissenschaften.

HOUBEN, Jan E.M.

1995a   *The Saṁbandha-Samuddeśa (chapter on relation) and Bhartṛhari's Philosophy of Language.* Groningen: Egbert Forsten.

1995b   Bhartṛhari's Perspectivism (2): Bhartṛhari on the Primary Unit of Language. In: *History and Rationality: the Skoevde Papers in the Historiography of Linguistics* (Acta Universitatis Skovdensis, Series Linguistica, Vol. 1. Ed. by Klaus D. Dutz and Kjell-Åke Forsgren): 29-62. Muenster: Nodus Publicationen.

1997a   The Sanskrit tradition. In: *The Emergence of Semantics in Four Linguistic Traditions: Hebrew, Sanskrit, Greek, Arabic* (W. van Bekkum, J. Houben, I. Sluiter, K. Versteegh): 49-145. Amsterdam: John Benjamins.

1997b   Bhartṛhari's Perspectivism (1): The Vṛtti and Bhartṛhari's Perspectivism in the first kāṇḍa of the Vākyapadīya. In: *Beyond Orientalism: The Work of Wilhelm Halbfass and its Impact on Indian and Cross-Cultural Studies* (ed. by E. Franco and K. Preisendanz): 317-358. Amsterdam: Rodopi.

1998a   Bhartṛhari's Vākyapadīya and the Ancient Vṛtti (1): The Vṛtti and Vṛsabhadeva's Paddhati on Vākyapadīya 1.46a. In: *Annals of the Bhandarkar Oriental Research Institute* 78 (1997 [98]):177-198.

1998b   The Theoretical Positions of Bhartṛhari and the Respectable Grammarian. In: *Rivista degli Studi Orientali*, vol. LXXII, Fasc. 1-4 (Roma, 1998):101-142.

*1999a   "Meaning statements" in Pāṇini's grammar: on the purpose and context of the Aṣṭādhyāyī. In: *Studien zur Indologie und Iranistik* 22:23-54.

*1999b   On syntactic and stylistic evidence regarding the authorship of the Vākyapadīya-Vṛtti. (Bhartṛhari's Vākyapadīya and the Ancient Vṛtti 3). In: *Wiener Zeitschrift für die Kunde Südasiens* 43:167-197.

ITKONEN, Esa

*1991   *Universal History of Linguistics. India, China, Arabia, Europe.* (Amsterdam Studies in the History of Linguistic Science, vol. 65.) Amsterdam: John Benjamins.

IYER, K.

1965   *The Vākyapadīya of Bhartṛhari with the Vṛtti.* Chapter I. English translation. Poona: Deccan College Postgraduate and Research Institute.

1966   *Vākyapadīya of Bhartṛhari with the Commentaries Vṛtti and Paddhati of Vṛsabhadeva. Kāṇḍa I.* Poona: Deccan College Postgraduate and Research Institute.

1969   *Bhartṛhari: A study of the Vākyapadīya in the light of the ancient commentaries.* Poona: Deccan College Postgraduate and Research Institute.

JOSHI, S.D., and S.D. LADDU

1983   *Proceedings of the International Seminar on Studies in the Aṣṭādhyāyī of Pāṇini* (Held in July 1981). (Publ. of the Centre of Advanced Study in Sanskrit, Class E, no. 9.) Pune: University of Poona.

JOSHI, S.D., and J.A.F. ROODBERGEN

1971   *Patañjali's Vyākaraṇa-Mahābhāṣya, Karmadhārayāhnika, ed. and translated with notes (P. 2.1.51-2.1.72).* Pune: Centre of Advanced Study in Sanskrit, University of Poona.

1983   The structure of the Aṣṭādhyāyī in historical perspective. In: *Proceedings of the International Seminar on Studies in the Aṣṭādhyāyī of Pāṇini* (ed. by S.D. Joshi and S.D. Laddu): 59-95. Pune: University of Poona.

2000   On kāraka, vibhakti and samāsa. In: *Annals of the Bhandarkar Oriental Research Institute* 80:95-112.

KAHRS, E.

1998   *Indian semantic analysis: The 'nirvacana' tradition.* (University of Cambridge Oriental Publications, 55.) Cambridge: Cambridge Univ. Press.

KELLY, John D.

*1996   What was Sanskrit for? Metadiscursive strategies in ancient India. In: *Ideology and Status of Sanskrit: Contributions to the History of the Sanskrit Language* (ed. J. Houben): 87-107. Leiden: E.J. Brill.

KIELHORN, Franz

1883   On the grammarian Bhartṛhari. In: *Indian Antiquary* 12:226-227. [Kleine Schriften (ed. W. Rau, Stuttgart: Steiner) 1969:185-186.]

KIPARSKY, Paul

1979   *Pāṇini as a Variationist.* Pune: Centre of Advanced Study in Sanskrit, University of Poona.

1991   On Pāṇinian Studies: A Reply to Cardona. In: *Journal of Indian Philosophy* 19:331-367.

KIPARSKY, Paul, and Frits STAAL

1969   Syntactic and semantic relations in Pāṇini. In: *Foundations of Language* 5:83-117.

KŚS   = *Kātyāyana Śrauta Sūtra, with a commentary by Sri Karkacharya.* Ed. by Pandit Nitya Nand Panta Parvatiya. Chowkhamba Sanskrit Series. Benares, 1928-1939.

KULLI, J.S.

*1983   Kannada Grammars and Sanskrit Tradition. In: *International Journal of Dravidian Linguistics* 13:40-46.

LADDU, S.D.

*1983   A glimpse of variational awareness of the Indian scholiasts. In: *Ṛtam* 11-15 (1979-1983; *Dr. Babu Ram Saksena Felicitation Volume*): 241-259.

LE MÉE, Jean

1989   Pāṇinīyas and engineers. In: *Studies in Indology: Prof. Rasik Vihari Joshi Felicitation Volume* (ed. A. Kumar et al.): 113-121. New Delhi: Shree Publishing House.

MILLER, Roy Andrew

*1995   Review of Verhagen 1994. In: *Journal of the American Oriental Society* 115.2:343-344.

PALSULE, G.B.

*1979   Review of Rau 1977. In: *Annals of the Bhandarkar Oriental Research Institute* 60:323-328.

PW   = *Sanskrit Wörterbuch*, by Otto Böhtlingk and Rudolph Roth, St. Petersburg: Eggers, 1855-1875.

RAGHUNĀTHA Śarmā

1963   *Vākyapadīyam [Part I] (Brahma-Kāṇḍam)* With the commentaries *Svopajñavṛtti* by Harivṛṣabha, and *Ambākartṛ* by 'Padmaśrī' Pt. Raghunātha Śarmā. Sarasvatībhavana-Granthamālā, vol. 91. Varanasi: Sampurnanand Sanskrit University. [Third edition 1988.]

1968   *Vākyapadīyam [Part II] (Vākyakāṇḍam)* With the Commentary *Ambākartṛ* by Raghunātha Śarmā. Sarasvatī Bhavan Granthamālā, vol. 91. Varanasi: Sampurnanand Sanskrit University. [With Upodghātaḥ by Baldeva Upādhyāya.]

RAJAM, V.S.

*1981   "A comparative study of two ancient Indian grammatical traditions: the Tamil Tolkappiyam compared with the Sanskrit Rk-Pratisakhya, Taittiriya-Pratisakhya, Apisali Siksa, and the Astadhyayi." Dissertation University of Pennsylvania.

RAU, Wilhelm

1977   *Bhartṛhari's Vākyapadīya. Die mūlakārikās nach den Handschriften herausgegeben und mit einem pāda-Index versehen.* Wiesbaden: Franz Steiner.

RENOU, Louis

1942   Les connexions entre le rituel et la Grammaire en Sanskrit. In: *Journal Asiatique* 233 (1941-42):105-165. [Reprint in *Choix d'études* (ed. N. Balbir and G.-J. Pinault), vol. 2:311-371. Paris: Presses de l'École française de l'Extrême-Orient, 1997.]

RriPS   see Cardona 1999b.

ROBINS, R.H.

1979   *A Short History of Linguistics.* Second Edition. London and New York: Longman.

ROCHER, Rosanne

*1986   Review of Kiparsky 1979. In: *Journal of the American Oriental Society* 106.4:862-863.

ROODBERGEN, J.A.F.

1974   *Patañjali's Vyākaraṇa-Mahābhāṣya, Bahuvrīhidvandvāhnika (P. 2.2.23–2.2.38). Text, Translation and Notes.* Pune: Centre of Advanced Study in Sanskrit, University of Poona.

ṚV   = Ṛg-Veda.

SCHARFE, Hartmut

*1981   Review of Kiparsky 1979. In: *Indogermanische Forschungen*, 86. Band: 351-354.

SEARLE, John R.

2002   End of the Revolution. In: *The New York Review of Books*, February 28:33.

SEUREN, Pieter A.M.

1998   *Western Linguistics: An Historical Introduction.* Oxford: Blackwell.

SHARMA, Rama Nath

1983   Review of Kiparsky 1979. *Language in Society* 3:361-369.

SoR   see Cardona 1976.

SV   = Sāma-Veda, ed. Theodor Benfey, Leipzig: Brockhaus, 1848.

THIEME, Paul

1935   *Pāṇini and the Veda: Studies in the early history of Linguistic Science in India.* Allahabad: Globe Press.

1956   Pāṇini and the Pāṇinīyas. In: *Journal of the American Oriental Society* 76:1-23. [Kleine Schriften (ed. G. Budruss, Stuttgart: Steiner) 1971: 573-595.]

1983   Meaning and form of the "grammar" of Pāṇini. In: *Studien zur Indologie und Iranistik*, Heft 8/9 (1982-83):3-34. [*Kleine Schriften* II (ed. R. Söhnen-Thieme, Stuttgart: Steiner) 1995:1170-1201.]

UNEBE, Toshiya

*1997   Bhartṛhari's verses cited in Ārya-Laṅkāvatāravṛtti ('Phags pa Langkar
        gshegs pa'i 'grel pa). In: *Indogaku Bukkyôgaku kenkyū / Journal of
        Indian and Buddhist Studies* 91:(19)-(23).

*1999   Barutoriharino Sattā ron. In: *Nanto Bukkyô / Journal of Nanto Society
        for Buddhist Studies* 76:1-25.

*2000   Jñānaśrībhadra's interpretation of Bhartṛhari as found in the
        Laṅkāvatāravṛtti (*'Phags pa Langkar gshegs pa'i 'grel pa*). In: *Jour-
        nal of Indian Philosophy* 28:329-360.

*2001   What is the ground of application of the term '*ākāśa*'? Jñāna-
        śrībhadra's reference to Bhartṛhari. In: *Indogaku Bukkyôgaku kenkyū /
        Journal of Indian and Buddhist Studies* 98:(42)-(46).

UPADHYAYA, Baldeva

1968   "Upodghātaḥ" in Raghunātha Śarmā 1968, pp. *ka-ña*. Reprinted in
        Vimarsha Chintāmaṇiḥ (Varanasi: Śāradā Saṁsthānam, 1985).

VERHAGEN, Peter

*1992   A Ninth-Century Tibetan Summary of the Indo-Tibetan Model of
        Case-semantics. In: *Tibetan Studies: Proceedings of the 5ᵗʰ Seminar of
        the International Association for Tibetan Studies Narita 1989* (ed.
        Ihara, S., Z. Yamaguchi): 833-844. Narita: Naritasan Shinshoji.

*1994   *A History of Sanskrit Grammatical Literature in Tibet. Volume 1:
        Transmission of the Canonical Literature.* Handbuch der Orientalistik
        Abt. 2 Bd. 8. Leiden: E.J. Brill.

*2001   *A History of Sanskrit Grammatical Literature in Tibet. Volume 1I:
        Transmission of the Canonical Literature.* Handbuch der Orientalistik
        Abt. 2 Bd. 8. Leiden: E.J. Brill.

VISHVABANDHU Sastri

1956   *Vedic Word Concordance. Vol. I: Saṁhitās, pt. III.* Hoshiarpur: Vish-
        veshvaranand Vedic Research Institute.

VP   = Bhartṛhari's Vākyapadīya, ed. Rau 1977. (Numerals indicate *kārikā*.)

VP I   = Bhartṛhari's Vākyapadīya, first kāṇḍa, ed. Iyer 1966. (Numerals
        indicate page and line.)

WERBA, Chlodwig H.

1997   *Verba Indoarica: die primären und sekundären Wurzeln der Sanskrit-
        Sprache. Pars I: Radices Primariae.* Wien: Der österreichischen Aka-
        demie der Wissenschaften.

WUJASTYK, Dominik

1993   *Metarules of Pāṇinian Grammar: Vyāḍi's Paribhāṣāvṛtti, Critically
        Edited with Translation and Commentary.* Groningen: Egbert Forsten.

YAJAN, Veer
1985   A tale of three terms (*vā*, *vibhāṣā*, and *anyatarasyām*). In: *Proceedings of the Fifth World Sanskrit Conference, Varanasi, India: October 21-26, 1981* (ed. by R.N. Dandekar and P.D. Navathe): 432-440. New Delhi: Rashtriya Sanskrit Sansthan.