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# THE ORTHOEPIC DIASKEUASIS OF THE RGVEDA AND THE DATE OF PĀNINI\*

## **ABBREVIATIONS**

P. Pāninian sūtra

RPr Rgveda-Prātisākhya. The sūtra numbers both according to Mangal Deva

Shastri's and Max Müller's editions are given.

RV Rgveda

1.1. The Rgveda is known to us in a form which is fixed down to the minutest details. It obtained this form as the result of a process which, in as far as it concerns details of sandhi etc., is known by the name 'orthoepic diaskeuasis'.

The main hypothesis to be defended in this article is that the orthoepic diaskeuasis of the Rgveda was not yet completed in the time of the Rgveda-Prātišākhya, and ended when but one version of the Rgveda remained, i.e., probably with the disappearance of the Bāṣkala Saṃhitā. (I do not take here into consideration the Kashmir Rgveda; see Bronkhorst, forthcoming.) The hypothesis contrasts with the currently held belief that the Śākhās of the Rgveda, as well as the Rgveda-Prātišākhya, presuppose, and therefore postdate, the final redaction of the Rgveda (Renou, 1947: 21, 35; cf. 1960: 1-2, 10).

A decision procedure, on the basis of which we can choose between these two opinions, is provided by the following. We have some idea of the original form of the hymns of the Rgveda, since the present Rgveda often deviates from the metre in a way that can easily be restored by undoing the sandhi or other minor changes. If the Rgveda-Prātišākhya stands somewhere in the process which began with the original form of the Rgvedic hymns, we may expect that at least some of the authorities who preceded the Prātišākhya but took part in the same process, came out in defence of a form of those hymns which, at least in some cases, deviates from their present, and is closer to their original one. If, on the other hand, the Prātišākhya belongs to a period which came after the orthoepic diaskeuasis, we may not expect such opinions on the part of those who took part in the development in which the Prātišākhya participates.

1.2. The *Rgveda-Prātišākhya* mentions the following authorities: Ānyatareya <sup>1</sup> (3.22(208)), Gārgya (1.15(16); 6.36(412); 11.17 (629); 11.26(638); 13.31(739)), Pañcāla (2.33(137); 2.81(185)), Prācya (2.33(137); 2.81(185)); Mākṣavya (Intr. v. 2); Māṇḍūkeya (Intr. v. 2; 3.14(200)), Yāska (17.42(993)), Vedamitra

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- (1.51(52)), Vyāli (3.23(209); 3.28(214); 6.43(419); 13.31(739); 13.37(745)), Śākaṭāyana (1.16(17); 13.39(747)), Śākala (1.64(65); 1.75(76); 6.14(390); 6.20 (396); 6.24(400); 6.27(403); 11.19(631); 11.21(633); 11.61(673)), Śākalya (3.13 (199); 3.22(208); 4.13(232); 13.31(739)), Śākalya (sthavira) (2.81(185)), Śākalyapitṛ (4.4(223)), Śūravīra (Intr. v. 3), Śūravīra-suta (Intr. v. 3). Unfortunately, none of the opinions ascribed to these authorities in the Prātišākhya has an effect on the metre of the hymns, be it positively or negatively. However, many of these authorities are mentioned elsewhere in the ancient, and not so ancient, literature, and opinions are ascribed to them which are not found in the Rgveda-Prātišākhya. Many of these other opinions, also, do not affect the metre, but there are some which do in a way that deserves our attention:
- (i) Pāṇini's Aṣṭādhyāyī contains the following rule: P.6.1.127: iko'savarne śākalyasya hrasvaś ca [saṃhitāyām (72), ekah pūrvaparayoh (84), na (115),³ aci (125)] "[In the opinion] of Śākalya, in connected speech (saṃhitā), no single [substitute] of what precedes and what follows [comes] in the place of [the vowels] i,  $\bar{i}$ , u,  $\bar{u}$ , r,  $\bar{r}$ , l, when a dissimilar vowel follows; and [if the earlier vowel is long,] a short [vowel comes in its place]."

The translation here given follows the interpretation of the Kāśikā (except in so far as this is not possible in view of footnote 12). The interpretation may, however, be improved upon by understanding the word chandasi "in Sacred Literature" (Thieme, 1935: 68) in this rule, from the preceding one. Both the mention of the name "Śākalya" and the unusual kind of sandhi described support this. We may expect that this rule was (also) valid for the Rgveda.

The Rgveda in its present form is not in agreement with Śakālya's rule. The earlier form of the Rgveda, on the other hand, agrees with it. E. Vernon Arnold (1905) makes the following statements about the original Rgveda. First: "Before dissimilar vowels final  $-i - \bar{i} - u - \bar{u}$  are regularly used with hiatus" (p. 76). Second: "The vowels  $-\bar{i}$ ,  $-\bar{u}$  are regularly shortened when followed by dissimilar vowels, but there are many exceptions" (p. 135). Third: "Final -a,  $-\bar{a}$  are regularly combined with an initial vowel or diphthong following: and final  $-i - \bar{i} - u - \bar{u}$  are regularly combined with similar vowels, that is -i or  $-\bar{i}$  with either -i or  $-\bar{i}$ , and -u or  $-\bar{u}$  with either -u or  $-\bar{u}$ " (p. 72). These three statements are so close to the opinion ascribed to Śākalya in P. 6.1.127 that they are almost a translation of that rule.

(ii) Purusottamadeva's Bhāṣāvṛṭṭi on P. 6.1.77 contains the following line (quoted in Mishra, 1972: 30n, 32n; Mīmāṃsaka, 1973: I: 26): ikāṃ yaṇbhir vyavadhānaṃ vyāḍigālavayor iṭi vakṭavyam/dadhiyaṭra dadhy aṭra madhuvaṭra madhv aṭra/ "It must be stated that [in the opinion] of Vyāḍi and Gālava there is separation of [the vowels] i, u, ṛ, l by [the consonants] y, v, r, l [respectively. Examples are] dadhi-y-aṭra [for dadhi aṭra, where we normally find] dadhy aṭra, madhu-v-aṭra [for madhu aṭra, where we normally find] madhv aṭra." The kind of

sandhi here ascribed to Vyāḍi and Gālava is not found in our Rgveda. (It is found in a few places elsewhere in the Vedic literature; see Mīmāṃsaka, 1973: I: 27f.) It would, however, make good the metre of the hymns of the Rgveda in innumerable instances (Whitney, 1888: 39, § 113).

(iii) The third case rests upon a somewhat unorthodox interpretation of some rules of the Astadhyayi, an interpretation which, however, has rather strong arguments to support it. They will be discussed in § 1.2.3.

Pāṇini's grammar contains the following three rules: P. 8.3.17: bhobhagoaghoapūrvasya yo'si [roh (16), rah (14)] "In the place of r of rU, which is preceded by bho, bhago, agho, -a or  $-\bar{a}$ , [comes] y, when a vowel or voiced consonant follows."

- P. 8.3.18: vyor laghuprayatnataraḥ śākaṭāyanasya [aśi (17)] "According to Śākaṭāyana, in the place of  $\nu$  and y [comes a substitute] of which the [articulatory] effort is lighter, when a vowel or voiced consonant follows."
- P. 8.3.19: lopaḥ śākalyasya [vyoḥ (18), aśi (17)] "According to Śākalya, there is elision of  $\nu$  and y when a vowel or voiced consonant follows."

When these rules are applied to a word ending in -as that is followed by a-, this sandhi evolves: -as+a->-a-rU+a- (8.2.66) > -ay+a- (8.3.17) or -ay+a- (8.3.17&18) or -a+a- (8.3.17&19). None of these three forms is ever found in our Rgveda, which invariably has -o- or -o+a-. The metre requires two distinct syllables in the vast majority of cases and that the first syllable be metrically short (Wackernagel, 1896: 324, § 272b; Ghatage, 1948: 14). Oldenberg (1888: 458) has argued that the original reading was -a+a- We note that this is the opinion of Śākalya expressed in P. 8.3.19. Oldenberg (1888: 457–58) further shows that -av for -as occurs in the Vedic literature, and does not exclude the possibility that -av+a- for -as+a- was the original form in the -av+a- for -av+a- for

All these three passages need some further comments.

- 1.2.1. There is no reason to doubt that the Śākalya mentioned in the Aṣṭādhyāyī is identical with the Śākalya mentioned in the Rgveda-Prātisākhya. On one occasion we find in the Aṣṭādyāyī an opinion ascribed to Śākalya which the Rgveda-Prātisākhya ascribes to the followers of Śākalya (Bronkhorst, forthcoming). P. 1.1.16, moreover, seems to bring Śākalya in connection with a Padapāṭha. We know from Nirukta 6.28 that the author of the Padapāṭha of the Rgveda was called thus. The connection of the Śākalya mentioned in the Aṣṭādhyāyī with the Rgveda seems therefore established.
- 1.2.2. Of the two, Vyāḍi and Gālava, only the first one is mentioned in the *Rgveda-Prātiśākhya*. <sup>5</sup> It is unlikely that Puruṣottamadeva derived his knowledge directly or indirectly from the *Samgraha*, a work reputedly <sup>6</sup> written by someone

called 'Vyāḍi'. All we know about this work (see Mīmāṃsaka, 1973: I: 282–90) shows that the Saṃgraha dealt with philosophical questions, and was not just a grammar. We are therefore justified in neglecting the claim of the commentator Abhayanandin on the Jainendra grammar to the extent that this rule derives from the Saṃgraha and is there ascribed to "some" (Jainendra Mahāvṛtti 1.2.1: ikāṃ yaṇbhir vyavadhānam ekeṣām iti saṃgrahaḥ; quoted in Mīmāṃsaka, 1973: I: 26n). We further do not have to decide whether the two Vyāḍis are one and the same or not.

1.2.3. The example -as+a- would yield -o- according to the orthodox interpretation of Pāṇini's grammar, in the following manner: -as+a- > -a-rU+a- (8.2.66) > -a-u+a- (6.1.113) > -o+a- (6.1.87) > -o- (6.1.109). There can be no doubt that this form of sandhi was also accepted by Pāṇini, for his own grammar makes an abundant use of it, e.g., in P. 8.3.17 (see above) which has yośi for yas+aśi. The question is if only this form was accepted. Some circumstances indicate that such is not the case.

The fact is that a strict application of the principles of Pāṇini's grammar can not lead to -o-, only to -ay+a-, -ay+a-, and -a+a-! To understand why, we must recall that the substitute rU for s is introduced in P. 8.2.66, a rule which is part of the last three sections of the Astadhyayi, the so-called "Tripādi", which has a linear rule ordering (Bronkhorst, 1980: 72f.). Use of P. 8.2.66 can therefore only be followed by application of a rule which comes after P. 8.2.66, certainly not by application of P. 6.1.113, which would be necessary to obtain -o-.

The location of P. 6.1.113 is the most flagrant violation of the principle of linear rule ordering of the Tripādī which there is in the  $Astadhyay\bar{t}$  (cf. Buiskool, 1939: 83, 99). P. 6. 1.113 reads: ato ror aplutād aplute [ati (109), ut (111)] "In the place of rU which follows a that is not prolated, [comes] u, when a non-prolated a follows." This rule presupposes the presence of the substitute rU. But rU is not introduced except in the Tripādī. Strictly speaking P. 6.1.113 should never apply, and be superfluous. Why was P. 6.1.113 not located in the Tripādī, somewhere after P. 8.2.66 and before P. 8.3.17?

I think there are two answers to this question, which are simultaneously valid. The first is that P. 6.1.113 has to "feed" P. 6.1.87 in the derivation of -o- out of -as+a- (see above). This answer alone is not fully satisfying, for if the linear ordering of the Tripādī was to be broken, then why not after the application of P. 6.1.113? The second answer is that if P. 6.1.113 were located in the Tripādī, it would make the derivation of -ay+a-/-ay+a-/-a+a- out of -as+a- impossible. That this second answer leads to a result which agrees so well with the original Rgveda, only confirms that it is most probably correct.

1.3. The above shows that Sākalya was not the final redactor of the Rgveda, as

Patañjali's Mahābhāṣya seems to say he was (on P. 1.4.84, vol. I, p. 347, 1.3: śākalyena sukṛtāṃ saṃhitām anuniśamya devaḥ prāvarṣat). Patañjali's opinion illustrates the process of apotheosis which Śākalya underwent,<sup>8</sup> as I observed elsewhere (Bronkhorst, forthcoming).

I shall now show that other data we possess about Śākalya and his Padapāṭha agree, or at any rate do not disagree, with the view that Śākalya preceded the final redaction of the *Rgveda*.

- 1.3.1. Aitareya Āraṇyaka 3.2.6 lays down two rules: where there is doubt whether or not n is to be used, there n must indeed be used; where there is a similar doubt regarding s, there s must be used (p. 139: sa yadi vicikitset saṇakāraṃ bravāṇī 3m aṇakārā 3m iti saṇakāram eva brūyāt saṣakāram bravāṇī 3m aṣakāra 3m iti saṣakāram eva brūyāt). The same chapter of the Aitareya Āraṇyaka (3.1.2) mentions the opinion of Śākalya regarding the mystical significance of union (saṃhitā). Doubts regarding the correct form of the Rgveda were apparently still alive in the time after Śākalya.
- 1.3.2. Six verses of the Rgveda have no Padapātha. They are RV 7.59.12; 10.20.1; 121.10; 190.1-2-3 (Kashikar, 1951: 44). This is most easily explained by the assumption that these verses were not considered part of the Rgveda by Śākalya. It further shows that the final redactors did not hesitate to deviate from the composer of the Padapātha in deciding what did, and what did not, belong to the Rgveda. (It is interesting to note that at least one hymn of the Rgveda (10.95) is known to have had fewer verses than at present at as late a date as that of the Satapatha Brāhmaṇa. See Oldenberg, 1912: 303.)
- 1.3.3. Oldenberg (1888: 384–85) points out that the Samhitā text contains several nom. sing. fem. words ending in  $-\bar{a}$  which are not joined with a following vowel. Oldenberg, following Lanman, explains this by assuming that the final redactors of the *Rgveda* considered these words as really ending in  $-\bar{a}h$ . The Padapāṭha, on the other hand, presents all these forms as actually ending in  $-\bar{a}$ . This indicates that the maker of the Padapāṭha and the final redactors of the Saṃhitā were different persons. Since the final redactors did not consider the Padapāṭha authoritative (see above, further fn. 8), this fact does not conflict with Śākalya's temporal priority to these redactors. <sup>10</sup>
- 2.1. In what phase of the development of the Rgveda does Pāṇini fit? There is no doubt that Pāṇini came after Śākalya, for he mentions the latter four times (P. 1.1.16; 6.1.127; 8.3.19; 4.51; see above pp. 84 and 85. The question is: Had the Rgveda known to Pāṇini already obtained the form which it had in the time of the

Rgveda-Prātiśākhya, and which was to remain virtually unchanged ever since? Three places of the Aṣṭādhyāyī seem to indicate that this was not the case.

- (i) P. 6.1.134: so'ci lope cet pādapūraṇam [sulopaḥ (132)] "There is elision of [the nom. sing. case-affīx] sU of sa 'he' before a vowel, if, in case of elision, there is completion of the Pāda." This rule is obeyed in our Rgveda where sas is followed by a vowel different from a; e.g., in RV 1.32.15: sed u rājā kṣayati carṣaṇīnām for saḥ/it/ etc., and in RV 8.43.9: sauṣadhīr anu rudhyase for saḥ/oṣadhīh/ etc. (cf. Oldenberg, 1888: 464; Arnold, 1905: 74). Where, however, sas is followed by a- and the metre requires contraction, "ist in einer Reihe von Fällen sā-überliefert..., in einigen andern so a- oder so mit dem Abhinihita Sandhi" (Oldenberg, 1888: 464; cf. Arnold, 1897: 292). Oldenberg is of the opinion that all these cases originally had sā-. Apparently Pāṇini defends here quite generally an older reading which survived but in a number of cases. Moreover, Pāṇini's concern for metre contrasts with the unconcern for the same found in the Rgveda-Prātiśākhya; see Oldenberg, 1888: 372-73n; Müller, 1891: lxxixf.
- (ii) P. 6.1.115: nāntaḥpādam avyapare 12 [saṃhitāyām (72), ekaḥ pūrvaparayoḥ (84), pūrvaḥ (107), enaḥ padāntād ati (109)] "In a Saṃhitā [text], when e or o which are final in a word precede, [and] when a which is not [itself] followed by v or y, follows, [then] the preceding [sound is] not the single [substitute] of both the preceding and the following [sound], when [these sounds occur] in the interior of a Pāda."
- P. 6.1.116: avyādavadyādavakramuravratāyamavantvavasyusu ca [saṃhitāyām (72), ekaḥ pūrvaparayoḥ (84), pūrvaḥ (107), enaḥ padāntād ati (109), nāntaḥpādam (115)] "In a Saṃhitā [text], when e or o which are final in a word, precede, [and] when a follows which is [the initial sound] in [one of the following words:] avyāt, avadyāt, avakramuḥ, avrata, ayam, avantu, avasyu, [then] the preceding [sound is] not the single [substitute] of both the preceding and the following [sound], when [these sounds occur] in the interior of a Pāda."
- P. 6.1.116 is not in agreement with the facts of our Rgveda. There are at least two places where ayam has been joined with a preceding e or o, viz. RV 1.108.6 vrṇāno'yam and RV 5.30.3 vahate'yam. Nowhere does ayam behave in the prescribed manner. avasyu is joined with a preceding e or e (e or e or e
- (iii) Pāṇini seems to consider the sandhi form ay+a- for as+a- correct, which agrees with the original Rgveda, but not with the Rgveda known to us. This has been explained in § 1.2, above.

- 2.1.1. It must still be shown that the sūtras 6.1.134 and 6.1.115—116 really are about the Veda. In the case of P. 6.1.134 there can be no doubt. The preceding rule contains the word chandasi "in Sacred Literature". The Kāśikā illustrates the rule with the help of the two examples from the Rgveda which were reproduced above (and adds that some think that the rule is not confined to Vedic verse alone (pādagrahaṇenātra ślokapādasyāpi grahaṇaṃ kecid icchanti; this would justify a verse subsequently quoted in the Kāśikā). It seems that wherever in the Aṣṭādhyāyī the word pāda is used to specify a context, it refers to feet of Vedic verse. The remaining places are: P. 3.2.66: here chandasi is understood from rule 63; P. 8.3.9: rkṣu is understood from the preceding rule; P. 6.1.115 and 8.3.103: here yajusi "in a sacrificial formula in prose" occurs in a following rule (P. 6.1.117 and 8.3.104 respectively), suggesting that the verse-feet (pāda) talked about in the earlier rules likewise belong to sacrificial formulas, and therefore to Vedic verse; P. 8.1.6, finally, deals with a phenomenon which is only found in Vedic verse (see the Kāšikā on this rule).
- 2.1.2. P. 8.3.17, which justifies the sandhi form -ay+a- for -as+a-, occurs in the company of P. 8.3.18 and 19, which mention Śākaṭāyana and Śākalya respectively (see p. 85, above). These two authorities are mentioned in the Rgveda-Prātiśākhya, and their opinions may be considered to apply also to the Rgveda, if not primarily to that work. It is therefore safe to say the same of P. 8.3.17.
- 2.2. The above seems to show that Pāṇini worked with a version of the Rgveda which is earlier than the versions described in the Rgveda-Prātiśākhya. The only serious objection which one might raise, as far as I can see, is that Pāṇini's version is not earlier, but quite simply different from the ones of the Prātišākhya. And indeed, we have no guarantee that the Rgveda-Prātišākhya describes all the versions of the Rgveda which existed in its time. The fact that we obtain opinions of the authorities mentioned in the Prātišākhya from sources other than the Prātišākhya shows that the information provided by the Prātišākhya is in no way complete.

There is, nonetheless, reason to think that Pāṇini did not draw upon an altogether different version of the *Rgveda*. To begin with, Pāṇini mentions Śākalya on four occasions (p. 87, above) and also knows of the Śākalas, or so it seems (P. 4.3.128). Perhaps more important is that his rules 6.1.115—116 (which we discussed in § 2.1, above) seem to be an earlier version of some rules of the *Rgveda-Prātiśākhya*. <sup>13</sup> This I shall show now.

P. 6.1.115—116 specify the circumstances in which e and o retain their original form before a. The  $Rgveda-Pr\bar{a}tis\bar{a}khya$  adopts the opposite procedure: it specifies the circumstances when e and o merge with a. In spite of this difference, there is a remarkable similarity.

RPr 2.35(139) reads: antahpādam akārāc cet saṃhitāyāṃ laghor laghu yakārādy akṣaraṃ paraṃ vakārādy api vā bhavet "In the interior of a Pāda, if, in the Saṃhitā [text], a light syllable beginning with y or even v follows a light vowel a, [this a becomes one with the preceding e or o]". This means the same as P. 6.1.115, and more. In addition it contains a restriction on that rule. According to P. 6.1.115, e and o merge with a following a, when that a is followed by v or y. According to RPr 2.35(139), e and o merge with a following a, when that a is followed by v or y, and is a light vowel, and when moreover the syllable beginning with v or v is light.

The advantage of the formulation in the Prātišākhya is clear. Of the seven exceptions which Pāṇini had to enumerate in rule P. 6.1.116, six are excluded by the added restriction of the Prātišākhya. But a price had to be paid. Twenty exceptions are enumerated in the immediately following sūtras of the Rgveda-Prātišākhya. <sup>14</sup> This means that the complicated qualification which we find in RPr 2.35(139) does not in any way simplify the description of the subject-matter. The formulation of the Prātišākhya can most easily be accounted for by taking it as an improvement upon an earlier formulation, the one found in the Aṣṭādhyāyī or one closely similar to it.

- 2.3. I shall now enumerate a few more circumstances which seem to fit our conclusion that Pāṇini preceded the *Rgveda-Prātiśākhya* and made use of an earlier version of the *Rgveda*.
- Pāṇini's grammar does not know the retroflex consonant l. Our Rgveda contains this sound, but we know that not all versions had it (Bronkhorst, forthcoming). The introduction of *l* was "doubtless a dialectical anticipation of the more general identical process in MidIA" (Allen, 1962: 54) and may have taken place rather late. This is supported by the fact that *l* occupies the place of *d* where our Rgveda would otherwise have had d between two vowels, not where the original Rgveda would otherwise have had d between two vowels (Wackernagel, 1896: 255-56). E.g., vīdv-anga was originally pronounced vīduv-anga, but contains nonetheless no  $\underline{l}$ . One way of explaining the absence of  $\underline{l}$  in the Astādhyāy $\overline{i}$  is that Pānini lived before this sound made its appearance in the Veda, and therefore before the Rgveda-Prātiśākhya. 15 (If Pānini lived after the sound l had found entrance into the Śākala version of the Rgveda, it would be hard to account for the absence of *l* from the Astādhyāyī by saying that this sound was not used in the language of the region where Pānini lived (Lüders, 1923: 301-02). Pānini knew the Sākalas (above, p. 89) and therefore probably also the peculiarities of their version of the Rgveda. If these peculiarities included l in Pānini's time, this sound would, and should, have been mentioned in the Astādhyāyī, irrespective of the presence or absence of the sound in Pānini's own dialect.)

- 2.3.2. Vowels with circumflex accent are described as follows in the Aṣṭādhyāyī: P.1.2.31: samāhāraḥ svaritaḥ [ac (27)] "A vowel which is a mixture [of an udātta and an anudātta vowel] is svarita".
- P.1.2.32: tasyādita udāttam ardhahrasvam "Of that [svarita vowel] half [the length of] a short [vowel, starting] from the beginning, is udātta."

There has been some discussion why this description is included in the Astādhyāyī (Thieme, 1957; Cardona, 1968), which does not concern us here. We note the difference from the Rgveda-Prātiśākhya, 16 which has the following sūtras: RPr 3.4(189–90): tasyodāttatarodāttād ardhamātrārdham eva vā "Of that [svarita accent 17] half a mātrā or even half [of the svarita accent] is higher than the udātta [accent]".

RPr 3.5(191): anudāttaḥ paraḥ śeṣaḥ sa udāttaśrutiḥ "The following remainder [of the svarita accent] is anudātta; it sounds like udātta."

RPr 3.6(192) further specifies that this description is not valid when a syllable follows which has an udātta or svarita accent. The commentator Uvaṭa explains that in such cases the latter part of the svarita accent becomes really udātta (p. 114: yadi tūdāttaṃ svaritaṃ vā paraṃ syāt tadānudāttaḥ paraḥ śeṣaḥ syāt). The description of the Rgveda-Prātiśākhya makes the impression of being more sophisticated than the description of the Aṣṭādhyāyī. This may be due to the fact that the former is of later date than the latter. 18

3.1. We see that there are good reasons to think that our hypothesis is correct. The orthoepic diaskeuasis of the *Rgveda* took place over a rather long period of time, and was not yet fully completed when the *Rgveda-Prātisākhya* was composed (better perhaps: reached its present form).

The investigation has further provided us with some chronological information, most important among which is, no doubt, that Pāṇini's Aṣṭādhyāyī is older than the Rgveda-Prātiśākhya. We also saw that Śākalya, who in Yāska's Nirukta was no more than the composer of the Padapāṭha, had become the redactor of the Saṃhitā in Patañjali's Mahābhāṣya. Since in the Anuvākānukramaṇī he is said to have seen the Veda (Bronkhorst, forthcoming) and apparently has reached his apex, it is reasonable to think that these three works have this chronological order: the Nirukta preceded the Mahābhāṣya, which in its turn preceded the Anuvākānukramaṇī.

There have been attempts to discover the rules employed in the orthoepic diaskeuasis of the *Rgveda* (Hejib-Sharma, 1979; Ghatage, 1948: 18). Such rules may be discoverable in some cases, but the complicated history of the process, in which many people participated while representing different views, makes it unlikely that all phonetic peculiarities of our *Rgveda* fall under rules.

It must, finally, be pointed out that the lack of agreement between the Astādhyāyī and our Rgveda may henceforth have to be looked at through different eyes. Certainly where phonetic questions are concerned, Pāṇini may describe an earlier form of the *Rgveda*, and may not deserve to be blamed for being lacunary, as he is, e.g., by Renou (1960: 27).

3.2. It remains to say a few words about the difference that may have existed between schools that were concerned primarily with the Rgveda Samhitā and those that were concerned primarily with the ritual. Karl Hoffmann (1974) has argued — on the basis of P. 7.2.69: sanim sasanivāmsam, which is found in Mānava Śrauta Sūtra 1.3.4.2 and Vārāha Śrauta Sūtra 1.3.5.16 — that Pāṇini lived in the older Sūtra period, 19 i.e., after the Mānava Śrauta Sūtra and the Vārāha Śrauta Sūtra. I am not sure if Hoffmann's arguments are compelling, for (as Hoffmann himself observes, pp. 75—76) the words sanim sasanivāmsam occur in a cited mantra, which may be older than these two Sūtras. Be this as it may, Hoffmann's hypothesis places Pāṇini in a time when differences of opinion regarding the ritual had given rise to different schools (Renou, 1947: 25—26). This means that we may have to distinguish between simultaneously existing schools connected with the supposedly correct form of the Rgveda Saṃhitā, and such as owe their existence to particular views on the ritual. Schools belonging to these two groups may, but by no means have to, coincide.

We know the names of at least three schools that were concerned with the form of the Rgveda: Śākala, Śaiśirīya (see Bronkhorst, forthcoming), Bāṣkala. Schools of the second type, which were primarily concerned with the ritual, may have been the Āśvalāyana and Śāṅkhāyana schools (Renou, 1947: 25f). R. G. Bhandarkar (1893) has argued that these two schools belonged to both the Śākala and the Bāṣkala Śākhā. This point of view is confirmed by the commentator Gārgya Nārāyaṇa on Āśvalāyana Śrauta Sūtra 1.1.1 (p. 1); see also his comments on Āśvalāyana Gṛḥya Sūtra 3.5.9 (pp. 167–68). Some other evidence tends to ascribe both the Āśvalāyana and the Śāṅkhāyana school to the Bāṣkala Śākhā (Renou, 1947: 25, and esp. Aithal, 1969: 187–89).

It is interesting to observe that the unification of Śākhās which we noticed with respect to the form of the Saṃhitā, has its counterpart in the tendency to rejoin which is found in the ritual schools of the *Rgveda* (Renou, 1947: 46; cf. Surya Kanta, 1933: 9-11, 66).

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### NOTES

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- <sup>1</sup> The Rgveda-Prātisākhya does not enable us to decide whether "Anyatareya" or "Ānyatareya" is the correct name. The commentator on Caturādhyāyikā 3.74, however, cites the opinion of one Ānyatareya. See Whitney, 1862: 174.
- <sup>2</sup> Many such passages are given in Mīmāmsaka, 1973: I: 69-71, and elsewhere in the same book, to be found with the help of the index (Mīmāmsaka, 1973: III: 111-50).
- <sup>3</sup> See note 12, below.
- Ghatage's (1948) attempts to prove that the passages concerned must be read  $-\check{o}+a$ , with short  $\check{o}$ , show at best that this was "an intermediate stage of abhinihita sandhi", as he himself seems to admit (p. 18).
- <sup>5</sup> "Vyāli", which is found in the Rgveda-Prātiśākhya, is a śākalization of "Vyāḍi". See Bronkhorst, forthcoming.
- <sup>6</sup> Explicitly said by Bhartrhari, *Mahābhāṣyadīpikā* p. 23, 1. 19. Vyāḍi and the *Saṃgraha* are both mentioned in Patañjali's *Mahābhāṣya*, possibly with the understanding that the former was the author of the latter; see Scharfe, 1977: 125.
- <sup>7</sup> As far as I can see, no difficulties would arise if P. 6.1.113 and 6.1.87 but then also P. 6.1.109 and 6.1.78 would be taken into the Tripādī, in this order (after 8.2.66 and before 8.3.19, of course). If this is correct, the riddles surrounding P. 6.1.113 intensify and depend for their solution exclusively on the second answer.
- <sup>8</sup> Interestingly, Patañjali has no respect for the makers of Padapāthas (padakāra), for he says that they must follow grammar (lakṣaṇa), rather than vice versa: na lakṣaṇan padakārā anuvartyāh/padakārair nāma lakṣaṇam anuvartyam/yathālakṣaṇam padam kartavyam// (vol. II, p. 85, 11. 4-5; vol. III, p. 117, 11. 18-19; p. 398, 11. 8-10). We may recall that also Yāska did not hesitate to disagree with Śākalya's Padapātha (Nirukta 6.28).
- This advice has been followed by the Taittirīyas with regard to borrowed mantras (Renou, 1947: 33n). According to Bhartrhari (Mahābhāsyadīpikā p. 1, 1. 7) the Taittirīyas read even the word agni with n. This probably refers to Taittirīya Brāhmaṇa 3.5.6 (borrowed from RV 6.16.34): agnir vrtrāṇi janghanat. This line has no n in agnir in our version of that text, but Jayantabhatṭa records that it sometimes has (Nyāyamañjarī vol. I, p. 685).
- Oldenberg (1888: 386) thinks that these redactors preceded the Padapātha. Since he gives no real arguments, we can ignore his opinion.
- Oldenberg later (1907: 834-35) changed his view, on the basis of the later language. This, of course, is a weak argument. Pāṇini's rule is evidence that Oldenberg's earlier opinion was the correct one.
- This is the reading found in Patanjali's Mahābhāṣya. The Kāśikā has: prakṛtyāntaḥpādam avyapare. The Bhāṣya-reading seems to be older, for, although Patanjali is acquainted with the reading prakṛtyā, Kātyāyana's vārttikas show no sign of such an acquaintance. See Thieme, 1935: 47-48. The word prakṛtyā may have been borrowed from RPr 2.51 (155), which defines the meaning of pragṛhya.
- <sup>13</sup> Already Renou (1957: 120, n. 580) pointed at the similarity between P. 6.1.115f and RPr 2.35(139)f.
- Sandhi with preceding e or o takes place in avartrah, avyatyai, ayopāṣṭiḥ, avantu, avīratā, avatvacaḥ, avīrate, avāṃṣi, dvaḥ (RPr 2.40(144)). Further exceptions: agne'yam (RPr 2.42(146)); yavase'viṣyan, vṛṭrahatye'vīḥ (RPr 2.43(147)); tavase'vāci, vahate'yam, januṣo'yā (RPr 2.44(148)); viśo'yanta, santo'vadyāni, bharanto'vasyavaḥ (RPr 2.45(149)); te'vardhanta (RPr 2.46(150)); te'vindan (RPr 2.47(151)).
- That the Padapātha contains <u>l</u>, may be explained by the process of śakalization, which also affected the <u>Rgveda-Prātiśākhya</u> (Bronkhorst, forthcoming).
- The Astādhyāyī differs in this respect from the other Prātiśākhyas as well. See Whitney's (1862: 164-69) description of the svarita in the Prātiśākhyas.
- The terms udātta, anudātta and svarita apply to vowels in the Aṣṭādhyāyī, to accents in the Rgveda-Prātiśākhya (Cardona, 1968: 455).

<sup>18</sup> Cardona (1968: 459) thinks that the description of svarita in the Aṣṭādhyāyī was only meant for svarita vowels occurring in the Aṣṭādhyāyī. This seems unlikely.

Of course, we must be careful not to revert to the belief that there was a clear Brāhmaṇa period followed by a clear Sūtra period; see Renou, 1947: 36, Gonda, 1975: 22.

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