

PĀṆINI AND THE VEDA RECONSIDERED*

Johannes Bronkhorst

The relationship between Pāṇini and the Veda has been much debated.¹ The presupposition underlying a major part of this debate has been that much or even most of Vedic literature existed in its present form prior to Pāṇini. In this article an attempt will be made to establish, as far as possible, the relationship between Pāṇini and the Veda without taking the correctness of this presupposition for granted.

1.1 A fundamental question is whether Pāṇini knew the Vedic texts, i.e., the ones with which he was familiar, in the same form as we do. Were the Vedic texts that Pāṇini knew identical in all details with the editions we have now? It appears that the answer to this question must be negative.

It is not always possible to decide that a text has not reached us in its original form. In the case of metrical texts this may be possible, however, and to some extent we may be in a position to determine what the original text was like. This is the case regarding the *Ṛgveda*. In another study (Bronkhorst 1981) it has been shown that certain rules of sandhi of the *Aṣṭādhyāyī* fit an earlier stage of the text of the *Ṛgveda* than the one we now have. The conclusion was

drawn that "the lack of agreement between the *Aṣṭādhyāyī* and our *Ṛgveda* may henceforth have to be looked at through different eyes. Certainly, where phonetic questions are concerned, Pāṇini may describe an earlier form of the *Ṛgveda*, and may not deserve to be blamed for being lacunary . . ." (pp. 91-92).

This conclusion has far-reaching implications. The *Ṛgveda* has been handed down with great care, with greater care perhaps than any other Vedic text. Yet even here Pāṇini's rules of sandhi do not fully agree with the present text, although we know that at least some of them once fitted. How much less can we expect full agreement between Pāṇini's rules of sandhi and all other Vedic texts. This means that a comparison of Pāṇini's rules of sandhi and the Vedic evidence, if it is to be made at all, must be made with the greatest care. A straight confrontation of Pāṇini's rules with the Vedic facts cannot be expected to yield more than partial agreement, and says little about the state of affairs in Pāṇini's day. In the present context it is important to recall that "Pāṇini's rules on Vedic sandhi do not necessarily describe the sandhi which was actually used in the Vedic texts which Pāṇini had before him. Rather, they describe the sandhi as it ought to be according to Pāṇini. This is confirmed by the circumstance that Pāṇini sometimes gives the opinions of others besides his own, for example, in P.8.3.17-19" (Bronkhorst 1982, 275).²

A development in tone patterns, too, must have taken place after Pāṇini. Kiparsky (1982, 73) sums up the results of an investigation into this matter: "[T]he tone pattern described by Pāṇini represents an older stage than that

described for the Vedic *saṃhitās* by the Prātiśākhya. While the *saṃhitās* themselves are of course older than Pāṇini's grammar [?; see below], we may assume that they were accented in Pāṇini's time with the tone pattern described in the *Aṣṭādhyāyī*, and that their present tone pattern, as well as the Prātiśākhya that codify it, are post-Pāṇinian revisions." It is true that Kiparsky derives the different tone patterns from accent properties belonging to morphemes that are stable in time. Yet it is at least conceivable, also, that these accent properties changed in the time before the tone patterns reached their final form.³ This means that little can be concluded from such deviations from Pāṇini in the accentuation of Vedic words⁴ as occur in *arya* (Thieme 1938, 91f.; Balasubrahmanyam 1964; 1969), *hāyana* (Balasubrahmanyam 1966), *jyeṣṭha* and *kaniṣṭha* (Devasthali 1967, 7-8),⁵ *arpita* and *juṣṭa* (Balasubrahmanyam 1974),⁶ *śriyase* (Balasubrahmanyam 1969; 1972), *voḍhave* (Balasubrahmanyam 1983), and *vṛṣṭi*, *bhūti*, and *vitti* (Keith 1936, 736).⁷

This is further supported by the fact that accents were not noted down until very late (Thieme 1935, 120f., 129f.). A passage in the *Śatapatha Brāhmaṇa* (1.6.3.10) gives further proof for this. There Tvaṣṭṛ pronounces a mantra wrongly, and as a result Vṛtra is killed by Indra instead of the reverse. The mantra concerned is *indraśatrur vardhasva*. The later tradition--Patañjali's *Mahābhāṣya* (1:2, l. 12), *Pāṇinīya Śikṣā* (verse 52), Bhaṭṭabhāskara and Sāyaṇa (on TS 2.5.2), etc.--agrees that the mistake concerned the accent: an intended *Tatpuruṣa* compound 'killer of Indra' becomes a *Bahuvrīhi* 'whose killer is Indra'. The formulation of TS 2.5.2.1-2--*yad abravīt svāhendraśatrur vardhasveti tasmād*

asyendraḥ śātrur abhavat--fully agrees with this. MS 2.4.3 is even clearer: *svāhendraśātrur vardhasva itīndrasyāhainam śātrum acikīrṣad indram asya śātrum akarot*. Yet the *Śatapatha Brāhmaṇa* formulates the story in a way that can only be explained on the assumption that there was no way to make the difference in accentuation visible. Rather than writing (or reciting!) the *Tatpuruṣa* compound with the appropriate accent, it analyzes the compound into *indrasya śātruḥ*. The passage then reads: *atha yad abravīd indra-śātrur vardhasveti tasmād u hainam indra eva jaghāna / atha yaddha śāśvad avakṣyad indrasya śātrur vardhasveti śāśvad u ha sa indram evāhaniṣyat /*.

These considerations show that any comparison between the linguistic data in Pāṇini and those in the Veda must be extremely careful in the fields of sandhi and accentuation. They also suggest that in other respects the Vedic texts known to Pāṇini *may* have undergone modification since Pāṇini's time.

As an example of a feature that *may* have changed since Pāṇini, consider the word *rātri/rātrī* in the mantras of the *Taittirīya Saṃhitā*. According to P.4.1.31 (*rātreś cājasau*), *rātrī* occurs in ritual literature (*chandasi*, see below) before all endings except the nominative plural (cf. Bhat 1968; Wackernagel 1896-1930, 3:185f.).⁸ Five times the mantras of the *Taittirīya Saṃhitā* contain the word in a form that allows us to determine whether *rātri* or *rātrī* is used. Twice (TS 4.3.11.3 and 5.7.2.1) it is *rātrī*, thrice *rātri*. However, it is not impossible that originally all five occurrences had a form of *rātrī*. TS 4.1.10.1 (*rātriṃ rātriṃ aprayāvaṃ bharantaḥ*) recurs as *rātriṃ rātriṃ* (at MS 2.7.7

and 3.1.9; KS 16.7 and 19.10; and ŚB 6.6.4.1). TS 4.4.1.1 (*rātriṃ jinvośigasi*) occurs as *rātriṃ jinvo* at KS 17.7. In these two cases the shortening of *ī* to *i* was a minor change. More problematic seems to be TS 7.4.18.1 (*rātrir āsīt piśaṅgilā*), to which no parallels with long *ī* correspond (Bloomfield 1906, 823). Here a substitution of *rātrī* would lead to *rātry āsīt*, which differs rather strongly from the mantra as we know it. However, no such objection can be raised against an earlier **rātri āsīt*; this in its turn might be looked upon as the result of sandhi applied to *rātri āsīt*, by P.6.1.127 (*iko' savarṇe śākalyasya hrasvas ca*), a rule of sandhi that also held in the *Ṛgveda*, at least according to Śākalya (see Bronkhorst 1982a, 181).

1.2 The second introductory question we have to ask is whether or not Pāṇini's Vedic rules were meant to be universally valid in the Vedic texts. Our observations on sandhi have made it clear that here, at least, there is nothing to contradict the supposition that Pāṇini's rules were meant to be adhered to throughout. (This does not necessarily mean, however, that the texts known to Pāṇini always had Pāṇini's kind of sandhi.) It is at least conceivable that all the Vedic rules of the *Aṣṭādhyāyī* were meant to be strictly followed unless the opposite is explicitly stated.

This takes us to the main point of this subsection. If Pāṇini's Vedic rules were not meant to be followed strictly, this should have been indicated in the *Aṣṭādhyāyī*. Kiparsky (1980) has shown that Pāṇini distinguished three kinds of optionality: *vā* 'preferably', *vibhāṣā* 'preferably not', and *anyatarasyām* 'either way'. This means that Pāṇini used various means to indicate optionality. As a matter of fact,

option is indicated in a number of Vedic rules. P.1.2.36, 6.2.164, and 7.4.44 read *vibhāṣā chandasi*, P.1.4.9 (*ṣaṣṭhī-yuktaś chandasi vā*), P.8.3.49 (*chandasi vā'prāmreḍitayoḥ*), P.5.3.13 (*vā ha ca chandasi*), P.3.4.88 and 6.1.106 (*vā chandasi*), P.6.4.5 and 6.4.86 (*chandasy ubhayathā*), P.6.4.162 (*vibhāṣarjōś chandasi*), P.8.2.70 (*amnarūdharavār ity ubkaya-thā chandasi*), P.8.3.104 (*yajusy ekeṣām*), P.8.3.119 (*nivya-bhibhyo'd vyavāye vā chandasi*), P.8.3.8 (*ubhayatharkṣu*), and P.6.4.9 (*vā ṣapūrvasya nigame*). The words *bahulam chandasi* 'variously in ritual literature' occur no less than seventeen times together,⁹ not counting the rules wherein they may have to be continued. In P.1.2.61 (*chandasi punarvasvor ekavacanam*) and 62 (*viśākhayōś ca [chandasi]*), the word *anyatarasyām* is in force from P.1.2.58, and is not cancelled until *nityam* in 1.2.63. In P.6.1.52 (*khidēś chandasi*) there is continuation of *vibhāṣā* from *sūtra* 51, cancelled by *nityam* in 6.1.57. P.3.1.85 (*vyatyayo bahulam*) continues *chandasi* from 3.1.84 (*chandasi śāyaj api*), which itself indicates optionality by means of the word *api*. Similar devices are used in P.1.4.81 (*chandasi pare'pi*), and 82 (*vyavahitās ca*); P.3.3.130 (*anyebhyo'pi dṛśyate [chandasi 129]*); P.5.3.14 (*itarābhyo'pi dṛśyante [chandasi 13]*); P.6.3.137 (*anyeṣām api dṛśyate [rci 133][?]*); P.6.4.73 and 7.1.76 (*chandasy api dṛśyate*); P.7.1.38 (*ktvāpi chandasi*); P.5.2.50 (*thaṭ ca chandasi*); P.5.3.20 (*tayor dārhilau ca chandasi*); P.5.3.33 (*paśca paścā ca chandasi*); P.5.4.12 (*amu ca chandasi*); and P.5.4.41 (*vṛkajyeṣṭhābhyām tiltātilau ca chandasi*). P.3.2.106 (*liṭaḥ kānaj vā*) is confined to ritual literature because only there *liṭ* occurs (P.3.2.105 [*chandasi liṭ*]). P.8.1.64 (*vaivāveti ca chandasi*) continues

vibhāṣā (63), cancelled by *nityam* in 8.1.66. P.6.1.209 (*juṣṭārpīte ca chandasi*) continues *vibhāṣā* from 208, discontinued by 6.1.210 (*nityam mantrē*). In P.6.3.108 (*pathi ca chandasi*) the word *ca* continues *vibhāṣā* from 6.3.106 (cf. Kiparsky 1980, 62). P.8.3.105 (*stutastomayōś chandasi*) appears to continue *ekeṣām* from 8.3.104. P.4.4.113 (*srotaso vibhāṣā dyaddyanu*) continues *chandasi* from 4.4.110.

Nityam in P.4.1.29 (*nityam samjñāchandasoḥ*), in 4.1.46 and 7.4.8 (*nityam chandasi*), and in 6.1.210 (*nityam mantrē*), does not indicate that here, exceptionally, some Vedic rules are universally valid. Rather, it is meant to block the option that is valid in the preceding rules, as so often occurs in the *Aṣṭādhyāyī*. We have no alternative but to assume that, just as in his other rules, Pāṇini's Vedic rules not indicated as being optional were meant to be generally valid.¹⁰

From this we must conclude that deviations from Pāṇini in the Vedic texts known to Pāṇini either did not exist in his time or were not considered correct by him.

1.3 We now come to the question of what range of literature Pāṇini considered "Vedic" in one way or another. This is best approached by studying Pāṇini's use of the word *chandas* by which he most often refers to Vedic literature. It is clear that Pāṇini employs this word in a special way. The most common meaning of *chandas* is 'meter', and then 'metrical text'. But this is not the only sense in which Pāṇini uses it. Thieme (1935, *passim*, esp. 67-69) showed that rules given under *chandasi* 'in *chandas*' are also valid for prose passages (*brāhmaṇa* and *yajus*). He therefore rendered *chandasi* as 'in Sacred Literature'. Thieme criticizes

Liebich's (1891, 26) translation 'pre-classical language', saying: "I do not think it an appropriate translation, since it appears to endow Pāṇini with a historical perspective he hardly could have possessed" (p. 67).

This makes sense, but a major difficulty remains. Many of the forms taught under the heading *chandasi* occur in *Sūtra* texts. Instances are numerous and only a few will be given here. The name *Punarvasu*, used optionally in the singular in *chandas* according to P.1.2.61 (*chandasi punarvasvor ekavacanam* [*anyatarasyām* 58]), is so found at *Viṣṇu-smṛti* (78.12) and VāŚS (1.5.1.5), besides several places in the *Black Yajurveda*. The singular of *viśākhā*, only allowed *chandasi* by P.1.2.62 (*viśākhayoś ca*), occurs similarly at VāŚS 2.2.2.14. The grammatical object of the root *hu* can have an instrumental ending in *chandas*, according to P.2.3.3 (*tr̥tīyā ca hoś chandasi*). One instance is MŚS 1.6.1.23 (*payasā juhōti dadhnā yavāgvājyena vā* [cf. Thieme 1935, 10]). Some forms are *only* attested in *Sūtras*. *Khānya-* (P.3.1.123) only occurs in LŚS 8.2.4 and 5; (*pra-*)*stāvya-* (id.) in LŚS 6.1.20; *unnīya* (id.) in ŚāGS 4.14.4; and *yaśobhagīna* (P.4.4.132) in HiŚS 2.5.43, 6.4.3.

It seems safe to conclude that Pāṇini's term *chandas* covered more than just 'Sacred Literature'. We may have to assume that certain works, primarily the ritual *Sūtras*, and among those first of all the *Śrauta Sūtras*, belonged to a fringe area wherein Vedic usage was sometimes considered appropriate. The effect of this assumption for our investigation is that, where a *chandas* word prescribed by Pāṇini is attested in one Vedic text and in one or more *Sūtras*, we are

not entitled to conclude that Pāṇini certainly knew that Vedic text.

1.4 The final introductory question we have to consider is the following. Are Pāṇini's Vedic rules descriptive or prescriptive? To be sure, to some extent they describe the language that Pāṇini found in Vedic texts, and are therefore descriptive. But are they exclusively so? It may well be that Vedic texts were still being composed in Pāṇini's day, and that he gives in his grammar guidelines regarding correct Vedic usage. This possibility has been discussed elsewhere (Bronkhorst 1982, 275f.) and is further strengthened by the evidence to be provided in the following sections of this article. Here attention may be drawn to another reason to conclude that at least some of Pāṇini's rules may have been meant to be prescriptive, besides, or rather than, being descriptive. They may have been composed with something like *ūha* in mind.

*Ūha*¹¹ is the term used to describe the adjustments Vedic mantras undergo to make them fit for other ritual contexts. An original mantra such as *agnaye tvā juṣṭam nirvapāmi*, directed to Agni, can become modified into *sūryāya tvā juṣṭam nirvapāmi*, directed to Sūrya.¹² *Devīr āpaḥ śuddhā yūyam* (MS 1.1.11, 1.2.16, 3.10.1; KS 3.6), directed to the waters, becomes *deva ājya śuddham tvam* when directed to clarified butter (*ājya*). Sometimes only the number needs adjustment, as when *āyur āśāste* (MS 4.13.9; TS 2.6.9.7; TB 3.5.10.4) becomes *āyur āśāsāte* or *āyur āśāsate*. Only the gender is modified when *jūr asi dhṛtā manasā juṣṭā viṣṇave tasyās te satyasavasah* (MS 1.2.4, 3.7.5; KS 2.5, 24.3; TS 1.2.4.1, 6.1.7.2; VS 4.17; ŚB 3.2.4.11; ŚBK 4.2.4.9) becomes

jūr asi dhr̥to manasā juṣṭo viṣṇave tasya te satyasavasah because a bull is under discussion.

Another interesting question is whether modified mantras are in fact mantras themselves. The later Mīmāṃsā tradition appears to be unanimous in its opinion that they are not. PMS 2.1.34 and Śabara's *Bhāṣya* thereon state explicitly that the result of *ūha* is not a mantra, and all later authorities in this field seem to have followed their example. This opinion is found, perhaps for the first time, in ĀpŚS 24.1.35, which reads *anāmnātās tv amantrā yathā pravaroḥanāmadheyagrahaṇānīti* "Die nicht (im Mantra- oder Brāhmaṇa-teile) überlieferten Teile sind indessen nicht als Mantra zu betrachten, z.B. der Pravara, die 'Verschiebung' (*ūha*), die Nennung eines Namens" (tr. Caland 1928a, 387).

It is not surprising that modified mantras were not considered mantras in their own right from an early date onward. After all, the opposite opinion would leave almost unlimited scope for creating new mantras. At a time when efforts had been made to gather all mantras into Vedic collections this must have been undesirable.

Yet there are clear traces of evidence that modified mantras were not always considered nonmantras. As late an author as Bhartṛhari (fifth century A.D.),¹³ who includes a long discussion on *ūha* in his commentary on the *Mahābhāṣya* (Ms 2b9 f.; AL 5.18 f.; Sw 6.17 f.; CE Āhn. 1, 5.1 f.) mentions "others" who think that modified mantras are themselves mantras.¹⁴ And several *Śrauta Sūtras* make no mention of the nonmantric nature of modified mantras in contexts in which that would have been appropriate, for example, BhāŚS (6.15), MŚS (5.2.9), and ŚŚS (6.1). Moreover, HiŚS (1.1.13-

14) specifies that which is not a mantra without mentioning *ūha*! Apparently, at one time, modified mantras were mantras.

This view is supported by the fact that modified mantras have actually been included in the Vedic collections as mantras. A particularly clear example is the long *adhriḡu* passage that occurs, or is discussed, in MS 4.13.4, KS 16.21, TB 3.6.6, AB 2.6-7 (6.6-7), KB 10.4, ĀśvŚS 3.3, and ŚŚS 5.17, with this difference: TB, AB, KB, and ŚŚS have *medhapatibhyām* where MS and KS have *medhapataye*. Interestingly, the difference is explained in AB 2.6.6 (6.6.6) in the following words:

*sa yady ekadevatyaḥ paśuḥ syān medhapataya iti brūyāt
yadi dvidevatyo medhapatibhyām iti yadi bahudevatyo
medhapatibhya ity etad eva sthitam*

If the victim be for one deity, 'for the lord of the sacrifice' [*medhapataye*] he should say; if for two deities, 'for the two lords of the sacrifice' [*medhapatibhyām*]; if for many deities, 'for the lords of the sacrifice' [*medhapatibhyaḥ*]. That is the rule. (Tr. Keith 1920, 138)

This is as clear a case of *ūha* as is possible.¹⁵

TS 2.3.10.1-2 repeats the same sacrificial formula four times, with differences in number, in a single passage in order to adjust it to different numbers of gods:

*aśvinoḥ prāṇo'si tasya te dattāṃ yayoh prāṇo'si svāhā
indrasya prāṇo'si tasya te dadātu yasya prāṇo'si svāhā*

*mitrāvaruṇayoḥ prāṇo'si tasya te dattāṃ yayoh prāṇo'si
svāhā viśveṣāṃ devānāṃ prāṇo'si tasya te dadatu yeṣāṃ
prāṇo'si svāhā*

The question we must now consider is to what extent the Vedic rules of the *Aṣṭādhyāyī* can be looked upon as having been composed with this kind of *ūha* in mind. Obviously, it cannot be maintained that this was the only purpose of these Vedic rules, for some were undoubtedly intended to describe isolated Vedic facts. But this does not exclude the possibility that *ūha* was one of the purposes for which some of the Vedic rules of the *Aṣṭādhyāyī* were formulated.

There is some reason to accept this last view. Some *Śrauta Sūtras* lay down rules pertaining to the modification of certain verbal forms. MŚS 5.2.9.6, for example, lists the following acceptable modified forms: *adat*, *adatām*, *adan*, *ghasat*, *ghastām*, *ghasan*, *aghasat*, *aghasām*, *aghasan*, *karat*, *karatām*, *karan*, *agrabhīt*, *agrabhīṣṭām*, *agrabhīṣuḥ*, and *akṣan*. ĀśvŚS 3.4.15, similarly, lists *ādat*, *ghasat*, *karat*, *juṣatām*, *aghat*, *agrabhīt* and *avīrḍhata*. ŚŚS 6.1.5, finally, lists *ādat*, *ādan*, *ghastu*, *ghasantu*, *aghasat*, *aghasan*, or *aghat*, *akṣan*, *agrabhīt*, *agrabhīṣuḥ*, *avīrḍhata*, *avīrḍhanta*, and others. This shows that there was concern in ritual circles regarding the correct use of certain verbal forms in modified mantras. Among the recurring forms are the aorists of the roots *ghas*, *ad*,¹⁶ and *kr*.

The shared concern of ĀśvŚS 3.4.15, ŚŚS 6.1.5, and MŚS 5.2.9.6 is explained by the fact that most of the modifications are meant for virtually identical texts, the so-called *Praiṣa sūktas*, in particular RV Khila 5.7.2 (f and l), which

correspond to MS 4.13.7 (p. 208, 1.3-7) and 4.13.9 (p. 211, 1.5-12).

It is very probable that Pāṇini knew the *Praiṣa sūktas* in which these modifications were to take place, for Scheftelowitz (1919, 47f.) has adduced reasons to believe that the *Praiṣas* are among the oldest Vedic texts in prose. This allows us to surmise that a Pāṇinian *sūtra* may have been composed partly to solve this same problem. This *sūtra* would then be P.2.4.80 (*mantrē ghasahvaraṇaśavṛdahādvṛckṛ-gamījanibhyo leḥ*), which deals with the aorists of a number of roots, among them *ghas* and *kr*, in a *mantra*. It favors here such forms as (a)*ghat*, (a)*ghastām*, *akṣan* and *akah*, and *akran* (not in all cases the same forms as the above *Śrauta Sūtras*).

If it can be accepted that P.2.4.80 was composed to serve the purpose of *ūha* (besides other purposes), the same may be true of other rules of the *Aṣṭādhyāyī*. This, in turn, would mean that these rules not only *describe* Vedic data but also *prescribe* the means for modifying Vedic mantras when necessary. This implies that we cannot always be sure that Pāṇini's Vedic rules describe forms that occurred in Vedic texts known to Pāṇini. Unattested forms accounted for by rules in the *Aṣṭādhyāyī* do not, then, in all cases have to have been part of texts that are now lost.

2. We can now turn to the main part of the present investigation: an attempt to determine which Vedic texts Pāṇini knew and which he did not. The above considerations make it clear that in this context Pāṇini's rules on sandhi and accent will be of little help. Moreover, none of the rules that concern details of the phonetic shape of words,

i.e., the orthoepic diaskeuasis of texts, can be relied upon to determine which texts Pāṇini knew, for the simple reason that these features may have changed, and in some cases certainly changed, after him. Our enquiry must in the main rely on word-forms prescribed in the *Aṣṭādhyāyī*.

Here another consideration arises. We have decided to take Pāṇini seriously, but this does not mean that we demand his grammar to be complete. Nor does it exclude the possibility that he made occasional mistakes. It does, however, imply that, where Pāṇini clearly and explicitly excludes certain features from the Vedic language, we must regard with suspicion the Vedic texts containing those features.

We proceed in a twofold manner. On one hand, we collect forms prescribed by Pāṇini for Vedic and attested in but one Vedic text and nowhere else. If a sufficient number of such forms are found for a particular Vedic text and nothing else pleads against it, we may then assume that this Vedic text was known to Pāṇini. On the other hand, we shall look for Vedic texts that contain features excluded by Pāṇini. If the number of such features is sufficiently large, we may consider the possibility that Pāṇini did not know these texts. This double approach will provide us with the material to be evaluated in subsequent sections.

2.1 Many words prescribed by Pāṇini are found only in the *Ṛgveda*. Some examples are *vr̥kati* (P.5.4.41) at RV 4.41.4; *cicyuṣe* (P.6.1.36) at RV 4.30.22; *yajadhvainam* (P.7.1.43) at RV 8.2.37; *jagr̥bhma* (P.7.2.64) at RV 1.139.10 and 10.47.1;¹⁷ *vr̥ṣanyati* (P.7.4.36) at RV 9.5.6; *tetikte* (P.7.4.65) at RV 4.23.7; and *svatavāṃḥ pāyuh* (P.8.3.11) at RV 4.2.6.

2.2 Three words prescribed by Pāṇini for Vedic are only found in the *Taittirīya Saṃhitā*: *khanya-* (P.3.1.123) at TS 7.4.13.1; the denominative *kavya-* (P.7.4.39) at TS 7.1.20.1; and *āṇḥuh* (P.6.1.36) at TS 3.2.8.3. Note that all three words occur in mantras. Thieme (1935, 64) was of the opinion that a fourth word, *brahmavādya* (P.3.1.123), is found only in the *Taittirīya Saṃhitā*. This word occurs in a *brāhmaṇa* portion (at TS 2.5.8.3) but not only there; it is also found at JUB 3.2.3.2; ĀpŚS 21.10.12; and VādhŚS (Caland 1928, 176). Thus, no direct evidence remains that Pāṇini knew the *brāhmaṇa* portion of the *Taittirīya Saṃhitā*.

2.3 Not all the evidence produced by Leopold von Schroeder (1879, 194f.; 1881-86, 1:xi f., 2:viii f.) to show that Pāṇini knew the *Maitrāyaṇī Saṃhitā* can stand scrutiny. Some cases are derived not from Pāṇini but from his commentators. Others correspond to rules of Pāṇini that are not confined to Vedic usage; these cases do not prove that Pāṇini knew the *Maitrāyaṇī Saṃhitā*, or a part thereof, for the simple reason that the words concerned were apparently also in use in other than ritual contexts. Finally, there are cases wherein Schroeder was mistaken in thinking that certain Vedic words prescribed by Pāṇini occurred only in the *Maitrāyaṇī Saṃhitā* and not in other texts.

However, the following cases can be used to establish Pāṇini's acquaintance with at least certain parts of the *Maitrāyaṇī Saṃhitā*. P.3.1.42 teaches the Vedic (*chandasi*, but *amantre*) verbal forms *abhyutsādayām akaḥ*, *prajanayām akaḥ*, and *pāvayāṃ kriyāt*. They occur at MS 1.6.5, 1.6.10 and 1.8.5, and 2.1.3, respectively, and nowhere else. The Vedic (*nigame*) forms *sādhyai* and *sādhvā* (P.6.3.113) are

nowhere found except in MS 1.6.3 and 3.8.5, respectively. *Agriya-* (P.4.4.117) is only attested at MS 2.7.13, 2.9.5, and in the colophon to 3.1.10. Noncompounded *bhaviṣṇu* (P.3.2.138) is found only at MS 1.8.1. *Prañīya-* (P.3.1.123) is found at MS 3.9.1 and nowhere else; *ucchiṣya-* occurs only at MS 3.9.2. *Purīṣyavāhana* (P.3.2.65) is found only at MS 2.7.4.

2.4 Vedic forms attested only in the *Kāṭhaka Saṃhitā* are the following (cf. Schroeder 1880; 1895): *ramayām akaḥ* (P.3.1.42) at KS 7.7; *upacāyyapṛḍa* (P.3.1.123) at KS 11.1; and *kṣariti* (P.7.2.34) at KS 12.11. One word occurs only in the *Kāṭhaka Saṃhitā* and in the *Kapiṣṭhala Saṃhitā*. Since the latter “is practically a variant of the *Kāṭhaka*” (Gonda 1975, 327), it is here included: *jagatya-* (P.4.4.122) at KS 1.8 = KapS 1.8, and at KS 31.7. *Adhvarya* in P.3.1.123 may indicate acquaintance with KS 35.7 = KapS 48.9 (Thieme 1935, 23-24; Gotō 1987, 191, n. 355).

2.5 A Vedic form found exclusively in the *Atharvaveda* is *ailayīt* formed by P.3.1.51 (cf. Thieme 1935, 64); it occurs at AVŚ 6.16.3.¹⁸ *Śivatāti* (P.4.4.143) is only found at AVP 5.36.1-9. The word *māmakī*, formed by P.4.1.30, occurs only AVP 6.6.8.¹⁹

2.6 Two Vedic forms occur in the *Lāṭyāyana Śrauta Sūtra* of the *Sāmaveda* and nowhere else (except, of course, in the later *Drāhyāyana Śrauta Sūtra*, which is often no more than a recast of the former): *khānya-* (P.3.1.123) at LŚS 8.2.4 and 5 (DrŚS 22.2.5 and 6); and *(pra-)stāvya-* (id.) at LŚS 6.1.20 (DrŚS 16.1.22 and 18). *Hvarita* (P.7.2.33) occurs only in a mantra in MŚS 2.5.4.24d and 4.4.39. *Sanim sasanivāṃsam* (P.7.2.69) occurs in mantras in MŚS 1.3.4.2 and VāŚS

1.3.5.16 (cf. Hoffmann 1974). *Dādharti* is only attested in JB 2.37.²⁰ *Yaśobhagīna* (P.4.4.132) is only attested HiŚS 2.5.43 and 6.4.3.

3.1 We now turn to forms excluded by Pāṇini.

P.3.1.35 (*kāspratyayād ām amantre liṭi*) forbids a periphrastic perfect to occur in a mantra, yet AVŚ 18.2.27 has *gamayāṃ cakāra* (cf. Whitney 1893, 249). AVP 18.65.10 has *gamayāṃ cakārtha*.

P.5.1.91 (*vatsarāntāc chaś chandasi*) prescribes *-īya* after words ending in *-vatsara*, resulting in forms like *saṃvatsarīya*. The next rule, 5.1.92 (*saṃparipūrvāt kha ca*), adds *-ina* in the same position, provided that *-vatsara-* is preceded by *sa-* or *pari-*. This means that Pāṇini did not know, or approve of, forms wherein *-vatsarīna-* is not preceded by *sa-* or *pari-*. Yet such forms occur: *idāvatsarīna* at TB 1.4.10.2 and *anuvatsarīna* at TB 1.4.10.3.

P.5.4.158 (*ṛtaś chandasi*) forbids the addition of *kaP* after a *Bahuvrīhi* compound ending in *-ṛ*. An exception is *brāhmaṇabhartṛka* (AA 5.3.2).

P.6.3.84 (*saṃānasya chandasy amūrdhaprabhṛtyudarkeṣu*) forbids substitution of *sa-* for *saṃāna* before *mūrdhan*, *prabhṛti*, and *udarka*. Yet this substitution has taken place in *saprabhṛti* (PB 15.1.6 and KB 20.4, 21.4, etc.); *sodarka* (PB 13.7.9, 13.8.1, 13.8.4, and 13.8.5; and KB 20.4, 21.4, etc.).

P.7.1.26 (*netarāc chandasi*) prohibits the use of neuter *itarad* in ritual literature. Yet it occurs at AB 6.15; KB 12.8; ŚB 4.5.8.14 and 13.8.2.9; TB 3.10.11.4; JB 1.213, 2.75, and 2.249; and at ṢaḍB 4.3.7, 4.4.10, and 4.5.8.

P.7.2.88 (*prathamāyāś ca dvivacane bhāṣāyām*) prescribes the nominatives *āvām* and *yuvām* with long penultimate *ā* for secular language, thus excluding these nominatives from the Vedic language. Yet they occur in *āvām* (AB 4.8; ŚānA 5.7; ŚB 4.1.5.16 and 14.1.1.23; BAU[K] 3.2.13; ChU 8.8.1) and *yuvām* (PB 21.1.1).

3.2 We obtain further results by applying more strictly our rule that Pāṇini's grammar is to be taken seriously. Grammatical *sūtras* that are not indicated as being optional must be accepted as intended to be of general validity. In incidental cases this may give rise to doubts,²¹ but no such doubt seems to attach to the following cases.

P.2.3.61 (*preṣyabruvor haviṣo devatāsampradāne*) is a rule valid for *Brāhmaṇa* literature (*anuvṛtti* of *brāhmaṇe* from rule 60; see Joshi and Roodbergen 1981, 101, n. 331), prescribing a genitive for the object of *preṣya* and *brū*, if it is an oblation in an offering to a deity. It thus excludes the use of the accusative in such cases. Yet the accusative is often used in the *Śatapatha Brāhmaṇa*, most clearly in *agnīṣomābhyām chāgasya vapām medaḥ preṣya* (ŚB 3.8.2.27; ŚBK 4.8.2.21), *agnīṣomābhyām chāgasya haviḥ preṣya* (ŚB 3.8.3.29; ŚBK 4.8.3.18), *indrāya somān prasthitān preṣya* (ŚB 4.2.1.23; ŚBK 5.2.1.20), and *chāgānām haviḥ prasthitam preṣya* (ŚB 5.1.3.14).²²

P.3.1.59 (*kṛmṛḍṛuhibhyaś chandasi*) is a nonoptional rule (cf. Kiparsky 1980, 62) prescribing *aṇ* as an aorist marker after the roots *kṛ*, *mṛ*, *ḍṛ*, and *ruh* in ritual literature. It excludes in this way the forms *akārṣīt*, *akārṣiḥ*, *akārṣam*, and *arukṣat* from Vedic literature. Yet these forms occur, as follows: (*a*)*kārṣīt* (GB 1.3.4; ChU 6.16.1); *akārṣiḥ*

(ŚB 10.5.5.3; GB 1.3.11); *akārṣam* (AVP 20.1.6; TB 3.7.5.5; TA 10.24.1, 10.25.1; GB 1.3.12); and *arukṣat* (AVŚ 12.3.42; AVP 17.40.2).

P.4.4.105 (*sabhāyāḥ yaḥ*) prescribes the suffix *ya* after *sabhā* in the sense *tatra sādhuḥ* (4.4.98). The next rule, P.4.4.106 (*ḍhaś chandasi*), makes an exception for ritual literature. The form *sabhya* derived by P.4.4.105 should apparently not occur in Vedic literature. It does, though, at the following places: AVŚ 8.10.9, 19.55.5; AVP 16.133.5; MS 1.6.11; TB 1.2.1.26, 3.7.4.6; and ŚB 12.9.2.3.

P.5.4.103 (*anasantān napuṃsakāc chandasi*) prescribes for ritual literature the addition of *ṭac* to neuter *Tatpuruṣa* compounds the last member of which end in *-an* or *-as*. Patañjali in his *Mahābhāṣya* (2:441) makes this rule optional, in order to account for words like *brahmasāman* and *devacchandas*, but this merely emphasizes the fact that Pāṇini's rule is not optional. Yet there are numerous exceptions, some of which occur in the following texts:²³

AVŚ 5.10.1-7 (*aśmavarman*), 19.7.2 (*mṛgaśiras*), 19.30.3 (*devavarman*).

AVP 5.29.1 (*sūryavarcas*), 6.12.9-11 and 6.13.1-3 (*aśmavarman*), 13.11.21 (*devavarman*), 19.48.14 (*hiraṇyanāman*).

MS 3.6.7 (*dīkṣitavāsas*), 3.11.9 (*vyāghraloman*).

VSM 19.92 (*vyāghraloman* = MS 3.11.9).

VSK 21.6.13 (*vyāghraloman* = MS 3.11.9 and VSM 19.92).

AB 1.26 (*devavarman*), 4.19 (*brahmasāman*, *agnīṣṭoma-sāman*), 7.19 (*iṣudhanvan*), 8.5 and 8.6 (*vyāghracarman*).

KB 2.1, 5.7, and 27.1 (*devakarman*), 5.5 (*pūrvedyuhkarman* and *puṣṭikarman*), 5.7 (*pitṛkarman*), 8.7 (*paśukarman*), 27.1 (*agnīṣṭomasāman*), 30.11 (*rātricchandas*).

GB 1.3.16 (*sarvacchandasa*), 1.5.25 (*svakarman*), 2.1.23 (*puṣṭikarman*, *pūrvedyuhkarman*), 2.6.6 (*yaḥṇaparvan*).

TB 1.7.8.1 (*śārdūlacarman*).

ŚB 4.6.6.5 and 13.3.3.5 (*brahmasāman*), 5.3.5.3, 5.4.1.9, and 11 (*śārdūlacarman*), 6.6.1.4, 7.3.1.4, etc. (*adhvarakarman*, *agnikarman*), 13.3.3.4 (*maitrāvaruṇasāman*), 13.3.3.6 (*acchāvākasāman*), 13.5.1.1 and 13.5.3.10 (*agniṣṭomasāman*), 14.3.1.35 (*patnikarman*).

ŚBK 1.1.2.5-6 (*mṛgaśiras*), 7.2.4.3 and 7.3.1.9-10 (*śārdūlacarman*).

JB 1.149, etc. (*rathantarasāman*), 1.155, etc. (*acchāvākasāman*), 1.172, etc. (*agniṣṭomasāman*), 2.240 (*uttaravayas*), 2.276 (*ācāryakarman*), etc.

PB 4.2.19, etc. (*agniṣṭomasāman*), 4.3.1, etc. (*brahmasāman*), 8.10.1, etc. (*acchāvākasāman*), 9.2.7 and 15 (*kṣātrasāman*), 9.2.20, etc. (*rātriṣāman*), 11.3.8 and 9 (*somasāman*), 13.9.22 and 23 (*varuṇasāman*).

ṢaḍB 4.2.12-14 (*brahmasāman*).

ĀrṣB 1.378 (*varuṇasāman*), 2.3.11 (*arkaśiras*), etc.

JĀB 5.3, etc. (*somasāman*), *Arkaparvan* 3.9 (*arkaśiras*), etc.

SāB 1.5.15 (*svakarman*), 2.1.6 (*setuṣāman*), 2.3.3 (*sarpasāman*), 2.3.6 (*arkaśiras*).

ŚātyB, p. 72 (*brahmasāman*, *acchāvākasāman*).

VaṃśaB 1 (*giriśarman*).

ŚāṇA 1.5 (*devacchandasa*), 3.5 (*brahmayaśas*, *brahmatejas*).

TA 1.15.1, etc. (*svatejas*).

P.5.4.142 (*chandasi ca*) prescribes substitution of *datṛ* for *danta* final in a *Bahuvrīhi* compound in ritual literature. It excludes from the Vedic language *Bahuvrīhi* com-

pounds ending in *danta*. Yet there are some: *kṛṣṇadanta* at AA 3.2.4 and ŚāṇA 11.4; *viṣadanta* at AVP 5.9.8; *iṣikādanta* at AVP 1.44.2; *ubhayatodanta* at AA 2.3.1, ŚB 1.6.3.30, ŚBK 2.6.1.21, JB 1.128, 2.84, and 2.114, and SāB 1.8.2; and *anyatodanta* at ŚBK 2.6.1.21 and JB 1.128, 2.84, and 2.114.

P.7.1.56 (*śrīgrāmaṇyoś chandasi*) determines the form of the genitive plural of *śrī* and *grāmaṇi* as *śrīṇām* and *grāmaṇīnām*, respectively. But genitive *sūtagrāmaṇyām* occurs at ŚB 13.4.2.5 and 13.5.2.7.

P.6.4.141 reads *mantreṣu āṇy āder ātmanah* (*lopaḥ* 134) "In mantras there is elision of the initial [sound *ā*] of *ātman* when [the instrumental singular ending] *ān* follows." It is not easy to determine the precise meaning of this *sūtra*. It may not imply that *ātman* never loses its initial *ā* before other case endings, since for all we know Pāṇini may have looked upon *tman* as a separate vocable, but this *sūtra* clearly excludes the occurrence of *ātmanā* in mantras. This form is found, however, in mantras at the following places: AVŚ 3.29.8; AVŚ 5.29.6-9 ≈ AVP 13.9.7-8; AVŚ 8.2.8 ≈ AVP 16.3.9; AVŚ 9.5.31-36 ≈ AVP 16.99.8; AVŚ 18.2.7; AVŚ 19.33.5 ≈ 12.5.5; AVP 3.28.1, 16.100.5-11, and 16.119.1-3; VSM 32.11 ≈ VSK 35.3.8; and MS 2.8.14.

To the above cases the following may be added:

P.2.4.48 (*hemantaśīśirāv ahorātre ca chandasi*) implies, as Thieme (1935, 13) rightly pointed out, that Pāṇini "must have known *śīśira-* as a *neuter*." However, *śīśira* is masculine at SVK 3.4.2; SVJ 2.3.3; AVŚ 6.55.2 and 12.1.36; AVP 17.4.6 and 19.9.3; ŚB 2.1.3.1, 2.6.1.2, 8.7.1.7 and 8, 13.6.1.10 and 11; ŚBK 1.1.3.1 and 1.2.3.6; JB 1.313, 2.51, 2.211, 2.356; and TA 1.6.1.

P.3.1.118 (*pratyapibhyāṃ graheḥ* [without *chandasi*; see Kielhorn 1885, 192 (195); Thieme 1935, 16]) prescribes *pratigrhya-* and *apigrhya-*. Kātyāyana's *vārttika* on this *sūtra* confines it to Vedic literature (*chandas*) and Patañjali mentions the alternatives *pratigrāhya-* and *apigrāhya-*. The last two forms were apparently not known to Pāṇini, yet *apratigrāhya-* occurs at SāB 1.7.2.

4. What patterns arise from these data? Which Vedic texts did Pāṇini know, and which did he not know? We shall try to arrive at an opinion on the basis of the forms emphatically accepted or rejected by Pāṇini himself.²⁴

4.1 Pāṇini records a number of forms that occur in the *Ṛgveda* and nowhere else. Among the forms he clearly rejects, not one occurs in the *Ṛgveda*. To this must be added the fact that P.1.1.16-18 refer to Śākalya's *Pada-pāṭha*. The *Padapāṭha* was added to the collection of hymns (excepting six verses; see Kashikar 1951, 44) and presupposes the latter. We may safely assume that Pāṇini knew the collected *Ṛgveda*, not just the individual hymns.

Note that this is in no way obvious. Pāṇini knew Vedic stanzas (*ṛc*) and sacrificial formulas in prose (*yajus*)--both of these went by the term *mantra*--besides *brāhmaṇa* and *kalpa*. He nowhere says that he knew the mantras in collections. In this connection it is interesting to observe that the term that came to designate such collections (*saṃhitā*) did not yet have this meaning in Pāṇini's grammar and in the Vedic scriptures. There it is synonymous throughout with *sandhi*. The *saṃhitā-pāṭha*, as opposed to the *pada-pāṭha*, is the version of the text with sandhi.

4.2 The question as to whether the Vedic collections,

the *Samhitās*, existed in Pāṇini's time as collections becomes pertinent with regard to the *Taittirīya Samhitā*. We saw that three forms prescribed by Pāṇini occur in the *Taittirīya Samhitā* and nowhere else (2.2, above). All these words occur in mantras. This means that possibly Pāṇini may not have known the *brāhmaṇa* portions of the *Taittirīya Samhitā*. This possibility is supported by the fact that these *brāhmaṇa* parts frequently contain a conspicuous non-Pāṇinian feature, viz., the ending *-ai* instead of *-ās* (see Caland 1927, 50; Keith 1914, 1:cxlv f.). Note also that the *brāhmaṇa* portion of the *Taittirīya Samhitā* refers twice (6.1.9.2, 6.4.5.1) to Aruṇa Aupaveśi, whose grandson Śvetaketu Āruṇeya is characterized as modern in the *Āpastamba Dharma Sūtra* (1.5.5).

All this suggests that the *Taittirīya Samhitā* was collected in its more or less final form at a late date, perhaps later than Pāṇini. This agrees with some facts regarding the *Taittirīya Brāhmaṇa* and *Taittirīya Āraṇyaka*, to which we now turn.

Both the *Taittirīya Brāhmaṇa* and the *Taittirīya Āraṇyaka* contain forms that are explicitly rejected by Pāṇini. The *Taittirīya Brāhmaṇa* has *idāvatsarīṇa*, *anuvatsarīṇa*, *itarad* (3.1, above), *akārṣam*, *sabhyā*; and *śārdūlacarman* (3.2). The *Taittirīya Āraṇyaka* has *akārṣam*, *svatejas*, and *śīśira* (m.) (3.2). It seems safe to conclude that these works were not known to, or accepted by, Pāṇini. The *Baudhāyana* and *Āpastamba Śrauta Sūtras* "accord in recognizing the whole content both of the *Brāhmaṇa* and of the *Āraṇyaka*" (Keith 1914, 1:lxviii). Yet "it would be impossible, so far as can be seen, to prove that to [these *Sūtras*] even the

Sanhitā was yet a definite unit" (ibid., lxxix-lxxx). The *sūtras* only distinguish between mantra and *brāhmaṇa*, which occur in each of the three, *Taittirīya Saṃhitā*, *Taittirīya Brāhmaṇa*, and *Taittirīya Āraṇyaka*.²⁵

The interrelationship of mantras and *brāhmaṇa* portions of the three *Taittirīya* texts suggests that they, or parts of them, once existed as an undivided whole. We see, for example, that the *brāhmaṇa* portions of TS 2.5.7 and 8 comment on the mantras of TB 3.5.1 and 2; TS 2.5.9 on TB 3.5.3.1-4.1; TS 2.6.1 and 2 on TB 3.5.5-7; TS 2.6.7 on TB 3.5.8; TS 2.6.9 on TB 3.5.10; and TS 2.6.10 on TB 3.5.11 (Keith 1914, 1:lxixiv). TS 3.5.11 supplements TB 3.6.1, giving the mantras for the *hotṛ* for the animal sacrifice (Keith 1914, 1:286, n. 4). Keith (1914, 1:lxix) comes to a similar conclusion on the basis of the *Śrauta Sūtras*: "So far as we can judge there is no trace of any distinction being felt by the *Sūtrakāras* between the nature of the texts before them."

It is not impossible that the creation of a *Padapāṭha* differentiated the *Taittirīya Saṃhitā* from *Taittirīya Brāhmaṇa* and *Taittirīya Āraṇyaka*, just as the *Ṛgveda* may conceivably have been collected by the author of its *Padapāṭha* (Bronkhorst 1982a, 187).

The fact that Pāṇini derives the term *Taittirīya*, in the sense 'uttered by Tittiri', in P.4.3.102 does not, of course, prove that the *Taittirīya* texts, as now known, were known to him. Pāṇini probably knew the mantras, or a number of them, that are now part of the *Taittirīya Saṃhitā*, and he may indeed have considered them *taittirīya* 'uttered by Tittiri'.

Note, finally, that the *Taittirīya Saṃhitā* appears to borrow from the *Aitareya Brāhmaṇa* 1-5, as argued by Keith (1914, 1:xcvii f.); see also Aufrecht (1879, vi, 431f.) and Keith (1920, 46). The *Aitareya Brāhmaṇa* itself, including its first five chapters, deviates in a number of points from Pāṇini (4.5, below).

4.3 Some of the other *Saṃhitās* of the *Yajurveda* sin occasionally against Pāṇini.

The *Vājasaneyi Saṃhitā* has *ātmanā*, masculine *śīsira*, and one *Tatpuruṣa* compound in *-an* (*vyāghraloman*). It shares this, however, with the *Maitrāyaṇī Saṃhitā*.

The *Maitrāyaṇī Saṃhitā* has *sabhya*, some *Tatpuruṣa* compounds in *-as* and *-an*, *ātmanā*; note further *dādhrati* (see note 19, above). These deviations from Pāṇini in the *Maitrāyaṇī Saṃhitā* are most surprising because Pāṇini appeared to know both the mantra and *brāhmaṇa* portions of this text (see 2.3, above). This warns us once again that we cannot assume that the texts we know now existed in the same form in Pāṇini's day.

4.4 Did Pāṇini know the *Atharvaveda*? Two forms prescribed by him are found only there, one in the *Śaunakīya* version and one in the *Paippalāda* version. However, opposed to these two forms are numerous others forbidden by Pāṇini. They include *gamayāṃ cakāra*, *gamayāṃ cakartha* (3.1), *akārṣam*, *arukṣat*, *sabhya*, several neuter *Tatpuruṣa* compounds ending in *-an* and *-as*, *viṣadanta* and *iṣikādanta*, *haricandra*, *ātmanā*, and *śīsira* (masc.) (3.2).

One might raise the question of whether the word-forms in the *Atharvaveda* may not have been Vedic in Pāṇini's opinion, that is, whether, perhaps, they were covered by

non-Vedic rules of the *Aṣṭādhyāyī*. This is suggested by Balasubrahmanyam's remark (1984, 23):

Among the seven *khyun-* derivatives taught by P[āṇini] in A[ṣṭādhyāyī] 3.2.56, *subhagamkaraṇī* and *priyam-karaṇam* are only attested in the *Samhitā* texts of the [*Atharvaveda*]-the former occurring at [AVŚ] 6.139.1 and AVP 7.12.5, and the latter at the *Paippalāda Samhitā* (3.28.5; 6). Neither in the other Vedic *Samhitās* nor in the *Brāhmaṇa-Āraṇyaka* texts, do we come across these derivatives.

Balasubrahmanyam's observation is misleading in that *subhagamkaraṇī* is not taught in P.3.2.56 nor anywhere else in the *Aṣṭādhyāyī*. This is so because a *vārttika* of the *Saunāgās* (Mbh, 2:105, 1.8; on P.3.2.56) is required to provide *subhagamkaraṇa* with its feminine ending, ī, as shown by Balasubrahmanyam himself. Thus, P.3.2.56 did not derive *subhagamkaraṇī* in the *Atharvaveda*. The fact that the *Atharvaveda* contains two more words of the same kind (*ayakṣmaṇkaraṇī* at AVŚ 19.2.5 and AVP 8.8.11; *sarūpaṇkaraṇī* at AVŚ 1.24.4 and AVP 1.26.5; see Balasubrahmanyam 1984, 25f.) and that these words are not even partially²⁶ derived in Pāṇini's grammar, makes it less than likely that the *priyamkaraṇam* of AVP 3.28.6 was meant to be explained in P.3.2.56.

An interesting confirmation that the *Atharvaveda* did not exist as a collection until long after the other three Vedas were collected is found in the *Chāndogya Upaniṣad*. Sections 3.1-5 make a number of comparisons, or rather identifications, of which the following are of interest to us.

Section 3.1 states that the bees are the *ṛcs*, the flower is the *Ṛgveda*; in 3.2 the bees are the *yajus* (pl.), the flower is the *Yajurveda*; and in 3.3 the bees are the *sāmans*, the flower is the *Sāmaveda*. The interesting observation comes in section 3.4, where the bees are the *atharvāṅgirasah* and the flower is *itihāsapurāṇam*. In 3.5, finally, the bees are the hidden teachings (*guhya ādeśāḥ*), which may be the *Upaniṣads*, and the flower is *Brahman* (n.). Since the *atharvāṅgirasah* constitute the *Atharvaveda* as we know it, the logic of the situation would have required that the flower in 3.4 be identified with the *Atharvaveda*. The fact that it is not hardly allows an explanation other than that the author of this passage did not know of such a definite collection of *atharvans* and *āṅgirases*. *Itihāsa* and *purāṇa* certainly do not designate the *Atharvaveda*, neither separately nor jointly (see Horsch 1966, 13f.).

Bloomfield (1899, 2f.), too, came to the conclusion "that many hymns and prose pieces in the AV. date from a very late period of Vedic productivity." Indeed, "there is nothing in the way of assuming that the composition of such texts as the AB. and ŚB. preceded the redactions of the Atharvan *Samhitās*."

Patañjali's *Mahābhāṣya* cites in its opening passage the first lines of the four Vedas; these apparently existed as collections in those days (second century B.C.). The first line is *śam no devīr abhiṣṭaye*, which begins the *Paippalāda* version of the *Atharvaveda*. Patañjali even informs us of the size of the *Atharvaveda* known to him, saying (Mbh, 2:378, 1.11; on P.5.2.37): *viṃśino'ṅgirasah*. This fits the twenty books of the *Paippalāda Samhitā*.²⁷ We may conclude

from this that the *Paippalāda Saṃhitā* existed in its present form, at any rate, in the second century B.C.

4.5 The *Aitareya Brāhmaṇa* transgresses Pāṇini's rules in containing *itarad*, nominative *āvām* (3.1), and several neuter *Tatpuruṣa* compounds in *-an* (3.2). It is also interesting that AB 7.17 has the periphrastic perfect *āmantrayām āsa*, as opposed to P.3.1.40, which allows only *kṛ* in such formations (Keith 1936, 747). We also find optatives in *-(ay)īta* instead of *-(ay)eta* (Renou 1940, 11), and the ending *-ai* for both genitive and ablative *-ās* (Caland 1927, 50), not prescribed by Pāṇini.

By way of exception some older arguments adduced by Keith (1920, 42f.) to determine the date of the *Aitareya Brāhmaṇa* will be reviewed here (see also Bronkhorst 1982, 276). The language of this *Brāhmaṇa* is said to be "decidedly older than the Bhāṣā of Pāṇini," on the basis of Liebich's Pāṇini (1891). The circularity of Liebich's arguments has been shown elsewhere (Bronkhorst 1982, 275f.). The fact that Yāska knew the *Aitareya Brāhmaṇa* is irrelevant, since it is very likely that he is later than Pāṇini (Bronkhorst 1984, 8f.). The *Aitareya Brāhmaṇa* contains indications that it knew the *Ṛgveda* before the completion of the orthoepic diaskeuasis but this implies nothing in view of the fact that the orthoepic diaskeuasis of the *Ṛgveda* was not completed until long after Pāṇini (Bronkhorst 1981). The absence of reference to metempsychosis must be viewed against the background of the unwillingness of orthodox Brahmanism to let these ideas find entrance into their sacred texts even at a time when they had become generally known and widely accepted (Bronkhorst 1989, 125).

4.6 The other *Brāhmaṇas* that are considered early are the *Kauṣītaki Brāhmaṇa*, *Pañcaviṃśa Brāhmaṇa*, *Jaiminīya Brāhmaṇa*, and *Śatapatha Brāhmaṇa* (Renou 1957, 14). We can be brief about them.

The *Kauṣītaki Brāhmaṇa* has a number of forbidden words: *saprabhṛti*, *sodarka*, and *itarad*, besides many neuter *Tatpuruṣa* compounds in *-an* and at least one in *-as*. Like the *Aitareya Brāhmaṇa*, it has optatives in *-(ay)īta* and *-ai* for *-ās*.

The *Pañcaviṃśa Brāhmaṇa*, too, has *saprabhṛti* and *sodarka*, as well as nominative *yuvām*, and many neuter *Tatpuruṣa* compounds in *-an*.

The *Jaiminīya Brāhmaṇa* goes against Pāṇini's grammar in having *itarad*, many neuter *Tatpuruṣa* compounds in *-an* and *-as*, *ubhayatodanta* and *anyatodanta*, and masculine *śīśira*.

The *Śatapatha Brāhmaṇa* deviates from Pāṇini's grammar in the words *itarad*, nominative *āvām*, *akārṣiḥ*, *sabhya*, an accusative rather than a genitive for the object of *preṣya*, many neuter *Tatpuruṣa* compounds in *-an*, *ubhayatodanta*, genitive plural *-grāmaṇyām*, and masculine *śīśira*.

The *Kāṇva* version of the *Śatapatha Brāhmaṇa*, finally, deviates in fewer respects, containing a few neuter *Tatpuruṣa* compounds in *-an* and *-as*, *ubhayatodanta* and *anyatodanta*, an accusative rather than a genitive for the object of *preṣya*, and masculine *śīśira*.

5. The above considerations must be treated with caution. For one thing, it is not known in any detail what changes were made in the texts during the process we refer to as their "orthoepic diaskeuasis." This implies that we cannot be altogether sure what features of those texts can

be used to determine their relationship with Pāṇini's *Aṣṭādhyāyī*. We also do not know how many serious deviations from Pāṇini's explicit statements must be considered evidence that Pāṇini was ignorant of a particular text. Further, we should remember that we made an assumption, which may not be acceptable to everyone, that Pāṇini's grammar can be taken seriously.

Neither should we be rash in concluding that Vedic texts that transgress the rules of Pāṇini repeatedly were for that reason completely unknown to Pāṇini. The problem is that, probably, no Vedic text has a single author. All are collections of parts of more or less heterogeneous origin. This applies to the *Samhitās* as well as to the *Brāhmaṇas* and *Āraṇyakas*. The most we can conclude from the deviations between the majority of Vedic texts and Pāṇini's grammar is that Pāṇini did not know much of Vedic literature in its present form, that is, in the collections known to us. Much of Vedic literature was still in a state of flux in Pāṇini's day, and had not yet reached the unalterable shape in which we know it.

These considerations are of value with regard to the texts that would seem to have been unknown to Pāṇini on the basis of the evidence reviewed in this article. They are, however, of equal value where the texts that appear to have been known to Pāṇini are concerned. The *Ṛgveda* may be an exception; it was known to Pāṇini along with its *Padapāṭha*, which leaves little room for major changes other than sandhi. But we must be cautious with respect to such texts as the *Maitrāyaṇī Samhitā* and *Kāṭhaka Samhitā*. It is true that they contain words prescribed by Pāṇini, which occur

nowhere else, but this proves no more than that Pāṇini was acquainted with certain portions of them, if it proves anything at all.

The regional origin and early spread of most of the Vedic texts may account for Pāṇini's lack of acquaintance with some of them. Pāṇini is held to have lived in north-west India. Texts from other parts of the country may only have become known to him if they were generally accepted as Vedic in their region and beyond it.

Notes

- * This study was carried out as part of a project of professors M. Witzel and T. E. Vetter, which was financed by the Netherlands Organization for the Advancement of Pure Research (Z.W.O.). In particular, Professor Witzel took a lively interest in the project. One of his own fields of specialization is the geographical distribution of Vedic schools in different periods. It is hoped that from that side additional evidence will come forth to shed light on the problems discussed here. Meanwhile, Witzel's "Tracing the Vedic Dialects" (1989) has appeared, which, unfortunately, could not be taken into consideration for the present article.
- 1. For a survey, see Cardona (1976, 226-28). Some important articles have been reproduced and discussed in Staal (1972, 135-204).
- 2. This means that one cannot conclude from certain peculiarities of sandhi in the *Maitrāyaṇī Samhitā* which are

not described by Pāṇini, that they “escaped his observation,” as Palsule (1982, 188) claims.

3. Balasubrahmanyam (1981, 400) notes that in the sample studied by him, “three per cent of the exclusive Vedic vocabulary differs from P[āṇini]’s accentual system, and four per cent of the common vocabulary manifests the apparent difference between P[āṇini] and the Veda with reference to the systems of *Kṛt* accentuation.”
4. Even Kātyāyana and Patañjali sometimes ascribe an accent to a Vedic word that deviates from the accent found in the surviving texts (see Balasubrahmanyam 1974, 3, on *sthāsnū*).
5. The fact that the *Phīṣṣūtras* of Śāntanava ascribe to *arya*, *jyeṣṭha*, and *kaniṣṭha* the accents found in the extant Vedic literature is reason to think that Śāntanava is later rather than earlier than Pāṇini; cf. Kielhorn (1866, 1f.) and Devasthali (1967, 39f.). Kapila Deva Shastri (Saṃ 2018, 28f.) argues for an earlier date of the *Phīṣṣūtras* on insufficient grounds (Cardona 1976, 176).
6. Cf. Kiparsky (1980, 69) and Devasthali (1984, 137).
7. Thieme (1985) shows that the accents prescribed by Pāṇini in the case of words that are commonly used to address people are the initial accents of the vocative. He concludes that Pāṇini’s accents are later than the (differing) Vedic ones. This may be correct, yet it does not by itself prove that all the texts having Vedic accentuation in these cases are older than Pāṇini. It is certainly conceivable that the Vedic texts were composed in a form of language that was kept archaic also

in its accents. Pāṇini’s *bhāṣā*, too, is younger than Vedic, yet Pāṇini does not for that reason necessarily postdate scriptures that use the Vedic language.

8. Note that MS 1.5.12 (p. 81 1.2-6) uses *rātri* in the language used by the gods and *rātri* elsewhere; this was pointed out to me by Professor Witzel.
9. P.2.3.62, 4.39, 73, 76, 3.2.88, 5.2.122, 6.1.34, 70, 133, 178, 2.199, 4.75, 7.1.8, 10, 103, 3.97, 4.78. Cf. Shivarani (1969).
10. It goes without saying that the generality of such rules can be restricted in various ways such as the presence of rules that account for exceptions (*apavāda*).
11. For a brief description, see Chakrabarti (1980, 134-36) and Jha (1942, 294-99).
12. The following examples are taken from Bhartṛhari’s discussion of *ūha* in his commentary on the *Mahābhāṣya* (see below).
13. We should not be misguided by this late date. Bhartṛhari made use of works on Mīmāṃsā older than Śabara’s, among them probably the one by Bhavadāsa. See Bronkhorst (1989a).
14. The relevance for grammar is, of course, that in this way it can be decided whether or not Vedic rules are to be used in the modified mantras. Note that Kumārila’s *Tantravārttika* on PMS 1.3.24 maintains that *ūha* is brought about without the help of grammar but rather with forms found in the Veda.
15. ŚSS 6.1.15, similarly, prescribes substitution of *medhapataye* or *medhapatibhyaḥ* for, apparently, *medhapatibhyām*, as instances of *ūha*.

16. *ghas* replaces *ad* before aorist endings according to P.2.4.37 (*luṅsanor ghas!*).
17. The value of this case is somewhat in doubt since TB 2.8.2.5 cites the same mantra as RV 10.47.1 with *jagr̥bhñā*; it may have contained *jagr̥bhma*.
18. My friend Dr. Harry Falk points out in a forthcoming article that Pāṇini cannot have known AVŚ 6.16.3, the reason being that Pāṇini derives *ailayīt* from *elayati*: the same mantra contains the form *ilaya* (*avelaya*), so that Pāṇini, had he known AVŚ 6.16.3 as a whole, would have derived *ailayīt* from *ilayati* rather than from *elayati*.
19. This was pointed out by Manjul Mayank in a paper read at the Seventh World Sanskrit Conference, Leiden, 1987.
20. The corresponding plural *dādhrati* occurs at TS 2.3.1.2, 5.3.9.2; MS 2.2.1; and KS 11.6. However, the juxtaposition of *dādharti*, *dardharti*, *dardharṣi*, and other finite verb forms seems to indicate that the precise form *dādharti* is meant.
21. For example, P.7.1.57 (*goḥ pādānte*) prescribes that the genitive plural of *go* at the end of a verse-foot in ritual literature is *gonām*. This is illustrated in RV 10.47.1. But the *Kāśikā* rightly observes that there are exceptions: RV 10.166.1 has *gavām* at the end of a verse-foot.
22. The *Kāṇva* parallel ŚBK 6.1.3.12 (*chāgānām haviṣām prasthitam preṣya*) seems to be the only example in Vedic literature in which P.2.3.61 is obeyed. Note that the single *vārttika* on P.2.3.61 is intended to make the rule invalid where the oblation is *prasthita*. This would

- justify all, or almost all, deviations from Pāṇini's rule, yet the fact that Pāṇini says nothing about *prasthita* in this context shows that he did not know, or accept, these counterexamples. Similarly, see Navathe (1987).
23. *bāhvojas* in RV 8.93.2 is considered a *Bahuvrīhi*, and not therefore a *Tatpuruṣa* compound, by Oldenberg (1909-12, 2:144). *somaparvabhiḥ* in RV 1.9.1 = AVŚ 20.71.7 = VSM 33.25 = VSK 32.2.8 = SVK 1.180 = SVJ 1.2.1.7.6 can be derived from *-parva*, by P.7.1.10.
24. Note that the insufficiency of Pāṇini's grammar with regard to the Vedic data has been known for a long time in the Pāṇinian tradition. Kumārila Bhaṭṭa, in his *Tantravārttika*, cites in this connection SVK 2.1006 = SVJ 4.17.11 (*madhya āpasya tiṣṭhati*), which has *āpasya* instead of *apām*.
25. Caland (1921, 3) observed that the *Āpastamba Śrauta Sūtra* refers to mantras of the *Taittirīya Saṃhitā* by way of their initial words, and to those of the *Taittirīya Brāhmaṇa* by citing them in full. Kashikar (1968, 400) has also shown that mantras from the *Taittirīya Brāhmaṇa* are often quoted by *pratīka*. The *Bhāradvāja Śrauta Sūtra* follows a similar practice (Kashikar 1968, 401).
26. That is, not even the forms *ayakṣmaṃkaraṇa* and *sarūpaṃkaraṇa*, without the feminine *ī*, are derived.
27. Note that the *Mahābhāṣya* also prefers the *Paippalāda* version of the *Atharvaveda* in some citations (see Renou 1953, 463).

Abbreviations

AA	<i>Aitareya Āraṇyaka</i>
AB	<i>Aitareya Brāhmaṇa</i>
AL	Abhyankar and Limaye's edition of Bhartṛhari's <i>Mahābhāṣyadīpikā</i>
ĀpSS	<i>Āpastamba Śrauta Sūtra</i>
ĀrṣB	<i>Ārṣeya Brāhmaṇa</i>
ĀśvSS	<i>Āśvalāyana Śrauta Sūtra</i>
AVP	<i>Atharvaveda</i> (Paippalāda)
AVŚ	<i>Atharvaveda</i> (Śaunakīya)
BAU(K)	<i>Bṛhadāraṇyaka Upaniṣad</i> (Kāṇva)
BhāSS	<i>Bhāradvāja Śrauta Sūtra</i>
CE	"Critical edition" of Bhartṛhari's <i>Mahābhāṣyadīpikā</i>
ChU	<i>Chāndogya Upaniṣad</i>
DrSS	<i>Drāhyāyana Śrauta Sūtra</i>
HiSS	<i>Hiraṇyakeśi Śrauta Sūtra</i>
JAB	<i>Jaiminīya-Ārṣeya-Brāhmaṇa</i> , edited by Bellikoth Ramachandra Sharma. Tirupati: Kendriya Sanskrit Vidyapeetha. 1967.
JUB	<i>Jaiminīya Upaniṣad Brāhmaṇa</i>
KB	<i>Kauṣītaki Brāhmaṇa</i>
KS	<i>Kāthaka Saṃhitā</i>
LSS	<i>Lāṭyāyana Śrauta Sūtra</i>
Ms	Manuscript of Bhartṛhari's <i>Mahābhāṣyadīpikā</i>
MS	<i>Maitrāyaṇī Saṃhitā</i>
MŚS	<i>Mānava Śrauta Sūtra</i>
P.	Pāṇinian sūtra
PB	<i>Pañcaviṃśa Brāhmaṇa</i>
PMS	<i>Pūrva Mīmāṃsā Sūtra</i>

SāB	<i>Sāmavidhāna Brāhmaṇa</i>
ṢaḍB	<i>Ṣaḍviṃśa Brāhmaṇa</i> , edited by Bellikoth Ramachandra Sharma. Tirupati: Kendriya Sanskrit Vidyapeetha. 1967.
ŚāGS	<i>Śāṅkhāyana Gṛhya Sūtra</i>
ŚānA	<i>Śāṅkhāyana Āraṇyaka</i>
ŚātyB	<i>Śātyāyana Brāhmaṇa</i>
ŚB	<i>Śatapatha Brāhmaṇa</i>
ŚBK	<i>Śatapatha Brāhmaṇa</i> (Kāṇva)
ŚSS	<i>Śāṅkhāyana Śrauta Sūtra</i>
Sw	Swaminathan's edition of Bhartṛhari's <i>Mahābhāṣyadīpikā</i>
TB	<i>Taittirīya Brāhmaṇa</i>
VaṃśaB	<i>Vaṃśa Brāhmaṇa</i>
VāSS	<i>Vārāha Śrauta Sūtra</i>

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