

# Language vs. grammatical tradition in Ancient India: How real was Pāṇinian Sanskrit? Evidence from the history of late Sanskrit passives and pseudo-passives<sup>1</sup>

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There are certain discrepancies between the forms and constructions prescribed by Pāṇinian grammarians and the forms and constructions that are actually attested in the Vedic corpus (a part of which is traditionally believed to underlie Pāṇinian grammar). Concentrating on one particular aspect of the Old Indian verbal system, viz. the morphology and syntax of present formations with the suffix *-ya-*, I will provide a few examples of such discrepancy. I will argue that the most plausible explanation of this mismatch can be found in the peculiar sociolinguistic situation in Ancient India: a number of linguistic phenomena described by grammarians did not appear in Vedic texts but existed within the semi-colloquial scholarly discourse of the learned community of Sanskrit scholars (comparable to Latin scholarly discourse in Medieval Europe). Some of these phenomena may result from the influence of Middle Indic dialects spoken by Ancient Indian scholars, thus representing syntactic and morphological calques from their native dialects onto the Sanskrit grammatical system.

**Keywords:** passive, Vedic, Sanskrit, Pāṇini, polyglossia, middle, grammatical tradition

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## 1. Introductory remarks

Old Indian linguistics is certainly one of the oldest linguistic traditions, differing in many respects from the younger traditions of Europe. The three great names in the history of the Sanskrit grammar are: Pāṇini, the author of the famous grammatical treatise *Aṣṭādhyāyī* (lit. ‘consisting of eight chapters’), dating to the sixth–fifth century BC; Kātyāyana, the author of brief commentaries (*vārttikas*) on Pāṇini’s *Aṣṭādhyāyī*; and Patañjali, who offered an extensive commentary on both Pāṇini’s *Aṣṭādhyāyī* and Kātyāyana’s *vārttikas*, the *Mahābhāṣya* (lit. ‘great commentary’), written around 150 BC.

It is well known that Ancient Indian grammarians and first and foremost, Pāṇini, followed by numerous commentators, have provided a fascinating description of the structure of Sanskrit, anticipating many achievements of modern linguistics, only rediscovered as late as in the twentieth century. These include such notions as ‘morphological zero’ (cf. the Pāṇinian concept of *lopa*), semantic roles (*kāraṅkas*; see Cardona 1974 and, most recently, Keidan 2012), and several others.<sup>2</sup> The admirability of the theoretical findings of the Pāṇinian linguistics did not prevent later scholars from paying particular attention to the correspondences between the linguistic system as described in the Ancient Indian grammatical treatises and the inventory of linguistic structures actually attested in the corpus of Old Indian (Vedic) texts. There is much literature on the features of Sanskrit as known to Pāṇini in general as well as on more specific issues, such as which Vedic texts (and, correspondingly, Vedic dialects) were known or unknown to Pāṇini – suffice it to mention Paul Thieme’s (1935) *Pāṇini and the Veda*, a pioneering work in the field that remains a classic to this day.

In spite of the fact that the problem of the relationship between Pāṇini and the Veda belongs to mainstream Vedic and Pāṇinian studies, little attention has been paid to one particular aspect of this general issue: the existence of forms or constructions taught by Pāṇini but unattested in the Vedic corpus. Quite regrettably, this issue is almost entirely neglected by traditional Sanskrit scholars and receives virtually no mention in many standard surveys of the Pāṇinian grammatical tradition. This may pro-

<sup>2</sup> There exists an enormous body of literature dealing with the Pāṇinian grammatical tradition. The most important surveys include Cardona (1976, 1999) and Otto Böhtlingk’s classic (1887) edition of Pāṇini’s *Aṣṭādhyāyī*, which remains one of the best presentations of this great text. For the *Mahābhāṣya*, see Franz Kielhorn’s (1892–1909) standard edition.

duce the impression that, although some forms, constructions and lexemes attested in the huge Vedic corpus could of course be unknown to Pāṇini, the opposite claim must certainly be true: all forms, constructions and other features of the language taught by Pāṇini are part of the language described by Pāṇini and other linguists of his epoch, which actually *existed* as one of the varieties of (Vedic) Sanskrit, and this variety *is* documented at least in some (Vedic) Sanskrit texts. *Communis opinio* now holds it that the language described by Pāṇini (Pāṇini's object language) can be roughly identified with Middle Vedic Sanskrit (also known as the language of the Vedic prose), attested in the Brāhmaṇas, Āraṇyakas, early Upaniṣads and Sūtras. The oldest of these prose texts can probably be dated to the middle of the first millennium BC (see Figure 2 for details of the main divisions within the Vedic corpus). More specifically, the closest approximation to the Pāṇinian Sanskrit is commonly considered to be the language of the Aitareya-Brāhmaṇa, following the influential book by Bruno Liebich (1891); for a detailed discussion, see, in particular, Whitney (1893) and also Bronkhorst (1982: 275–276, 279). Accordingly, the relationship between the Sanskrit contemporaneous with Pāṇini and the variety of the Old Indian language that served as an object language for Pāṇini – that is, the language that must have underlain Pāṇinian *description* and thus, eventually, Pāṇinian *prescription* ('Pāṇinian Sanskrit') – can allegedly be presented according to the diagram in Figure 1.

On closer examination, however, it turns out that this depiction is inadequate in various respects. Most conspicuously, we *do* find linguistic phenomena (forms, constructions, etc.) that are prescribed by Pāṇini's grammar, but are *not* found in the Vedic corpus – such as, for instance, the passives *janyate* and *tanyate* made from the roots *jan* 'be born' and *tan* 'stretch'; for details, see Section 3. There are good reasons to believe that such forms (*janyate*, *tanyate*, etc.) are not merely accidentally unattested,

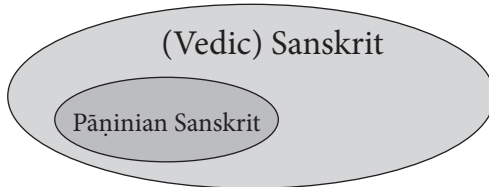


Figure 1. Linguistic sources of Pāṇinian Sanskrit: traditional view

but did not exist at all in the variety of Vedic Sanskrit contemporaneous with Pāṇini.

The aim of this article then is to elucidate the status of such Pāṇinian ‘extra-Vedic’ forms and, most importantly, to explain how they could have emerged. For that purpose, there is need to (i) determine the status of such forms within the Vedic linguistic system; (ii) to establish the relationships of these forms with their Vedic ‘prototypes’ – that is, with the comparable forms actually used in Vedic texts; and (iii) to explain how these forms could have emerged. To the best of my knowledge, this task has never been explicitly formulated and pursued before in Vedic and Pāṇinian scholarship.

Since a treatment of the full grammatical system within a single article is certainly not feasible, I will concentrate here on a detailed study of only one specific linguistic formation, the presents with the suffix *-ya-*, or *-ya-*presents for short. This limitation in the scope of research is deliberate. In my monograph (Kulikov 2012a), I offer a comprehensive description of the system of the Vedic *-ya-*presents, where all verbal formations with the suffix *-ya-* attested in the Vedic corpus were subjected to a thorough analysis and classification.<sup>3</sup> This study leads to a clearer understanding of the status of ‘extra-Vedic’ *-ya-*presents, so that in most cases it is possible to determine whether the lack of certain forms and constructions is purely accidental or not and, in this latter case, to pinpoint the grammatical rules and constraints that make the existence of such forms impossible. The system of *-ya-*presents is undoubtedly one of the best candidates for such a study, being well-attested from the early Vedic period onwards and, at the same time, one of the few Vedic formations that increase in productivity during the middle Vedic period, that is, in the period that can be considered chronologically contemporaneous with the earliest period of the Pāṇinian grammatical tradition.

The same operation of comparison of Pāṇinian and (middle) Vedic features can eventually be applied to other Sanskrit formations; however, few

<sup>3</sup> This study is based on evidence from Vedic texts, which were searched manually, using Viśva Bandhu’s *Vedic Word Concordance* (VWC) as well as concordances, word-indices and verbal dictionaries for individual texts, such as Lubotsky (1997) for the Ṛgveda and Whitney (1881) for the Atharvaveda. In addition, *-ya-*presents from a few late Vedic and early post-Vedic texts which are not covered by the VWC, such as the Kaṭha-Āraṇyaka or books 6–10 of the Mānava-Śrauta-Sūtra, have been excerpted by the author. Some additional information on *-ya-*presents attested in post-Vedic texts (not covered by the VWC either) is also obtainable from existing studies on Sanskrit grammar, e.g. Oberlies (2003).

of them (if any) fit this research task as adequately as the *-ya*-presents do.<sup>4</sup>

In what follows, I will pay special attention to the existence of such unattested forms and constructions. After a short introductory section (Section 2), offering a brief overview of the chronology of Old Indo-Aryan and the sociolinguistic situation in Ancient India, I will deal with one particular group of examples of mismatches between Pāṇinian Sanskrit and Vedic Sanskrit, the non-existing present formations with the suffix *-ya* introduced above (Section 3). Section 4 discusses some possible mechanisms of the emergence of such mismatches. The concluding Section 5 revisits the much debated problem of the reality of Pāṇinian Sanskrit, placing this proposed explanation within the general sociolinguistic context of Ancient India.

## 2. Languages and the sociolinguistic situation in Ancient India

### 2.1. Chronology of the Indo-Aryan languages

Before taking a closer look at some features of the grammatical system as outlined by Pāṇini, I will briefly outline the general chronology of the Indo-Aryan languages as well as the main sub-divisions within the Old and Middle Indo-Aryan periods; see Figure 2, overleaf.<sup>5</sup>

The Old Indo-Aryan (OIA) period in the history of Indo-Aryan languages opens with Vedic texts. Chronologically, Vedic can be divided into two main periods: early Vedic (also called ‘mantra language’, that is, the language of the hymns addressed to the Vedic gods, sacrificial formulae and magic spells), and middle/late Vedic (also called ‘the language of the Vedic prose’). The oldest layer of Vedic is attested in the language of the Ṛgveda (RV), which can approximately be dated to the second half of the second millennium BC. Within the RV, we can distinguish between the early RV (‘family books’, or maṇḍalas, which include books II–VII), and

<sup>4</sup> Compare, for instance, the present causatives with the suffix *-āya-* that are equally well-attested and increasingly productive in Vedic texts. However, an exhaustive study of the history of this formation, its morphology and syntax for the whole Vedic (and early post-Vedic) period is lacking; the monograph Jamison (1983) only covers the early Vedic period – the language of the Ṛgveda and Atharvaveda.

<sup>5</sup> For a survey of the main chronological stages of Indo-Aryan, see e.g. Masica (1993: 50–55). For the main chronological divisions within Sanskrit, see in particular Witzel (1995: 97–98) and Aklujkar (1996: 65–66).

Phase	Old Indo-Aryan	Middle Indo-Aryan	New Indo-Aryan
Languages	P ā l i	Ś a n s k r i t	Hindi, Marathi, Bengali, Assamese, Sinhala . . .
Texts	Early Vedic Atharvaveda R̥gveda	Middle Vedic Yajurveda, early Brāhmaṇas	Asōka Prakrits, Middle Prakrits, Apabhramśa Early Post Vedic – Epic Sanskrit – (Class. Sanskrit) Mahābhārata, Rāmāyaṇa Upaniṣads, Sūtras
Years	–1200 –1000	–500	–300 0 500 1000 2000

Figure 2. Chronology of Indo-Aryan languages and texts

the late RV (encompassing, above all, maṇḍalas I and X, as well as a part of book VIII, the *Vākhilya*). The language of the second most ancient text, the *Atharvaveda* (AV), in many respects resembles – and is essentially synchronic with – the language of the late RV. Early Vedic is followed by middle and late Vedic, attested in the *Brāhmaṇas*, *Āraṇyakas*, the oldest *Upaniṣads* and *Sūtras*. The post-Vedic period includes the younger *Upaniṣads* and *Sūtras* as well as Epic and Classical Sanskrit.

The absolute chronology of these periods poses serious problems (see e.g. Witzel 1995: 97–98), thus only very rough approximations can be given for the dating of the various periods. The early Vedic period cannot be dated earlier than 1500 BC (and unlikely began much later than 1200 BC); the middle Vedic period probably started after 800 BC; and the post-Vedic period must have started at some point in the second half of the first millennium BC, hardly much earlier than 300 BC.

The Middle Indo-Aryan *époque* approximately lasted from 600 BC (the time to which the oldest Middle Indic, Pāli, texts may reach back) till the end of the first millennium AD. From 1000 AD onwards, the earliest forms of New Indo-Aryan (NIA) languages, such as Old Hindi and Old Bengali, are attested.

Already by the Middle Vedic period, Sanskrit was no longer a spoken language, but co-existed, as a sacral language, alongside the Middle Indo-Aryan (MIA) vernaculars.

In order to complete this chronological survey, some clarifications on the sociolinguistic situation in ancient India will be given in the following section.

## 2.2. Notes on the sociolinguistic situation in Ancient India

Drawing on the general chronological scheme of the development of Indo-Aryan languages as shown in Figure 2, the sociolinguistic situation in the time of Pāṇini and Patañjali can be characterised as follows.<sup>6</sup>

During the middle and late Middle Indo-Aryan period, a number of languages (or, to be more precise, ‘forms of speech’) were used in India. In fact, we are dealing with a triglossia, or even polyglossia: Sanskrit was

<sup>6</sup> A detailed discussion of the sociolinguistic situation in Ancient India in general and of the status of Sanskrit in particular can be found, for instance, in the short but detailed survey Hock and Pandharipande (1978); Deshpande (1979; 1992; 1993); Akhujkar (1996); Houben (1996) and other articles published in the volume Houben (1996); see also Masica (1993: 55–60).

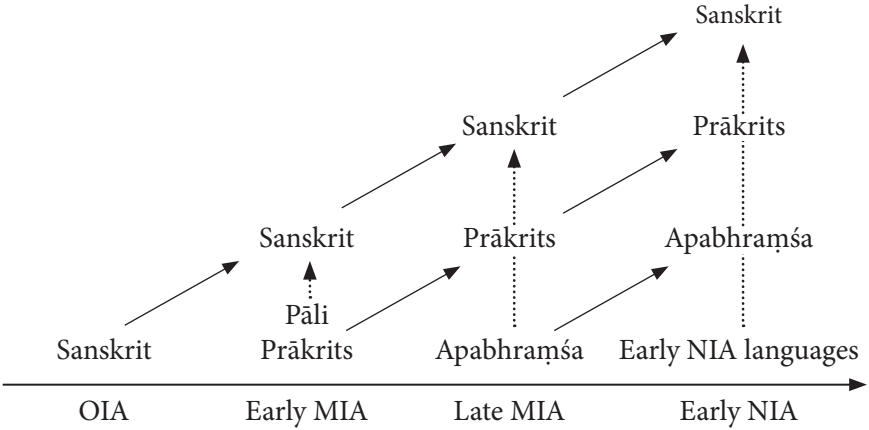


Figure 3. Polyglossia in Ancient India (adapted from Bubeník 1998). Note: the picture is to some extent simplified, since, in some periods and/or communities, certain Middle Indo-Aryan languages could even overrun Old Indo-Aryan (Sanskrit) in prestige

used in the Hindu sacral context, in scientific treatises and some literary works; MIA languages (Prākṛits) were used in poetry and dramatic works as well as in religious (Buddhist and Jainist) texts and in epigraphy. Late MIA vernaculars (Apabhraṃśa Prākṛits) found their place into the literary tradition as well, while the colloquial vernaculars, which represented the earliest forms of the New Indo-Aryan languages, were employed in everyday life.

We must emphasise that in the course of these developments Sanskrit and Prākṛits were not replaced and ousted by later varieties (i.e. Sanskrit by Prākṛits, Prākṛits by Apabhraṃśas, etc.), but moved up vertically into the position of the high/prestigious form of speech (as indicated by simple arrows in Figure 3), to be imitated by the lower varieties of speech. All these languages (or forms of speech) co-existed with each other. Most importantly, while the phonological systems and inventories of morphological forms of Old Indo-Aryan and Middle Indo-Aryan languages were basically preserved intact over the centuries, we can observe numerous traces of the influence of the spoken MIA and New Indo-Aryan vernaculars in the **syntax** and **semantics** of forms in the languages of higher rank. It thus appears that their grammatical systems, albeit morphologically stable, were open for syntactic ‘infection’ from below, as indicated by the



vertical dotted arrows in Figure 3. This fact is of crucial importance for understanding the syntactic developments in the late Old Indo-Aryan and MIA texts (for details, see Bubeník 1998: 16–23).

### 3. Mismatches between Pāṇinian Sanskrit and Vedic Sanskrit

#### 3.1. Preliminary remarks

As mentioned above, it is the *communis opinio* that the language described by Pāṇini can be roughly identified with middle Vedic Sanskrit, or the language of the Vedic prose that is attested in the Brāhmaṇas, Āraṇyakas, early Upaniṣads and Sūtras, and can probably be dated to the middle of the first millennium BC.

However, as already mentioned in the introductory section, a closer examination of the Vedic texts of this period reveals a remarkable discrepancy between the grammatical features (in particular of the verbal system) as described by the ancient Indian grammarians on the one hand, and the linguistic evidence obtainable from the Vedic texts on the other hand; for details, see Sections 3.3 and 3.4.

Of course, differences between various registers of forms actually used in texts and/or prescribed by grammarians did not pass Pāṇinian tradition entirely unnoticed. We can distinguish between three classes of forms: (i) forms that are only prescribed for Standard Sanskrit, Bhāṣā (*bhāṣāyām* – meaning, literally, ‘in speech’); (ii) forms that are generated specifically for Vedic metrical texts (*chandasi* ‘in mantra[s]’); and (iii) forms generated by unconditional rules of the Pāṇinian grammar, which may occur both in Standard Sanskrit (Bhāṣā) and in Vedic metrical texts (Chandas). According to Rau (1985: 103–105), the third class of forms – that is, the overlapping of the ‘bhāṣāyām’ and ‘chandasi’ forms, represented the language described by Pāṇini.

Whatever the exact relationship between the two (or three) registers posited by Pāṇini and the ‘object language’ of the Pāṇinian grammar was, this important threefold distinction leaves unexplained the origin of the ‘extra-Vedic’ forms taught by Pāṇini (such as the passives *janyate* and *tanyate* mentioned above). Obviously, such forms could not have emerged within the Vedic corpus as a result of the natural linguistic evolution of early or middle Vedic (which, as mentioned earlier, was not any longer a

living language after the early Vedic period). Moreover, the discrepancy between the two inventories of forms and constructions, discussed earlier, raises serious doubts about the status of the linguistic forms in question and, more generally, about the linguistic reality of the language described by Pāṇini.

William Dwight Whitney, one of the greatest linguists and Sanskritists of the nineteenth century, most emphatically expressed his scepticism about the linguistic reality of Pāṇinian Sanskrit. Whitney concluded – on the basis of a study of the verbal roots mentioned in the Pāṇinian root list, Dhātupāṭha, but not attested in Sanskrit texts, and the morphological formations which are taught by Pāṇini, but do not occur in texts either – that “the grammarians’ Sanskrit, as distinguished from them [i.e. the forms of Vedic and post-Vedic Sanskrit], is a thing of grammatical rule merely, having never had any real existence as a language, and being on the whole unknown in practice to even the most modern pandits [i.e. traditional Indian scholars]” (Whitney 1884: 282 = 1971: 290; see also Whitney 1893).

Whitney’s extreme position (shared by several Sanskritists, in particular Theodor Benfey; see Deshpande 1992 for a survey) was repeatedly criticised by later scholars, in particular by one of the main modern authorities in Pāṇinian studies, George Cardona (1976: 238–243). Cardona also attacked Joshi (1989: 274) for his opinion (shared by many modern Sanskritists) that “Sanskrit [had] stopped being a generally spoken language before 600 or 700 B. C.” and does not doubt “that Pāṇini describes a living language which at his time and in his area was used for ordinary discourse” and that “this language continued to be used currently in certain kinds of discourse at the times of Kātyāyana and Patañjali” (Cardona 1999: 214). Unfortunately (and like many other Pāṇinian scholars), when discussing particular forms and constructions prescribed by Pāṇini, Patañjali and other grammarians, Cardona is (almost) never concerned with the question of whether these forms and constructions in fact occurred in texts – which is often not the case, as I will demonstrate below.

In order to treat this problem exhaustively, it would be necessary to compare each element of the linguistic system documented in Vedic texts with the corresponding elements of the linguistic system as prescribed by Pāṇini. However, as explained in Section 1, in this article I will focus only on a small part of the Sanskrit linguistic system, viz. the passive and non-passive present formations with the suffix *-ya-*. Relevant background information on these formations will be provided in the following sections.

### 3.2. The Vedic verbal system and -ya-presents: basic facts

#### 3.2.1. *The active–middle opposition*

The Vedic verb is inflected in two diatheses, active (Skt. *parasmaipāda*) and middle (Skt. *ātmanepāda*). This opposition, inherited from Proto-Indo-European and found, for instance, also in Ancient Greek, is manifest in the formal opposition of two series of endings, as in act. *yájati* ‘sacrifices’ ~ mid. *yájate* ‘sacrifices for oneself’, act. *várdhati* ‘makes grow, increases’ (transitive-causative) ~ mid. *várdhate* ‘grows’ (intransitive), act. *svádati* ‘makes sweet’ (transitive-causative) ~ mid. *svádate* ‘is/becomes sweet’ (intransitive).

#### 3.2.2. *Present passive formations with the suffix -yá- and passive -i-aorists*

Passive forms of the present tense system (‘-yá-passives’ for short) are derived with the accented suffix -y(á)-,<sup>7</sup> as illustrated in (1):

- (1) Present passive forms of *pū* ‘purify’:  
 1sg. *pū-yé* ‘I am (being) purified’  
 2sg. *pū-yá-se* ‘you are (being) purified’  
 3sg. *pū-yá-te* ‘s/he is (being) purified’  
 etc.

Passives with active endings do not occur before late (post-Vedic) Sanskrit, and even in late texts they remain exceptional. Since there is no morphological opposition of middle and active forms with the suffix -yá- (i.e. 3SG. MID *pū-yá-te* is not opposed to 3SG. ACT. \**pū-yá-ti*, etc.), the morpheme -yá- alone can be regarded as the marker of the (present) passive, the middle inflection being automatically selected by the -yá-stem.

Next to the present passives with the suffix -yá-, Sanskrit has an isolated medio-passive aorist in -i (only the third-person singular form exists) of the type *srj* ‘release, create’ – *asarji* ‘has been released, created’; *yuj* ‘unite’ – *ayoji* ‘has been united’.<sup>8</sup>

<sup>7</sup> Information on the accent is only relevant for accentuated texts. The accentuated part of the Sanskrit corpus only includes some (above all, early) Vedic texts; post-Vedic texts do not mark accent. Furthermore, in accentuated Vedic texts, finite verbal forms do not bear independent accents, unless occurring (i) at the beginning of a sentence and/or pāda (i.e. the minimal metrical unit), or (ii) in a subordinate clause.

<sup>8</sup> For the early Vedic finite passive paradigm and relationships between the middle type of inflection and passive voice, see Kulikov (2006).

### 3.2.3. Vedic present formations with the suffix -ya- (class IV)

-yá-passives are opposed to present formations with a suffix -ya- and accent on the root, traditionally called ‘class IV presents.’ They can take both active and middle inflection and are employed in non-passive usages. Many of them are intransitive (*krúdhya* ‘is/becomes angry’, *jáyate* ‘emerges, appears, is born’,<sup>9</sup> *dívyati* (act.) / *dívyate* (mid.) ‘plays’), but there are also a few transitives, such as *ásyati/ásyate* ‘throws’, *vidhya* ‘pierces’, and *mán-yate* ‘thinks, believes’.

### 3.2.4. Constraints on the derivation of -yá-passives

In contrast to class IV presents, which can be derived from both transitives and intransitives, only transitive verbs can form -yá-passives in Vedic (see Kulikov 2012b, where this claim is corroborated).

However, throughout the whole Vedic period we observe a growth in productivity of this formation. In early Vedic, -yá-passives are attested for about 75 roots (only for non-derived transitives). Middle Vedic doubles the number of roots which form -yá-passives and shows first examples of -yá-passives made from **derived transitives** – that is, verbs whose transitivity results from applying a valency-increasing (transitivising) derivation, i.e. from causatives. The earliest examples of passives derived from causatives are found in the earliest Middle Vedic texts, in the mantras of the Yajurveda (YV): *ā-pyāyyámāna* ‘being made swell’ (attested from the Vājasaneyi-Saṃhitā onwards; the passive stem *-pyāyyá-* is derived from the truncated causative stem *-pyāy[áya]-* ‘make swell’, itself made from the root *pyā* ‘swell’), *pra-vartyámāna* ‘being rolled forward’ (*-vartyá-* ← *-vart(áya)-* ‘make turn’ ← *vrt* ‘turn’; attested in the Maitrāyaṇī Saṃhitā), *sādyáte* ‘is (being) seated, set’ (*sādyá-* ← *sād(áya)-* ‘make sit, set’ ← *sad* ‘sit’; attested from the mantras of the Yajurveda onwards); for details, see Kulikov (2008; 2012a: 696–698). Finally, from the Śrauta-Sūtras onwards (that is, from the end of the Vedic period on), first passives of causatives derived from transitive verbs appear; cf. the early example in (2).

<sup>9</sup> As I argued elsewhere (Kulikov 2012a: 321–322), there are no good reasons for a passive analysis of *jáyate*, contrary to the opinion widely spread in earlier Indo-European and Indo-Iranian scholarship. The erroneous passive interpretation of this intransitive present could (partly) be due to the influence of the deceptive passive morphology of its European translations, such as English *is born*, German *ist geboren* and French *est né*.

- (2) (Vādhūla-Sūtra 4.101: 9) (see Caland 1928: 222 = 1990: 522)

sa yo ha vā evaṃ-vidā-  
 that:NOM.SG.M which:NOM.SG.M PRCL thus-knowing:INS.SG  
 adhvaryunā yāj-ya-māno  
 adhvaryu:INS.SG perform.sacrifice:CAUS-PRES.PASS-PART:NOM.SG.M  
 yajamāno na rdhno-ti [. . .]  
 sacrificer:NOM.SG not succeed:PRES-3SG.ACT

'If the institutor of the sacrifice (*yajamāna*), being caused by the thus-knowing adhvaryu (-priest) to perform a sacrifice, does not succeed. . .'

### 3.3. Alleged (Pāṇinian) -yá-passives and passive constructions

#### 3.3.1. Non-existing forms: janyate and tanyate

As already mentioned in Section 1, the forms *janyate* and *tanyate* are prescribed by Pāṇinian *sūtras* 6.4.43–44 as possible passives from the roots *jan* 'be born' and *tan* 'stretch', alongside the regular and well-attested (in Vedic, from the earliest texts onwards) *jāyate* and *tāyāte*; see Renou (1961: 434–435, §312),<sup>10</sup> Kiparsky (1979: 136–137, with n. 66) and Werba (1997: 288, 348). However, according to the comprehensive survey of -ya-presents offered in Kulikov (2012a: 97, n. 223 and 321–322), neither *janyate* nor *tanyate* are found in the Vedic corpus.<sup>11</sup> The lack of these forms in (late) Vedic texts (that is, in the part of the Vedic corpus contemporaneous with Pāṇini) was already noticed by Kiparsky (1979: 137 and n. 66). All occurrences of *janyate* and *tanyate* are found in Classical (post-Vedic) Sanskrit texts (Kiparsky [1979: 137, n. 66] mentions Yoga-Vāsiṣṭha, Tattvabindu and some others), which were written under the incontestable authority of the Pāṇinian grammatical tradition, and therefore generally used those and only those forms and constructions that were prescribed by Pāṇini.

#### 3.3.2. Non-existing functions: passive–non-passive accentuation

An even more telling example of the mismatch between Vedic and Pāṇinian Sanskrit is provided by the Pāṇinian *sūtra* 6.1.195 *acaḥ karṭṛ yaki*.

<sup>10</sup> According to Renou, "refait sur *janati* et en soi non probant [rebuilding on the basis of *janati* is implausible in and of itself]" (1961: 434–435).

<sup>11</sup> *tanyate* is attested, for instance, in late (post-Vedic) Upaniṣads, e.g. in Mahā-Upaniṣad 4.47, 49, 50; Cūlikā-Upaniṣad 4 (see Weber 1865: 12); see also Werba (1997: 348) and Kulikov (2012a: 97, n. 223).

According to this rule, ‘before [the passive suffix] *-ya-* [in verbs with the roots ending] in a vowel (aC-) [the root optionally bears the accent if the verb is employed] in the agentive [i.e. non-passive – for instance, reflexive] [usage]’ (as e.g. in examples from the Kāśikā Vṛtti commentary: *lūyate/lūyāte* ‘[the field] is reaped by itself’). In other words, one might expect, in accordance with this rule, that, at least for some passives with the suffix *-ya-*, both root accentuation and suffix accentuation could be observed for non-passive usages.

Evidence from the Vedic corpus does not support this hypothetical accentual distribution, however. First, none of the relatively few *-yá-*passives that occur with non-passive meanings in some contexts (see Kulikov 2011, where this rare passive to non-passive [passive to anticausative] transition is discussed at length)<sup>12</sup> appear with ‘non-passive’ accentuation on the root; that is, no examples of the type *lūyate*<sup>13</sup> ‘is reaped by itself’ or *pūyate* ‘is purified by itself, purifies’ are found. Second, although we do find some twenty presents with the suffix *-ya-* (including a few *-ya-*presents derived from roots ending in a vowel) that actually attest accentuation fluctuating between suffix and root, none of them show any correlation between the place of accentuation and their meaning. This is, for instance, the case with *-ya-*presents such as *kṣīyate/kṣīyāte* ‘perishes’, *jīyate/jīyāte* ‘suffers loss’, or *śīyate/śīyāte* ‘falls (off)’. As I argued elsewhere (Kulikov 1998; 2012a: 709–721), these non-passive intransitive (anticausative) presents are not used as passives, *kṣīyate/kṣīyāte* meaning ‘perishes’ (not \*‘is destroyed’), *jīyate/jīyāte* ‘suffers loss’ (not \*‘is overpowered, is oppressed, is robbed’). Moreover, as rightly suggested already by Delbrück (1888: 267) and corroborated at length in Kulikov (2012a), suffix accentuation is only attested in texts of certain Vedic schools (Vedic dialects), above all, in the Atharvaveda, the Maitrāyaṇī Saṃhitā and the Śatapatha-Brāhmaṇa. It can thus be considered as secondary in these *-ya-*presents (see Kulikov 2012a: 720–721). Therefore, the traditional (Pāṇinian) explanation of this accent shift as motivated by their non-passive (reflexive or anticausative) syntax is not supported by linguistic facts.<sup>14</sup>

<sup>12</sup> These secondary anticausatives include two semantic groups: (i) verbs of perception and knowledge transfer, such as Ved. *ḍṛśyāte* ‘is seen’ → ‘is visible; appears’, *śrūyāte* ‘is heard, is known, is famous’; and (ii) a few verbs of caused motion, such as *kīryāte* ‘is scattered; falls (down)’ (root *kṛ*) or *srjyāte* ‘is set free, is emitted; runs’ (root *srj*).

<sup>13</sup> Incidentally, this present is not found outside the works of Indian grammarians.

<sup>14</sup> The only clear instance of an opposition correlated with the place of accent is *pacyāte/pācyate*, employed in the sense ‘be cooked’ or ‘ripen’, depending on its accentuation (on

3.3.3. *Non-existing constructions: passives of intransitives?*

The constant growth of productivity and extension of the lexical scope of *-yá*-passives, attested in the history of (Vedic) Sanskrit, may produce the impression that eventually all verbs came to form passives with the suffix *-yá-* (in non-accentuated texts evidently *-ya-*). Yet, however productive this formation had become by the end of the Vedic period, even at that time we do not find passives made from intransitives.

This incontestable linguistic fact is strikingly at odds with a number of forms and constructions taught by Sanskrit grammarians. In particular, grammarians teach (impersonal) passives made from intransitives (on which see, in particular, Ostler 1979: 353–356), as in examples (3) and (4), quoted from Ostler (1979: 353):

- (3) *māsam ās-ya-te devadattena*  
 month:ACC sit-PRES.PASS-3SG Devadatta:INS  
 ‘Devadatta sits for a month.’ (lit. ‘For a month (it) is sat by Devadatta.’)
- (4) (Daśakumāracarita 96 (S 41))  
*bhadrakāḥ pratīḥ-ya-tām kaṃcit kālam*  
 good.sir:VOC.PL wait-PRES.PASS-3SG.IMPV some time:ACC.SG  
 ‘Good sirs, wait for a moment.’

Note that such examples do not show one of the constituent features of the canonical passive constructions, the promotion of the direct object (obviously lacking in intransitive constructions) to the subject position.

Such ‘non-passive passives’ are said to be used particularly in a polite or respectful style of speech, for instance, when addressing persons of high social status. In the Classical language, such usages are attested for passive imperatives, as in (5) and (6) (examples from Whitney 1889: 362, §999a). Note that we even find constructions with the instrumental of the subject of the base (non-passive) intransitive sentence, as in (6):

- (5) *iha- āgam-ya-tām*  
 here come-PRES.PASS-3SG.IMPV  
 ‘Come hither!’

the suffix vs. on the root; see Kulikov 2012a: 400–406). Note, however, that this correlation holds true only for the language of the Ṛgveda (where the root accentuation is attested only once, in RV 1.135.8, against three instances of suffix accentuation). Furthermore, the semantic opposition ‘be cooked’ ~ ‘ripen’ does not amount to the passive/non-passive distinction, but suggests an idiomatic change (lexicalisation).

- (6) *tvayā tatra-eva sthī-ya-tām*  
 you:INS there just stand-PRES.PASS-3SG.IMPV  
 'Please stand right there!'

Moreover, Ostler (1979: 355–356) suggests that even constructions with accusatives of time can be passivised, so that the accusative noun may be promoted to the subject position and therefore surface in the nominative in a passive construction, as in the following example (for which he indicates no source, however):

- (7) *māsa ās-ya-te devadattena*  
 month:NOM sit-PRES.PASS-3SG Devadatta:INS  
 'Devadatta sits for a month.' (lit.: 'A month is sat by Devadatta.')

### 3.3.4. 'Extra-Vedic' Pāṇinian forms and constructions and their grammatical status: preliminary conclusions

The forms and constructions discussed in Sections 3.3.1–3.3.3 pose major difficulties for the study of Pāṇinian Sanskrit. What texts could be the source of linguistic information for Sanskrit grammarians concerning such constructions, and accordingly, what is their status within the Old Indian linguistic system? The Ancient Indian grammatical tradition is usually believed to focus mainly on the dialect of the Vedic prose as its object of linguistic description (object language). However, as I argued above, a detailed study of the Vedic *-yá*-passives reveals that the forms and constructions discussed before are entirely lacking in prose texts. Furthermore, the fact that such examples can be found in texts of the classical (post-Vedic) period is of no demonstrative value, since it was exactly under the incontestable authority of the Pāṇinian grammar that these texts were created.

Obviously, we have to admit that Sanskrit grammatical treatises could have served as a source for introducing such clearly artificial constructions into literary texts, rather than the other way around. The question of how such forms could have emerged within the Pāṇinian tradition will be discussed in the next section.



### 3.4. Pāṇinian prescriptions: artificial or real forms and constructions?

In order to address this issue, it is necessary to take a closer look at the grammatical prescriptions related to the forms and constructions in question. It seems that examples such as (3) and (4) take their roots in a rule formulated by Patañjali in the *Mahābhāṣya* (that is, around 150 BC), in the commentary on *vārttika* 15 to Pāṇini 3.1.87:

- (8) a. *sr̥jiyujyoḥ sakarmakayoḥ kartā bahulaṃ karmavad bhavatī vaktavyam | śyaṃs tu bhavati*

‘It must be stated that the agent (kartar) of [the roots] *sr̥j* [‘release, create’] [and] *yuj* [‘join; employ, practice’], when they have an object (karman), is often like the patient/object. But [the suffix which these roots take] is *ŚyaN* [, i.e. the suffix *-ya-* of the class IV presents], not *yaK* [i.e. not the suffix *-yá-* of passives].’

Patañjali further continues:

- (8) b. *sr̥jeḥ śraddhopapanne kartari karmavadbhāvo vācyaś ciṅ-ātmanepadārthaḥ*

‘When the agent (kartar) of [the verb] *sr̥j* [‘release, create’] is endowed with faith [i.e. treated with respect], it must be stated that [he] is like the patient/object (karman), for the sake of *Ciṅ* [i.e. the morphological operation which derives the passive aorists in *-i* of the type *asar̥ji*, normally meaning ‘has been created’] and *Ātmanepada* [i.e. middle type of inflection].’

This rule licenses the unusual type of constructions with *-ya-*passives (and passive *i*-aorists) found in examples (9)–(11) (quoted by later Indian scholars):

- (9) *sr̥j-ya-te* *mālām*  
make-PRES.PASS/CL.4.PRES-3SG garland:ACC.SG  
‘[S/he] is (respectfully?) making a garland.’
- (10) *a-sar̥j-i* *mālām*  
AUGM-make-AOR.PASS:3SG garland:ACC.SG  
‘[S/he] has (respectfully?) made a garland.’
- (11) *yuj-ya-te* *brahmacārī* *yogam*  
practice-PRES.PASS/CL.4.PRES-3SG brahmacārī:NOM.SG yoga:ACC.SG  
‘The brahmacārī [i.e. a student of Veda] practices yoga.’

Patañjali's prescription (8) was discussed in detail by Bronkhorst (1983). Bronkhorst rightly pointed out that examples such as (9) and (11) would not pose a problem for interpretation if the roots *śṛj* 'create' and *yuj* 'join, practice' could form non-passive class IV presents with the suffix *-ya-*. This is not the case, however; to put it in more strict terms, in the enormous corpus of Vedic texts we find no evidence for the existence of non-passive transitive class IV presents *śṛjyate* 'creates, makes' and *yujyate* 'joins, practices'. Bronkhorst assumes that adding *śṛj* and *yuj* to the class of verbal roots which can form class IV presents, the '4th gaṇa' in traditional terminology, may have happened at a later time.

Bronkhorst's analysis and considerations were severely criticised by Cardona (1999: 99–104). He believes that "[i]n the language of Patañjali's time and place" constructions such as (9)–(11) were indeed possible. He further explains:

[Patañjali] notes that with respect to *śṛj* the provision is made that an agent is treated as though it were an object in order to allow *ciṅ* [= passive *i*-aorist] and *ātmanepada* affixes [= middle inflection]; with respect to *yuj*, the provision is made so that the suffix *yak* which would be in order for a normal object-agent [. . .] not occur. (Cardona 1999: 102–103)

After this vague clarification, he states that "the major claim upon which Bronkhorst bases so much of his later argumentation itself rests on an insufficient understanding of what is said in the text of the Mahābhāṣya to which Bronkhorst appeals" (Cardona 1999: 104).

The discussion between Bronkhorst and Cardona clearly shows that opinions on the linguistic reality of Pāṇinian Sanskrit remain as drastically different as they were in the times of Whitney: obviously, the two opposite views on the reality of Pāṇinian Sanskrit, the Whitneyan extreme 'nihilism' (Pāṇinian Sanskrit never existed as a language) and the 'orthodox' opinion that it was a living language, can barely be reconciled. Correspondingly, the fundamental question on the origins of Pāṇinian Sanskrit remains open: what are the possible sources of this mismatch between the grammatical prescriptions and linguistic facts? In order to answer this question, we have to recall the chronology of Indo-Aryan languages and the sociolinguistic situation in Ancient India in the times of Pāṇini and his followers, that is, roughly in the second half of the first millennium BC.

#### 4. Pāṇinian innovations as a result of co-existence of late Sanskrit and Middle Indic dialects

##### 4.1. Passives and *-ya*-presents: phonological and morphological changes in Middle Indo-Aryan

Let us take a closer look at the system of passive verbs attested in MIA languages (i.e. in the period of evolution immediately following the Old Indo-Aryan period), considering first evidence from Pāli, the earliest attested MIA language.

In general, Pāli passives continue Vedic *-yá*-passives, but their form has changed in accordance with the phonetic laws operating between Old Indo-Aryan and Middle Indo-Aryan as well as changes in the morphological system: (i) Consonant clusters ending with *-y* (as many other clusters) changed to geminates or were substituted by consonant plus *īy*: *Cy* → *CC* or *Cīy*; (ii) the active–middle opposition was lost, only active endings survived; (iii) the Vedic accent disappeared.

A few examples of Pāli passives resulting from these developments are given in (12):

(12) Sanskrit	Pāli
<i>ucyáte</i> ‘is called’	> <i>vuccati</i>
<i>yujyáte</i> ‘is (being) united’	> <i>yujjati</i>
<i>hanyáte</i> ‘is (being) killed, hit’	> <i>haññati</i>
<i>dhāvīyāmāna-</i> ‘being rubbed’	> <i>dhoviyamāna-</i>
<i>kathyate</i> ‘is (being) told’	> <i>kathīyati</i>
<i>pūjyate</i> ‘is (being) worshipped’	> <i>pujīyati</i>

These developments have an important corollary: the reflexes of the OIA *-yá*-passives could not be distinguished any longer by accentuation and diathesis (active/middle) from those of the original class IV presents, so that these two morphological formations could easily be confused in MIA and eventually fell together. This, in turn, may have created favourable conditions for the use of the original passives in constructions which were typical of the class IV presents, that is, for their non-passive usages (examples of which can be found, for instance, in De Vreese 1961 and Oberlies 2001: 199).

This usage is exemplified in the case of Pāli *ādiyati*, the reflex of Skt. *ā-dīyate* ‘is taken’ (prefixed verb *ā-dā* ‘take’), which can be used in transi-

tive constructions to mean ‘clings, takes, obtains, gains’, as illustrated in (13) and (14):

- (13) (Vinaya-Piṭaka 1.25.2)  
*tejaṃ pariādiyeyyan*  
 fire:ACC take:YA.PRES:3SG.OPT  
 ‘May I obtain the fire.’

- (14) (Vinaya-Piṭaka 2.296.21)  
*vaḍḍhenti kaṭasiṃ ghoram ādiya-nti punabbhavan*  
 enlarge cemetery:ACC terrible:ACC take:YA.PRES-3PL rebirth:ACC  
 ‘[Some people] enlarge the realm of death (lit.: they enlarge the cemetery [by dying]) and gain a terrible rebirth’ (i.e. they are born again in a bad shape).’

Another example is Pāli *vediyati*, the reflex of Skt. *vedyate* ‘is made known, is told’ (passive derived from the causative *vedayati* ‘makes known, tells’), employed in the sense ‘feels’, as in (15):

- (15) (Vinaya-Piṭaka 3.37.25)  
*so tatha dukkhā tikkhā kharā kaṭukā*  
 thus sorrowful:ACC sharp:ACC painful:ACC terrible:ACC  
*vedanā vediyati*  
 feelings:ACC feel:YA.PRES:3SG  
 ‘Thus [he] experiences sorrowful, sharp, painful, terrible feelings.’

Some presents with the suffix *-ya-* corresponding to Vedic *-yá-* passives can be employed both in passive and non-passive usages, as, for instance, *abhibhuyyati* ‘overcomes, overpowers; is overpowered’, as in (16) and (17):

- (16) (Udāna-Aṭṭhakathā 324.2)  
*upādiṇṇaka-sarīram khaṇḍiccādīhi*  
 attached-body:NOM broken.teeth.and.other:INS  
*abhibhuyya-ti*  
 overpower:PRES.PASS-3SG  
 ‘The body which is attached [to the physical senses] is overpowered by [the physical decline manifested in] broken teeth and other [similar phenomena].’
- (17) (Paṭiṣ 2, 196.20)  
*rāgaṃ abhibhuyya-ti*  
 passion:ACC overcome:YA.PRES-3SG  
 ‘[He] overcomes passion . . .’

Similar phenomena can be observed in other MIA languages. Thus, we find, for instance, in Magadhi the verb *hammaï*, the morphological reflex of Skt. passive *hanya(te)*, which is employed in the sense of Skt. *hanti* ‘kills’, not ‘is killed’. Likewise, Āpabhraṃśa texts show the verbal form *kijjai* (= Skt. *kriya(te)* ‘is made’), employed in the sense ‘makes, performs’, as in (18):

- (18) (Dohākoṣa of Kāṇha 20; cf. De Vreese 1961: 18)  
*aiso so nīvvāṇo bhañijjai jahi maṇa māṇasa*  
 this that nirvāna call:PASS.3SG in which mind of.mind  
*kiṃ pi ṇa kijjai*  
 nothing make:YA.PRES.3SG  
 ‘That [state] is called nirvāṇa, in which the mind **does not perform**  
 anything of the mind.’

The existence of such new MIA pseudo-passives (i.e. reflexes of the Old Indo-Aryan presents with the passive suffix *-ya-* that are not used in passive constructions) may be the clue to the rise of pseudo-passives as discussed in Section 3.

#### 4.2. New patterns in late Sanskrit and Middle Indic models

In order to figure out possible mechanisms of the rise of new types of *-ya-* presents in late Sanskrit, we have to recall that late Vedic, post-Vedic and, in general, late Old Indo-Aryan texts were written and edited by native speakers of MIA (or even early forms of NIA) languages, not of an Old Indo-Aryan language (Sanskrit). Vedic Sanskrit was not a spoken language any longer at least from the middle of the 1st millennium BC onwards. In many cases the ‘phonetic distance’ (formal difference) between the original Old Indo-Aryan forms and their MIA reflex was not too drastic, so that OIA forms could readily be restored from their MIA reflexes. For that reason, the syntactic features of the MIA *-ya-* presents could quite easily be transferred onto the corresponding Old Indo-Aryan forms, inducing some crucial changes in the grammatical system of the late Sanskrit texts under discussion.

Accordingly, the MIA *-ya-* presents, morphologically related to the Old Indo-Aryan *-yá-* passives, but employed in non-passive usages, could easily find their way back to OIA – hence such forms as *srjyate* ‘makes’ and *yujyate* ‘practices (yoga)’ in (9) and (11). This resulted in the rise of homonymous presents, such as *srjyate* and *yujyate*, which can mean both ‘is made’ and ‘makes’, ‘is practiced’ and ‘practices’:

Pattern I:

*srj*: *srjyate* ‘is made’/‘makes’

*yuj*: *yujyate* ‘is practiced’/‘practices’

This scenario may account for the rise of some new (albeit rare and isolated) *-ya*-presents, such as *sūyate* ‘produces, generates’ (mostly with the preverb *pra*), which is synonymous with the old root present *sūte* (attested from the Ṛgveda onwards) and opposed to the homonymous *-ya*-passive *sūyate* ‘is produced’. The *-ya*-passive is a late Vedic formation, whilst the *-ya*-present first appears in post-Vedic texts, in the late Sūtras and Smṛtis, see Gotō (1991: 698); Kulikov (2012a: 508–510).

Apparently, this situation gave rise to some descriptive problems, which Patañjali and other grammarians tried to accommodate into the classical Sanskrit grammar by introducing a rather artificial rule which licensed the non-passive usage of *-yá*-passives.

Pattern I, with its lack of formal distinction between passives and non-passives, was unsatisfactory in several respects – foremost, because of the merger of a transitive verb and its passive, which is extremely uncommon for Sanskrit. In order to distinguish between the two functions and two usages of such forms, some varieties of late Sanskrit may have introduced the secondary active–middle opposition, on the model of such pairs as mid. *várdhate* ‘grows’ (intransitive) ~ act. *várdhati* ‘makes grow, increases’ (transitive), mid. *svádate* ‘is/becomes sweet’ (intransitive) ~ act. *svádati* ‘makes sweet’ (transitive-causative). Accordingly, the newly-built *-ya*-presents could take active endings, thus becoming formally distinguished from the original (historically correct) *-ya*-passives with middle inflection, which would result in pairs of the type II:

Pattern II:

*srj*: mid. *srjyate* ‘is created’ ~ act. *srjyati* ‘creates’

Active *-ya*-presents of the type *srjyati* are quite commonly attested in Buddhist Hybrid Sanskrit (on which see below). The use of the active inflection could of course also have been supported by the situation in the contemporaneous MIA dialects, where the active/middle did not survive at all. However, isolated examples of the type II can be found as early as in Sanskrit texts immediately following the Vedic period. One of the earliest attestations is found in the Maitrāyaṇī Upaniṣad, see examples (19a) and (19b). Here, two *-ya*-presents of the verb *abhi-bhū* ‘overcome’ (prefixed

derivative of *bhū* ‘become’) co-occur within the same passage. In addition to the passive *abhibhūyate* ‘is (being) overcome’ with the middle inflection, the new transitive *abhibhūyati* ‘overcomes’ with the active inflection appears, which is, for some reason, selected instead of the synonymous regular class I present (thematic root formation) *abhibhavati*:

(19) (Maitrāyaṇī Upaniṣad 3.2–3)

- a. *asti khalv anyo ’paro bhūtāt mākhyo yo*  
is indeed another different bhūtātman:called which:NOM.SG.M  
*yaṃ sitāsitaḥ karma-phalair*  
this:NOM.SG.M good.and.evil:INS.PL act-result:INS.PL  
***abhibhū-ya-mānaḥ***  
overcome-PRES.PASS-PART.MID:NOM.SG.M  
*sad-asad-yonim āpadyate*  
higher-lower-form.of.existence:ACC.SG enter:PRES:3SG.MID  
‘Indeed, there is another (ātman) called ‘bhūtātman’, which, **being overcome** by good and evil results of acts, enters upon higher and lower form of existence. . .’
- b. *atha yathā- ayaḥ-piṇḍe han-ya-māne na- agnir*  
and as iron-lump forge-PRES.PASS-PART not fire  
***abhibhū-ya-ty evaṃ na- abhibhūyaty***  
overpower-YA.PRES-3SG.ACT SO not overpower-YA.PRES-3SG.ACT  
*asau puruṣo ’bhibhū-ya-ty*  
this puruṣa overpower-YA.PRES-3SG.ACT  
*ayaṃ bhūtātma- upasaṃśliṣṭa-tvāt*  
this bhūtātma completely.enveloped-N.ABSTR:ABL.SG  
‘And just as when a lump of iron has been forged into the same shape fire no longer can **overpower** [it], so the puruṣa no longer **overpowers** [the *bhūtātma*]; [on the contrary], this *bhūtātma* **overpowers** [the puruṣa], because of keeping him completely enveloped.’<sup>15</sup>

Even more instructive is evidence from Buddhist Hybrid Sanskrit (see Edgerton 1953: 137–138, 183). This is a mixed language resulting from supplementing Classical Sanskrit with forms taken from Middle Indo-Aryan vernaculars, so that direct borrowings from such languages as Pāli were

<sup>15</sup> For a detailed discussion of this passage, see van Buitenen (1962: 129–130).

allowed. Here, many examples of both type I and type II are found. Thus, we find such pairs as *hūyate* ‘is called’ – *ā-hūyati* ‘calls’ or (*sam*)*dṛśyate* ‘is seen, is/become visible’ – (*sam*-)*dṛśyati* ‘sees’, illustrated in (20)–(21):

- (20) (Lañkāvatāra-Sūtra 268.14)  
*dṛś-ya-nti*                      *bhogam*                      *spariṣam*                      *samānam*  
 see-YA.PRES-3SG.ACT property:ACC contact:ACC same:ACC  
*dehāntagam* *loka-guruṃ*                      *kriyāṃ*                      *ca*  
 death:ACC world-teacher:ACC action:ACC and  
 ‘[The wise men] see (material) property, (physical) contact, death, the teacher of the world and action as [being of the] same nature.’
- (21) (Gaṇḍavyūha 523.19–21)  
*pratibhā-samudrāḥ samdṛś-ya-nte*  
 light-ocean:NOM.PL see-PRES.PASS-3PL.MID  
 ‘The oceans of light become visible.’  
 . . .  
*sarva-rūpa-gatāni sarva-kriyāś ca samdṛś-ya-ti*  
 all-form-route:ACC.PL all-action:ACC.PL and see-YA.PRES-3SG.ACT  
 ‘[He] sees the routes of all forms and all deeds.’

## 5. Concluding remarks on Pāṇinian Sanskrit: a semi-colloquial language of scholarly community?

To summarise, Pāṇini and the Pāṇinian grammatical tradition in general prescribed a considerable amount of forms and constructions which, most likely, never existed in the Vedic dialects that were documented in Vedic prose texts contemporaneous with the époque of the Ancient Indian grammarians and thus, allegedly, must have served as an object language for Pāṇinian descriptivists. The abnormal forms and constructions which were in the spotlight of the present discussion must have originated in the very peculiar sociolinguistic situation in Ancient and Medieval India as shown in Figure 3 (Section 2.2), when the forms of speech, or languages, of the higher rank – above all, Sanskrit, – copied syntactic features of the spoken languages. Accordingly, the traditional view of the relationship between the Sanskrit of Pāṇini’s time and the variety of Old Indian language as described by Pāṇini (‘Pāṇinian Sanskrit’; see Figure 1) should be reconsidered in accordance with Figure 4.



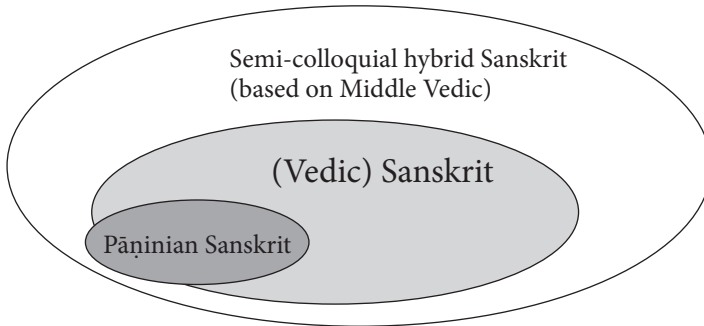


Figure 4. Linguistic sources of Pāṇinian Sanskrit: revised view

The rise of such ‘Pāṇinian-only’ forms and constructions, albeit not directly documented in Vedic texts, must nevertheless represent some linguistic reality. Occasionally and quite rarely, a few instances of this type (such as *-bhūyati*, *sūyate* or *tanyate*) could have penetrated into some late Vedic and early post-Vedic texts, but even then such phenomena remain exceptional and isolated. The emergence of these forms could be triggered both by Middle Indo-Aryan patterns and by some internal (primarily analogical) processes.

Thus, passives *janyate* and *tanyate* (see Section 3.3.1) could be created in analogy with the *-ya*-presents made from aniṭ roots, such as *mányate* ‘thinks’ (root *man*) or *hanyáte* ‘is killed’ (root *han*), instantiating a more straightforward formal relationship between the root and the *-ya*-stem than in the case of the regular derivatives *jāyate* and *tāyate*. The rise of the forms of the type *śṛjyati* ‘creates’ could be due to the lack of the active–middle distinction in Middle Indo-Aryan, which could, on the one hand, have licensed the confusion of the different voices in late Sanskrit texts, and, on the other hand, account for the emergence of secondary *-ya*-presents with the type of inflection (middle or active) that was not actually attested in Vedic (as in the case of *śṛjyati*). Although *śṛjyati* ‘creates’ does not occur in the Vedic corpus, secondary transitives of this type may be exemplified by such extremely rare forms as *abhi-bhūyati* ‘overcomes’ that could have emerged as new transitive pendants of passives with the suffix *-ya-*. This probably occurred first and foremost in the cases where the original passive semantics of the *-ya*-passive was blurred, representing the

passive to anticausative transition, as described in Kulikov (2011).<sup>16</sup>

The main locus of such forms and constructions was probably the semi-colloquial scholarly discourse of the learned community, from which they could only exceptionally find their way into Vedic texts (or, to be precise, into their final redactions). Accordingly, these rare attestations, as confronted with the corresponding Pāṇinian prescriptions, serve as a unique source of information about the grammatical system of this hypothetical semi-colloquial scholarly (Pāṇinian) Sanskrit of the late Vedic period.

The idea that Pāṇinian Sanskrit (which, in analogy to Buddhist Hybrid Sanskrit, might also be called 'Pāṇinian Hybrid Sanskrit') was used as a semi-colloquial language within the learned Brahmanic community is not entirely a novelty; see a comprehensive discussion of several aspects of this issue in Deshpande (1992).<sup>17</sup> However, quite often such statements are largely based on indirect indications contained in grammatical treatises and speculations on possible addressees of the Brahmans' speech only. In this article I argued that substantiating such claims should primarily rely upon a full cataloguing of the basic features of the grammatical system of this 'Pāṇinian Hybrid Sanskrit' than can only be based on a thorough comparative analysis of the inventories of Vedic and Pāṇinian forms and constructions, as illustrated in the example of Sanskrit *-ya*-presents. Ideally, the full grammatical system obtainable from the Pāṇinian prescriptive apparatus should be 'sifted', form by form and construction by construction, through the 'sieve' of the textual evidence available from the (middle/late) Vedic corpus. Those items which will be 'sifted out' at the outcome of this analysis (that is, forms such as, for instance, *janyate*, *sūyate* 'produces', *srjyati* or *-bhūyati*) can be qualified, with high probability, as belonging uniquely to the Pāṇinian semi-colloquial Sanskrit.

This form of Old Indo-Aryan could not function as a normal living language: it was not spoken by adult persons addressing their children and

<sup>16</sup> More examples of this type can be found in the mixed Buddhist Hybrid Sanskrit (which was more open to the Middle Indo-Aryan influence).

<sup>17</sup> Cf. such descriptions of Pāṇinian Sanskrit as "the male brāhmaṇa second language" (Deshpande 1992: 119); "a current spoken form of Sanskrit which the Brāhmaṇa males acquired as a second language, but used very widely in ritual as well as non-ritual contexts" (Deshpande 1992: 120); or Witzel's (1989: 109) claim that "there was something like a Vedic Koiné, but [...] this 'educated Sanskrit' of the Brahmin community which they used, as it is attested for Uddālaka Āruṇī, in their disputations, from Madra (Punjab) to Videha (Bihar), existed in many local varieties based on the various forms of Old Indo-Aryan and of the underlying Prakrit dialects spoken in the particular area".

therefore was not learned by children as first language (cf. Deshpande's 1992: 119 definition of this idiom as "a current spoken form of Sanskrit which the Brahmāṇa males acquired as a second language"); nor was it used in every-day life. Rather, we are dealing with a particular language, the status of which was comparable to that of the spoken Medieval Latin in use in Europe within scholarly and/or religious communities. In many cases, Medieval Latin revealed a number of grammatical (syntactic) features of the contemporaneous living languages, such as Old and Middle French and Old Spanish, among others (see, for instance, Norberg 1968 and Harrington et al. 1997, to name just a few important handbooks on this issue).

Although this issue goes beyond the scope of the present article, it will be useful to give a few illustrations from Latin that might help to clarify the status of Pāṇinian Sanskrit. A thorough analysis of the inventory of grammatical features peculiar to Medieval Latin, as opposed to Classical Latin, can reveal a number of phenomena comparable to the features of Pāṇinian Sanskrit discussed above, in particular, in the domain of passive formations and in the use of morphological passives. Thus, the frequent use of the analytical passive of the type *amatus est* could have become a distinctive feature of Medieval Latin (especially after the eighth century AD; see Muller 1924), particularly in the Romance linguistic area, when the synthetic passive of the type *amatur* was ultimately lost in living Romance languages, being replaced by analytical forms.<sup>18</sup> Accordingly, patterns of the native languages of the authors and redactors of Latin texts could trigger the use of the corresponding formation in colloquial scholarly Latin, ousting synthetic passive forms.

Another group of changes in this variety of Latin could be due to the influence of Greek – particularly in translations from Greek (such as St. Jerome's Latin translation of the Bible, *Vulgate*). One telling example, particularly appropriate in the context of this article, is the translation of the Greek synthetic middle voice, inherited from Proto-Indo-European, which was used syncretically to express a number of intransitivising derivations, including the passive (for details, see e.g. Allan 2003). Accordingly, it could have triggered the use of the Latin synthetic passive of the type *amatur* (normally lacking the non-passive functions in the Classical language) in Latin translations from Greek in the non-passive (anti-causative or reflex-

<sup>18</sup> On the reorganisation of voice distinctions in Late Latin, see, in particular, Cennamo (2001).

ive) constructions – as in the case of the well-known passage from Old Testament (22), which can be compared to its Greek parallel (23):<sup>19</sup>

(22) Latin (Genesis 1: 2)

... *et spiritus Dei fereba-tur super*  
and Spirit:NOM.SG God:GEN.SG move:IMPF-3SG:PASS over

*aquas*

water:ACC.PL

‘...and the Spirit of God was hovering (lit. moved (himself); not \*was moved!) over the waters.’

(23) Ancient Greek (Genesis 1: 2)

καὶ πνεῦμα θεοῦ ἐπεφέρε-το

and Spirit:NOM.SG God:GEN.SG bring:IMPF-3SG.MID

ἐπάνω τοῦ ὕδατος

above ART:GEN.SG.M/N water:GEN.SG

‘...and the Spirit of God was hovering over the water.’<sup>20</sup>

Obviously, the abnormal (non-passive) use of the Latin passive reproduces the non-passive use of the Greek middle form in (23) and thus must be due to the functional syncretism of the Greek middle: the Latin morphological passive was considered the full equivalent of the Greek morphological middle (mediopassive) form.

Similar examples of ‘new deponent verbs’ are quite numerous, particularly in post-Classical Latin, cf. *lacrimor* (postcl.) ‘shed tears, weep’ alongside *lacrimo* (id.)<sup>21</sup> and other examples listed, for instance, by Flobert (1975: II, 1009–1013) and Bonnet (1890: 402–413), among others. On this phenomenon, see also Weiss (2009: 524, n. 42).

The illustrations and short discussion of Medieval Latin material given above aim to illustrate that the example of the Pāṇinian semi-colloquial scholarly Sanskrit is not unique. Comparable phenomena can be expected to exist within other cultural (and linguistic) traditions in the case of diglossia, especially if one of the two languages represents an earlier form of another language (as in the case of Sanskrit and Prakrits or Latin and

<sup>19</sup> On dissimilarities between the Greek and Latin voice systems and the effects thereof in Latin translations, see, for instance, Calboli (1990; 2009: 177).

<sup>20</sup> For the history of the exegesis of this passage, see, in particular, Smoroński (1925).

<sup>21</sup> Flobert (1975: II, 1013) saw a minor semantic difference between the two forms, rendering *lacrimo* as ‘verser des larmes’, while *lacrimor* is translated as ‘fondre en larmes, se répandre en larmes’.

[early] Romance languages). However, it seems that some aspects of the linguistic system of the Pāṇinian semi-colloquial scholarly Sanskrit are less directly obtainable from texts than the material of the scholarly Medieval Latin. The corpus of treatises of the ancient Indian grammarians can be considered as a valuable, and virtually unique, source of information about this hypothetical language.

Furthermore, we even have some reasons to assume that the rise and rapid development of the Pāṇinian prescriptive grammatical tradition was due, first and foremost, to the fact that (and has happened essentially after) the Vedic language had ceased to be considered as a living language and the necessity of its codification had been clearly formulated by the Brahmanic scholarly community. This task was particularly pressing in view of increasing variation within the (semi-colloquial) idiom essentially based on Middle Vedic Sanskrit, but heavily influenced by Middle Indic dialects, that was used by Ancient Indian paṇḍitas in their scientific and, to some extent, informal discourse.

Our knowledge about this language is limited to several features that had been taken over from the scholarly (and perhaps para-scholarly) discourse of Ancient Indian intellectuals and scattered throughout late Vedic and early post-Vedic texts. A complete catalogue and concise description of the system of these features remains a task for future researchers. A clear understanding of this linguistic situation should, at any rate, spare us many misunderstandings and mistakes in the study of the linguistic systems and texts of the late Old Indo-Aryan and Middle Indo-Aryan periods.

## References

- Aklujkar, Ashok. 1996. The early history of Sanskrit as supreme language. In Jan Houben, ed. *Ideology and status of Sanskrit: Contributions to the history of the Sanskrit language* (Brill's Indological Library 13). Leiden: Brill, 59–85.
- Allan, Rutger. 2003. *The middle voice in Ancient Greek* (Amsterdam studies in classical philology 11). Amsterdam: Gieben.
- Böhtlingk, Otto. 1887. *Pāṇini's Grammatik*. Herausg., übersetzt, erläutert und mit verschiedenen Indices versehen von O. Böhtlingk. Leipzig: Haessel.
- Bonnet, Max. 1890. *Le latin de Grégoire de Tours*. Paris: Hachette.
- Bronkhorst, Johannes. 1982. The variationist Pāṇini and Vedic: A review article. *Indo-Iranian Journal* 24: 273–282.

- Bronkhorst, Johannes. 1983. On the history of Pāṇinian grammar in the early centuries following Patañjali. *Journal of Indian Philosophy* 11: 357–412.
- Bubeník, Vit. 1998. *A historical syntax of late middle Indo-Aryan (Apabhraṃśa)* (Current issues in linguistic theory 165). Amsterdam: John Benjamins.
- van Buitenen, Johannes A. B. 1962. *The Maitrāyaṇiya Upaniṣad. A critical essay, with text, translation and commentary* (Disputationes Rheno-Trajectinae 6). The Hague: Mouton.
- Caland, Willem. 1928. Eine vierte Mitteilung über das Vādhūlasūtra. *Acta Orientalia* 6: 97–241. [= Caland 1990: 397–541].
- Caland, Willem. 1990. *Kleine Schriften* (Glasenapp-Stiftung 27). Stuttgart: Steiner.
- Calboli, Gualtiero. 1990. Das lateinische Passiv und seine Beziehung zur nominalen Qualifikation. *Indogermanische Forschungen* 95: 104–160.
- Calboli, Gualtiero. 2009. Latin syntax and Greek. In Philip Baldi & Pierluigi Cuzzolin, eds. *New perspectives on historical Latin syntax*. Vol. 1: *Syntax of the sentence*. Berlin: Mouton de Gruyter, 65–193.
- Cardona, George. 1974. Pāṇini's kāraṅkas: Agency, animation and identity. *Journal of Indian Philosophy* 2: 231–306.
- Cardona, George. 1976. *Pāṇini: A survey of research*. The Hague: Mouton.
- Cardona, George. 1999. *Recent research in Pāṇinian studies*. Delhi: Motilal Banarsidass.
- Cennamo, Michela. 2001. On the reorganization of voice distinctions and grammatical relations in Late Latin. In Claude Moussy, ed. *De Lingua Latina novae quaestiones. Actes du Xè Colloque International de Linguistique latine Paris-Sèvres, 19–23 avril 1999*. Louvain: Peeters, 51–65.
- De Vreese, Koenraad S. J. M. 1961. Apabhraṃśa studies (IV). *Journal of the American Oriental Society* 81: 13–21.
- Delbrück, Berthold. 1888. *Altindische Syntax*. Halle a.S.: Verlag der Buchhandlung des Waisenhauses. (B. Delbrück. *Syntaktische Forschungen*, V).
- Deshpande, Madhav M. 1979. *Sociolinguistic attitudes in India: An historical reconstruction*. Ann Arbor: Karoma Publishers.
- Deshpande, Madhav M. 1992. Sociolinguistic Parameters of Pāṇini's Sanskrit. In V. N. Jha, ed. *Vidyā Vratini, Prof. A. M. Ghatage Felicitation Volume*. Delhi: Sri Satguru Publications, 111–130.
- Deshpande, Madhav M. 1993. *Sanskrit & Prakrit: Sociolinguistic issues*. Delhi: Motilal Banarsidass.
- Edgerton, Franklin. 1953. *Buddhist Hybrid Sanskrit grammar and dictionary*. Vol. I: *Grammar*; Vol. II: *Dictionary*. New Haven: Yale University.
- Flobert, Pierre. 1975. *Recherches sur les verbes déponents latins*. T. 1–2. Lille: Service de reproduction des thèses.
- Gotō, Toshifumi. 1991. Materialien zu einer Liste altindischer Verbalformen: 4. *dogh/dugh/doh/duh*, 5. *sav/su*, 6. *¹sav/sū*, 7. *²(sav<sup>i</sup>)sū*. *Bulletin of the National Museum of Ethnology* (Osaka) 16: 681–707.

- Harrington, Karl P. 1997. *Medieval Latin*. 2nd ed., rev. by J. Pucci; with a grammatical introduction by A. G. Elliott. Chicago: University of Chicago.
- Hock, Hans Heinrich & Rajeshwari Pandharipande. 1978. Sanskrit in the pre-Islamic sociolinguistic context of South Asia. In Braj B. Kachru & S. N. Sridhar, eds. *Aspects of sociolinguistics in South Asia* (International Journal of the Sociology of Language 16 [Special issue]). The Hague: Mouton, 11–25.
- Houben, Jan E. M. 1996. Sociolinguistic attitudes reflected in the work of Bhartṛhari and some later grammarians. In Houben, ed. 157–193.
- Houben, Jan E. M., ed. 1996. *Ideology and status of Sanskrit: Contributions to the history of the Sanskrit language* (Brill's Indological Library 13). Leiden: Brill.
- Jamison, Stephanie W. 1983. *Function and form in the -āya-formations of the Rig Veda and Atharva Veda* (Ergänzungshefte zur Zeitschrift für vergleichende Sprachforschung 31). Göttingen: Vandenhoeck & Ruprecht.
- Joshi, Sivaram Dattatreya. 1989. Patañjali's view on Apaśabdas. In Colette Caillat, ed. *Dialectes dans les littératures indo-aryennes* (Publications de l'Institut de civilisation indienne 55). Paris: Collège de France, 267–274.
- Keidan, Artemij. 2012. The *kāraka-vibhakti* device as a heuristic tool for the compositional history of Pāṇini's *Aṣṭādhyāyī*. *Rivista degli studi orientali* 84: 279–294.
- Kielhorn, Franz. 1892–1909. *The Vyākaraṇa-Mahābhāṣya of Patanjali*. Ed. by F. Kielhorn. 3 vols. 2nd ed., rev. Bombay: Government Central Book Depot.
- Kiparsky, Paul. 1979. *Pāṇini as a variationist*. Ed. by S. D. Joshi (Current studies in linguistics 7). Cambridge, Mass.: MIT Press/Poona: Poona University Press.
- Kulikov, Leonid. 1998. Vedic *-ya*-presents: Semantics and the place of stress. In W. Meid, ed. *Sprache und Kultur der Indogermanen. Akten der X. Fachtagung der Indogermanischen Gesellschaft. Innsbruck, 22.–28. September 1996* (Innsbrucker Beiträge zur Sprachwissenschaft 93). Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 341–350.
- Kulikov, Leonid. 2006. Passive and middle in Indo-European: Reconstructing the early Vedic passive paradigm. In Werner Abraham & Larisa Leisiö, eds. *Passivization and typology: Form and function* (Typological studies in language 68). Amsterdam: John Benjamins, 62–81.
- Kulikov, Leonid. 2008. The Vedic causative *saṃkhyāpāyati/saṃkśāpāyati* reconsidered. In Leonid Kulikov & Maxim Rusanov, eds. *Indologica. T. Ya. Elizarenkova Memorial Volume* (Orientalia et Classica 20). Moscow: Izdatel'stvo RGGU, 245–261.
- Kulikov, Leonid. 2011. Passive to anticausative through impersonalization: The case of Vedic and Indo-European. In Anna Siewierska & Andrej Malchukov, eds. *Impersonal constructions: A cross-linguistic perspective* (Studies in language companion series 124). Amsterdam: John Benjamins, 229–254.
- Kulikov, Leonid. 2012a. *The Vedic -ya-presents: Passives and intransitivity in Old Indo-Aryan* (Leiden Studies in Indo-European 19). Amsterdam: Rodopi.



- Kulikov, Leonid. 2012b. Vedic preverbs as markers of valency-changing derivations: Transitivity and objecthood in Indo-European (Evidence from Old Indo-Aryan). *Studies in Language* 36: 721–746.
- Liebich, Bruno. 1891. *Panini. Ein Beitrag zur Kenntnis der indischen Literatur und Grammatik*. Leipzig: Haessel.
- Lubotsky, Alexander. 1997. *A Rgvedic word concordance* (American Oriental Series 82). New Haven, Conn.: American Oriental Society.
- Masica, Colin P. 1993. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Muller, Henry F. 1924. The passive voice in Vulgar Latin. *Romanic Review* 15: 68–93.
- Norberg, Dag. 1968. *Manuel pratique de latin médiéval* (Connaissance des langues 4). Paris: Picard.
- Oberlies, Thomas. 2001. *Pāli – A grammar of the language of the Theravāda Tipiṭaka. With a concordance to Pischel's Grammatik der Prakrit-Sprachen* (Indian philology and South Asian studies 3). Berlin: Mouton de Gruyter.
- Oberlies, Thomas. 2003. *A grammar of Epic Sanskrit. With a concordance to Pischel's Grammatik der Prakrit-Sprachen* (Indian philology and South Asian studies 5). Berlin: Mouton de Gruyter.
- Ostler, Nicholas. 1979. *A theory of case and verb diathesis applied to Classical Sanskrit*. Cambridge, Mass.: MIT Ph.D. dissertation.
- Rau, Wilhelm. 1985. *Die vedischen Zitate im Vyākaraṇa-Mahābhāṣya* (Akademie der Wissenschaften und Literatur, Mainz. Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse; Jg. 1985, Nr. 4). Wiesbaden: Steiner.
- Renou, Louis. 1961. *Grammaire sanscrite*, 2nd edn. Paris: Adrien-Maisonneuve. 1st publ. 1930.
- Smoroński, Kazimierz. 1925. Et Spiritus Dei ferebatur super aquas. Inquisitio historico-exegetica in uinterpretationem textus Gen. i: 2f. *Biblica* 6. 140–156, 275–293, 361–395.
- Thieme, Paul. 1935. *Pāṇini and the Veda: Studies in the early history of linguistic science in India*. Allahabad: Globe Press.
- Vishva Bandhu Śāstri, ed. 1935–1992. [VWC] *A Vedic word-concordance*. I. *Samhitās*. 6 vols.; II. *The Brāhmaṇas and the Āraṇyakas*. 2 vols.; III. *Upaniṣads*. 2 vols.; IV. *Vedāṅga-sūtras*. 4 vols. Lahore/Hoshiarpur: Vishveshvaranand Vedic Research Institute.
- Weber, Albrecht. 1865. Analyse der in Anquetil du Perron's Uebersetzung enthaltenen Upanishad. *Indische Studien* 9: 1–173.
- Weiss, Michael. 2009. *Outline of the historical and comparative grammar of Latin*. Ann Arbor: Beech Stave.
- Werba, Chlodwig H. 1997. *Verba Indoarica: die primären und sekundären Wurzeln der Sanskrit-Sprache*. Pars I: *Radices Primariae*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.



- Whitney, William Dwight. 1881. *Index verborum to the published text of the Atharva-Veda* (Journal of the American Oriental Society 12). New Haven, Mass.: American Oriental Society.
- Whitney, William Dwight. 1884. The study of Hindu grammar and the study of Sanskrit. *American Journal of Philology* 5: 279–297. [Repr. Whitney 1971: 287–305].
- Whitney, William Dwight. 1889. *Sanskrit grammar*. 2nd ed. Cambridge, Mass.: Harvard University Press.
- Whitney, William Dwight. 1893. On recent studies on Hindu grammar. *American Journal of Philology* 14: 171–197.
- Whitney, William Dwight. 1971. *Whitney on language: Selected writings of William Dwight Whitney*. Cambridge, Mass.: MIT Press.
- Witzel, Michael. 1989. Tracing the Vedic dialects. In Colette Caillat, ed. *Dialectes dans les littératures indo-aryennes* (Publications de l'Institut de civilisation indienne 55). Paris: Collège de France, 97–265.
- Witzel, Michael. 1995. Early Indian history: Linguistic and textual parameters. In George Erdosy, ed. *Language, material culture and ethnicity. The Indo-Aryans of ancient South Asia* (Indian Philology and South Asian Studies 1). Berlin: Mouton de Gruyter, 85–125.

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