Derivation and interpretation in Pāṇini's system

1 Speakers and listeners

Pāṇinīyas recognize the interaction between a speaker (*prayoktṛ*)
and a listener (*śrotṛ*) in communication. In the vṛrti on his
Vākyapadīya, Bhartṛhari describes such an interaction. In his
commentary on VP 2.19, he puts it as follows. Speech units
(*śabdāḥ*) inextricably bound with the capacity to convey meanings
(*saṃsṛṣṭaśaktayaḥ*) occur in the internal organ called *buddhi* of
speakers (*prayoktṝṇām*) who are possessed of speech (*samāviṣṭa-
vācām*). They occur there first in a state such that there is no
sequence of sounds (*kramasaṃhāreṇa*). Through a speaker's effort
(*prayatnena*) in setting the flow of air (*prāṇe*) and articulators
(*karaṇeṣu*) in motion, however, these speech units reach a state of
occurring in sequence (*kramavṛttitām*). Once they have gone
through (*anubhūya*) this state — that is, have been articulated as
sounds — they reach a state where they enter into hearers also
(*pratipattṛṣv api*) with their sequence done away with (*krama-
pratyastamayenaiva*).[1] Commenting on VP 1.44, Bhartṛhari cites a
verse[2] saying that an unitary (*avibbhaktaḥ* 'undivided') speech unit
which signifies a meaning (*arthasya vācakaḥ*) arises from divided
entities (*vibhaktebhyaḥ*), that is, from perceived sounds. Preceding
this, Bhartṛhari presents two viewpoints, that of a speaker and that
of a listener. Due to the activity (*vyāpārāt*) of speech organs, a
speech unit acquires modification (*pratilabdhavikriyaviśeṣaḥ*) —
that is, is manifested as articulated sounds — and becomes an

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[1]संसृष्टशक्तयश्च क्रमसंहारेण समाविष्टवाचां प्रयोक्तॄणां शब्दा बुद्धौ प्रयत्नेन प्राणे करणेषु च क्रम-
वृत्तितामनुभूय प्रतिपत्तृष्वपि क्रमप्रत्यस्तमयेनैव समावेशं प्रतिपद्यन्ते । (VPVṛ. 2.19 [201.10-12).

[2]एवं ह्याह अविभक्तो विभक्तेभ्यो जायतेऽर्थस्य वाचकः । शब्दस्तत्रार्थरूपात्मा सम्भेदमुपगच्छति ॥ (VPVṛ.
1.44 [102.5-7]). The second half of the verse says with regard to the
speech unit that arises from the divided sounds that here a speech unit is
identical with a meaning, in that it now achieves a non-differentiation
between speech unit and meaning in the buddhi of the hearer.

object of the auditory sense (*śrotrānupātī*); it thus is employed (*prayujyate*) for meanings (*artheṣu*) which are to be signified, in the guise of what brings meaning to light (*prakāśakabhāvena*), always subordinate to what is to be signified (*pratyāyya-paratantraḥ*).   The speech unit which is devoid of sequence (*labdhānusaṁhāraḥ*) is thus the cause (*nimittam*) of a unit that has acquired sequence (*upajanitakramaḥ*), and the latter functions as a signifier (*pratyāyakaḥ*). The speech unit, moreover, is said to have the property of making a meaning understood (*pratyāyakatvam*) in that it enters into cognitions (*pratipattiṣu prāptasamāveśasya*) in a form that has lost any sequence (*kramarūpapratyastamayena*). From the point of view of the listener, then, what has sequence (*kramavān*) is the cause of that which has no sequence (*akramanimittam*).[3]   The process from a speaker's stand is reiterated later in the Vākyapdīya proper,[4] where Bhartṛhari draws a parallel with the light (*jyotiḥ*) inherent in a stick one rubs to make fire (*araṇisthaḥ*): as this is a cause of another, outward, light (*prakāśāntarakāraṇam*), similarly is a speech unit (*śabdaḥ*) in the buddhi (*buddhisthaḥ*) separately a cause of sounds (*śrutīnām*).

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[3]व्यापारात्तु प्रतिलब्धविक्रियविशेषः श्रोत्रानुपाती प्रकाशकभावेन नित्यं प्रत्याय्यपरतन्त्रोऽर्थेषु प्रयुज्यते । लब्धानुसंहारो विमित्तम् उपजनितक्रमस्तु प्रत्यायक इत्येके । तस्यापि क्रमरूपप्रत्यस्तमयेनैव प्रतिपत्तिषु प्राप्त-समावेशस्य प्रतयायकत्वमाचक्षते । अपर आह क्रमवानाक्रमनिमित्तम् । (VPVṛ. 1.44 [102.1-4]). Although *eke* 'some' and *aparaḥ* 'another' are used, different viewpoints (*pakṣa*) are represented from the perspective of a speaker and listener. This is brought out by Śrīvṛṣabha (VPP 102.21-22): क्रमभूतानां च वर्णानां बुद्धिसे निमित्तम् न च ते वाचका इति पक्षान्तरमाह । श्रत्रपेक्षयैतदेव विपरीतम् । Bhartṛhari portrays the procedures again in his commentary on the Mahābhāṣya (Dīpikā 3.13-14); I do not enter here into this passage. Nor does my exposition require considering here Bhartṛhari's conception of word and meaning as mutually cause and effect, depending on the perspective in question, that of a listener or a speaker, as well as Buddhist discussions of the same topic.

[4]अरणिस्थं यथा ज्योतिः प्रकाशान्तरकारणम् । तद्वच्छब्दोऽपि बुद्धिस्थः श्रुतीनां कारणं पृथक् ॥ (VP 1.47/46).

A speaker's perspective is portrayed in the Pāṇinīyaśikṣā,[5] where it is said that the ātman first apprehends meanings (*arthān*) through the buddhi and, having done so (*sametya*), it associates the manas with the desire to speak (*vivakṣayā*); the manas then strikes the bodily fire, and this sets the breath (*mārutam*) in motion (*prerayati*). This is also the perspective taken in prātiśākhyas, which deal with speech production but not speech perception. For example, the Ṛgvedaprātiśākhya[6] says the upward moving breath (*vāyuḥ*) called *prāṇa* reaches a state (*āpadyate*) of being śvāsa (*śvasatām*) or nāda (*nādatāṁ vā*), depending on whether the glottal aperture (*kaṇṭhasya khe*) is open (*vivṛte*) or close (*saṁvṛte*), when there is an effort on the part of a speaker (*vaktrīhāyām*).

2 Derivation and a speaker's perspective

2.1 Kātyāyana on speech being prompted by meaning

In consonance with viewing language from a speaker's perspective, Kātyāyana states in his very first vārttika[7] that the grammar (*śāstreṇa*) serves as a means to establish a restriction for the sake of merit (*dharmaniyamaḥ*) — that is, establishing that only the use of correct speech forms leads to merit — given that correct speech forms, their meanings, and the relation (*śabdārthasambandhe*) between the two are established (*siddhe*) and also that the use of such speech forms (*śabdaprayoge*) is prompted by meaning (*arthaprayukte*), as is known from the world of communication (*lokataḥ*). That is, as Nāgeśa points out,[8] a

[5]आत्मा बुद्ध्या समेत्यार्थान्मनो युङ्क्ते विवक्षया । मनः कायाग्निमाहन्ति स प्रेरयति मारुतम् ॥ (PŚ 3).

[6]वायुः प्राणः कोष्ठ्यमनुप्रदानं कण्ठस्य खे विवृते संवृते वा । आपद्यते श्वासतां नादतां वा वक्त्रीहायाम् ॥ (ṚPr. 13.1).

[7]सिद्धे शबदार्थसम्बन्धे लोकतोऽर्थप्रयुक्ते शब्दप्रयोगे शास्त्रेण धर्मनियमो यथा लौकिकवैदिकेषु ॥ Patañjali divided the vārttika into sections for discussion.

[8]भाष्ये अर्थप्रयुक्त इति । अर्थज्ञानप्रयोजनेन कृत इत्यर्थः । परस्य विशिष्टार्थबोधो भवतिति शबदः प्रयुज्यते प्रयोगेणाविर्भूतशब्दज्ञानेनार्थज्ञानादिति भावः । (Ud. I.33).

speaker's use of a speech form has as its purpose that another person understand a particular meaning the speaker wishes to convey, so that the usage is due to this purpose.

2.2 Patañjali on speech being caused by meaning

On several occasions, Patañjali presents arguments which contrast two stands concerning meanings and speech units.

2.2.1. For example, the Mahābhāṣya on **A** 2.1.1 (समर्थः पदविधिः) takes up the particular features (*viśeṣāḥ*) due to meaning unification (*ekārthībhāvkṛtāḥ*)[9] in forming derived units such as compounds. One of these concerns number distinctions. In strings such as

(1a) *rājñaḥ puruṣaḥ* 'a servant of a king'

(1b) *rājñoḥ puruṣaḥ* 'a servant of two kings'

(1c) *rājñāṁ puruṣaḥ* 'a servant of several kings'

there is a formal distinction of numbers: singular *rājñaḥ*, dual *rājñoḥ*, and plural *rājñām*. The compound

(2) *rājapuruṣaḥ*

on the other hand, shows no such distinction: the constituent *rājan-* can correspond to any of the forms noted. The argument concerning these proceeds as follows:

I. In a string (*vākye*), there is a number distinction (*saṅkhyā-viśeṣaḥ*), as in (1a), (1b), (1c).[10]

II. There is a reason why this is so. What is the reason? Because the unit signifying the difference is not present. Just you utter such a unit and that distinction will be understood.[11]

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[9]इमे तर्होकार्थीभावकृता विशेषाः सङ्ख्याविशेषो व्याक्ताभिधानमुपसर्जविशेषणं चयोगः इति । (Bh. I.362.13-14).

[10]सङ्ख्याविशेषो भवति वाक्ये राज्ञः पुरुषः राज्ञोः पुरुषः राज्ञां पुरुष इति । समासे न भवति राजपुरुष इति । (Bh. I.362.14-15).

[11]अस्ति कारणं येनैतदेवं भवति । किं कारणम् । योऽसौ विशेषवाची शब्दस्तदसांनिध्यात् । अङ्ग हि भवांस्तमुच्चारयतु गंस्यते स विशेषः । (Bh. I.362.15-17) The respective endings *ṅas*, *os*, and *ām* of *rājñaḥ*, *rājñoḥ*, and *rājñām* belong to the subsets of nominal

III. Response:[12]   This should not be thus.   It should not be (*bhavitavyam*) that a meaning (*arthena*) is caused by a speech unit (*śabdakṛtena* 'made by a speech unit').   It should be that a speech unit is caused by a meaning.   One should thus view this in the following manner: it is due to a meaning aspect that in the present instance — (2) as opposed to (1a)-(1c) — the distinction is not understood.   Moreover, one must necessarily recognize this to be so.   For, if one considers that the distinction is not understood here because the speech unit signifying the distinction is not present, then conversely one would have to accept that the distinction should be understood in the following examples:

(3a) *apsucaraḥ* ('fish')   (3b) *goṣucaraḥ* ('rooster')

(3c) *varṣāsuja* (the insect called *indragopa*)[13]

The arguments presented reflect contrasting positions with respect to what Pāṇini provides for.   Pāṇini accounts derivationally for the contrast and relation between (1a)-(1c) on the one hand and (2) on the other hand by providing that a pada which terminates in a sixth-triplet ending optionally combines with a semantically and syntactically related pada to form a unit to which the class name *samāsa* ('compound') is assigned:[14]

(1a') ((*rājan-ṅas*)*puruṣa-su*))samāsa

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endings called *ekavacana*, *dvivacana*, and *bahuvacana*; these occur when one, two, or several entities are signified: बहुषु बहुवचनम् । द्व्येकयोर्द्विवचनैकवचने (**A** 1.4.21-22, see PWT 157 [**241**]).

[12]ननु च नैतेनैवं भवितव्यम् । न हि शब्दकृतेन नामार्थेन भवितव्यम् । अर्थकृतेन नाम शब्देन भवितव्यम् । तदेतदेवं दृश्यताम् अर्थरूपमेवैतदेवञ्जातीयकं येनात्र विशेषो न गम्यत इति । अवश्यं चैतदेवं विज्ञेयम् । यो हि मन्यते योऽसौ विशेषवाची शब्दस्तदसान्निध्यादत्र विशेषो न गम्यत इति इह तस्य विशेषो गम्येत अप्सुचरः गोषुचरः वर्षासुज इति । (Bh. I.316.17-21).

[13]I have glossed in accordance with commentators, e.g., Pr. II.510: गोषुचरः कुक्कुट उच्यते ... वर्षासुज इति इन्द्रगोपः ।   RaPr. V.22: अप्सुचर इति । मत्स्यादौ रूढोऽयम् । गोषुचर इति । कुक्कुटे रूढऽयम् । वर्षासुज इति । इन्द्रगोपे रूढोऽयम् ।

[14]षष्ठी । समर्थः पदविधिः । प्राक्कडारात्समासः । (**A** 2.2.8, 2.1.1, 2.1.3); see PWT 140-141 (**221**), 205-206 (**301**).

(1b') ((*rājan-os*)*puruṣa-su*))_{samāsa}

(1c') ((*rājan-ām*)*puruṣa-su*))_{samāsa}

A compound is a derived nominal base (*prātipadika*), an ending contained in which is generally deleted:[15] ((*rājan-ṅas*)*puruṣa-su*)) → (*rājan-puruṣa-*), (*rājan-os*)*puruṣa-su*) → (*rājan-puruṣa-*), ((*rājan-ām*)*puruṣa-su*)) → (*rājan-puruṣa-*). Although *rājan-* in such constructs lacks a nominal ending, however, by convention, an operation which is conditioned by the presence of an affix still takes effect even if the affix is deleted.[16] Accordingly, *rājan-Ø* resulting from the deletion of *ṅas*, *os*, or *ām* still bears the class name *pada*, which depends on a nominal base having a nominal ending after it; thereby, the *-n* of *rājan-* is dropped by virtue of being treated as a pada-final segment.[17] There are also compounds where endings of first constituents are not absent; (3a, b, c) are instances of such compounds. In (3a) and (3b), the second constituent contains the derived nominal base *cara-*, formed with the kṛt suffix *ṭa* after the verbal base *car* ('go about'); in (3c) the second constituent contains *-ja-* from the base *jan* ('be born') with the suffix *ḍa*.[18] Provision is made that in a tatpuruṣa compound whose second constituent is a derivate with a kṛt suffix the ending

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[15]**A** 1.2.46: अर्थवदधातुरप्रत्ययः प्रातिपदिकम् । 2.4.71: सुपो धातुप्रातिपदिकयोः (लुक् 58); see PWT 22, 186 (**48**, **278**).

[16]प्रत्ययलोपे प्रत्ययलक्षणम् (**A** 1.1.62); see PWT 63-64 (**103**).

[17]सुप्तिङन्तम्पदम् । नलोपः प्रातिपदिकान्तस्य (**A** 1.4.14, 8.2.7); see PWT 23, 347 (**49**, **539**).

[18]**A** 3.2.16: चरेष्ठः (अधिकरणे 15), 97: सप्तम्याञ्जनेर्डः । The suffix belongs to the class called *kṛt* and are introduced on condition that the base be used with a co-occurring term: *ṭa* if this term denotes a locus (*adhikaraṇe*) in which the agent in question goes about, *ḍa* if the term is a word terminating in a seventh-triplet ending referring to something where an agent is born. The derivates in *-ṭa* and *-ḍa* obligatorily form a compound with these terms; see PWT 219 (**315**).

of a preceding first constituent is variously retained.[19]   This accounts for the presence of the locative plural ending *su* in the first constituents of (3a, b, c).

The claim made under II assumes that the zero-replacement (*luk*) which Pāṇini provides for (see note 15) actually serves to eliminate an ending which would otherwise occur because the number distinction associated with it (see note 11) is actually present to begin with in the compound and the elimination of the ending results in this not being understood.[20]   The response in III, on the other hand, reverts to the point made in I, namely that the absence of a number distinction in the first constituent of (2) is due to meaning unification: there is a separate meaningful unit, the compound *rājapuruṣa*, in which no number distinction is made for the constituent *rāja-*.   Moreover, if the physical presence of singular, dual, or plural endings were the decisive factor in the distinction between strings like (1a,b,c) and a compound like (2), then one would have to accept that the presence of the plural ending *su* in *apsu-*, *goṣu-*, and *varṣāsu-* of (3a,b,c) would determine one's understanding of plurality, so that *apsucara* and *goṣucara* would be understood to refer to things which go about in many bodies of water and among many head of cattle; *varṣāsuja* would correspondingly be understood to refer to something born at many seasons.   But this is not true.

In sum, Pāṇini recognizes a relation between strings such as (1a, b, c) and derived nominal bases such as *rājapuruṣa* in (2), and he accounts for these relations by introducing nominal endings to form theoretical strings such as (1a', b', c'), then allowing two possibilities: derive (1a, b, c) or optionally combine the constituent

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[19]**A** 6.3.14: तत्पुरुषे कृति बहुलम् (अलुगुत्तरपदे 1).

[20]तदसान्निध्यादिति । लुका विभक्तेर्निवर्तितत्वादित्यर्थः । (Pr. II.510), लुक्शास्त्रपर्यालोचनयार्थ-सत्त्वमनुमीयत इति भावः । (Ud. II.510).

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padas to form a new nominal base, within which endings are dropped. This derivational procedure, however, merely serves to account for the relations.   It does not require that there be a meaning distinction — among three numbers — that is eliminated. It recognizes instead that the distinction in question does not obtain in such derived nominals.[21]

2.2.2 A related discussion in the Mahābhāṣya concerns (1a) as an example of a genitive ending accounted for by **A** 2.3.50: षष्ठी शेषे (अनभिहिते 1).   This sūtra states that a nominal ending of the sixth triplet (ṣaṣṭhī) follows a nominal on condition that a residual (śeṣe 'remainder') relation — that is, a relation that does not hold between an action and a participant which plays a role in bringing this to accomplishment[22] — is to be expressed, provided it is not already expressed (anabhihite). The relation between a king and his servant spoken of in (1a) is a possessor-possessed relation (svasvāmibhāvasambandha): the property of being a possessor (svāmin) resides in the king, that of being a possession (sva) in the man whom the king in effect owns by virtue of paying and maintaining him. In addition, the king is here viewed as a qualifier (viśeṣaṇa) with respect to the servant, who is the qualificand (viśeṣya), qualified as belonging to the king.   Accordingly, the servant is said to be the principal (pradhāna) entity referred to and the king is considered a subordinate (guṇa) in the qualifier-qualificand status.   Since the possessor-possessed relation as formulated comprises two relational properties, it is considered to reside in both (dviṣṭha) of the related entities, although it is expressed as something additional (vyatiricyate) in the king, which

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[21]The Bhāṣya on **A** 2.3.50: षष्ठी शेषे presents comparable arguments in connection with why the meaning of a master related to a possession is understood for rājñaḥ and a sixth-triplet ending occurs only with the base rājan- in (2). I omit this discussion for lack of space.

[22]On śeṣa relations, see Cardona 2008.

now has a subordinate status, being intended to qualify a qualificand.[23]

The Bhāṣya's discussion centers on the syntax of (1a): why *rājan-* takes a sixth-triplet ending (*rājñaḥ*) but *puruṣa-* is followed by an ending of the first triplet (*puruṣaḥ*).[24] In his third vārttika, Kātyāyana brings up the issue: if one states **A** 2.3.50, then it is necessary also to prohibit (*pratiṣedhaḥ* 'negation, prohibition') a sixth-triplet ending for the term denoting a qualificand, and one must provide for a first-triplet ending.[25] Patañjali clarifies, as follows. Under the Pāṇinian statement, a prohibition has to be stated. In (1a), the king is a qualifier, the servant a qualificand. With respect to the latter, the meaning of the nominal base (*prātipadikārthaḥ*) is added to (*vyatiriktaḥ*): *puruṣa-* here refers to a man as a qualificand. Hence, an ending of the first triplet, used if the base meaning alone is denoted (see note 24) does not obtain, so that a sixth-triplet ending by **A** 2.3.50 would occur, given that more than the base meaning is involved and the man in question does not

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[23]द्विष्ठोऽप्यसौ परार्थत्वाद् गुणेषु व्यतिरिच्यते । तत्राभिधीयमानश्च प्रधानेऽप्युपयुज्यते ॥ (VP 3.7.157). The second half of the verse says that the relation thus overtly expressed as occurring in the subordinate also is associated (*upayujyate* 'is used') as occurring in the principal entity. This reflects the Bhāṣya discussion. Kaiyaṭa cites the kārikā (Pr. II.823) with *upayujyate* in the fourth pāda, and this is the reading in Rau's edition, without variants. In his commentary, Helārāja (VPH 3.7.157 [358.2]) says *upabhuktam*, which he glosses *spaṣṭam evābhihitam* ('clearly expressed'), and Subramania Iyer's and Raghunātha Śarmā's editions read *upabhujyate*.

[24]Such an ending is introduced when there is to be signified nothing more than a base meaning and a gender, a measure, or a number: प्राति-पदिकार्थलिङ्गपरिमाणवचनमात्रे प्रथमा (**A** 2.3.46); see PWT 156 (**240**).

[25]षष्ठी शेष इति चेद्विशेष्यस्य प्रतिषेधः । तत्र प्रथमाविधिः । (2.3.50 vt. 3-4). Kaiyaṭa explains (Pr. II.821) that the problem arises under Pāṇini's formulation. In another grammar, the rule is worded गुणे षष्ठी, specifying that the ending occurs with respect to a subordinate (*guṇe*): षष्ठी शेष इति चेदिति । अस्मिन्सूत्रन्यासे दोषः सम्बन्धस्य द्विष्ठत्वात्प्रधानादपि षष्ठीप्रसङ्गः । व्याकरणान्तरे तु गुणे षष्ठीति वचनान्नास्ति ।

play the role of a participant in an action.[26]   One must state a
negation of such an ending, and an ending of the first triplet must
be provided (*vidheyā*).[27]   Kātyāyana responds to this by alluding to
what had been in the second vārttika on **A** 2.3.46: what is addition
to the base meaning of *puruṣa*- in (1a) is a meaning attributable to
the string (*vākyārthaḥ*), so that the base meaning remains without
addition, thus allowing a first-triplet ending.[28]

   This gives rise to the question: for what reason is the additional
meaning in the servant of (1a) said to be attributable to the string?
Why should not the additional meaning in the king be such?[29]   At
this point, Patañjali enters into a discussion which in part is parallel
to the discussion shown in §**2.2.1**, as follows.

   I. The additional meaning in question is understood to apply
for the king even without the use of the term *puruṣa*, but this does
not apply to the servant without the use of the term *rājan*.[30]

   II. There is a reason why this is so. What is the reason? You
utter a sixth-triplet ending after the term *rājan*. Just you utter a
sixth-triplet ending after the term *rājan* and that meaning will be
understood.[31]

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[26]भाष्ये षष्ठी स्यादिति । कारकप्रातिपदिकार्थव्यतिरिक्त्वात्षष्ठ्येव स्यादित्यर्थः । (Ud. II.821).   I
do not take up a possible complication, namely that a form of a verb
meaning 'be' — such as *asti* 'is' — can be understood in (1a), signifying
an act in which the referent of *puruṣa*- functions as a kāraka.

[27]षष्ठी शेष इति चेद्विशेष्यस्य प्रतिषेधो वक्तव्यः । राज्ञः पुरुष इत्यत्र राजा विशेषणं पुरुषो विशेष्यः । तत्र
प्रातिपदिकार्थो व्यतिरिक्त इति कृत्वा प्रथमा न प्राप्नोति । तत्र षष्ठी स्यात् तस्याः प्रतिषेधो वक्तव्यः । (Bh.
I.464.3-5), तत्र षष्ठीं प्रतिषिध्य प्रथमा विधेया राज्ञः पुरुष इति । (Bh. I.464.8).

[28]उक्तं पूर्वेण । (2.3.50 vt. 5), किमुक्तम् । न वा वाक्यार्थत्वादिति । यदत्राधिक्यं वाक्यार्थ सः ।
(Bh. I.464.10).

[29]कुतो नु खल्तत् पुरुषे यदाधिक्यं स वाक्यार्थ इति न पुना राजनि यदाधिक्यं स वाक्यार्थः स्यात् । (Bh.
I.464.10-12).

[30]अन्तरेणापि पुरुषशब्दप्रयोगं राजनि सोऽर्थो गम्यते न पुनरन्तरेण राजशब्दप्रयोग पुरुषे सोऽर्थो गम्यते ।
(Bh. I.464.12-13).

[31]अस्ति कारणं येनैतदेवं भवति । किं कारणम् । राजशब्दाद्धि भवान् षष्ठीमुच्चारयति । अङ्घ हि भवान्
पुरुषशब्दादप्युच्चारयतु गंस्यते सोऽर्थः । (Bh. I.13-15).

III. This should not be thus. It should not be that a meaning is caused by a speech unit. It should be that a speech unit is caused by a meaning. One should thus view this in the following manner: it is due to a meaning aspect that this additional meaning is understood to apply for the king even without the use of the term *puruṣa*. And what is that? Being one who possesses (*svāmitvam*). And what is this due to (*kiṅkṛtam* 'produced by what?')? To what he possesses (*svakṛtam*). This has an analog. Distinctions in the meanings of nominal bases are brought about by actions (*kriyākṛtāḥ*), and particular names produced thereby (*tatkṛtākhyāḥ*) come to the fore (*prādur bhavanti* 'appear'): *karman* ('object'), *karaṇa* ('instrument'), *apādāna*, *sampradāna*, *adhikaraṇa* ('locus'). Further, these names sometimes serve (*upādīyante* 'are taken, expressed') as causes (*nimittatvena*) for triplets of nominal endings (*vibhaktīnām*) coming into play, sometimes not. They do so when they deviate from the meaning of a base. When they do not, they remain solely names.[32]

IV. For the king of (1a), his being a possessor is due to a possession, and a sixth-triplet ending occurs with *rājan-*. In the same way, for the king's servant, his being a possession is due to a possessor, so that a sixth-triplet ending obtains also for *puruṣa-*.[33]

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[32]ननु च नैतेनैवं भवितव्यम् । न हि शब्दकृतेन नामार्थेन भवितव्यम् । अर्थकृतेन नाम शब्देन भवितव्यम् । तदेतदेव दृश्यताम् । अर्थरूपमेवैतदेवञ्जातीयकं येनात्रन्तरेणापि पुरुषशब्दप्रयोगं राजनि सोऽर्थो गम्यते । किं पुनस्तत् । स्वामित्वम् । किङ्कृतं पुनस्तत् । स्वकृतम् । तद्यथा प्रातिपदिकार्थानां क्रियाकृता विशेषा उपजायन्ते । तत्कृताश्चाख्या प्रादुर्भवन्ति कर्म करणमपादानं सम्प्रदानमधिकरणमिति । तासु पुनर्विभक्तीनामुत्पत्तौ कदाचिन्निमित्त-त्वेनोपादीयन्ते कादाचिन्न । कदा च विभक्तीनामुत्पत्तौ निमित्तत्वेनोपादीयन्ते । यदा व्यभिचरन्ति प्रातिपदिकार्थम् । यदा हि न व्यभिचरन्त्याख्याभूता एव तदा भवन्ति कर्म करणमपादानं सम्प्रदानमधिकरणमिति । (Bh. I.464.15-23).

[33]यथैव तर्हि राजनि स्वकृतं स्वामित्वं तत्र षष्ठ्येव पुरुषेऽपि स्वामिकृतं स्वत्वं तत्र षष्ठी प्राप्नोति । (Bh. I.464.23-24).

V. That meaning is expressed by the sixth-triplet ending that comes in after the term *rājan-*; hence, there will not be a sixth-triplet ending after the term *puruṣa-*.[34]

VI. Then is there not a string

(4) *puruṣasya rājā* 'the man's king'?

There is, but then a first-triplet ending follows the term *rājan-*.[35] Then is there not a string

(5) *rājñaḥ puruṣasya* 'the king's man's'?

There is such as string, but only if another (*bāhyam* 'external') meaning is considered (*samīkṣya*).[36]

Under III, the point is made that *rājñaḥ* of (1a) has a sixth-triplet ending conditioned by a meaning: the king in question bears a relation — of possession — to another entity.   Since the other thing is necessary for the relation to obtain, the king's property of being a possessor is said to be caused by it. A parallel is drawn to relations between kārakas and the acts in which they participate to bring them to accomplishment. These acts are said to bring about distinctions in the meaning of nominal bases such that the things denoted are given particular class names such as *karman* and *karaṇa*. Thus, a sickle may serve as the means for cutting (*lunāti* 'cuts'), so that it is given the kāraka class name *karaṇa*.[37]   The denotation of a karaṇa, moreover, can serve as a condition for introducing a third-triplet ending after a nominal,[38] as in *dātreṇa* (← *dātra-ṭā*) of

(6) *dātreṇa lunāti* '… is cutting … with a sickle.'

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[34]राजशब्दादुत्पद्यमानया षष्ठ्याभिहितः सोऽर्थ इति कृत्वा पुरुषशब्दात्षष्ठी न भविष्यति । (Bh. I.464.24-25).

[35]*rājan-su → rājan-Ø → rājān → rājā*; see PWT 347 (**539**).

[36]न तर्हीदानीमिदं भवति पुरुषस्य राजेति । भवति राजशब्दात् तदा प्रथमा । न तर्हीदानीमिदं भवति राज्ञः पुरुषस्येति । भवति बाह्यामर्थमभिसमीक्ष्य । (Bh. I.464.25-27).

[37]साधकततमङ्करणम् (**A** 1.4.42); see PWT 137-138 (**214**).

[38]कर्तृकरणयोस्तृतीया (**A** 2.3.18); see PWT 155-156 (**240**).

Here, the base meaning of *dātra* has added to it the property of being a means. One may, however, speak merely of a sickle itself and say that it is a means, as in

(7) *dātraṁ karaṇam*.

Now the base meaning of *dātra* has not been added to, so that the base takes a first-triplet ending (*dātram* ← *dātra-su*).

Under IV, the point is made that the argument advanced for *rājñaḥ* of (1a) having a sixth-triplet ending can equally well be made for *puruṣa-* having the same ending. This is conceded, but the possible fault is avoided, under V, by noting that introduction of such an ending after *puruṣa-* is ruled out because the relation is signified by the ending which follows *rājan-*; in accordance with **A** 2.3.1, the ending is not introduced once more to denote the same relation. Finally, under VI, the question is posed whether one does not then have an expression (5) with the same ending after both the bases in question. This is countered by noting that, although (5) is possible, it is not a complete expression: the ending of *rājñaḥ* designates a relation between the king and his man, but the ending of *puruṣasya* now signifies a relation external to this, one which requires a third relatum.

2.2.3 The Bhāṣya on **A** 7.1.33: साम आकम् (युष्मदस्मड्व्याम् 27) once more brings up the same issue. In his third, fourth and fifth vārttikas on this sūtra,[39] Kātyāyana presents the following argument.[40] In deriving *yuṣmākam* and *asmākam* from *yuṣmad-ām* and *asmad-ām*,

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[39]सुट्प्रतिषेधस्वादेशे लोपविज्ञानात् । न वा टिलोपवचनादादेशे टाप्प्रतिषेधार्थम् । न वा लिङ्गाभावाट्टिलोप-वचनानर्थक्यम् । (7.1.33 vtt. 3-5).

[40]The central issue concerns whether an alternative formulation of **A** 7.1.33, with *āmaḥ* instead of *sāmaḥ* would wrongly allow the initial augment *suṭ* to be added to the genitive plural ending *ām*, by **A** 7.1.52: आमि सर्वनाम्नः सुट् (आत् 50), which serves to introduce the augment to *ām* if this follows a pronominal stem ending with an *a*-vowel. If the *-d* of *yuṣmad* and *asmad* is deleted before *ām* (**A** 7.2.90: शेषे लोपः), this becomes possible; see PWT 324, 315 (**498**, **478**).

one must disallow the introduction of the initial augment *suṭ* to the ending. For, deleting the final sound of these pronouns by **A** 7.2.90 (see note 40) is acknowledged to apply before an ending that has replaced another. If, then, *ākam* is allowed to replace *ām*, one will allow, undesiredly, a final form with this augment (**yuṣmāsam*, *asmāsam*).[41] This problem is avoided by suggesting an alternative formulation for **A** 7.2.90: instead of letting this delete the final sound of the stems, the rule is now stated so as to delete the segment which begins with its last vowel (*ṭilopa-vacanāt*):[42] *yuṣmad-ām* → *yuṣm-ām*, *asmad-ām* → *asm-ām*. Moreover, the claim is made, this reformulation is necessary in order to avoid allowing the feminine suffix *ṭāp*, by **A** 4.1.4: अजाद्य-तष्टाप् (स्त्रियाम् [3]) after *yuṣma-* and *asma-*.[43] This alternative is rejected, however, as serving no purpose, because these pronouns have no gender. Nor does one have to state this fact. It is known without being explicitly stated.

At this point, arguments come up that parallel those presented earlier (§§**2.2.1-2.2.2**).

I. For there is no distinction in *yuṣmad* and *asmad* used in the feminine, masculine, or neuter.[44]

II. There is a reason why this is so. What is the reason? Because the unit conveying the difference is not present. Just you utter such a unit and that distinction will be understood.[45]

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[41]सुट्प्रतिषेधस्तु वक्तव्यः । किङ्कारणम् । आदेशे लोपविज्ञानात् । यः स शेषे लोप आदेशे स विज्ञायते ।(Bh. III.253.2-3).

[42]न वा सुट्प्रतिषेधो वक्तव्यः । किङ्कारणम् । टिलोपवचनात् । आदेशे यः स शेषेलोपष्टिलोपः स वक्तव्यः । (Bh. III.253.5-6). अचोऽन्त्यादि टि (**A** 1.1.64); see PWT 18 (**41**).

[43]किम्प्रयोजनम् । टाप्प्रतिषेधार्थम् । टाब्माभूदिति । (Bh. III.253.6-7).

[44]स तर्हि टिलोपो वक्तव्यः । (Bh. III.253.7), न वा वक्तव्यम् । किङ्कारणम् । लिङ्गाभावात् । अलिङ्गे युष्मदस्मदी । किं वक्तव्यमेतत् । न हि । कथमनुच्यमानं गम्यते । न ह्यस्ति विशेषो युष्मदस्मदोः स्त्रियां पुंसि नपुंसके वा । (Bh. III.253.9-11).

[45]अस्ति कारणं येनैतदेवं भवति । किङ्कारणम् । योऽसौ विशेषवाची शब्दस्तदसान्निध्यात् । अङ्ग हि

III. This should not be thus. It should not be that a meaning has a speech unit as its cause (*śabdanimittakena*). On the contrary, it should be that a speech unit has a meaning as its cause (*arthanimittakena*). One should thus view this in the following manner: it is due to a meaning aspect that in the present instance the distinction is not understood. Moreover, one must necessarily recognize this to be so. For, if one considers that the distinction is not understood here because the speech unit signifying the distinction is not present, then conversely one would have to accept that the distinction should be understood in the following examples: *dṛṣad* ('stone' [fem.]), *samidh* ('kindling wood' [fem.]).[46]

That is, one cannot argue that a form such as *tvam* ('you' [nom. sg.] ← *yuṣmad-su*) or *aham* ('I' ← *asmad-su*) fails to make understood a feminine gender distinction because it lacks a feminine suffix. Such reasoning would require that a term such as *dṛṣad*, which does make a feminine gender understood, should be accompanied by a feminine suffix; but it is not.[47]

2.3 Meaning conditions and derivation

A 3.1.26: हेतुमति च (णिच् 25, धातोः 7, प्रत्ययः 1, परश्च 2) introduces the unit **ṇic**, to which is assigned the class name *pratyaya* ('affix'),

भवांस्तमुच्चारयतु गंस्यते स विशेषः । (Bh. III.253.11-13). I have used 'the unit conveying the difference' to render *viśeṣavācī śabdaḥ*, with 'conveying' instead of 'signifying', because feminine suffixes are considered to be not signifiers (*vācaka*) but cosignifiers (*dyotaka*) of femininity, a meaning attributed to a nominal base with which an affix is used; see note 47 and §**2.3**.

[46]ननु च नैतेनैवं भवितव्यम् । न हि शब्दनिमित्तकेनार्थेन भवितव्यम् किन्तर्ह्यर्थनिमित्तकेन शब्देन भवितव्यम्। तदेतदेवं दृश्यताम्। अर्थरूपमेवैतदेवज्ज्ञातीयकं येनात्र विशेषो न गम्यत इति । अवश्यं चैतदेवं विज्ञेयम्। यो हि मन्यते योऽसौ विशेषवाची शब्दस्तदसन्निध्यादत्र विशेषो न गम्यत इतीहापि तस्य विशेषो न गम्येत दृषत् समिदिति। (Bh. III.253.13-17).

[47]It is on account of such usages that feminine suffixes such as *ṭāp* in terms like *ajā* ('she goat' ← *aja-ā*) are treated as cosignifying a feminine, a meaning attributed to the accompanying base; see PWT 441 (**685**).

after (*paraḥ*) a verbal base (*dhātoḥ*).   The sūtra contains the locative singular *hetumati*, referring to an action which has a causal agent (*hetu*), that is, causation. This locative is susceptible to two possible interpretations: (a) it is a locative absolute, with the seventh-triplet ending introduced on condition that an action serves to characterize another action;[48] (b) it has a seventh-triplet ending signifying a locus (*adhikaraṇa*) in which an act occurs.[49]   Under (a), **A** 3.1.26 provides that the affix ***ṇic*** is introduced (*bhavati* 'comes into being, is') after a verbal base if an action with a causal agent is to be signified (*abhidheye sati*).   Under (b), on the other hand, the sūtra provides that the affix is introduced following a base which occurs in this meaning (*hetumati vartamānāt*).[50]

Comparably, **A** 4.1.3: स्त्रियाम् (ङ्याप्प्रातिपदिकात् 1, प्रत्ययः 3.1.1, परश्च 2) can be a heading whereby: (a) the affixes ***ṭāp*** and so on are introduced by subsequent rules if the meaning 'feminine' is to be signified (*striyām abhidheyāyāṁ satyām*); (b) the affixes are introduced after a nominal base (*prātipadikāt*) which occurs in this meaning (*striyāṁ vartamānāt prātipadikāt*), so that they are allowed to occur in a meaning attributed to the base (*svārthe*).[51]

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[48]**A** 2.3.37: यस्य च भावेन भावलक्षणम् (सप्तमी 36); see PWT 173-174 (**265**).

[49]सप्तम्यधिकरणे च (**A** 2.3.36); see PWT 155-156 (**240**).

[50]कथमिदं विज्ञायते हेतुमत्यभिधेये णिज्भवतीति आहोस्विद्धेतुमति यो धातुर्वर्तते । (Bh. II.31.7-8), कथमिदं विज्ञायते हेतुमत्यभिधेये णिज्भवति आहोस्विद्धेतुमति यो धातुर्वर्तते (हेतुमति) वर्तमानादिति । (VPVṛ. 1.26 [73.1-2]), हेतुः स्वतन्त्रस्य कर्तुः प्रयोजकः । तदीयो व्यापारः हेतुमान् । तस्मिन्नभिधेये धातोर्णिच्-त्ययो भवति । (Kāś. 3.1.26). Bhartṛhari alludes to the Bhāṣya passage I have cited in the context of saying that all such optional procedures depend on the considerations of persons who abstract putative constituent meanings from full utterances, which are in fact unanalyzable wholes from the point of view of communication.

[51]कथं पुनरिदं विज्ञायते स्त्रियामभिधेयायां टाबादयो भवन्तीति आहोस्वित्स्त्रीसमानाधिकरणात्प्राति-पदिकादिति । (Bh. II.198.20-21), सिद्धं तु स्त्रियाः प्रातिपदिकविशेषणत्वात्स्वार्थे टाबादयः । (4.1.3 vt. 5), सिद्धमेतत् । कथम् । प्रातिपदिकविशेषणत्वात् । प्रातिपदिकविशेषणं स्त्रीग्रहणम् स्वार्थिकाष्टाबादयः । नैवं विज्ञायते स्त्रियामभिधेयायामिति नापि स्त्रीसमानाधिकरणादिति । कथं तर्हि । स्त्रियां यत्प्रातिपदिकं वर्तते तस्माद्वाबादयो भवन्ति । कस्मिन्नर्थे । स्वार्थे । (Bh. II.199.19-22), तथा स्त्रियामिति । किं स्त्र्यभिधाने

The positions which Pāṇinīyas finally accept for these sūtras are (a) for **A** 3.1.26, (b) for **A** 4.1.3. Under the accepted interpretation of the former, then, this sūtra introduces an affix under a meaning condition: if meaning M is to be denoted, the affix A is introduced after base B.

3 Pāṇini operates with meaning conditions for affixation

It is demonstrable that Pāṇini himself, not just later students of his work, operated in the above manner, allowing affixes to occur on condition that stated meaning conditions are met.

Three sūtras are particularly interesting on this point: **A** 3.3.156: हेतुहेतुमतोर्लिङ् (धातोः 3.1.91), **A** 3.3.139-140: लिङ्निमित्ते लृङ् क्रियातिपत्तौ (भविष्यति 136, धातोः 3.1.91), भूते च । According to the first sūtra, the *l*-affix *liṅ* follows a verbal base to signify an agent on condition that the action this denotes is related to another act as cause and effect (*hetuhetumatoḥ*). **A** 3.3.139 -140 introduce *lṛṅ* under a condition that determines that *liṅ* is introduced (*liṅnimitte*) — that is, if related verbs denote acts related as cause and effect — when the acts in question are referred to the future (*bhaviṣyati*) and also to the past (*bhūte*), provided that these fail to take place (*kriyātipattau*). The first rule serves to account for conditional sentences with optative forms, such as

    (8) *kṛṣṇaṁ namec cet sukhaṁ yāyāt* 'If one venerates Kṛṣṇa, one attains happiness.'

The next rules account for the use of conditional forms in contrafactual conditions, for example

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टाबादयः स्व्यर्थवृत्तेः प्रातिपदिकात्स्वार्थे वेति । (VPVṛ. 1.26 [73.2-4]). As shown, a third position is considered: affixes are introduced after a base that is coreferential with one used in the feminine. The finally accepted view is (b). See Cardona 1983: 44-49.

(9) *yadi vṛrṣṭir abhaviṣyat subhikṣam abhaviṣyat* 'If there were to be good rains (but there won't be), there would be plenty of food.'/ 'If there had been good rains, there would have been plenty of food.'[52]

Now, *liṅimitte* in **A** 3.3.139 can be interpreted properly only as a ṣaṣṭhītatpuruṣa form (*liṅnimittam = liṅo nimittam*).[53]   Other interpretations are ruled out on various grounds. To begin with, consider the possibility that *liṅnimitte* is a tatpuruṣa of the subclass called *karmadhāraya*, in which both terms are coreferential. This compound, equivalent to *liṅy eva nimitte* ('a condition that is *liṅ*) would refer to the *l*-affix *liṅ* as a unit serving to condition something. Since this is a speech element, the locative is to be interpreted as referring to a right context for an operation on a preceding element.[54] However, the only element that could be said to precede is a verbal base (*dhātu*), given that **A** 3.3.19 comes under the heading of **A** 3.1.91. Further, since **A** 3.3.19 is part of a set of rules headed by **A** 3.1.1, the only reasonable operation is the introduction of an affix (*pratyaya*) after a verbal base. At best, then, **A** 3.3.19 under the supposed interpretation, would let a verbal base receive an affix on condition that *liṅ* followed. But the affix is now not specified. Consequently, interpreting *liṅnimitte* as a karmadhāraya leads to nonsense in terms of Pāṇini's grammar. There are also no contextual grounds for interpreting *liṅnimitte* as a bahuvrīhi (*liṅ nimittaṁ yasya tasmin*). The only thing *liṅ* serves to condition — by way of the affixes that replace it — is the introduction of affixes. Thus, for example, in deriving *namet* of (8), the ending that replaces *liṅ* conditions the introduction of the stem suffix *śap*

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[52]See PWT 168-169 (**257-258**).

[53]For example, Kāś. 3.3.139: हेतुहेतुमतोर्लिङ्डिन्येवादिकं लिङो निमित्तम् । तत्र लिङ्ङिमित्ते भविष्याति काले लृङ् प्रत्ययो भवति क्रियातिपत्तौ सत्याम् ।

[54]तस्मिन्निति निर्दिष्टे पूर्वस्य (**A** 1.1.66); see PWT 53 (**90**).

after the base.[55]   Only if *liṅ* of *liṅnimitte* refers to an affix, is it possible for **A** 3.3.19 to provide for an affix. But then the affix can hardly be *liṅ* itself.   Consequently, the only reasonable interpretation of *liṅnimitte* in this sūtra is the one adopted by Pāṇinīyas, so that the condition in question is the relation between actions stated in **A** 3.3.156.

One must, then accept that in Pāṇini's derivational system a meaning can serve as a condition (*nimitta*) for the occurrence of an affix.

This does not mean, nevertheless, that one must reject the possibility that speech units are themselves causes.   On the contrary, both meanings and speech units indeed serve as causes. From a speaker's point of view, a meaning to be made understood to a listener is a cause of his using a speech unit in order to have that listener understand what he wishes to convey.   From a listener's point of view, the sounds a speaker utters serve as conditions for his understanding what the latter means to say, by converting those sounds to the systematic units both speaker and listener share in a common language. From a listener's viewpoint also, utterances used by speakers are subject to analysis leading to abstracted constituents. In a derivational system like Pāṇini's, such abstracted units are then synthesized to account for strings which speakers of the language would use.[56]   This derivational system proceeds by introducing affixes after bases under stated conditions, and among these are meaning conditions: an affix is allowed to occur if a given meaning is to be signified.

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[55]*nama-l → nam-ti → nam-t → nam-yāst → nam-a-yāst → nam-a-yāt → nam-a-iyt → nam-a-it → namet*; see PWT 152, 168 (**235**, **243**, **257**).

[56]Pāṇini operates with rules of such synthesis and presupposes the analysis that leads to the abstraction of units; see PWT 428-449.

4 A different approach suggested[57]

Recently, Jan E. M. Houben has argued on several occasions that Pāṇini's grammar did not proceed in this manner. Instead, he maintains, the derivational system starts with an actual linguistic string, characterized as a 'provisional statement'. Houben (1999: 45) also recognizes, in accordance with some other modern linguists, discrete "levels" in Pāṇini's derivational system and speaks of what he calls 'level 1', which he labels 'not as "semantics" but as "semantics, pragmatics, intentionality."' Houben says of this level (1999: 45):

> It is the interface between the user and the grammar. Statements in the grammar belonging to this level ask the user to makes decisions and judgements regarding different aspects of his provisional statement: semantic aspects or aspects concerning the referents (*artha*) of his statement, pragmatic aspects or aspects concerning the context (*prakaraṇa*) of his statement, and intentional aspects or aspects of his intention (*vivakṣā*).

The same author (Houben 2009a: 523-524) expresses some wonder at what other scholars of Pāṇini seem to have missed: 'Can it be that a simple point has been overlooked by most scholars of Pāṇini's Aṣṭādhyāyī, namely that there too the starting point and the final aim of the user of grammar has always been the sentence and never a word in isolation, that the starting point is a preliminary sentence that needs to be checked or that needs some little extra refinement?' In addition, he says (Houben 2009b: 14) the following of Pāṇini's system:

> The system of Pāṇini's grammar "clearly requires a user who wants to check and possibly improve a preliminary statement" (Houben 2003: 161). The system implies the

[57]This section replicates, with modifications, section 7 of 'Pāṇini and his predecessors: tradition and innovation', the Professor N. N. Choudhury memorial lecture presented at Delhi University on January 29, 2012. This is to appear in a planned volume of the lecture series.

> presence of a knowledgeable user, a preliminary statement and the application of first analytic and next synthetic procedures to the words in it, with the user keeping in mind the preliminary statement and its purport, and aiming at the best possible, *saṁ-skṛta* form of his preliminary statement.

Immediately preceding this, Houben notes what he calls 'a vital point', namely that, 'Pāṇini was definitely aware of various "substandard" forms of the language, forms which from a modern perspective we would assign to an altogether different language such as Prakrit.' After the extended statement cited above, he also goes on to emphasize that, 'The concrete starting point for a derivation in the synthetic phase of the consultation cycle of a user of grammar in Pāṇini's time will then never be "pure" meaning or an autonomous level of semantic representation ....' It is, instead, the selection of a root such as *bhū* or a nominal stem. He continues, saying (Houben 2009b: 14):

> In the sociolinguistic context of Pāṇini's time we can suppose that the preliminary statement of the user of the grammar contained not necessarily only "perfectly formed" words but also substandard ones, for instance *honti* or *bhonti* instead of *bhavanti*. The knowledge of the user of grammar in Pāṇini's time concerns not only the basic outlines of the grammar and knowledge of the language aimed at but also substandard forms current in his time and area.

The expression 'we can suppose' in Houben's statement is telling. For in all of this discussion, as also in his earlier paper of 2003, he does not offer concrete evidence from the Aṣṭādhyāyī itself demonstrating the impossibility of starting with semantics associated with grammatical contrasts that can serve as conditions, along with co-occurrence conditions, for introducing affixes to bases. He repeatedly speaks simply of 'semantics' in the first level

of those scholars with whose views he disagrees,[58] and comments on the 'semantic level' accepted by two of these scholars, remarking (Houben 1999:26-27):

> One wonders how the semantic level can be placed as the basis and, as far as derivations are concerned, at the beginning of the sophisticated grammar of Pāṇini, while it is admitted at the same time that this semantic level is very sketchy, and that Pāṇini makes no attempt to characterise the possible semantic representations by any rules.

Houben does not, however, note that the semantics selected are precisely those that are linked with grammatical and phonological rules, not some vague 'pure' semantics.

He also speaks of a user's intentional aspects or aspects of his intention (*vivakṣā*), neglecting to note that Patañjali makes a pertinent distinction between an individual user's desire to speak (*prāyoktrī vivakṣā*) in a particular manner — in effect to use Prakrit if he wishes — as opposed to the communal vivakṣā (*laukikī vivakṣā*), that is the generally accepted usage in a community of speakers who serve as a model for the grammar.[59]

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[58]Houben nevertheless remains comfortable with the view that there are discrete levels in Pāṇini's system. He assumes (1999: 46) four levels, though these differ in detail from those posited by earlier modern scholars. I think I have demonstrated, however (Cardona 2009) that Pāṇini's system proceeds from meaning to initial strings subject to operations that result in final utterances, with a set of kāraka classification rules that mediate between semantics and expressions, and that one proceeds in a continuum, with possible appeal to meaning conditions at later stages of a derivation. Scharf (2009) also speaks against the anachronistic notion that Pāṇini operated with four discrete levels.

[59]विवक्षा च द्वयी । अस्येव प्रायोक्त्री विवक्षा अस्ति लौकिकी । प्रायोक्त्री विवक्षा प्रयोक्ता हि मृद्व्या स्निग्धया श्लक्ष्णया जिह्वया मृदुस्निग्धान्श्लक्ष्णाञ्छब्दान्प्रयुङ्क्ते । लौकिकी विवक्षा यत्र प्रायस्य सम्प्रत्ययः । प्राय इति लोको व्यपदिश्यते । (Bh. II.342.26-343.3). The Bhāṣya on A 6.3.109 (पृषोदरादीनि यथोपदिष्टम्) takes up the issue of who *śiṣṭas* are and where they

In connection with vivakṣā, Pāṇinīyas bring up examples such as

(10) *dhanuṣā vidhyati* '… pierces … with a bow'

(11) *dhanur vidhyati* 'The bow pierces ….'

(10) calls for assigning a bow to the kāraka category named *karaṇa* by virtue of its serving, more than any other participant in the act of piercing (*vyadh*), as the means of bringing this act to accomplishment (*sādhakatamam*); such a kāraka is denoted by a third-triplet ending. (11) calls for the bow to have the category name *kartṛ* by virtue of being spoken of as an independent (*svatantra*) participant in the act of piercing. This is accounted for by stating the kāraka classification rules in question in a particular order: **A** 1.4.42: साधकतमङ्करणम् । 1.4.54: स्वतन्त्रः कर्ता. In addition, these rules come under the heading of **A** 1.4.1-2 (आकडारादेका सञ्ज्ञा । विप्रतिषेधे परङ्कार्यम्), so that, of the class names provided for, only one is allowed to apply to an entity at once and, if two rules come into conflict, what is provided for by the later rule takes precedence. Concerning (10)-(11) — his examples (1)-(2) — Houben says (1999: 28) he accepts the position that vivakṣā 'continues to play a role in the choice of kāraka-designations, especially if it is clear that a certain number of alternative ontological-logical classifications are possible (the bow as instrument in (1) and agent in (2)).' In accepting the role of vivakṣā with respect to kāraka classifications, he is accepting what Pāṇinīyas have always maintained; there is nothing new here. On the other hand, Houben glosses over an important detail. The Bhāṣya to 1.4.1 vt. 30,[60] does not deal with (10) and (11) opposed to each other. The bow's classifications as karaṇa and kartṛ in each instance is opposed to its classification as apādāna (**A** 1.4.24: ध्रुवमपायेऽपादानम्). For a bow to be

live. See, for example, PWT: 550-554 (**834**).

   [60]See Cardona 1974a: 235-237, 283-284 (note 16).

spoken of as an instrument in piercing something, it has simultaneously to be spoken of as a point of departure for arrows which are released from it and serve as means of piercing:

(12) *dhanuṣo nirgatair bāṇair vidhyati*

For a bow to be spoken of as an agent of piercing, the same must also hold: the bow must also simultaneously be spoken of as a point of departure. In brief, (10) and (11) are acceptable utterances which Pāṇini accounts for. Pāṇini also knows that the semantics associated with these utterances involve another, conflicting, classification, reflected in (12). That is, he accounts for acceptable utterances and their semantics.

Houben also accepts that in the context of Pāṇini's system, what he calls a 'provisional statement' subject to modification may include Middle Indic forms like *honti*. The question then arises: are such forms in any way allowed in preliminary strings of a Pāṇinian derivation? For this to be possible, one would require either that Pāṇini's grammar have some rules providing for sound shifts of the type *bh-* → *h-* or include in the set of verb bases not only items such as *bhū* but others such as *ho* found in forms like Middle Indic *hoti, honti*. There is no evidence for either. Houben's assertion could be maintained also under the view that a speaker who considers a preliminary statement and is familiar with Middle Indic in addition to Sanskrit could conceive of such a string with some Middle Indic elements. This, however, runs contrary to the very conception of what *śabdānuśāsana* and *vyākaraṇa* mean to Pāṇinīyas: a work by which correct usage is explained once this has been segregated from incorrect usage.[61] Thus conceived, Pāṇini's grammar deals only with correct usage. This is noted at the beginning of the Mahābhāṣya, where Patañjali considers three alternatives of how the śabdānuśāsana should proceed: should it

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[61]See PWT: 564-572 (**845-848**).

serve to teach correct speech forms (*śabdopadeśa*), incorrect speech forms (*apaśabdopadeśa*) or both (*ubhayopadeśa*)?[62]   The third option is set aside as redundant.   Explaining correct forms would establish a restriction whereby incorrect forms are ruled out, and teaching that incorrect forms are not to be allowed would result in limiting the grammar to correct usage.   The decision to explain only correct speech forms is made on the grounds of brevity (*laghutvāt*).   For any single correct speech form such as *gauḥ* there are several incorrect forms (*apabhraṁśāḥ* 'corruptions') such as *gāvī, goṇī, gopotalikā*.   Consequently, Pāṇini's śabdānuśāsana is a grammatical treatise whereby are explained speech forms that are desired and accepted.[63]   Moreover, Patañjali remarks that augments, replacements, affixes, verbal bases, and nominal bases recited in the Aṣṭādhyāyī are all given therein without any fault of pronunciation.[64]   At least from the time of Patañjali, then, the Aṣṭādhyāyī and its ancillary texts were transmitted faultlessly.   Accordingly, unless one wishes completely to divorce Pāṇini from his later tradition with respect to this issue, one can rule out of court the possibility of unassimilated Middle Indicisms in the Aṣṭādhyāyī and its ancillaries.

It is therefore difficult to see how this grammar could allow preliminary sentences that Houben envisions, with possible Middle Indic forms, which would require the intervention of the grammar to bring them to acceptable status.   Such utterances would have to

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[62]शब्दानुशासनमिदानीं कर्तव्यम् । तत्कथं कर्तव्यम् । किं शब्दोपदेशः कर्तव्य आहोस्विदपशब्दोपदेश आहोस्विदुभयोपदेश इति । (Bh. I.5.12-14).

[63]लघुत्वाच्छब्दोपदेशः । लघीयाञ्शब्दोपदेशः । गरीयानपशब्दोपदेशः । एकैकस्य शब्दस्य बहवोऽपभ्रंशाः । तद्यथा गौरित्यस्य शब्दस्य गावीगोणीगोपोतलिकादयोऽपभ्रंशाः । इष्टान्वाख्यानं खल्वपि भवति । (Bh. I.5.20-22).

[64]अथवेदं तावयं प्रष्टव्यः क्वेमे संवृतादयः श्रूयेरन्निति । आगमेषु । आगमाः शुद्धाः पठ्यन्ते । विकारेषु तर्हि । विकाराः शुद्धाः पठ्यन्ते । प्रत्ययेषु तर्हि । प्रत्यया: शुद्धाः पठ्यन्ते । धातुषु तर्हि । धातवोऽपि शुद्धाः पठ्यन्ते । प्रातिपदिकेषु तर्हि । प्रातिपदिकान्यपि शुद्धानि पठ्यन्ते । (Bh. I.14.15-18).

be creations of some speakers who possibly intended to utter something in accordance with accepted norms reflected in the grammar but somehow slipped. Although Pāṇinīyas accept that Pāṇini's grammar serves to contrast accepted and unacceptable usages, there is no evidence of their conceiving of the Aṣṭādhyāyī as a set of rules serving to touch up unacceptable 'preliminary statements'.

There is no evidence from Pāṇini's work or the statements of Pāṇinīyas to support the major claim Houben makes. Nor does Houben himself offer much concrete evidence to back up his assertions. I find one repeated claim that is based on actual statements in the Aṣṭādhyāyī, and this concerns Vedic rules. He remarks (1999: 48):

> It is further to be noted that if Pāṇini's grammar were to go basically from meaning to form, there would be no good justification for the presence of rules dealing with finished utterances in transmitted Vedic literature. But if the starting point is not meaning but a 'provisional statement' the grammar may not only serve to fine-tune (*saṃ-skṛ*) our own statements (mainly *bhāṣā*, in the case of *ūha* possibly also *chandas*), but also to check a given expression (*chandas*, but also *bhāṣā*) and contribute where necessary to its proper understanding and codification.[65]

In the same vein, Houben says (2003: 161), 'If the system is only synthetic, why would so much attention have been paid to the finished utterances of Vedic texts with all their grammatical exception?' More recently (2012: 166-167), the same author asks

[65]At this point, Houben adds a note (2003: 48 note 31): 'Cf. Patañjali's statement that the *padakāras* (apparently the authors of a *padapāṭha*) are to follow the grammar rather than the other way around …' The Mahābhāṣya discussions to which Houben then alludes concern the presence or absence of an avagraha and the segmentation *akṣaṇ-vān*, *akṣaṇ-vantàḥ*, found in the Ṛgvedapadapāṭha, instead of *akṣa-ṇvān*, *akṣa-ṇvantàḥ*. Houben's 'apparently' is therefore inappropriate.

> If placing "semantics" as the starting point is in conflict with the presence of a considerable number of rules, namely the specifically Vedic ones (and moreover with the majority of the explicit aims mentioned in the Paspaśāhnika: *rakṣā* "preservation of the Veda," *ūha* "ritual modification" etc.), how can it be that this view has become so widespread among Pāṇini specialists (cf. Houben 1999: 23-26)?

It is noteworthy that Houben leaves padapāṭhas out of consideration except to refer to padakāras in passing (see note 65). Now, Pāṇinian rules which provide for usages that apply only in the domain of Vedic are fully compatible with his derivational system. Pāṇinian rules which provide for Vedic usage, whether as a general domain (*chandasi*) or in particular subdomains such as mantras or verses (*ṛc*), should be considered to operate on the basis of theoretically posited strings, as in padapāṭhas. Consequently, Pāṇini can state the same sort of rules for Vedic usage as he does for the language current in his time and area, differing from these only by applying in specific limited domains. For example, in Vedic there occur first person plural active forms of the type *smasì* (e.g., ṚV 1.29.1b) instead of *smaḥ* and nominative plural forms of the type *devāsàḥ* instead of *devāḥ* (e.g., ṚV 1.19.6b). In the Ṛgvedapadapāṭha, Śākalya gives *devāsàḥ, smasì*. To account for these, Pāṇini provides that in Vedic alone (*chandasi*), *masi*, with final *-i*, occurs and the nominal ending **jas** receives the final augment *as**uk*** if it follows a stem ending with an *a*-vowel.[66] A slightly more complex example of variation concerns third person plural middle verb forms such as *āsàte*, *duhrate*, and *duhre*. The first represents the norm in Sanskrit, with the ātmanepada ending

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[66]**A** 7.1.46 50: इदन्तो मसि (छन्दसि 38), आज्जसेरसुक् । The Kāśikā on each of these sūtras refers to what is designated by *chandasi* as a domain (*viṣaya*): छन्दसि विषये मस् इत्ययं शब्द इकारान्तो भवति । अवर्णान्तादङ्घादुत्तरस्य जसेरसुगागमो भवति छन्दसि विषये ।

-*ate*. The second has the ending -*ate*, but with an initial *r*-, and the last example lacks -*t*- (-*e* ← -*ae*). Pāṇini accounts for these starting with a base followed by the ending *jha*, which replaces the *l*-affix *laṭ*. The -*a* of this ending is replaced by -*e*, since it derives from an *l*-affix marked with *ṭ*. In ātmanepada endings following a stem that does not end in -*a*, *jh* of this ending is replaced by *at*. Further, in Vedic usage (*chandasi*), the ending can receive the initial augment *ruṭ* and also have its *t* deleted.[67] Stating that such forms occur in a particular domain, Vedic usage, is comparable to saying that in the dialect of Śākaṭāyana speakers use third plural imperfect forms with the ending *us* instead of *ant* (→ *an*) after verbal bases in -*ā* as well as *dviṣ*:[68] *ayuḥ, adviṣuḥ* instead of *ayān, adviṣan*. Moreover, this system has a background in the procedures of padapāṭha authors like Śākalya, who posit structures to account for saṃhitā texts.

Houben also brings into play the sociolinguistic situation at the time of Pāṇini and early Pāṇinīyas and claims that the grammar will serve not only to eliminate imperfections such as possible Middle Indic forms but also to 'fine-tune' and check Vedic expressions. Now, Patañjali does indeed consider the coexistence of nonstandard and accepted standard usage. He also makes the important point that eminent standard speakers could use nonstandard forms with impunity, so long as this was not done in a ritual.[69] In addition, Kātyāyana and Patañjali lay stress on the question whether the knowledge or use of correct speech leads to merit (*dharma*) and felicity (*abhyudaya*). After an extended

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[67]टित आत्मनेपदानां टेरे । (**A** 3.4.79); **A** 7.1.5, 8: आत्मनेपदेष्वनतः (झः 3, अत् 4), **A** 7.1.8: बहुलं छन्दसि (रुट् 6); **A** 7.1.41: लोपस्त आत्मनेपदेषु (छन्दसि 38). By **A** 6.1.97: अतो गुणे (अपदान्तात् 96, पररूपम् 94, एकः पूर्वपरयोः 84), -*e* is the single replacement for -*ae* (← *ate)* once -*t*- has been dropped.

[68]**A** 3.4.111,112: लङः शाकटायनस्य (आतः 110, झेर्जुस् 108), द्विषश्च ।

[69]See PWT: 550 (**833**).

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discussion, the conclusion is reached that both should be involved: the use of correct speech forms preceded by a knowledge of the grammar results in felicity.[70]   As Kaiyaṭa notes, when Kātyāyana says *śāstrapūrvake prayoge*, he means the use of correct speech forms preceded by a knowledge of the grammar in the sense that one who uses such speech forms knows them to be correct as described in Pāṇini's *śabdānuśāsana* in terms of bases and other constituents involved in derivation.[71]   That is, although a native speaker of the accepted speech also knows vernacular speech and could use either to express what he wishes to say, it is not sufficient that he be able to use correct speech. This is meritorious if one also knows that the speech in question is granted its status by virtue of being described as it is in Pāṇini's grammar.

Patañjali also names the preservation of the Veda as the first of the compelling reasons for studying grammar.[72]   To be sure, this does involve checking Vedic expressions. Consider again forms of the type *dụhrạtẹ, dụhre*. Someone who is a native speaker of the accepted correct speech, where forms with -*ate* are the norm, could possibly consider such forms deviant, but one who knows grammar does not commit this error. As Kaiyaṭa notes, such a person knows that Pāṇini's grammar accounts for them.[73]   This does not imply that Pāṇini's grammar must be a system that begins with preliminary utterances which can be checked for correctness.   It means simply that a grammarian conversant with Pāṇini's derivational system knows that this accounts for such Vedic forms

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[70]See PWT: 547-548 (**831**).

[71]... शब्दानां प्रकृत्यादिविभागज्ञानपूर्वकः प्रयोग इत्यर्थः । (Pr. I.40).

[72]See PWT: 544-545 (**828**).

[73]लोके लोपाद्दृष्ट्वं वेदे दृष्ट्वा भ्राम्येद्वैयाकरणः । वैयाकरणस्तु न भ्रमति वेदार्थं चाध्यवस्यति । (Pr. I.8).   Kaiyaṭa illustrates with *aduhra*, the imperfect corresponding to *duhre*, and cites the pertinent rules. In his *Mahābhāṣyadīpikā*, Bhartṛhari illustrates with several examples; it is not necessary to discuss these here.

in a particular manner. In the same vein, the fact that Patañjali also invokes the modification (*ūha*) of mantras in particular contexts does not require that Pāṇini's system conform to what Houben claims. For example, if a mantra contains the dative form *agnayè* in one context and another context calls for a corresponding form of the stem *sū́rya-*, any native speaker knows that the form in question is *sūryā̀ya*.[74] One who also knows Pāṇini's grammar is capable of modifying a mantra with a knowledge of how the grammar accounts for the forms. Both forms involve nominal stems followed by the ending *ṅe*. After a stem in *-a*, this ending is replaced by *ya*, which then conditions the substitution of a long vowel *-ā* in the stem,[75] but an ending marked with *ṅ* conditions replacement by a guṇa vowel for the final *-i* of a stem that belongs to the ghi class:[76] *sūrya-e → sūrya-ya → sūryāya, agni-e → agne-e → agnaye*.[77]

Let me finally revert to the central issue of Pāṇinian derivations beginning with meaning conditions. Concerning modern scholars who accept this basic point, although they differ in other respects, Houben remarks (1999: 31)

> However, if the models are taken seriously, it can hardly be imagined that anyone was ever able to make effective use of Pāṇini's grammar: How can a potential speaker start with mere meanings or with semantic elements, or with an abstract semantic level, and next ask his grammar to provide him with the proper utterance to express it?

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[74]Kaiyaṭa (Pr. I.9) cites the two forms and Vedic texts in which they are used. Bhartṛhari goes into much more detail concerning ūha. Again, it is not necessary to consider all the details in the present discussion.

[75]A 7.1.13: डेर्यः (अतः 9, अङ्गस्य 6.4.1); 7.3.102: सुपि च (अतो दीर्घो यञि 101).

[76]A 7.3.111: घेर्ङिति (गुणः 108).

[77]A 6.1.78: एचोऽयवायावः (अचि 77).

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This betrays, I think, a misunderstanding of what Pāṇini's work is meant to be. As Pāṇinīyas from earliest times recognize, this work is an anuśāsanam, a means of explaining, through derivation, correct speech units as they occur in utterances of model speakers (śiṣṭa). Pāṇinīyas do not conceive of the Aṣṭādhyāyī as something that should provide a speaker 'with the proper utterance to express' what he wishes to convey. It is viewed as a means of accounting for what speakers utter when they communicate with each other. To be sure, Bhartṛhari remarks that a speaker selects (upādatte) an appropriate (yogyaṁ) speech unit (śabdam) with respect to meanings to be conveyed (abhidheyeṣu) that have been brought to mind (-prāpitasannidhāneṣu 'made to be present') by his wish to express (vivakṣā-), just as one applies the appropriate organ of perception with respect to objects when one wishes to perceive something; and he speaks of this vivakṣā as dependent on appropriate speech units (yogyaśabdanibandhanayā),[78] that is, on speech units which have the capacity to express the meanings one wishes to convey. But the same author has no illusions of Pāṇini's or anyone else's grammar being a true model of what is in a speakers mind or instructing speakers on how they may produce utterances. On the contrary, he explicitly denies this. For example, he says that affix meanings (pratyayārthāḥ) which are stated (nirdiṣṭāḥ) as a condition (nibandhanam) for the introduction of affixes in a given grammatical tradition (anvākhyānasmṛtau 'an explanatory smṛti') are said to be (udāhṛtāḥ), in another grammatical tradition (smṛtyantare),

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[78]योग्यं हि शब्दं प्रयोक्ता विवक्षाप्रापितसन्निधानेष्वभिधेयेषु प्रत्यर्थमुपादत्ते । तदर्थोपलिप्समानः प्रतिविषयं योग्यमेवेन्द्रियमुपलब्धौ प्रणिधत्ते । (VPVṛ. 1.13 [44.4-5]); cf. शब्द एवोपदेष्टा । तत्सामर्थ्य-मेवानुगच्छन्तो वक्तारो योग्यशब्दनिबन्धनयैव विवक्षया प्रवर्तन्ते । (VPVṛ. 1.129 [209.1-2]).

meanings attributed to bases (*prakṛtyarthāḥ*).[79]   In his auto-commentary on the kārikā in question, Bhartṛhari remarks that the division of meanings that is adopted by different grammarians (*pauruṣeyaḥ pravibhāgaḥ* 'division made by men') depends solely on what these grammarians wish to accept: in the grammars of some grammarians, all affixes are explained as redundant, serving to cosignify meanings attributed to their bases.[80]   Neither Bhartṛhari nor his predecessor or successor Pāṇinīyas conceives of the grammar as somehow directly playing a role in a speaker's producing an utterance, serving 'to provide' a 'potential speaker' 'with the proper utterance' to express meanings.   Pāṇinīyas consider Pāṇini's śabdānuśāsana a description, a means of accounting for how a community of speakers expresses itself, intended for an audience of native speakers of the language described.

In sum, Houben has not presented cogent evidence supporting his claims. What he adduces in support of these claims is equally well explained by understanding Pāṇini's system in the way that Pāṇinīyas have understood it from the times of earliest commentators onwards.   It is proper to reject his attempt to demonstrate that Pāṇini's system does not operate in the manner

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[79]अन्वाख्यानस्मृतौ ये च प्रत्ययार्था निबन्धनम् । निर्दिष्टास्ते प्रकृत्यर्थाः स्मृत्यन्तर उदाहृताः ॥ (VP 2.231).

[80]स्वेच्छानिबन्धन एवायं पौरुषेयः प्रविभागोऽर्थानां बहुधाश्रीयते । तथा हि केषाञ्चिन्निसर्तॄणां स्मृतिशास्त्रेषु सर्व एव प्रत्ययाः स्वार्थिकाः प्रकृत्यर्थानुवादिन इत्यन्वाख्यायन्ते । (VPVṛ. 2.231 [248]). Different views are in fact considered in the Mahābhāṣya and subsequent works concerning meanings to be attributed to bases such as *aśva* ('horse'). Some scholars attribute five meanings to the base: the generic property (*jāti*) of being a horse, individual (*vyakti*) horses, gender (*liṅga*), number (*saṅkhyā*) and the possible role a referent plays in accomplishing an action (*kāraka*); others say the first three are base meanings, the last two affix meanings. It is not necessary to discuss the issues here. See Deshpande 1992.

accepted by Pāṇinīyas and most modern scholars. It is appropriate to accept instead that Pāṇini's is a derivational system which starts with meanings to be expressed by utterances that are accounted for by combining bases and affixes under stated conditions.[81]

5 Interpreting Pāṇinian sūtras

5.1 Introduction

The Aṣṭādhyāyī is composed in Sanskrit to account for utterances in this language by native speakers of Pāṇini's time as well as for archaic usage in Vedic texts. Accordingly, Pāṇini can expect that students of his grammar, who are themselves native speakers, knew conventions of usage common to him and all other native speakers of the language he describes. For example, when he says स्वरादिनिपातमव्ययम् (**A** 1.1.37),[82] he can assume of his audience that they will understand a verb form *asti* or *bhavati*.[83] In addition, he can assume his audience to understand an utterance like **A** 1.1.37 in the same manner one understands

(13) *ayaṁ gauḥ* (*asti*) 'This (is) a bull'

in response to the question

(14) *ko'yam* 'What is this?'

Someone who sees a bull for the first time and asks (14) receives (13) as an answer informing him that the animal present is one called by the word *go* (nom. sg. *gauḥ*). Similarly, **A** 1.1.37 states that items of the set beginning with *svar* ('heaven') and those called *nipāta* are named *avyaya*.

5.2 Contexts requiring metarules[84]

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[81]Scharf 2011 also argues against Houben's thesis.

[82]See PWT 5 (**11**), 27 (**54**).

[83]Kātyāyana formulates this convention in vārttika 11 on अनभिहिते (**A** 2.3.1). See PWT 6-7 (**13**).

[84]On the issues considered in this section see also Cardona 1974b.

In his first three vārttikas on षष्ठी स्थानेयोगा (**A** 1.1.49), Kātyāyana considers the purpose of this sūtra and under what conditions the rule comes into play. First, he remarks that the sūtra is stated in order to establish a restriction (*niyamārtham*).[85] That is, this metarule establishes that of all the possible relations which can condition the use of a sixth-triplet ending, only the relation 'in place of' is to be understood in grammatical statements. The second vārttika[86] notes that this allows for an overly broad application (*atiprasaṅgaḥ*) in that the restriction thus established would apply also where a sixth-triplet ending should be understood to designate other relations, such as part-whole. Lastly, Kātyāyana notes[87] that the restriction does not obtain (*aprāptiḥ*) for relations such as part-whole, because the relation (*yogasya*) in question is not doubted (*asandigdhatvāt*). As Patañjali explains, [88] a restriction is formulated for instances where there is doubt, and in the case of terms with sixth-triplet endings signifying relations such as part-whole, there is no doubt. Further, one does not have to say this explicitly, since it is known from common usage. For example, a person A going to another village may inquire of a person B, saying, 'I'm going to another village. Please tell me the way.' B then says to A, 'At that spot, you should take the right-hand path, at that spot the left one.' The direct diagonal path is not explained, because there is no doubt about it. Similarly, in the

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[85] षष्ठ्याः स्थानेयोगवचनं नियमार्थम् । (1.1.49 vt. 1).

[86] अवयवषष्ठ्यादिष्वतिप्रसङ्गः शासो गोह इति । (1.1.49 vt. 2). I deal here only with the first rule alluded to, **A** 6.4.34 (see **§5.2.1**).

[87] अवयवषष्ठ्यादीनां चाप्राप्तिर्योगस्यासन्दिग्धत्वात् । (1.1.49 vt. 3).

[88] अवयवषष्ठ्यादीनां च नियमस्याप्राप्तिः । किङ्कारणम् । योगस्यासन्दिग्धत्वात् । सन्देहे नियमो न चावयवषष्ठ्यादिषु सन्देहः । किं वक्तव्यमेतत् । न हि । कथमनुच्यमानं गंस्यते । लौकिकोऽयं दृष्टान्तः । तद्यथा । लोके कश्चिच्चिन्मृच्छति ग्रामान्तरं गमिष्यामि पन्थानं मे भवानुपदिशत्विति । स तस्मा आचष्टे अमुष्मिन्नवकाशे हस्तदक्षिणो गृहीतव्योऽमुष्मिन्नवकाशे हस्तवाम इति । यस्त्र तिर्यक्पथो भवति न तस्मिन्सन्देह इति कृत्वा नासावुपदिश्यते । एवमिहापि सन्देहे नियमो न चावयवादिषषष्ठ्यादिषु सन्देहः । (Bh. I.118.19-25).

grammar, the restriction applies in case of doubt, and there is no doubt where a relation such as part-whole is understood.

In brief, **A** 1.1.49 is invoked only where the context of a sūtra does not suffice to show that a particular relation is concerned.

5.2.1 षष्ठी स्थानेयोगा (**A** 1.1.49)

Recall (see §**2.2.2**) that Patañjali says (5) *rājñaḥ puruṣasya* is in effect an incomplete string which creates an expectancy for something else. If, for example, one supplies *bhāryā* ('wife'), the result is

(15) *rājñaḥ puruṣasya bhāryā*

saying that a woman is the wife of the servant of the king. Here, the genitive *puruṣasya* does not create any expectancy for something related to the man. Each of the genitives *rājñaḥ* and *puruṣasya* is now bound to another term.

A parallel to (5) and (15) in the Aṣṭādhyāyī is **A** 6.4.34: शास इदङ्हलोः (उपधायाः झ्रिति 24).[89] The genitive *śāsaḥ* ('of *śās*') is linked to *aṅhaloḥ* ('before *aṅ* or a consonant'), but another genitive, *upadhāyāḥ* is unbound, and the relation signified by the sixth-triplet ending (**A** 2.3.50, see §**2.2.2**) in this form thus remains unspecified. The metarule **A** 1.1.49 therefore comes into play: a genitive not susceptible of a single interpretation in a given sūtra is understood to denote one relation: 'in place of' (*sthāne*). Accordingly, *sthāne* is understood and linked with *upadhāyāḥ* in **A** 6.4.34, which thus provides that *i* (*it*) occurs in place of the penultimate sound (*upadhāyāḥ*) of *śās* ('command, instruct') before the suffix *aṅ* or the initial consonant of a suffix marked with *k* or *ṅ*; e.g., *aśiṣat* (3sg. aor.), *śiṣṭa-* (pptcple.).[90] **A** 1.1.49 does not serve to interpret the *śāsaḥ*, however, because this is already linked to *upadhāyāḥ*, so that the relation involved — that of apart and a

[89]See Cardona 1974b: 308-310.
[90]See PWT 298 (**447**).

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whole (*avayavāvayavibhāvasambandhaḥ*) — is contextually known.

In a similar vein, consider **A** 7.1.85-88:[91] पथिमथ्यृभुक्षामात् (सौ 82, अङ्गस्य 6.4.1), इतोऽत्सर्वनामस्थाने । थोऽन्थः । भस्य टेर्लोपः, which state operations for the stems *pathin-* ('path, way'), *mathin-* ('churning utensil'), and *r̥bhukṣin-* (R̥bhukṣin). Before endings of the set called *sarva-nāmasthāna* (*su*, *au*, *jas*, *am*, *aut*)**,** -*a*- substitutes for -*i*- of these stems, and -*th*- is replaced by -*nth*-; before the first-triplet ending *su* in particular, the final sound -*n* of these stems is replaced by *ā*; before vowel-initial endings, however, that part of the stem that begins with its last vowel — that is, -*in*- — is replaced by zero; e.g., *panthāḥ* (nom. sg. ← *pathin-su*), *panthānau* (nom-acc. du. ← *pathin-au/aut*), *pathā* (instr. sg. ← *pathin-ṭā*). The genitive plural *pathimathyr̥bhukṣām* in **A** 7.1.85 cannot be unambiguously interpreted, so that **A** 1.1.49 serves to interpret this as signifying the relation 'in place of'. The same genitive is understood to recur in **A** 7.1.86-87, which also contains the genitive forms *itaḥ* and *thaḥ*. Here, *pathimathyr̥bhukṣām* is immediately linked to *itaḥ* and *thaḥ*, so that contextually one understands the first genitive to refer to the stems of which the vowel *i* and the consonant *th* are parts. Accordingly, here **A** 1.1.49 serves to interpret *itaḥ* and *thaḥ*, not *pathimathyr̥bhukṣām*. Similarly, in **A** 7.1.88 this genitive as well as *bhasya* are understood to be linked directly with *ṭeḥ*: they refer to the stems in question when they occur before vowel-initial endings, so that they bear the label *bha*. On the other hand, *ṭeḥ* is not bound. Hence, **A** 1.1.49 comes into play: that part of the stem which is called *ṭi* is deleted.

The part-whole relation holds also between an item and a segment that is added to it as an augment. For example, **A** 6.4.71-72: लुङ्लङ्लृङ्क्ष्वड्-दात्तः (अङ्गस्य 1), आडजादीनाम् introduce *aṭ* and *āṭ* to

[91]See PWT 312 (**472**).

stems which occur before verb endings that derived from the *l*-affixes *luṅ*, *laṅ*, and *lṛṅ*; *āṭ* for vowel-initial stems, *aṭ* for others.[92] Now, *aṭ* and *āṭ* bear the marker *ṭ*, and the sūtra आद्यन्तौ टकितौ (**A** 1.1.46) provides that entities marked with *ṭ* and *k* respectively are the initial (*ādi*) and final (*anta*) parts of the items to which they are introduced. Accordingly, the genitive ending of *aṅgānām* understood in **A** 6.4.71-72[93] is interpreted contextually as signifying the part-whole relation, so that **A** 1.1.49 does not come into play.

There are also sūtras with genitive forms naming various grammarians whose observations Pāṇini mentions. For example, **A** 8.3.18, 19, 22: व्योर्लघुप्रयन्नतरः शाकटायनस्य । लोपः शाकल्यस्य । हलि सर्वेषाम् (अशि 17) concern different ways in which pada-final *-v* and *-y* preceded by an *a*-vowel as well as *bho*, *bhago*, and *agho* are treated before voiced segments: according to Śākaṭāyana, they are produced with very slight effort, as light glides; according to Śākalya, they are deleted; but all agree that they are deleted before a consonant.[94] Clearly, *śākaṭāyanasya*, *śākalyasya*, and *sarveṣām*, used with reference to persons, do not refer to entities subject to replacement. They refer to scholars who have described different substitutions for *-v* and *-y*, so that the relation in question is that of one by whom something has been stated and the one who has stated this

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[92]E.g. *akārṣīt* (3sg. aor. ← *kṛ-luṅ*), *akarot* (3sg. impfct ← *kṛ-laṅ*), *akariṣyat* (3sg. cond. ← *kṛ-lṛṅ*); *aikṣiṣṭa* (3sg. aor. ← *īkṣ-luṅ*), *aikṣata* (3sg. impfct. ← *īkṣ-laṅ*), *aikṣiṣyata* (3sg. cond. ← *īkṣ-lṛṅ*) from the bases *kṛ* ('do, make') and *īkṣ* ('look').

[93]The singular *aṅgasya* of the major heading is contextually modified to the plural *aṅgānām* as required by the plural *luṅlaṅlṛṅkṣu*, and this is coreferential with *ajādīnām*.

[94]See PWT 356-358 (**557-558**).

(*proktapravācakabhāvsambandha*).[95] Here again, **A** 1.1.49 does not enter into play.

Consider now the sūtra सरूपाणामेकशेष एकविभक्तौ (**A** 1.2.64). This rule provides for one (*eka-*) of a group of homophonous terms (*sarūpāṇām*) to remain (*-śeṣaḥ* 'which is left over') when a single ending is used.[96] Here again, there is a bound genitive: *sarūpāṇām* is linked with *eka-*, which is coreferential with *-śeṣa* in the compound *ekaśeṣaḥ*. The relation in question can be considered that of part and whole: one of a group remains.   In addition, however, the construction can be of the type *vadatāṁ varaḥ* 'best of speakers', where a sixth-triplet ending follows a nominal denoting a group from which (*yataḥ*) a member (or members) is singled out (*nirdhāraṇam*).[97] Accordingly, **A** 1.1.49 is not required for interpreting **A** 1.2.64, so that it is not brought into play here. The rule does not provide for substitution by a single unit.[98]

5.2.2 तस्मिन्निति निर्दिष्टे पूर्वस्य । तस्मादित्युत्तरस्य (**A** 1.1.66-67)

These sūtras apply to interpret locative and ablative forms in contexts where a native speaker could not otherwise interpret such

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[95]Accordingly, some commentators supply *matena* ('according to the opinion of …'), e.g., Kāś. 8.3.18: वकारयकारयोर्भोभगोअगचोअवर्णपूर्वयोरः पदान्तयोर्लघु-प्रयत्नतर आदेशो भवत्यशि परतः शाकटायनस्याचार्यस्य मतेन ।

[96]See PWT 11-12 (**13**), 260-261 (**374**).

[97]**A** 2.3.41: यतश्च निर्धारिणम् (सप्तमी 36, षष्ठी च 38). Cf., e.g., N 1.2.64 (I.372-374): सरूपाणां शब्दानामिति । निर्धरिणे षष्ठी । तेन स्वरूपाणां मध्ये समानजातीयो यः सरूपः स एक एव शिष्यते न विरूपः । समानजातीयस्यैव हि निर्धारणं भवति न विजातीयस्य । अथवा समुदायलक्षणैषा षष्ठी । सरूपसमुदायान्तःपाती च सरूप एव भवति न विरूपः । तेन सरूप एव शिष्यते ।

[98]Pontillo attempts to show that the rule does provide for substitution, but does not consider the syntax of the genitive *sarūpāṇām*.

terms unambiguously.[99] The rules apply, as does **A** 1.1.49,[100] to restrict (*niyamārtham*) what one is to understand.[101] or example,

> (16) *grāme devadattaḥ* 'Devadatta is in the vicinity of the village'

has the locative *grāme* referring to a place near where Devadatta is situated. One does not know from this sentence whether this man is at a place before or after the village. Similarly, if one says

> (17) *grāmād devadattaḥ*

the ablative *grāmāt* could ambiguously be connected with different direction words:[102] *pūrvaḥ* ('before, east of'), *paraḥ* ('beyond'). Supplying terms such as *pūrvaḥ* in such instances eliminates the ambiguity. Similarly, in rules such as **A** 6.1.77, 8.1.28 (see below), where locative and ablative forms occur which a native speaker cannot unambiguously interpret in context, **A** 1.1.66-67 enter into play.[103]

Patañjali remarks that a substrate, to which the kāraka class name *adhikaraṇa* is assigned, is of three kinds:[104] an enveloping (*vyāpaka*) locus, such as sesame seeds in which (*tileṣu* [loc. pl.]) oil (*tailam*) occurs; a locus of contiguity (*aupaśleṣika*); and a locus of domain (*vaiṣayika)*, which involves neither enveloping nor contiguity, for example, the ultimate happiness referred to as

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[99]See Cardona 1974b: 312-326, PWT 53 (**90**).

[100]See §**5.2** with notes 85-88.

[101]तस्मिंस्तस्मादिति पूर्वोत्तरयोर्योगयोरविशेषान्नियमार्थं वचनम् दध्युदकम् पचन्योदनम् । (1.1.66-67 vt. 2).

[102]It is assumed that (17) does not refer to the village as a kāraka and is instead to be construed with a direction word to be supplied; **A** 2.3.29: अन्यारादितरर्तेदिक्शब्दाञ्चूत्तरपदाजाहियुक्ते (पञ्चमी 28) accounts for fifth-triplet endings after nominals linked with direction words; see PWT 165 (**250**).

[103]तस्मिंस्तस्मादिति पूर्वोत्तरयोर्योगयोरविशेषान्नियमार्थोऽयमारम्भः । गामे देवदत्तः पूर्वः पर इति सन्देहः । गामादेवदत्तः पूर्वः पर इति सन्देहः । एवमिहापि इको यणचि दध्युदकं पचन्योदनम् । उभाविकावुभावचौ । अचि पूर्वस्याचि परस्येति सन्देहः । तिङतिङ इत्यतिङः पूर्वस्यातिङः परस्येति सन्देहः । इष्यते चात्राचि पूर्वस्य स्यादतिङः परस्येति । तज्ञान्तरेण यन्नं न सिध्यतीति नियमार्थं वचनम् । (Bh. I.172.21-26).

[104]अधिकरणं नाम त्रिप्रकारम् व्यापकमौपश्लेषिकं वैषयिकमिति । (Bh. III.51.8-9).

svarga (loc. sg. *svarge*) as the domain of one's wish (*icchā*). He also notes that a speech unit cannot have any relation with another speech unit which is a locus except contiguity.[105]

For example, the *-i* of *dadhi-* ('yogurt') and *-u* of *madhu* ('honey') are replaced respectively by *-y* and *-v* before a vowel such as the *a-* of *atra* ('here'): *dadhy atra*, *madhv atra*. The rule which states this substitution, **A** 6.1.77 (इको यणचि), consists of three singular terms: a genitive *ikaḥ*, a nominative *yaṇ*, and a locative *aci*. The first two terms are linked through the intervention of **A** 1.1.49 (§§**5.2.-5.2.1**): semivowels *y v r l*, denoted by *yaṇ*, occur in place of vowels *i u ṛ ḷ*, denoted by **ik**. The locative *aci*, however, cannot be interpreted unambiguously in the sūtra as it stands. To be sure, since *aci* is a locative and *ac* denotes vowels, so that the rule concerns the replacement of vowels by semivowels, one understands a relation of contiguity. Nevertheless, the vowels to be replaced could be understood to occur before or after other vowels. **A** 1.1.66 comes into play to specify that *aci* refers to vowels that serve as contexts for an operation on what precedes (*pūrvasya*).

Analogously, **A** 1.1.67 serves to interpret ablative forms such as *atiṅaḥ* in **A** 8.1.28: तिङतिङः (अनुदात्तं सर्वमपादादौ 18). The sūtra provides that a pada which terminates with a verb ending has all low-pitched vowels if it follows a pada with an ending other than a verb ending (*atiṅaḥ*).[106]

That **A** 1.1.66-67 establish restrictions such that locative and ablative forms are subject to specified interpretations does not mean that they apply everywhere that a sūtra contains such a form.

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[105]शब्दस्य च शब्देन कोऽन्यऽभिसम्बन्धो भवितुमर्हत्यन्यदत उपश्लेषात् । (Bh. III.51.9-10). This is said by way of rejecting the need for **A** 6.1.72 (संहितायाम्), an issue that does not concern the present discussion.

[106]See PWT 393 (**615**).

Pāṇini describes not only the accepted usage of his time and area but also properties of speech in Vedic usage, referred to in general by the locative *chandasi*. As the Kāśikā notes,[107] this refers to a domain (*viṣaya*) of usage: the locative refers to a locus (*adhikaraṇa*) of a particular kind, such that **A** 1.1.66 does not enter into play.

The following three sūtras contain the locatives *yuṣmadi*, *asmadi*, and *śeṣe*: युष्मद्युपपदे समानाधिकरणे स्थानिन्यपि मध्यमः । अस्मद्युत्तमः । शेषे प्रथमः (**A** 1.4.105, 107, 108). These rules provide for the distribution of sets of verb endings which replace *l*-affixes and to which are assigned the class names *madhyama*, *uttama*, and *prathama*.[108] Endings of the madhyama and uttama sets, respectively, are selected if the *l*-affix which has been replaced is coreferential respectively with a potentially used second and first person pronoun *yuṣmad* and *asmad*. Endings of the prathama group are selected if neither of these conditions is met (*śeṣe* 'remainder'). The term *upapade* ('co-occuring term'), stated in **A** 1.4.105 and understood in the next two rules mentioned, states a co-occurrence condition. Accordingly, the locatives *upapade, samānādhikaraṇe*, and *sthānini* are not to be interpreted by **A** 1.1.66. On the contrary, these are locative absolutes, accounted for by **A** 2.3.37.[109]

The same use of locative forms applies for rules in which meaning conditions are stated for operations; see §**2.3**.

The contexts in which ablative forms are to be interpreted by **A** 1.1.67 are comparably circumscribed. Consider, for example, **A** 3.1.97: अचो यत् (धातोः 91, प्रत्ययः 1, परश्च 2) and **A** 4.1.4: अजाद्यतष्टाप् (ङ्याप्प्राति-पदिकात् 1, स्त्रियाम् 3, प्रत्ययः 3.1.1, परश्च 3.1.2). Both come under the major heading **A** 3.1.1, whereby an item introduced by a subsequent rule

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[107]See§**4** with note 66.
[108]See PWT 150-151 (**234**).
[109]See §**2.3** with note 48.

is called *pratyaya*, and is said to occur following (*paraḥ*) items to be specified. **A** 3.1.97 is stated under the subheading **A** 3.1.91, so that the affix in question is introduced after an item which bears the class label *dhātu*: the sūtra introduces *yat* following a verbal base (*dhātoḥ*) that ends in a vowel (*acaḥ*).[110] **A** 4.1.4 comes under the subheading **A** 4.1.1: it provides for the suffix *ṭāp* in derivates of the set beginning with *ajā* ('goat') as well as after nominal bases that end with short *a* (*at*).[111] The ablative forms in these sūtras are thus unambiguously construed with the direction word *paraḥ* and there is no question of **A** 1.1.67 playing a role in their interpretation.

6 Summary

Pāṇinīyas not only recognize the interaction between a speaker (*prayoktṛ*) and a listener (*śrotṛ*) in communication (§**1**) but also emphasize that Pāṇini's derivational system operates from a speaker's perspective (§**2**). There is, moreover, incontrovertible evidence that Pāṇini himself adopts this position: a derivation accounting for speech units in an utterance starts from meanings to be expressed, and these meanings serve — as does also the co-occurrence of other items — as conditions (*nimitta*) for the introduction of affixes to bases (§**3**). A claim to the contrary has not been justified (§**4**). In addition, Pāṇini takes a listener's perspective in connection with the interpretation of sūtras in the Aṣṭādhyāyī (§**5**). Those who are expected to understand these statements are native speakers of the language described, of whom Pāṇini can and does expect a knowledge of conventions and syntactic constructions known to any native speaker. In accordance with this, he formulates particular metarules to allow

[110]See PWT 76 (**122**).
[111]See §**2.1.3** with note 51.

interpreting rules where — for reasons of economy and generalization — he leaves out certain terms necessary for the unambiguous interpretation of given genitive, locative, and ablative forms.

The Aṣṭādhyāyī is thus not simply a set of rules which are to apply mechanically in deriving utterances. The sūtras of Pāṇini's grammar account through derivation for utterances which native speakers of the language described use, and these sūtras require for their interpretation and application the active intervention of a native speaker of this langugage.

References and abbreviations

A   *Aṣṭādhyāyī*

Abhyankara, Vasudev Kashinath

  1962-72 *The Vyākaraṇa = Mahābhāṣya of Patañjali, Edited by F. Kielhorn, Revised and furnished with additional readings, references, and select critical notes, third edition.* Three volumes. Poona: Bhandarkar Oriental Research Institute. [A reissue labelled 'fourth edition' was published in 1985 and 1996.]

Bh.   *Mahābhāṣya.* See Abhyankar, Vasudev Kashinath; Vedavrata.

Bronkhorst, Johannes

  1987   *Mahābhāṣya-Dīpikā of Bhartṛhari, Fascicule IV*: *Āhnika I.* Bhandarkar Oriental Research Institute Post-graduate and Research Department Series No. 28. Poona: Bhandarkar Oriental Research Institute.

Cardona, George

  1974a   Pāṇini's *kārakas*: agency, animation and identity. *Journal of Indian Philosophy* 2: 231-306.

  1974b   On Pāṇini's metalinguistic use of cases, in *Charudeva Shastri Felicitation Volume presented to Prof. Charudeva Shastri on the occasion of his seventy-fifth anniversary by friends and admirers*, edited by Charudeva Shastri felicitation volume editorial committee, Delhi: Charudeva Shastri Felicitation Committee, pp. 305-326.

  1983   *Linguistic analysis and some Indian traditions* (The Pandit Shripad Sastri Deodhar Memorial Lectures, first series). Pune: Bhandarkar Oriental Research Institute.

1997   *Pāṇini, his Work and its Traditions*; *volume I*: *Background and Introduction; second edition, revised and enlarged*. Delhi: Motilal Banarsidass.

2008   *Pāṇini and Pāṇinīyas on śeṣa relations*. First Kunjunni Raja Memorial Lecture, Aluva — Kerala, Kunjunni Raja Academy of Indological Research. [Revised version in *Indological Research*: *Different Standpoints*, edited by P. C. Muraleemadhavan, revised edition, New Delhi: New Bharatiya Book Corporation, 2013, pp. 101-150.]

2009   On the structure of Pāṇini's system, in *Sanskrit Computational Linguistics*, *First and Second International Symposia, Roquefort, France, October 2007, Providence, RI, USA, May 2008, Revised Selected and Invited papers*, edited by Gérard Huet, Amba Kulkarni and Peter Scharf, Berlin, Heidelberg: Springer, pp. 1-32.

Deshpande, Madhav M.

1992   *The Meaning of Nouns, Semantic Theory in Classical and Medieval India, Nāmārthanirṇaya of Kauṇḍabhaṭṭa Translated and Annotated*. (Studies of Classical India 13). Dordrecht: Kluwer.

Dīpikā   Bhartṛhari's *Mahābhāṣyadīpikā*. See Bronkhorst, Johannes.

Ghosh, Manomohan

1938   *Pāṇinīya Śikṣā or the Śikṣā Vedāṅga Ascribed to Pāṇini* (*being the most ancient work on Indo-Aryan phonetics*), *critically edited in all its five recensions with an introduction, translation and notes together with its two commentaries*. Calcutta: University of Calcutta. Reprinted 1986, Delhi: Asian Humanities Press.

Houben, Jan E. M.

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

2003 Three myths in modern Pāṇinian studies. *Asiatische Studien/Études Asiatiques* 57: 121-174.

2009a Bhartṛhari as a 'cognitive linguist', in *Bhartṛhari*: *Language, Thought and Reality* (*Proceedings of the International Seminar, Delhi, December 12-14, 2003*), edited by Mithilesh Chaturvedi, Delhi: Motilal Banarsidass, pp. 523-542.

2009b Pāṇini's grammar and its computerization: a construction grammar, in Kulkarni and Huet 2009: 6-25.

2012 Studies in India's Vedic grammarians, 1: Nārāyaṇa Bhaṭṭa's *Prakriyā-sarvasva* and Pāṇini's *Śe*, in *Studies in Sanskrit Grammars*, *Proceedings of Vyākaraṇa Section of the 14th World Sanskrit Conference*, edited by George Cardona, Ashok Aklujkar and Hideyo Ogawa, Delhi: D.K. Printworld, pp. 163-194.

Kulkarni, Amba and Gérard Huet

2009 *Sanskrit Computational Linguistics*, *Third International Symposium, Hyderabad, India, January 15-17, 2009*, *Proceedings*. Heidelberg, New York: Springer.

Mangal Deva Shastri

1931 *The Ṛgveda-Prātiśākhya with the Commentary of Uvaṭa edited from original manuscripts*, *with introduction, critical and additional notes, English translation of the text, and several appendices*, *Volume* II: *Text in Sūtra-form*. Allahabad: The India Press Limited.

Narasimhacharya, M. S.

1978   *Commentaires sur le Mahābhāṣya de Patañjali et le Pradīpa de Kaiyaṭa, Mahābhāṣya Pradīpa Vyākhyānāni, V: Adhyāya 2 Pāda 1-4.* Publications de l'Institut Français d'Indologie 51, 5. Pondichéry: Institut Français d'Indologie.

Pontillo, Tiziana

in press "Where the sense is intended although the corresponding speech unit is not employed": the ekaśeṣa case, in *Vyākaraṇa Across the Ages*, *Proceedings of the vyākaraṇa section of the 15th World Sanskrit Conference*, edited by George Cardona, Delhi: D.K. Printworld.

Pr.   *Pradīpa*. See Vedavrata.

PŚ   *Pāṇinīyaśikṣā*. See Ghosh, Manomohan.

PWT   See Cardona, George 1997.

Raghunātha Śarmā

1979   *Vākyapadīyam* [*Part III*, *Vol. II*] [*Bhūyodravya-Guṇa-Dik-Sādhana-Kriyā-Kāla-Puruṣa-Sankhyā-Upagraha and Liṅgasamuddeśa*] *with the Commentary 'Prakāśa' by Helārāja and 'Ambākartrī' by Pt. Raghunātha Śarmā.* Sarasvatī Bhavana Granthamālā 91. Varanasi: Sampurnanand Sanskrit Vishvavidyalaya.

RaPr.   *Ratnaprakāśa* of Śrīśivarāmendrasarasvatī. See Narasimhacharya, M. S.

Rau, Wilhelm

1977   *Bhartṛharis Vākyapadīya, Die Mūlakārikās nach den Handschriften herausgegeben und mit einem Pāda-Index versehen.* Abhandlungen für die Kunde des Morgenlandes Band XLII, 4. Wiesbaden: Steiner.

ṚV   *Ṛgveda*. See Sonatakke, N. S. and C. G. Kashikar.

ṚPr.   *Ṛgvedaprātiśākhya*. See Mangal Deva Shastri.

Scharf, Peter M.

2009   Levels in Pāṇini's Aṣṭādhyāyī, in Kulkarni and Huet: 66-77.

2011   On the semantic foundation of Pāṇinian derivational procedure: the derivation of *kumbhakāra*. *Journal of the American Oriental Society* 131: 39-72.

Sonatakke, N. S. and C. G. Kashikar.

1933-51 *Ṛgveda-Saṁhitā with the Commentary of Sāyaṇācārya*. Five volumes. Poona: Vaidic Samshodhan Mandal.

Subramania Iyer, K. A.

1963   *Vākyapadīya of Bhartṛhari with the Commentary of Helārāja, Kāṇḍa III, Part 1 Critically Edited ....* Deccan College Monograph Series 21. Poona: Deccan College.

1966   *Vākyapadīya of Bhartṛhari with the Vṛtti and the Paddhati of Vṛṣabhadeva, Kāṇḍa I, Critically Edited ....* Deccan College Monograph Series 32. Poona: Deccan College.

1983   *Vākyapadīya of Bhartṛhari* (*An ancient Treatise on the Philosophy of Sanskrit Grammar*) *containing the Ṭīkā of Puṇyarāja and the Ancient Vṛtti, Edited ... with a Foreword by Ashok Aklujkar*, *Kāṇḍa II*. Delhi; Motilal Banarsidass.

Ud.   *Uddyota*. See Vedavrata

Vedavrata

1962-63 श्रीभगवत्पतञ्जलिविरचितं व्याकरण-महाभाष्यम् [श्रीकैय्यटकृतप्रदीपेन नागोजीभट्टकृतेन भाष्यप्रदीपोद्द्योतेन च विभूषितम्]. Five volumes. Gurukul Jhajjar (Rohtak): Harayāṇā-Sāhitya-Saṁsthānam.

VP   *Vākyapadīya*. See Rau, Wilhelm.

VPH   Helārāja's *Prakīrṇaprakāśa* on the *Vākyapadīya*. See Raghunātha Śarmā 1979, Subramania Iyer, K. A. 1963.

VPP   Śrīvṛṣabha's paddhati, the *Sphuṭākṣara,* on the *Vākyapadīya*. See Subramania Iyer, K. A. 1966.

VPPu.   Puṇyarāja's ṭīkā on the *Vākyapadīya*. See Subramania Iyer, K. A. 1983.

VPVṛ.   Vṛtii on the *Vākyapadīya*. See Subramania Iyer, K. A. 1966, 1983.