

# GRAMMATICAL METHOD IN PĀNINI:

His Treatment of Sanskrit Present Stems

BY  
BETTY SHEFTS

AMERICAN ORIENTAL SOCIETY

NEW HAVEN, CONNECTICUT

1961



AMERICAN ORIENTAL SERIES  
ESSAY 1

# GRAMMATICAL METHOD IN PĀṆINI

# AMERICAN ORIENTAL SERIES

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AMERICAN ORIENTAL SOCIETY

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# ACKNOWLEDGEMENTS

This is, in revised form, the Ph.D. dissertation which I presented in 1955 to the Department of Linguistics at Yale University. I am grateful to the Chairmen of the Department, first Professor Franklin Edgerton, and then Professor Bernard Bloch, who, through their courses and personal encouragement, helped me complete my study; and to the Graduate School for the grant of fellowships throughout my graduate study, including the year in which I wrote the dissertation.

To Professor Paul Thieme, who directed my dissertation, I owe a great debt of gratitude for the care and kindness with which he guided me in the study of the Indian grammarians, both in writing the dissertation and in revising it for publication.

I also wish to express my appreciation to my other teachers of Sanskrit: Professor Murray B. Emeneau, who first awakened my interest in Sanskrit; Professor Paul Tedesco; Professor Louis Renou, who introduced me to the Indian grammarians in the course which he gave on Pāṇini at Yale in 1952; and Pandit V. B. Bhāgvat of the Ṭīlak Mahārāṣṭra Vidyāpīṭh, who continued my instruction in the *Mahābhāṣya* in 1957.

I am grateful to Hugh Stimson for his generosity in reading the dissertation and giving some very helpful criticism and suggestions for revision.

BETTY SHEFTS



# INTRODUCTION

The interest Pāṇini's grammar holds for the student of the history of ancient Indian literature and the Sanskrit language, is matched by what it should evoke in the student of general linguistics and the historian of scientific thinking. In the first instance, this interest lies, of course, in its contents: Pāṇini's sober, thoroughly mechanistic description of the regular word formation of Sanskrit by means of a functional analysis of the word forms. Nowadays, it is sometimes not clearly realized that the analysis of speech into its units: sentences, words, sounds (wrongly called "letters"), as it was introduced by the Greeks (Dionysios Thrax, 2nd century B.C.) and practised in Europe throughout till the beginning of last century, was deficient in one essential point: it ignored the abstract functional elements (morphemes) of the words, taking the words, naively, to be natural, indissoluble wholes; and that it was only the acquaintance with Pāṇini's method that furnished the means to perfect it: now it became possible to dissect the nominal and verbal forms of other Indo-European languages also into their elements: "root," "suffix[es]," "ending," each of which has its peculiar shape and function and which unite into word forms in ways that can be described as strictly definable, regularly reoccurring processes.

Pāṇini's analytical method became first known in Europe—not through a study of his work itself, which is much too difficult to understand for a non-specialist, but—from later treatises that simplified its presentation and limited themselves to its most elementary application, but were quite sufficient to give a clear idea of its essential features. They did not, however, reflect accurately the peculiar form of Pāṇini's statements. It is but natural that to-day, when the problem of "scientific description," which is mainly a problem of accurate presentation, is attracting so much attention, a special interest should be taken in Pāṇini's way of presenting his material. Whoever reads a modern journal dedicated to "descriptive linguistics" will be struck by the evident endeavor to express linguistic facts by strictly defined terms and abstract definitions. If he chances to look, he will find this same endeavor in Pāṇini, whose grammar is characterized by later Indian scholars as "a definition that comprises the generalia and the particularia" (sāmānyaviśeṣavalakṣaṇam, Patañjali I p. 6 1.3; sūtram lakṣaṇam I p. 12 1. 17). More than before, when Pāṇini's algebraic formulae gave cause, at best, for mild curiosity and, at worst, for lamenting his "ill-advised" and "spleenetic hankering after brevity" ("grammarians rejoice over the saving of the length of half a short vowel as over the birth of a son," Paribhāṣā 122), which would make his work so difficult of access for those who are looking in it for practical information, we are prepared to-day to appreciate theoretical implications and the scientific interest of his terminological definitions, his consistent teaching procedures and his strictly logical formulations of the grammatical processes.

Dr. Shefts attempts to go somewhat deeper into Pāṇini's presentational procedures, choosing as an example his description of the different present stem

formations. She adds to it a translation of the discussion of certain of its logical and technical aspects in the Vārttika of Kātyāyana and the Bhāṣya of Patañjali. Though she made every effort to keep her translation readable and to furnish sufficient explanations, it will still prove, I am afraid, not too light a task to follow her. Yet, studying the treatment she gives to Pāṇini and the discussions of the Mahābhāṣya—which are not an elucidating commentary, but a scholastic investigation into the logical and factual correctness of Pāṇini's formulations—may actually be a comparatively easy way of becoming acquainted at first hand with the method of Pāṇini and its classic development with his successors. The texts handled in this dissertation belong to the hardest of Sanskrit literature. I hope, competent critics will find that here is a progress as to literal accuracy and perhaps also as to insight into a way of thinking that by virtue of its mechanistic quality is almost unique in antiquity and has some striking resemblance to certain quite modern approaches to linguistics.

I will and can not, of course, understate the differences of Pāṇinian and modern linguistics. In fact, they are just as striking as the analogies. Rather, I want to emphasize the necessity of a comparison that will prove, I believe, a fascinating intellectual adventure, especially for those who are still able to rid themselves of Western smugness. But before such a comparison can be done in a satisfactory manner, there should be more reliable help than there is now for becoming familiar with Pāṇini, Kātyāyana and Patañjali. Sometimes, I think, we Western scholars are apt to be more interested in our own theories concerning the Sanskrit grammarians than in their actual teachings. One of Dr. Shefts' merits, it seems to me, is that she has followed in her investigation a principle voiced by Patañjali (I p. 11 1.1): śabdapramāṇakā vayam. yac chabda āha tad asmākam pramāṇam "We follow the authority of the word. What the word says (*i.e.*, what the author *says*, not what he may, according to our assumption, *think*), that is our means of cognition."

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## CHAPTER I

# PĀṆINI 3.1.68–85

### A. INTRODUCTION

Pāṇini's grammar . . . is not a description of Sanskrit speech, but an argument that is meant to show that most of the speech units (*śabda*) of the sacred language are 'built up' (*saṃskṛta*) from simpler elements in a peculiar way that can be stated by definitions. Anything that may be looked upon as 'complex' is of interest to him, anything 'simple' . . . is not (Thieme, "Pāṇini and the pronunciation of Sanskrit", 268).

*Sūtras* 3.1.68–85 illustrate this definition of Pāṇini's grammar: the complex speech units that Pāṇini defines in these *sūtras* are such as are exemplified by *bhāvati*, that is, the units derived from stems of the 'present' system; the elements that form these units are (1) roots, grouped on the basis of the nonfinal, stem-forming suffixes which may follow them, (2) these suffixes themselves, and (3) the final suffixes which follow the stem.

Two characteristics of the method of presentation which contribute to the famed brevity of Pāṇini's grammar are *anuvṛtti*—the 'following' of a term used in the *sūtra* in other, later *sūtras*, where it then has to be supplied (I have enclosed such terms in square brackets)—and the *its*—sounds symbolic of nonphonetic features, which are attached to the forms possessing such features. (The resulting succinctness is not always entirely unambiguous: for ambiguity caused by *anuvṛtti*, cf. Patañjali's discussion of whether *upadhāyās* from 6.4.89 should be supplied in 6.4.111 *śnasor allopaḥ*;<sup>1</sup> it is a major concern of Pāṇini's commentators to ascertain whether or not a sound can be said to have the function given in the grammar for that sound as *it*.<sup>2</sup>) In Chapter II, I have listed, and discussed, under each *it* which occurs in 3.1.68–85, the *sūtras* in which Pāṇini defines its functions: e.g., for *śap* in 3.1.68, cf. *śit* and *pit*; for *śyan* in 3.1.69, cf. *śit* and *nit*. (For clarity, I have left *its* in roman type.)

1. In three instances there are alternant forms of the present-stem forming morphemes: i.e., *-no- ~ -nu-* to 3.1.73, e.g., *śṛ-ṇo-ti*, *śṛ-ṇu-te*; *-o- ~ -u-* to 3.1.79, e.g., *tan-o-ti*, *tan-u-te*; *-nā- ~ -nī-* to 3.1.81, e.g., *krī-nā-ti*, *krī-nī-te*. In the case of *-no- ~ -nu-* and *-o- ~ -u-*, the latter alternant is stated because the other alternant results automatically from the general rules on vowel substitution (cf. *guṇa*, Chapter II). In the case of *-nā- ~ -nī-*, Pāṇini must give *-nā-* because, if he gave *-nī-*, a *guṇa* substitute would—wrongly—take the place of *-ī-* before the *sārvadhātuka* suffixes *tip*, etc.

2. The order in which *śap*, etc. are taught in these *sūtras* corresponds, basically, to the arrangement of the root classes in the *Dhātupāṭha*, an order which has been

<sup>1</sup> Kielhorn, *The Vyākaraṇa-Mahābhāṣya of Patañjali* II.61.10–1.

<sup>2</sup> Cf. Patañjali's discussion of whether the *ś-* of *śnam* (taught in 3.1.78) can be said to have the function described for *ś* as *it* in Pāṇini's grammar.

unduly maligned, above all by Whitney, who said:

Chance itself, if they had been thrown together in a hat, could not more successfully have sundered what belongs together, and juxtaposed the discordant;<sup>3</sup> . . . the 'classes' or 'conjugation-classes' as laid down by the native Hindu grammarians . . . are arranged by the latter in a certain wholly artificial and unsystematic order (the ground of which has never been discovered).<sup>4</sup>

In defense of the Hindu grammarians it should be noted that as long as the ground for the order had never been discovered, the charge of 'wholly artificial and unsystematic' levelled at this order was premature. Liebig, struck by 'die merkwürdige Reihenfolge dieser Klassen im einzelnen, vor allen der fünften und achten, ja zum Teil ihr Charakter selbst, der zu Panini's sonstigem Niveau nicht recht stimmen will,'<sup>5</sup> suspected that the arrangement of the ten classes was pre-Pāṇinian in origin.

3. I believe it can be shown that there are reasons for this apparently disordered order, and that these reasons are:

(1) The ordering of śap, etc., by length—in units termed *mātrās*: a consonant =  $\frac{1}{2}$  *mātrā*, a short vowel = 1 *mātrā*, a long vowel = 2 *mātrās*—with short preceding long. (This has a parallel in the early classification of metres by the number of syllables they contain, i.e., the order *gāyatrī*—24 syllables, *uṣṇih*—28 syllables, *anuṣṭubh*—32 syllables, *brhati*—36 syllables, *pañkti*—40 syllables, *triṣṭubh*—44 syllables, and *jagati*—48 syllables.<sup>6</sup>) The criterion of length, however, was not applied to the present-stem forming morphemes as taught in the grammar, but rather to a list of verbs containing forms which have the high-grade alternants in the fifth and eighth classes (and hence  $2\frac{1}{2}$  and 2 *mātrās*, respectively, instead of  $1\frac{1}{2}$  and 1). This is not a difficult assumption to make: such a form, the third person active singular, is one of the most commonly used in citing verbs. In the *Aitareyabrāhmaṇa*, the general citation form was that of the participle; in the *Nighaṇṭus*, however, the third singular present had largely taken its place<sup>7</sup> (and is the common form in which verbs are cited)—Pāṇini, himself, although he more often cites by root, sometimes cites in this form, when referring to a root, e.g., 2.4.52 *aster bhūh* '(The root) *bhū* (appears) in the place of *asti* [the root *as*]' and 2.4.75 *juhotyādibhyaḥ śluḥ* [śapah: 2.4.72] 'After *juhoti* [the root *hu*], etc., *ślu* [appears in the place of śap]'.<sup>8</sup>

(2) The grouping together of what shares a feature in common. In addition to teaching the suffixation of one *vikaraṇa* (see Chapter II, s.v.) to one class of roots (e.g., śyan to the class 'div, etc.' in 3.1.69), Pāṇini teaches that after certain roots, two occur in free variation with each other, i.e., 3.1.70–2 śap and śyan, 3.1.75–6 śap and śnu, 3.1.82 śnā and śnu. Thus, there are rival forms which exhibit śyan or śnu (the *vikaraṇas* which follow śap in the *sūtras*) beside śap; there

<sup>3</sup> Whitney, *The study of Hindu grammar* 296.

<sup>4</sup> Whitney, *Sanskrit grammar* 602.

<sup>5</sup> Liebig, *Einführung* III.49.

<sup>6</sup> Cf. Liebig, *Einführung* II.4.

<sup>7</sup> Liebig, *Einführung* II.15.

are no rival forms—taught by Pāṇini—which exhibit any other *vikaraṇas* beside śap. Hence śyan and śnu are taught before any of the other *vikaraṇas*.

The order of the present-stem forming morphemes, as they are taught in 3.1.68-85, is as follows:

<i>vikaraṇa</i>	<i>mātrās</i>	class	
śap	1	1	<i>bhāv-a-ti</i>
<i>vikaraṇas</i> which alternate with śap	1½	4	<i>dh̥v-ya-ti; bhrām-ya-ti, bhrām-a-ti</i>
	2½	5	<i>su-nó-ti; akṣ-ṇó-ti, ákṣ-a-ti</i>
<i>vikaraṇas</i> which never alternate with śap	1	6	<i>tud-á-ti</i>
	1½	7	<i>ru-ná-ddhi</i>
	2	8	<i>tan-ó-ti</i>
	2½	9	<i>stabh-ná-ti, stabh-nó-ti</i>

4. The invisibility of śap after roots of the second and third classes is taught in 2.4.72 and 2.4.75:

2.4.72 *adiprabhṛtibhyaḥ śapaḥ* [luk: 2.4.58]

‘[luk—invisibility; cf. *lopa*, Chapter II] (appears) in place of śap after (the roots of the so-called second class) *ad*, etc.’

2.4.75 *juhotyādibhyaḥ śluḥ* [śapaḥ: 2.4.72]

‘*ślu*—invisibility—(appears) [in place of śap] after (the roots of the third class) *juhoti* [*hu*], etc.’

It is evident, then, that the second and third classes must follow immediately after the first class (which has śap) in the *Dhātupāṭha* because they too have, or have had, śap. Exigencies of the presentation (more specifically, of *anuvṛtti*) place the second before the third class: 2.4.72 is linked to the *sūtras* which precede it by the *anuvṛtti* of *luk*; 2.4.75 is linked to 2.4.72 by the *anuvṛtti* of *śapaḥ*. If 2.4.75 were to precede 2.4.72, it would have to read *juhotyādibhyaḥ śapaḥ śluḥ*, and 2.4.75 would have to read *adiprabhṛtibhyaḥ luk* (thus unnecessarily stating *luk* twice, here and in 2.4.58).

5. The tenth class also has the *vikaraṇa* śap, here added to a ‘root’ composed of original root plus *ṇic*, e.g., *cur-ṇic-śap-tip* > \**cor-e-a-ti* > *coráyati*. This class of roots is placed last in the *Dhātupāṭha* root list since the element *-aya-* in the form *coráyati* is as long as the longest *vikaraṇa*, *-na-* (in, e.g., the form *kri-na-ti*); in addition, the class is unique in its stem-formation.

6. The choice of the first or *-a-* class as basic in preference to the sixth or *-á-* class, whose *vikaraṇa* is equal in number of *mātrās* to that of the first, is a natural one: the *guṇa* substitute for the root vowel which appears in the first class, but not the sixth, conforms to the general rule prescribing a *guṇa* substitute before *sārvadhātuka* (and *ārdhadhātuka*) suffixes (cf. *guṇa*, Chapter II); the absence of *guṇa* before such suffixes is stated as an exception to this rule. The statistics of membership in the two classes document the accuracy of this description: in the *Dhātupāṭha*, 1059 roots are listed for the first class, 143 for the sixth.

## B. TEXT AND TRANSLATION

- 3.1.68 *kartari śap* [sārvadhātuke: 3.1.67]  
 '[Before<sup>8</sup> a sārvadhātuka (suffix)] when there is a *kartṛ* [to be designated],  
 śap (appears),' e.g., *bhū-śap-tip* > *bho-a-ti* > *bhāvati*.
- 3.1.69 *divādibhyaḥ śyan* [sārvadhātuke: 3.1.67, *kartari*: 3.1.68]  
 '[Before a sārvadhātuka suffix, when there is a *kartṛ* to be designated] after  
 (the roots) beginning with *div*, *śyan* (appears),' e.g., *div-śyan[n̄]-tip* >  
*dīvyati*.<sup>9</sup>
- 3.1.70 *vā bhrāśbhlāśbhramuklamutrasitruṭiḥ* [sārvadhātuke: 3.1.67, *kartari śap*:  
 3.1.68, *śyan*: 3.1.69]  
 '[Before a sārvadhātuka suffix, when there is a *kartṛ* to be designated, śap  
 appears]—or [śyan] after (the roots) *bhrāś*, *bhlāś*, *bhramu*, *klamu*, *trasi*,  
*truṭi*, and *laś*, e.g., *bhramu-śap-tip* > *bhrāmati*; *bhramu-śyan[n̄]-tip* >  
*bhrāmyati*.<sup>10</sup>
- 3.1.71 *yaso 'nupasargāt* [sārvadhātuke: 3.1.67, *kartari śap*: 3.1.68, *śyan*: 3.1.69,  
*vā*: 3.1.70]  
 '[Before a sārvadhātuka suffix, when there is a *kartṛ* to be designated, śap  
 appears—or śyan] after *yas* without a preverb,' e.g., *yas-śap-tip* > *yāsati*;  
*yas-śyan[n̄]-tip* > *yāsyati*; but only *pra-yas-śyan[n̄]-tip* > *prayāsyati*.
- 3.1.72 *saṃyasaś ca* [sārvadhātuke: 3.1.67, *kartari śap*: 3.1.68, *śyan*: 3.1.69, *vā*:  
 3.1.70]  
 'And [before a sārvadhātuka suffix, when there is a *kartṛ* to be designated,  
 śap appears—or śyan] after *saṃyas*, e.g., *saṃ-yas-śyan[n̄]-tip* > *saṃyās-*  
*yati*; *saṃ-yas-śap-tip* > *saṃyāsati*.
- 3.1.73 *svādibhyaḥ śnuḥ* [sārvadhātuke: 3.1.67, *kartari*: 3.1.68]  
 '[Before a sārvadhātuka suffix, when there is a *kartṛ* to be designated] after  
 (the roots) beginning with *su*, *śnu* (appears),' e.g., *su-śnu[n̄]-tip* > *sunōti*.
- 3.1.74 *śruvaḥ śr ca* [sārvadhātuke: 3.1.67, *kartari*: 3.1.68, *svādibhyaḥ śnuḥ*: 3.1.73]  
 '[Before a sārvadhātuka suffix, when there is a *kartṛ* to be designated, after  
 the roots beginning with *su*, *śnu* appears] and *śr* replaces *śru*, e.g., (*śru* >)  
*śr-śnu[n̄]-tip* > *śrnoti*.
- 3.1.75 *akṣo 'nyatarasyām* [sārvadhātuke: 3.1.68, *kartari śap*: 3.1.68]  
 '[Before a sārvadhātuka suffix, when there is a *kartṛ* to be designated] after

<sup>8</sup> The translation of the genitive, locative, and ablative case endings in the *sūtras* by 'in place of,' 'before,' and 'after' is in accordance with *sūtras* 1.1.49, 1.1.66, and 1.1.67, which teach these special functions: 1.1.49 *ṣaṣṭhī sthāneyogā* 'The sixth [case ending, i.e., the genitive] denotes the relation "in the place of" '; 1.1.66 *tasmīn iti nirdiṣṭe pūrvasya* 'When "that" [i.e., a form, for example *tad* 'that,' with locative ending] is quoted, [a substitute which is taught appears] in the place of the preceding [element]'; 1.1.67 *tasmād ity uttarasya* 'When "that" [with ablative ending] is quoted, [a substitute which is taught appears] in the place of the following [element].'

<sup>9</sup> -ī- replaces the -i- of *div* by 8.2.76 *rvor upadhāyā dīrgha ikaḥ* [ante: 8.2.37, *hali ca*: 8.2.77, *dhātor*: 8.2.74] 'Before *r* and *v*, finally and before a consonant, a long vowel replaces an *ī*, *ū*, *ṛ*, or *ḷ* which is the next to last sound of a root.'

<sup>10</sup> The long *ā* of *bhrāmyati* is by 7.3.74 *śamām aṣṭānām dīrghaḥ śyani* 'Before *śyan* there is substitution of a long vowel for the vowel of the roots *śam* (Dh. 4.95) and the seven roots which follow it [in the *Dhātupāṭha*].'



(the root) *akṣ*, either of the two [i.e., either *śap*, the basic alternant, or *śnu*] (may appear),’ e.g., *akṣ-śap-tip* > *akṣati*; *akṣ-śnu[n]-tip* > *akṣṇoti*.

- 3.1.76 *tanukaraṇe takṣaḥ* [sārvadhātuke: 3.1.67, kartari: 3.1.68, anyatarasyām: 3.1.75]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated, either of the two, i.e., either *śap*, the basic alternant, or *śnu*, may appear] after (the root) *takṣ* ‘making thin,’ e.g., *takṣ-śap-tip* > *takṣati*; *takṣ-śnu[n]-tip* > *takṣṇoti*.

- 3.1.77 *tudādibhyaḥ śaḥ* [sārvadhātuke: 3.1.67, kartari: 3.1.68]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated] after (the roots) beginning with *tud*, *śa* (appears),’ e.g., *tud-śa-tip* > *tuddti*.

- 3.1.78 *rudhādibhyaḥ śnam* [sārvadhātuke: 3.1.67, kartari: 3.1.68]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated] after (the roots) beginning with *rudh*, *śnam* (appears),’ e.g., *rudh-śnam[n]-tip* > *ru-na-dh-ti* > *runāddhi*.

- 3.1.79 *tanādikṛñbhya uḥ* [sārvadhātuke: 3.1.67, kartari: 3.1.68]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated] after (the roots) beginning with *tan*, and after (the root) *kṛñ*, *u* (appears),’ e.g., *tan-u-tip* > *tanōti*; *kṛñ-u-tip* > *karōti*.<sup>11</sup>

- 3.1.80 *dhinvikṛṇvyor a ca* [sārvadhātuke: 3.1.67, kartari: 3.1.68, *tanādikṛñbhya uḥ*: 3.1.79]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated, after the roots beginning with *tan*, and after the root *kṛñ*, *u* appears] and *a* replaces [the final sound,<sup>12</sup> i.e., *v* of] (the roots) *dhinvi* and *kṛñvi* [of the *tan* class],’ e.g., [*dhinv* >] *dhina-u-tip* > *dhinōti*.<sup>13</sup>

- 3.1.81 *kryādibhyaḥ śna* [sārvadhātuke: 3.1.67, kartari: 3.1.68]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated] after (the roots) beginning with *kṛī*, *śnā* (appears),’ e.g., *kṛī-śnā[n]-tip* > *kṛīṇāti*.

- 3.1.82 *stambhustumbhuskambhuskumbhaskuñbhyaḥ śnuś ca* [sārvadhātuke: 3.1.67, kartari: 3.1.68, *kryādibhyaḥ śnā*: 3.1.81]

‘[Before a *sārvadhātuka* suffix, when there is a *karṭr* to be designated, after the roots beginning with *kṛī*, *śnā* appears:] after (the roots) *stambhu*, *stumbhu*, *skambhu*, *skumbhu*, and *skuñ* [of the *kṛī* class], *śnu* (appears), too,’ e.g., *skuñ-śnā[n]-tip* > *skunāti*, *skuñ-śnu[n]-tip* > *skunōti*.

- 3.1.83 *halaḥ śnaḥ śnac jhau*

‘After a consonant, before *hi*, *śnac* replaces *śnā*,’ e.g., *muṣ-śnā-hi* > *muṣ-śnac-hi* > *muṣana* [with loss of the *hi* by 6.4.105 *ato heḥ* (luk: 6.4.104)] ‘luk—invisibility—replaces *hi* after *ā*’].

<sup>11</sup> *karoti* shows *guṇa* of *-r-* before the suffix *-u-*, and of *-u-* before the suffix *tip* (*a* is the *guṇa* substitute of *r*; after this *a*, *r* is added by 1.1.51 *ur aṇ raparaḥ* ‘An *ā*, *ī*, or *ū* which is in place of *r*, is followed by *r*’).

<sup>12</sup> By *paribhāṣā* 1.1.52 *alo ‘ntyasya*, when a substitute is taught, it is understood to be ‘in place of the last sound.’

<sup>13</sup> The *-a* of *dhina* is lost by 6.4.48 *ato lopah* [ārdhadhātuke: 6.4.46] ‘Before an ārdhadhātuka suffix, *lopa*—invisibility—replaces *ā*.’

3.1.84 *chandasi śāyaj api* [*halah śnah śānaj jhau*: 3.1.83]

‘[After a consonant, before *hi*, *śānac* replaces *śnā*;] in the sacred literature, *śāyac* also [replaces *śnā*],’ e.g., *grbh-śnā-hi* > *grbh-śāyac-hi* > *grbhāya* [with loss of *hi* after *ā* as in 3.1.83].

3.1.85 *vyatyayo bahulam* [*chandasi*: 3.1.84]

‘[In the sacred literature] alternation frequently (appears),’ e.g., (cf. the *Kāśikā* on 3.1.85) *bhédati* < *bhid-śap-tip* (RV 5.86.1, etc., *abhédam* 10.28.9); *bhinátti* < *bhid-śnam*[ñ]-*tip*.

## CHAPTER II

# DEFINITIONS

**ārdhadhātuka.** Cf. **sārvadhātuka.**

*i* as *it*. Cf. *idit*.

-*i*. Cf. *idit*.

*it*

1. Pāṇini defines *it* in *sūtras* 1.3.2–8:

1.3.2 *upadeśe* 'j' *anunāsika it* '*it* is a nasalized vowel [which appears] in the grammar (in grammatical instruction only),

1.3.3 *hal antyam* 'a final consonant,

1.3.4 *na vibhaktau tusmāh* [*antyam*: 1.3.3] '[but] not a (final) dental, *s*, or *m* in an ending,

1.3.5 *ādir nītuḍuḥ* 'an initial *ñi*, *tu*, or *du*,

1.3.6 *ṣaḥ pratyayasya* [*ādir*: 1.3.6] 'an *ṣ* [which is initial] in a suffix!,

1.3.7 *cuṭu* [*ādir*: 1.3.5, *pratyayasya*: 1.3.7] 'a palatal or cerebral [which is initial in a suffix],

1.3.8 *lašakv ataddhite* '*l*, *ś*, or a velar [which is initial in a suffix]—but not a *taddhita* (secondary suffix).'

2. By 1.3.9 *tasya lopah* we learn that '*lopa* [invisibility] (appears) in the place of that,' that is, replaces the *it* at the moment of substitution, when the elements taught in the grammar are combined in speech.

3. The functions of the *its* which are attached to the roots and *vikaraṇas* in 3.1.68–84—e.g., to denote pitch—I shall describe individually in the following definitions. The *its* have other uses, however, one of which is illustrated by the -*c* of *ac* 'vowel' in 1.3.2 (in the sandhi variant 'j') and the -*l* of *hal* 'consonant' in 1.3.3 above—i.e., in the formation of abbreviations. These *its* occur at the end of each *sūtra* in the enumeration of sounds known as the *śivasūtras* (the *sūtras* revealed by the god Śiva), which precedes the *sūtras* proper of the grammar. In this enumeration, *its* are stopping points. Any sound in the list may be taken as a starting point. This sound (or rather, syllable) joined to any *it* in the list refers to the sound itself and to the following sounds up to that *it*. The 14 *śivasūtras* are:

(1) *a i uṇ* (2) *ṛ ḷ k* (3) *e oṇ* (4) *ai auc* (5) *ha ya va raṭ*

(6) *laṇ* (7) *ña ma ṇa ṇa nam* (8) *jha bhañ* (9) *gha ḍha dhaṣ*

(10) *ja ba ga da daś* (11) *kha pha cha ṭha tha ca ṭa tav*

(12) *ka pay* (13) *śa ṣa sar* (14) *hal*

Thus, *ac* (*śivasūtras* 1 through 4) means 'vowel', *hal* (*śivasūtras* 5 through 14) 'consonant'.

4. This method of referring to any series by an initial sound plus final *it*, a procedure described by *paribhāṣā* 1.1.71 *ādir antyena sahetā*, yields, in other places, such terms as *sup* and *tīṇ*, designating the case endings of the noun and

the personal endings of the verb, respectively. Thus, *sup* refers to the endings listed in 4.1.2 (brackets are mine): *sv [au jas am auṭ ṣaṣ tã bhyām bhis ñe bhyām bhyas ñasi bhyām bhyas ñas os ām ñy os su]p*; *tiñ* refers to the endings listed in 3.4.78: *ti[p tas jhi sip thas tha miḥ vas mas tātām jha thās āthām dhvam iḍ vahi mahi]ñ*.

**idit.** 3.1.70 *trasi*, *truṭi*; 3.1.80 *dhinvi*, *kṛṇvi*.

1. 7.1.58 *idito num dhātōḥ* 'After a root which has *i* as *it* (there appears) *num* [i.e., -*n*(-) after the last vowel: 1.1.47 *mid aco 'ntyāt paraḥ* 'That which has *m* as *it* follows the last vowel']. The -*d*- of *idit* < *t* by sandhi. The function of this *t* is taught by *paribhāṣā* 1.1.70 *taparas talkālasya* 'That which is followed by *t* (appears) in place of its [own] time [alone]', e.g., *i* in the *sūtras* = *ī*; *it* = *ī*; *īt* = *ī*.

2. No forms with nasal infix from the roots *tras* or *truṭ* are attested in Sanskrit (nor does the *Dhātupāṭha* cite these roots with -*i*). From this we infer that the -*i* with which they are cited in 3.1.70 is not an *it*, that it was not nasalized. Nasalization of vowels—one way of marking *its*—is a feature of Pāṇini's grammar that has unfortunately been lost in transmission and can only be reconstructed from the commentators' and our own—sometimes imperfect—knowledge of the language Pāṇini was describing.

Not discovering any other purpose for this -*i*, we must judge it *uccāraṇārthaḥ* 'for [ease of] pronunciation.' [Cf. Renou, *Term. gramm.* s.v. *uccāraṇārtha*, and *Durghaṭavṛtti* 1.80, for examples of this sort of interpretation.]

3. Patañjali discusses at length the question of the -*n*- of *dhinvi* and *kṛṇvi* (*Dh.P.* 1,624 *dhiṇi*; 1,629 *kṛṇi*). That is, why are the roots cited with -*n*- if the -*i* is given in order to show that the *n* will appear here?

**u** as *it*. Cf. **udit**.

**-u.** Cf. **udit**.

**udit.** 3.1.70 *bhramu*, *kramu*, *klamu*; 3.1.82 *stambhu*, *stumbhu*, *skambhu*, *skumbhu*.

7.2.56 *udito vā* [*kṛvi*: 7.2.55, *iṭ*: 7.2.35] 'After (root) which has *ū* as *it*, there may (or may not) be *iṭ* before *ktvā*' (e.g., *bhramitvā*, *bhrāmtvā*)

(The function of the *ṭ* of *iṭ* is taught in 1.1.46 *ādyantau ṭakītau* 'That which has *ṭ* or *k* as *it* [appears] at the beginning and the end [respectively],' i.e., *iṭ* is added to -*tvā*, which it precedes, not to the root, which it follows.)

**karṭr.** 3.1.68 *kartari* (*bhāva*- and *karman*: 3.1.66 *bhāvakarmanoh*)

1. Pāṇini defines *karṭr* 'doer' ['agent'] as 'he who has himself as authority (who acts independently)': 1.4.54 *svatantraḥ kartā*; *karman* 'what is done' ['object'] he defines as that which is 'most desired to be reached by the agent': 1.1.49 *kartur īpsitatamaṃ karma*.

2. These, then, are concepts defined in terms of meaning, not form. An often-cited example illustrates two ways in which they are expressed—by verbal suffixes, and by nominal case endings:<sup>14</sup>

<sup>14</sup> For a complete list of the *kāraṅkas*, the semantic factors which make up the action complex (there are four in addition to *karṭr* and *karman*) and the means by which they may be expressed, cf. Bruno Liebich's *Die Casuslehre der indischen Grammatiker*.

*pacati odanaṃ devadattaḥ* 'He—Devadatta—cooks the gruel.'

*pacyate odano devadattena* 'It—the gruel—is cooked by Devadatta.'

In both these examples, it is Devadatta who acts, with the cooking of the gruel as his object. Pāṇini, however, isolates and identifies the elements which express these meanings: in *pacati odanaṃ devadattaḥ*, the second *-a-* of *pacati* designates the actor ([3.1.67 *sārvadhātuke*] 3.1.68 *kartari śap* '[Before a *sārvadhātuka* suffix,] when there is an agent [to be designated], *śap* [appears]'), the *-m* of *odanaṃ* the object ([2.3.1 *anabhihite*] 2.3.2 *karmaṇi dvitīyā* 'The second [case ending, i.e. the accusative] [appears] when there is an object [which isn't already expressed]'); in *pacyate odano devadattena*, the *-ya-* of *pacyate* designates the object ([*bhāvakarmaṇoḥ*: 3.1.66] 3.1.67 *sārvadhātuke yak* 'Before a *sārvadhātuka* suffix, when there is a process or object [to be designated], *yak* [appears]'), the instrumental ending of *devadattena* the agent ([2.3.1 *anabhihite*] 2.3.18 *karṭṭkaraṇayos tṛtīyā* 'The third [case ending, i.e., the instrumental] [appears] when there is an agent or an instrument [which isn't already expressed]'). The nominatives *devadattaḥ* and *odano* identify—e.g., as to gender (cf. 2.3.46)—the entities which function as agent and object; they do not indicate these functions.

3. The concept *bhāva* 'process' (which Pāṇini does not define) is similarly expressed in various ways: by the verbal suffix *yak* (3.1.66–7; cf. above, §2), e.g. *āsyate* (< *as-yak-te*[n] *bhavatā* 'sitting is done by you,' but also by the noun-forming suffix *ghaṇ* (3.3.18 *bhāve* [ghaṇ: 3.3.16] 'When there is a process [to be designated], *ghaṇ* [appears]'), e.g., *pāka* (< *pac-ghaṇ*) 'the process of cooking' = 'the cooking.'

**karman.** Cf. *karṭṭ*.

**guṇa** 1. All the present-stem forming morphemes taught in 3.1.68–84 are either *sārvadhātuka* or *ārdhadhātuka*; *guṇa* is prescribed before *sārvadhātuka* and *ārdhadhātuka* suffixes by 7.3.84 *sārvadhātukārdhadhātukayoḥ* [*guṇaḥ*: 7.3.82] '*Guṇa* (appears) before a *sārvadhātuka* or *ārdhadhātuka* (suffix).'

2. *guṇa* is defined in 1.1.2 *ad eṇ guṇaḥ* '*guṇa* = *ā*, *e*, and *o*.'

3. 1.1.3–5 teach the interpretation of the term *guṇa* in rules such as 7.3.84, §1, above:

1.1.3 *īko guṇavṛddhī* '*guṇa* and *vṛddhī* replace *īk* [*ī*, *ā*, *ṛ*, *l*].'

1.1.4 *na dhātulopa ārdhadhātuke* '(but) not when there is *lopa*—invisibility—of (part of) the root before an *ārdhadhātuka* (suffix).'

1.1.5 *kṛitī ca* 'and (not) before that which has *k* or *ṇ* as *it*.'

4. The suffix *śap* is, for example, by virtue of its *ś-*, *sārvadhātuka*, and *guṇa* is therefore prescribed before it by 7.3.84 *sārvadhātukārdhadhātukayoḥ*. Now, *śap* is preceded by various roots, among them *bhū*. In its use of the genitive, 1.1.3 *īko guṇavṛddhī* shows that *guṇa*—*ā*, *e*, *o*—occurs in place of, not in addition to, these roots, or rather, in place of as much of them as is covered by the formula *īk* (cf. the *śivasūtras* s.v. *it*), e.g., instead of the *ū* of *bhū*. Another principle of interpretation—1.1.50 *sthāne 'naratamaḥ* 'That which is closest (most like) (appears) in place of [replaces]'—is required to show that it is *o*, and not *ā* or *e*, that takes the place of the *ū* of *bhū*, since, of *ā*, *e*, and *o*, it is *o* that is, phonetically, closest to *ū* (and a *vidhi*, or prescriptive rule, to account for *o* being

replaced by *av*: 6.1.78 *eco 'yavāyāvah* [*aci*: 6.1.77] 'Before a vowel, *ay*, *av*, *āy*, and *āv* replace *ec* [*e*, *o*, *ai*, *au*]'.<sup>15</sup>

**ñ** as *it*. Cf. *ñit*.

**ñit**. 3.1.69 *śyan*[ñ]; 3.1.73 *śnu*[ñ]; 3.1.77 *śa*[ñ]; 3.1.78 *śnam*[ñ]; 3.1.81 *śnā*[ñ].

1. The above-listed suffixes are *ñit* because, although *ñ* is not affixed to them, they are *sārvadhātuka* since they have *ś* as *it* (cf. *śit*), and all *sārvadhātuka* suffixes which do not have *p* as *it* are to be interpreted as having *ñ* as *it*: 1.2.4 *sārvadhātukam apit* [*ñit*: 1.2.1] 'A *sārvadhātuka* (suffix) which does not have *p* as *it* has *ñ* as *it*.'

2. *ñit* functions to prohibit *guṇa* and *vṛddhi* by 1.1.5 *kñiti ca* (cf. *guṇa*). The *guṇa* prohibited in the case of the suffixes *śyan*, *śnu*, etc., is that enjoined in 7.3.84 *sārvadhātukārdhādhatukayoḥ* (cf. *guṇa*). Hence *dīvyati*, *śṛṇoti*, *tudati*, *runaddhi*, and *krīṇāti*, without *guṇa*-substitute for the vowel of the syllable preceding the *vikaraṇa*.

**c** as *it*. Cf. *cit*.

-**c**. Cf. *cit*.

**cit**. 3.1.83 *śānac*; 3.1.84 *śāyac*.

1. 6.1.163 *citah* [*anta udāttaḥ*: 6.1.159] 'The final vowel of that which has *c* as *it* is high-pitched.'

2. This excepts the suffixes *-āna-* and *-āya-* from 3.1.1–3 *pratyayaḥ paraś ca ādyudāttaś ca* 'A suffix is what follows and whose first vowel is high-pitched.' (A word can have only one high-pitched vowel: 6.1.148 *anudāttaṃ padam eka-varjam* 'A word is low-pitched with the exception of one [vowel].')

**ñ** as *it*. Cf. *ñit*.

-**ñ**. Cf. *ñit*.

**ñit**. 3.1.79 *kṛñ*; 3.1.82 *skuñ*.

1.3.72 *svaritañītaḥ kartrabhiprāye kriyāphale* [1.3.12: *ātmanepadam*] 'After [a root] (this *sūtra* occurs in the section on roots and *its*, beginning with 1.3.1 *bhūvādayo dhātavaḥ*) which has high-low pitch or *ñ* as *it*, the endings of the middle voice occur, when the result of the action is intended for the actor.'

**dhātu**. 1.3.1 *bhūvādayo dhātavaḥ* 'roots = *bhū*, etc.'

A list of the roots *bhū*, etc., is lacking the grammar. This *sūtra* is one indication that for Pāṇini, too, a listing such as we have in the *Dhātupāṭha* supplemented the grammar.<sup>15</sup>

**n** as *it*. Cf. *pit*.

-**n**. Cf. *pit*.

**pit**. Cf. *pit*.

<sup>15</sup> By 3.1.32 *sanādyantā dhātavaḥ* 'dhātavaḥ (roots) = that which ends in *san* [the desiderative *s* taught in 3.1.5], etc., the term root is extended to include, e.g., that part of a tenth-class present form which precedes the *vikaraṇa*. So, in *bhāvati*, *bhav-* is (the sandhi variant of) a root; in *corayati*, *coray-* is also (the sandhi variant of) a root.

**paribhāṣā.** 1. The goal of Pāṇini's grammar is the description of the building up, or *saṃskāra*, of the complex forms of language out of simple elements. This goal is attained by means of three sorts of aphorismic statements, or *sūtras*: a statement which describes some part of this building up is called a *vidhi* 'prescription, rule.' Statements which describe the technical apparatus of the grammar, necessary for the understanding of the *vidhis*, are of two sorts, the *saṃjñās* and the *paribhāṣās*. The *saṃjñās* comprise the technical lexicon of the grammar. *Saṃjñā* means both 'technical term' and a denotative definition of a technical term, usually in the form of a nominal predication—two nouns in the nominative, the *saṃjñā* usually second. (This order is disturbed in the first *sūtra*—*vrddhīr ād aic 'vrddhi = ā, ai, and au*—by the practice of beginning with an 'auspicious' word—and *vrddhi*, in its nontechnical sense of 'prosperity' qualifies as 'auspicious'.) The *paribhāṣās* ('maxims intended to guide and assist in the interpretation and application of the rules of Pāṇini's grammar'<sup>16</sup>) comprise the grammar of the grammar. Pāṇini's commentators, notably Kātyāyana and Patañjali, added to the *paribhāṣās* explicitly stated by Pāṇini those which they considered implicit or implied. In the 17th century, Nāgajibhaṭṭa made a critical study of 133 of these *paribhāṣās* in his *Paribhāṣenduśekhara*.

2. Examples of *saṃjñā*, *paribhāṣā*, and *vidhisūtras* can be seen above, s.v. *guṇa*: 1.1.2 *ad eṃ guṇaḥ* is a *saṃjñā*; 1.1.3–5 *iko guṇavṛddhi, na dhātulopa ārdhadhātuke*, *kñiti ca* are *paribhāṣās*; 7.3.84 *sārvadhātukārdhadhātukayoḥ* [*guṇaḥ*: 7.3.82] is a *vidhi*.

**p** as **it**. Cf. **pit**.

**-p**. Cf. **pit**.

**pit**. 3.1.68 *śap* (*nit*: 3.1.69 *śyan*)

1. 3.1.4 *anudāttau suppitau* 'sup [a collective term for the case-endings of the noun; cf. *it*] and (a suffix which has) *p* as *it* have low-pitched vowels.'

2. This exception to 3.1.1–3 *pratyayaḥ paraś ca ādyudattaś ca* 'A *pratyaya* ('suffix') is what follows and has a high-pitched first vowel' is not an exhaustive list of the suffixes whose vowels are low-pitched: the vowels of a suffix which has *n* as *it* are also low-pitched. (6.1.197 *ñnity ādir nityam* [*udattaḥ*: 6.1.159] 'Before that which has *ñ* or *n* as *it*, the first vowel is always high-pitched'; and 6.1.148 *anudattaṃ padam ekavarjam* 'A word is low-pitched with the exception of one [vowel].')

3. *pī* and *nī* suffixes differ in this, however: *pī* suffixes, since they are *sārvadhātuka*, are preceded by *guṇa*; the *guṇa* which would occur before *nī* suffixes, which are of course also *sārvadhātuka*, is counteracted, since they are also *nī* (cf. s.v.). For example: *bhū-śap-tīp* > *bho-a-ti* > *bhāvati*; *dīv-śyan*[*nī*]-*tīp* > *dīv-ya-ti* > *dīvyati*.

**pratyaya** 3.1.1 *pratyayaḥ*, 3.1.2 *paraś ca*, 3.1.3 *ādyudattaś ca* 'pratyaya (suffix) = what follows and has a high-pitched first vowel.'

**bhāva**. Cf. **kartr**.

<sup>16</sup> Kielhorn, *Paribhāṣenduśekhara* II.i.

**m** as *it*. Cf. *mit*.

-**m**. Cf. *mit*.

*mit*. 3.1.78 *śnam*.

1.1.47 *mid aco 'ntyāt paraḥ* 'That which has *m* as *it* follows the last vowel.'

**luk**. Cf. *lopa*.

**lopa**. 1. In *sūtras* 2.4.72 and 2.4.75 Pāṇini teaches *luk* and *ślu* as morphologically conditioned substitutes for *śap*:

2.4.72 *adiprabhṛtibhyaḥ śapaḥ* [*luk*: 2.4.58] '*luk* (appears) in place of *śap* after *ad*, etc. (the roots of the so-called second class).'

2.4.75 *juhotyādibhyaḥ śluḥ* [*śapaḥ*: 2.4.72] '*ślu* (appears) in place of *śap* after *juhoti* [*hu*], etc. (the roots of the so-called third class).'

2. He defines these terms in 1.1.60–3:

1.1.60 *adarśanaṃ lopah* '*lopa* is invisibility.'

1.1.61 *pratyayasya lukślulupah* [*adarśanam*: 1.1.60] '*luk*, *ślu*, and *lup* [are the instances of invisibility which] (appear) in place of a suffix.'

1.1.61 *pratyayalope pratyayalakṣaṇam* 'When there is invisibility of a suffix, the (nonphonetic) features of the suffix remain' [These non-phonetic features are: (1) its function; and (2) its effect on the phonetic features of other forms.]

1.1.63 *na lumatāṅgasya* [*pratyayalope pratyayalakṣaṇam*: 1.1.62] '[the non-phonetic features of a suffix] connected [with the phonetic features] of the stem (do) not (remain) when [there is invisibility of a suffix] by *luk*, *ślu*, or *lup*.'

3. The suffix *śap* causes the substitution of *guṇa* for the vowel of the preceding syllable by 7.3.84 *sārvadhātukārdhadhātukayoḥ* (cf. *guṇa*). Since the invisibility of *śap* in the verb classes beginning with *ad* and *juhoti* is caused by *luk* and *ślu*, *guṇa* is not substituted for the vowel of the preceding syllable, as it would be if the invisibility of *śap* were termed *lopa*. *luk* and *ślu* function as *lakṣaṇas* themselves, however: the *lakṣaṇa* functions of *luk* are not all relevant to verbal forms; one relevant to the *ad* class of verbs is taught in 7.3.89 *uto vṛddhir luki hali* 'After *ū* there is *vṛddhi* before *luk* before a consonant', e.g., *yu-luk-tīp* > *yauti*. In the case of *ślu*, the effect of the *lakṣaṇa* is reduplication of the root: [6.1.1 *ekāco dve prathamasya*] 6.1.10 *ślau* '(In place of one initial syllable there are two) before *ślu*', e.g., *hu-ślu-tīp* > *juhoti*.

4. *luk* and *ślu* (and *lup*) have the outward marks of morpheme [*lu*] plus *it* compounds (cf. *it*; -*k* would be *it* by 1.1.3, *ś-* by 1.1.8), but if ever the designation *vīṣeṣaṇārtha* 'to serve as a distinguishing mark' is justified, it is here (for a contrary view, see Chatterji, *Technical terms* 287–8). Since the zero morphemes *luk*, *ślu*, and *lup* have different functions, they must be distinguished from each other, and -*k* and *ś-* are safe *its*, since, when they are applied here, the results are entirely negative. *guṇa* would be substituted before *ślu* and *luk* as *sārvadhātuka* and *ārdhadhātuka* suffixes (cf. s.v. *sārvadhātuka* and *guṇa*), but since *luk* has *k* as



it, and *ślu* has *ñ* as *it* (cf. *ñit*), the rule teaching *guṇa*—7.3.84 *sārvadhātukār-dhadhātukayoḥ*—would be counteracted by 1.1.5 *knīti ca* (cf. *guṇa*).<sup>17</sup>

**vikaraṇa.** Kātyāyana and Patañjali (on 3.1.67) refer to the present-stem forming elements taught in 3.1.68–84 by the term *vikaraṇa*. A *vikaraṇa* is, etymologically, what causes a *vikāra* ‘variant’ (for an example of *vikāra*, see *vārtt.* 1 to 3.1.83). In the usage of the grammarians, *vikaraṇa* is restricted to elements affixed to the root (cf. Renou, *Term. gramm.* 82); in fact, root plus *vikaraṇa* is identical with the definition of *\*sārvadhātu* ‘whole root’ reconstructed below (s.v. *sārvadhātuka*). It seems apparent that the *vikāra* caused by the *vikaraṇa* is the *\*sārvadhātu* ‘whole root,’ in contrast to the *\*ardhadhātu* ‘half root.’

**vipariṇāma.** A change in inflection which is performed on a term given in one *sūtra*, in order that, when it is carried over, by *anuvṛtti*, into another *sūtra*, it may fit into the syntax of the latter *sūtra*. For example, the *Kāśikā* on 3.1.68 carries over the ablative singular *dhātoḥ* intact from 3.1.22; on 3.1.69, in order that it may agree with the ablative plural *divādibhyaḥ*, it gives *dhātubhyaḥ*.

ś as *it*. Cf. *śit*.

ś-. Cf. *śit*.

śit. 3.1.68 *śap*; 3.1.69 *śyan*; 3.1.73 *śnu*; 3.1.77 *śa*; 3.1.78 *śnam*; 3.1.81 *śnā*; 3.1.83 *śānac*; 3.1.84 *śāyac*.

3.4.113 *tiñ śit sārvadhātukam* ‘*sārvadhātuka* = the personal endings of the verb, and (a suffix which has) *ś* as *it*.’

ślu. Cf. *lopa*.

**sārvadhātuka.** 1. The adjective *sārvadhātuka* ‘having to do with a whole root’ is one of the terms of a dichotomy of *pratyayas* ‘suffixes’; the other is *ārdhadhātuka* ‘having to do with a half root.’ The corresponding nouns—*\*sārvadhātu* ‘whole root’ and *\*ardhadhātu* ‘half root’—do not appear in Pāṇini’s grammar or in any of the extant grammatical literature. What actually precedes Pāṇini’s *sārvadhātuka* suffixes overlaps, in part, with what precedes his *ārdhadhātuka* suffixes (there are instances, listed below, where both follow the bare root). In the following, I shall describe the function and distribution of these suffixes in an attempt to show why Pāṇini used these terms as he did.

<sup>17</sup> *lopa*, *luk*, *ślu*, and *lup* are what Leonard Bloomfield referred to when he said (*Language* 209): ‘... the Hindus hit upon the apparently artificial but in practice eminently serviceable device of speaking of a *zero element*: in *sheep*: *sheep* the plural suffix is replaced by *zero*—that is, by nothing at all.’ In speaking of zero substitutes, however, we use a mathematical term, one of a dichotomy which opposes nothing, or no number, in equal measure, to every other number. There are several Sanskrit mathematical terms for zero—e.g., *kha*, *śūnyam*—but *lopa* ‘a breaking off, dropping off’ is not one of them, and *luk*, *ślu*, and *lup* are solely grammatical terms.

Bloomfield also said that ‘A zero alternant may go with modification of the accompanying form’ (*Language* 216). This ‘modification of the accompanying form’ is the effect of the *lakṣaṇa* of the ‘zero alternants’ and forms the basis for the fourfold classification: *lopa*, *luk*, *ślu*, and *lup*.

2. WHICH SUFFIXES ARE *sārvadhātuka* AND WHICH ARE *ārdhadhātuka*:

- 3.4.113 *tīñ śīt sārvadhātukam* 'sārvadhātuka' = the personal endings of the verb (for the construction of the term *tīñ*, cf. *it*) and 'a suffix which has) *ś* as *it*.' [Suffixes which have *ś* as *it* are: (a) *śap* and its substitutes, with the exception of *u*, i.e., *śyan*, *śnu*, *śa*, *śnam*, *śnā*, *śānac*, and *śāyac*. These suffixes, taught in 3.1.68 ff., all follow the bare root; (b) *śa*, a primary noun-forming suffix, occurring after bare roots; and (c) the participle-forming *śatr* (which occurs after the *vikaraṇas śap* and *śya*); the infinitive-forming *śadhyai* and *śadhyain* (which occur after the *vikaraṇa śap*).]
- 3.4.114 *ārdhadhātukam śeṣaḥ* 'ārdhadhātuka' = the rest [everything else].'
- 3.4.115 *līṭ ca* 'and *līṭ* [the endings of the perfect]' (The perfect endings are *tīñ*, or *tīñ*-substitutes [3.4.81–2] and would therefore be *sārvadhātuka* by 3.4.113, if it weren't for this *sūtra*.)
- 3.4.116 *līñ āśiṣi* '(and) *līñ* [the endings of the optative-precative], when wishing (is to be expressed) [the endings of the precative].' (*līñ*, like *līṭ* in 3.4.115, is *tīñ* [with substitutions as stated in 3.4.105–8] and would also be *sārvadhātuka*, if it weren't for this *sūtra*. Both the perfect and the precative, it should be noted, follow the bare root; the other *tīñ* suffixes—  
• e.g., in the present—follow root plus *vikaraṇa*.)
- 3.4.117 *chandasy ubhayathā* 'In the sacred literature, both ways.' (By *ubhayathā* Pāṇini disqualifies any statement made in terms of *sārvadhātuka* or *ārdhadhātuka* from applying to forms found exclusively in the sacred literature.)<sup>18</sup>

3. THE FUNCTIONS OF *sārvadhātuka* AND *ārdhadhātuka* SUFFIXES:

(a) *iṭ*, the *-i-* which occurs before suffixes beginning with a consonant other than *y*, occurs much more frequently before an *ārdhadhātuka* suffix than before a *sārvadhātuka* suffix. (The occurrence of *iṭ* before *ārdhadhātuka* suffixes is described in *sūtras* 7.2.35–75, its occurrence before *sārvadhātuka* suffixes in *sūtras* 7.2.76–8.)

(b) Before a *sārvadhātuka* suffix whose vowel is high-pitched, *guṇa* is always prohibited (before a suffix having a low-pitched vowel, it is prohibited in some instances, where the suffix is then made *nit*); before *ārdhadhātuka* suffixes, this is true only of perfect endings, and then not after a consonant cluster.

The *sūtras* relevant to the *guṇa*-pitch correlation in the case of *sārvadhātuka* suffixes are:

- 1.2.4 *sārvadhātukam apit* [nīt: 1.2.1] 'A *sārvadhātuka* (suffix) which does not have *p* as *it* [has *n* as *it*].'
- 3.1.1–3 *pratyayaḥ paraś ca ādyudāttaś ca* 'A suffix is what follows and whose first vowel is high-pitched.'

<sup>18</sup> *chandas* originally referred exclusively to metrical literature; it was later extended to include prose. Liebhich (*Pāṇini* 26 f.) took *chandas* to mean 'pre-classical' or 'archaic' by a shift of meaning: 'metrical' > 'metrical plus archaic' > 'archaic'. According to Thieme (*Pāṇini and the Veda* 67 ff.), alongside the element of metre, there was the element of sacredness. The latter, with a shift of meaning, prevailed, and *chandas*, in Pāṇini, ought therefore to be translated 'sacred literature.'

- 3.1.4 *anudāttau suppitau* '(but) *sup*—the case endings of the noun—and (a suffix which has) *p* as *it* have low-pitched vowels.' A suffix which has *n* as *it* [any *sārvadhātuka* suffix which does not have *p* as *it*; cf. 1.2.4 above] therefore has a high-pitched first vowel (with the one exception of a *sārvadhātuka* suffix which has *n* as *it*; cf. *pīt*).
- 7.3.84 *sārvadhātukārdhadhātukayoḥ* [*guṇaḥ*: 7.3.82] 'Before *sārvadhātuka* and *ārdhadhātuka* (suffixes) there is *guṇa*.' (This includes *sārvadhātuka* suffixes which are *pīt*, since *pīt* is nowhere excepted.)
- 1.1.5 *knīti ca* [*guṇavṛddhī*: 1.1.3, *na*: 1.1.4] 'And (there is no *guṇa* or *vṛddhi*) before that which has *k* or *n* as *it*.'

The *sūtras* which show this pitch-*guṇa* correlation for the *ārdhadhātuka* perfect are:

- 1.2.5 *asamyogāl liṭ kit* [*apīt*: 1.2.4] 'Except after a consonant cluster, a perfect ending [which doesn't have *p* as *it*] has *k* as *it*.'

3.1.1–4, 7.3.84, and 1.1.5, as for *sārvadhātuka* suffixes (cf. above).

#### 4. THE DISTRIBUTION OF *sārvadhātuka* AND *ārdhadhātuka* SUFFIXES:

Under the headings *a*, *b*, and *c*, I list the three types of occurrence (Dh = *dhātu* 'root'; P = *pratyaya* 'suffix'; — = the position of the *sārvadhātuka* or *ārdhadhātuka* suffix in question):

	<i>a</i>	<i>b</i>	<i>c</i>
<i>ārdhadhātuka</i>	Dh—		Dh—P
<i>sārvadhātuka</i>		DhP—	Dh—P

EXAMPLES. I have enclosed in square brackets the suffix in question. (The elements in parentheses are neither root nor suffix themselves, but are added to roots or suffixes: the commentators term them *āgamas* 'augment, additions [without function]'.) The number after each example is that of the *sūtra* which identifies the suffix as *sārvadhātuka* or *ārdhadhātuka*. I have translated these *sūtras* (3.4.113 for *sārvadhātuka*, 3.4.115–6 for *ārdhadhātuka*), above.

#### I. Examples of distribution type *a*:

1. The infinitive *bhavitum* < *bhū*-(*it*)-[*tum*] 3.4.114
2. The third person singular perfect active *babhūva* < *bhū* reduplicated-(*vuk*)-[*ṇal*] 3.4.115
3. The first person plural active perfect *babhūvīma* < *bhū* reduplicated-(*vuk*)-(*it*)-[*ma*] 3.4.115
4. The third person singular middle precative *bhaviṣīṣṭa* < *bhū*-(*it*)-(*sīyut*)-(*suṭ*)-[*ta*] 3.4.116

#### II. Examples of distribution type *b*:

1. The third person singular active present *bhavati* < *bhū*-*śap*-[*tīp*] 3.4.113 (as *tīñ*)
2. The third person singular future active *bhaviṣyati* < *bhū*-(*it*)-*sya*-[*tīp*] 3.4.113 (as *tīñ*)

#### III. Examples of distribution type *c*:

##### A. *ārdhadhātuka*:

1. The third person singular future active *bhaviṣyati* < *bhū*-(*it*)-[*sya*]-*tīp* 3.4.114
2. The third person singular present active *karoti* < *kṛn*-[*u*]-*tīp* 3.4.114

B. *sārvadhātuka*

The third person singular present active *bhavati* < *bhū*-[śap]-tip 3.4.113 (as *śit*)

5. CONCLUSION. It is apparent that the complementary distribution [distribution type *a* and *b*] represents the original situation; the overlap [distribution type *c*] is chronologically secondary: pre-Pāṇinian \**ardhadhātu* 'half root' is Pāṇini's *dhātu* 'root'; pre-Pāṇinian \**sārvadhātu* 'whole root' is Pāṇini's *dhātu* 'root' plus *pratyaya* 'suffix'.<sup>19</sup> It is, further, apparent that the distribution of the terms *sārvadhātuka* and *ārdhadhātuka* in their application to the nonfinal suffixes of type *c* is chronologically secondary because the analysis which recognized them was also chronologically secondary. In assigning these nonfinal suffixes to one or the other of the two categories, the criterion (and hence the meaning of *sārvadhātuka* and *ārdhadhātuka*) was function, not distribution. The nonfinal suffixes (*vikaraṇas*), with the exception of *-u-*, were termed *sārvadhātuka* because they showed the pitch-*guṇa* correlation observed in suffixes added to the 'whole root', and because they did not have the augment *iṭ*.<sup>20</sup> The *-u-* (of *tan*, etc. and *krñ* taught in 3.1.79) was assigned to the *ārdhadhātuka* category because the pitch-*guṇa* correlation did not always hold here (e.g., in *karōti*, where there is *guṇa* before a high-pitched vowel), and because, although it did not have the augment *iṭ*, the environment—before an *ārdhadhātuka* suffix beginning with a vowel—was one where the contrast *iṭ*: zero is neutralized.

sūtra. Cf. *paribhāṣā*.

<sup>19</sup> Wackernagel (*Altindische Grammatik* 1.1xix) says: 'Bei Yaska bedeutet *dhātu* "Verbalform" und diese ursprüngliche Bedeutung lebt bei P. noch fort in *sārvadhātuka* - "an den ganzen *dhātu*- antretend" '. However, Yaska, e.g., in referring to the invisibility of the *upadhā* (cf. 1.1.65 *alo 'ntyāt pūrva upadhā* 'upadhā is what precedes the last sound') of the root in *jagmatuḥ*, i.e., the invisibility of *-a-* of the root *gam* (cf. Lakshman Sarup, *The Ni-ghanṭu and the Nirukta* 44), shows that *dhātu* meant the same to him as it did to Pāṇini. Yaska speaks of roots and cites verbal forms (e.g., the third person singular), but Pāṇini himself does this on occasion, e.g.: 2.4.52 *aster bhūḥ 'bhū* takes the place of *asti* [i.e., *as*]; 2.4.75 *juhotyādibhyaḥ śluḥ* [śapaḥ: 2.4.72] 'After *juhoti* [i.e., *hu*], etc., *ślu* appears [in place of śap].'

<sup>20</sup> Patañjali on 3.1.78 denies that the *ś-* of *śnam* can be for the purpose of showing that *-na-* is *sārvadhātuka* (i.e., to indicate prohibition of *guṇa*) and hence not *ārdhadhātuka* (i.e., to indicate that there will not be the augment *iṭ*), but does this because of a technicality: *śnam* is infixed, and the relevant rules on *sārvadhātuka* and *ārdhadhātuka* suffixes are taught in terms of suffixed elements.

## CHAPTER III

# EXTRACTS FROM THE MAHĀBHĀṢYA AND THE KĀŚIKĀ

### A. INTRODUCTION

Three speakers take part in the dialogues which constitute the *Mahābhāṣya*. They are: the *śiṣya* 'pupil,' who attacks Pāṇini's formulations; the *ācāryadeśiya* 'unaccomplished [lit., substitute] teacher,'<sup>21</sup> who defends them; and the *ācārya* 'teacher,' who gives a decision in particularly difficult cases, sometimes maintaining, and sometimes changing Pāṇini's formulations. Patañjali did not indicate who was speaking, and his commentators do not always agree in attributing remarks to the *ācārya* or *ācāryadeśiya*.<sup>22</sup> To attempt to assign the arguments to the various speakers is therefore to risk almost certain error. Since even a faulty attempt makes the line of argument clearer, however, I am taking that risk: in the following, 1 stands for *śiṣya*, 2 for *ācāryadeśiya*, 3 for *ācārya*.

An important element in Patañjali's discussions in the *Bhāṣya* is the work of his predecessors—chief among them Kātyāyana<sup>23</sup>—whose tradition he continues. This tradition is primarily a critical one—its aim not so much to elucidate Pāṇini's meaning, as to find out those places where he fell short of achieving his goal (Nāgōjibhaṭṭa defines a *vārttika* as: *sūtre 'nuktaduruktacintākāratvam*<sup>24</sup> 'making scruples about what is left unsaid, and what is badly said, in the *sūtra*'), but also to defend Pāṇini's formulations where they might wrongly be suspected of containing anything '*anukta*' or '*durukta*.' While the aim of this tradition—and in particular of Patañjali—can be said to be purely academic, in that it concentrates on investigating in a theoretical way the material and logical correctness of Pāṇini's formulations, the *Kāśikā* has a practical purpose. It wants to give an extract of the material content of Pāṇini's grammar and its interpretation by the *Bhāṣya*. It takes from the *Bhāṣya* those arguments that seem relevant from a practical point of view, suppresses merely theoretical discussions, and, on the whole, prefers that solution which appears simplest, even though it may be less satisfactory, from the logical point of view, than a more subtle and complicated one.

We know Kātyāyana's *vārttikas* only through the *Bhāṣya*. Kielhorn recognized and separated them out in his text by this criterion: what is followed by a para-

<sup>21</sup> For this term and its translation, see Kielhorn, Notes on the Mahabhashya 1.80-1 and *Kātyāyana and Patanjali* 53.

<sup>22</sup> Kielhorn, Notes 1.80.

<sup>23</sup> '... the *Vārttikas* of Kātyāyana ... to explain which is the main object of Patañjali' (Kielhorn, Notes 4.228); 'The Mahābhāṣya is in the first instance a commentary on Kātyāyana's *Vārttikas*' (Kielhorn, *Kātyāyana and Patanjali* 51).

<sup>24</sup> quoted by Kielhorn, *Kātyāyana and Patanjali* 2.

phrase or a repetition—Patañjali's means of identifying a statement as Kātyāyana's—is a *vārttika*.<sup>25</sup> [In the following, I have italicized and numbered in parentheses the *vārttikas*; in addition, I have indicated, in the translation, when a statement of Patañjali's paraphrases a preceding *vārttika*. The *vārttikas* themselves I have left untranslated.]

Patañjali also quotes the work of other, earlier grammarians in the *kārikās*, verses which comment on Pāṇini's *sūtras* or Kātyāyana's *vārttikas*. [Two of these occur in the following text: one on 3.1.67 (II.58.16–20) *supām karmādayo 'py arthāḥ . . .*; the other on 3.1.79 (II.62.7–8) *tanādītvāt kṛñāḥ siddham . . .*] As Kielhorn pointed out, they are of three sorts in their relation to the accompanying text: some Patañjali discusses; some—the *saṃgrahaśloka*s—sum up Patañjali's discussion; still others are neither discussed, nor do they sum up a discussion.<sup>26</sup>

A brief sketch of the arguments put forth in the portion of the *Bhāṣya* translated here, together with an indication of their source—whether Kātyāyana, a *kārikā*, or Patañjali himself—will point up Patañjali's relation to his tradition.<sup>27</sup>

On 3.1.67 Patañjali discusses Kātyāyana's *vārttikas* 1 and 2, which argue the question whether the locatives *bhāvakarmaṇoḥ* (in 3.1.66) 'when there is a process or an object [to be designated]' and *kartari* (in 3.1.68) 'when there is an agent [to be designated]' give the purpose of the personal endings (*sārvadhātuka*) before which (3.1.67) the stem-forming suffixes (*vikaraṇa*) are to be added to the root, or whether they give the purpose of the stem-forming suffixes themselves. While the *vārttikas* raise objections to each of these interpretations, Patañjali decides for the first and shows that the objection raised against it may be waived. (The *Kāśikā* accepts Patañjali's decision. I myself have in my translation decided for the second alternative as syntactically preferable and logically sound enough.) He then presents three more *vārttikas* which point out an alleged deficiency in the formulation of *sūtras* 3.1.66–70 and seek to alleviate this difficulty by an involved manipulation of the *sūtras* [*yogavibhāga* 'division of a rule']. Patañjali shows that this is unnecessary, since Pāṇini indicates the correct result elsewhere in the grammar.<sup>28</sup>

(Patañjali does not discuss 3.1.69–70, 72–7, 81–2.)

On 3.1.77 Patañjali questions Pāṇini's use of the term *anupasargāt* in this *sūtra* and declares it unnecessary: a term in the following *sūtra* performs the same function. The *Kāśikā* adopts Patañjali's statement—but not his criticism—of Pāṇini's purpose in giving this term.

<sup>25</sup> Kielhorn discusses this thoroughly in *Kātyāyana and Patañjali* (for a summation of his conclusions, see esp. 26–7).

<sup>26</sup> Kielhorn, Notes 4.233. (Kielhorn, in opposition to the commentators, doubts that Patañjali is the author of the *saṃgrahaśloka*s.)

<sup>27</sup> It is, of course, impossible to know what Patañjali may have derived from other grammarians that he does not quote. As Kielhorn says: '... we shall probably be doing no injustice to Patañjali, when we maintain that he frequently has taken the substance of his discussions and many of his arguments from those older works, even where he has not actually and distinctly quoted from them' (Notes 4.232).

<sup>28</sup> For a discussion of 'indication' in establishing *paribhāṣās*, see Kielhorn, *Paribhāṣendu-śekhara* iv ff.

On 3.1.78 Patañjali questions the purpose of *ś-* in *śnam*. First, he considers what would seem to be its purpose according to Pāṇini's definition of *ś* as *it*, i.e., to mark *-na-* as a *sārvadhātuka* suffix, and thereby to prohibit *guṇa* in the preceding syllable. This possibility Patañjali rejects, since, he says, the rules prescribing *guṇa* wouldn't apply anyway: *śnam* is an infix, and the rule on *guṇa* applies to suffixes. If this were Pāṇini's purpose in making the *ś-* of *śnam*, the *ś-* would be *durukta*. (As a matter of fact, it seems likely that this was Pāṇini's purpose, and that he meant to include *śnam* as a suffix added to an *aṅga* 'stem.') For the same reason, Patañjali rejects the possibility that the *ś-* is to show that *-na-* is not an *ārdhadhātuka* suffix.

Next, Patañjali considers, and rejects, Kātyāyana's proposal (that the *ś-* was to provide for shortening of roots belonging to the *pū* class before *-na-*)—a proposal which Kātyāyana himself rejected.

Patañjali's final decision is: the *ś-* is to distinguish this *-na-* from other instances of the sound combination *na*, and cites a *sūtra* where there would be ambiguity if the *ś-* were not present. The *Kāśikā* accepts Patañjali's judgment (which hardly reflects the intention of Pāṇini himself).

On 3.1.79 Patañjali questions, and denies, the need for giving '*kṛñ*' in addition to '*tan*, etc.' in this *sūtra*, since there would be no practical difference in the application of other rules if *kṛñ* were included in the 'etc.' (The *Kāśikā* accepts the *ācāryadeśīya*'s statement that there is a *sūtra*—2.4.79 *tanādibhyas tathāsoḥ*—which would yield wrong results, if *kṛñ* were taken to be included in '*tan*, etc.')

On 3.1.80 Patañjali (a) defends Pāṇini's procedure in teaching the element *a* as a substitute to be replaced by invisibility (*lopa*), since this *a* would have a grammatical function—the prevention of *guṇa* (the *Kāśikā* accepts his decision and quotes it almost verbatim), and (b) finds fault with the form in which the roots *dhinvi* and *kṛṇvi* are cited in this *sūtra*—i.e., with nasal infix—since the shorter forms *dhivi* and *kṛvi* would be sufficient, the nasal infix correctly resulting anyway from 7.1.58. (This the *Kāśikā* does not mention.)

On 3.1.83 Patañjali first states that the *ś-* of *śānac* is to prevent *guṇa* in the preceding syllable, then investigates Kātyāyana's *vārttikas* on this *sūtra*. Kātyāyana first (*vārtt.* 1) denies any purpose to this *ś-*, since *-āna-* would, as a substitute for *śnā*, automatically have the latter's *its*. He then (*vārtt.* 2) reverses his position, and says that the fact that the *ś-* is given indicates the principle that *its* don't carry over to substitutes, if they are substitutes of *sārvadhātukas*. Patañjali, after considering the pros and cons, rejects this principle. (The *Kāśikā* does not consider this problem.)

**Note:** A reference in the form 3.1.68 is to a *sūtra* of Pāṇini's; a reference in the form II.61.20 is to volume, page, and line in Kielhorn's edition of the *Mahābhāṣya*.

## B. EXTRACTS FROM THE MAHĀBHĀṢYA ON 3.1.67–83

*sārvadhātuke yak* (3.1.67)

A. II.57.18–21

2. . . . *idaṃ vicāryate bhāvakarmakartāraḥ sārvadhātukārthā vā syur vikaraṇārthā veti.*

1. *katham ca sārvaadhātukārthāḥ syuḥ, katham vā vikaraṇārthāḥ?*
2. 'bhāvakarmavācīni sārvaadhātuke *yag bhavati*, 'kartṛvācīni sārvaadhātuke *śab bhavati*' *ti*, sārvaadhātukārthāḥ; 'bhāvakarmaṇor *yag* bhavati sārvaadhātuke, *kartari śab bhavati sārvaadhātuka*' *iti*, vikaraṇārthāḥ.
2. This is [now] being considered: whether *bhāva*, *karman*, and *kartṛ* (as used in 3.1.66–8) are the meanings of the sārvaadhātuka (suffixes [*mīp*, *tīp*, *sīp*, etc.]) or of the vikaraṇas [*śap*, *śyan*, etc.]. (This question is raised by an ambiguity in the wording of 3.1.66–8; e.g., in 3.1.66 *ciṇ bhāvakarmaṇoḥ*, 3.1.67 sārvaadhātuke *yak*, should *bhāvakarmaṇoḥ* be referred to sārvaadhātuke or to *yak*?)
1. And how would they be the meanings of the sārvaadhātuka (suffixes), or how the meanings of the vikaraṇas?
2. (If you say) 'Before a sārvaadhātuka (suffix) which expresses a *bhāva* or a *karman*, *yak* appears; before a sārvaadhātuka (suffix) which expresses a *kartṛ*, *śap* appears,' they are the meanings of the sārvaadhātuka (suffixes). (If you say) 'Before a sārvaadhātuka (suffix), *yak* occurs when there is a *bhāva* or a *karman* [to be designated]; before a sārvaadhātuka (suffix), *śap* appears when there is a *kartṛ*,' they are the meanings of the vikaraṇas.

## B. II.57.21–6

1. *kaś cātra viśeṣaḥ?*
2. *bhāvakarmakartāraḥ sārvaadhātukārthāś ced ekadvibahuṣu niyamānupapattir atadarthatvāt. (1)*  
*bhāvakarmakartāraḥ sārvaadhātukārthāś ced ekadvibahuṣu niyamasyānupapattiḥ.*

1. *kiṃ kāraṇam?*
2. *atadarthatvāt. na hi tadānīm ekadvādaya eva vibhaktyarthāḥ.*

1. *kiṃ tarhi?*
2. *bhāvakarmakartāro 'pi.*

1. And what is the difference in this (i.e., What is the difference between these two interpretations)?
2. *bhāvakarmakartāraḥ sārvaadhātukārthāś ced ekadvibahuṣu niyamānupapattir atadarthatvāt. (vārtt. 1)*

(The following statement of the *ācāryadeśīya* is a paraphrase of the preceding *vārttika*, up to *atadarthatvāt*.) If *bhāva*, *karman*, and *kartṛ* are the meanings of the sārvaadhātuka (suffixes), then it isn't possible to restrict them (i.e., the meanings of the sārvaadhātuka suffixes) to singular, dual, and plural (as was proposed in the discussion on 1.4.21–2<sup>29</sup>).

1. Why [not]?
2. *atadarthatvāt*. Because then [if this alternative, that *bhāva*, *karman*, and *kartṛ* are the meanings of the sārvaadhātuka suffixes, is accepted] the meanings of the endings are not exclusively singularity, etc.

<sup>29</sup> Cf. *vārtt. 1.* on Pāp. 1.4.22 . . . *niyamārthaṃ racanam* 'The teaching [given in 1.4.21–2] is for the sake of restriction,' which on one alternative is taken by Patañjali (I.322.9) to mean that we have to paraphrase 1.2.21 f. as: *ekasminn evaīkavacanam dvayor eva dvivacanam bahuṣveva bahuvacanam* 'The singular [endings] appear when there is to be designated *only* one, the dual endings when *only* two, the plural endings when *only* many.' This alternative is considered by Patañjali as the valid one in his discussion I.322.15 ff.



1. What then (what other meanings do they have)?
2. (The meanings) *bhāva*, *karman*, and *kartr*, too.

## C. II.57.26–58.9

1. *santu tarhi vikaraṇārthāḥ.*
2. *vikaraṇārthā iti cet kṛtābhīhite vikaraṇābhāvaḥ. (2) vikaraṇārthā iti cet kṛtābhīhite vikaraṇo na prāpnoti: 'dhārayaḥ, pāraya' iti.*
1. *kim ucyate 'kṛtābhīhita' iti na,<sup>30</sup> lenāpy abhidhānam bhavati.*
2. *śakyam lenābhīdhānam āśrayitum. pakṣāntaram idam āsthitam bhāvakarmakartāraḥ sārva-dhātukārthā vā syur vikaraṇārthā veti, yadi ca lenāpy abhidhānam syān nedaṃ pakṣāntaram syāt.*
1. *katham śakyam, yadā bhavān evāha 'laḥ karmaṇi ca bhāve cākarmakebhyaḥ' iti?*
2. *evam vakṣyāmi 'laḥ karmaṇo bhāvāc cākarmakebhya' iti.*
1. *yasmims tarhi le vikaraṇā na śrūyante, kas tatra bhāvakarṃmakartṛn abhidhāsyati?*
2. *kva ca na śrūyante?*
1. *ya ete lugvikaraṇāḥ ślūvikaraṇāś ca.*
2. *atrāpy ukte kartṛtve lug bhaviṣyati.*
1. *yasmims tarhi le vikaraṇā naivotpadyante, kas tatra bhāvakarṃmakartṛn abhidhāsyati?*
2. *kva ca naivotpadyante?*
1. *linliṭoḥ. tasmān naitac chakyam vaktum na lenāpy abhidhānam bhavātīti. bhavati ced 'abhihite vikaraṇābhāva' ity eva.*
1. Let them [*bhāva*, *karman*, and *kartr*] be the meanings, then, of the *vikaraṇas*. [At this point the *śiṣya* has accepted the foregoing argument (which assumes that, corresponding to one form there can be only one meaning—that meaning being, in the case of the personal endings of the verb, the distinction between singular, dual, and plural) as sufficient cause for abandoning the first alternative, that *bhāva*, *karman*, and *kartr* are the meanings of the *sārva-dhātuka* suffixes.]
2. *vikaraṇārthā iti cet kṛtābhīhite vikaraṇābhāvaḥ. (vārtt. 2) (The following is a paraphrase of vārttika 2.) If they [*bhāva*, *karman*, and *kartr*] are the meanings of the *vikaraṇas*, then, when [*bhāva*, *karman*, or *kartr*] is expressed by a *kṛt* (a primary noun-forming suffix), a *vikaraṇa* would, wrongly, not result (= ought not to result): *dhārayaḥ* 'holding,' *pārayaḥ* 'satisfying.'*

(In these forms a *kṛt* suffix *śa* is added to the causative stems *dhāraya-* and *pāraya-*, which contain the *vikaraṇa* śap: *dhāraya* < *dhī-ṇic-śap* [*ṇic* forms causative 'roots' by 3.1.25–6 and 3.1.32]; *pāraya* < *pr-ṇic-śap*. In the resulting nominal stems *dhāraya-a-* and *pāraya-a-*, the two *ā*'s (of śap and śa) are replaced by one in accordance with 6.1.97 *ato guṇe* [*ekaḥ pūrvaparayoh*: 6.1.84, *pararūpam*: 6.1.94, *apadāntāt*: 6.1.96] 'Except at the end of a word, there appears, when *ā* precedes and *guṇa* [*ā*, *e*, *o*] follows, in place of the former and the latter, one [sound] having the form of the latter [i.e. *guṇa*].'

<sup>30</sup> Punctuation vs. Kielhorn.

The *kṛt* suffix *śa* means 'karṭṛ' by 3.4.67 *kartari kṛt*; if, in 3.1.68 *kartari śap* [*sārvadhātuke*: 3.1.67], *kartari* were referred to the *vikaraṇa* śap, rather than to *sārvadhātuke*, the meaning *karṭṛ* would be expressed twice in forms like *dharayaḥ*, *parayaḥ*, or rather, since the *kṛt* suffix already indisputably expresses the *karṭṛ*, there wouldn't be a *vikaraṇa*. This is Kātyāyana's objection to attributing the meanings *bhāva*, *karman*, and *karṭṛ* to the *vikaraṇas*, an objection which is based on the reverse of the assumption made in objecting to the first alternative—i.e., corresponding to one meaning, there can be only one form.)

1. Why is it said, 'When it (the *bhāva*, *karman*, or *karṭṛ*) is expressed by a *kṛt* (suffix),' [then there ought to be] no [*vikaraṇa*]? [*bhāva*, *karman*, and *karṭṛ*] are also designated by *la* [the personal endings of the verb, both those which are *sārvadhātuka* and those which are *ārdhadhātuka*, by 3.4.77 ff.].?
2. It is impossible to have recourse (in the present discussion) to their designation by personal endings. This second alternative (of the two alternatives) '*bhāva*, *karman*, and *karṭṛ* must be either the meanings of the *sārvadhātuka* (suffixes), or they must be the meanings of the *vikaraṇas*' is being maintained, and if they (*bhāva*, *karman*, and *karṭṛ*) were designated by personal endings, this second alternative wouldn't exist.
1. How can it be impossible, when you yourself say [in reciting Pāṇini's grammar] '*laḥ karmaṇi ca bhāve cākarmakebhyah*' (3.4.69 'The personal endings appear when there is a *karman* (to be expressed), and, after those [stems of intransitive verbs] which have no *karman*, when there is a *bhāva* (to be expressed).')
2. I shall teach [3.4.69] thus: *laḥ karmaṇo bhāvāc cākarmakebhyah* 'The personal endings appear *after* [a suffix designating] a *karman*—and after [a suffix designating] a *bhāva*, after those [roots] which have no *karman*.' (That is, the speaker wants to change the wording of 3.4.69.)
1. Then, where before personal endings *vikaraṇas* are not heard, what will designate the *bhāva*, *karman*, and *karṭṛ*?
2. And where (before personal endings) aren't they heard?
1. [In the forms] which have *luk* and *ślu* as *vikaraṇas* [i.e., in the second and third classes, where *luk* and *ślu*, zero substitutes for the basic *vikaraṇa* śap, occur by 2.4.72 and 2.4.75].
2. Here, too, (only) when the fact that there is a *karṭṛ* has been expressed (by śap, according to 3.1.68 *kartari śap*), will *luk* appear [as an invisible substitute for śap]. (Cf. Chapter II, s.v. *lopa*.)
1. Then, where before personal endings, *vikaraṇas* do not even come into existence [to be subsequently replaced by zero substitutes], what will designate *bhāva*, *karman*, and *karṭṛ*?
2. And where do they not even come into existence?
1. Before *lin* and *lit* [the endings of the optative-precative and perfect]. Therefore it is impossible to teach this: 'They aren't designated by personal endings, too.' And *if* they are, (Kātyāyana should have said) simply *abhihite vikaraṇābhāvaḥ* 'When they (*bhāva*, *karman*, *karṭṛ*) are (already) expressed

(by some other element), a *vikaraṇa* ought not to appear' (instead of *kṛtābhīhite vikaraṇābhāvaḥ* 'When they are expressed by a *kṛt* (suffix), a *vikaraṇa* ought not to appear').

## D. II.58.9-13

2. *evaṃ tarhīdaṃ syāt. yadā bhāvakarmaṇor las, tadā kartari vikaraṇā; yadā kartari las, tadā bhāvakarmaṇor vikaraṇāḥ.*
3. *idam asya. 'yady eva svābhāvikam athāpi vācanikam, prakṛtipratyayaḥ pratyayārthaṃ saha brūta' iti. na cāsti saṃbhavo yad ekasyāḥ prakṛter dvayor nānārthayor yugapad anusahāyibhāvaḥ syāt. evaṃ ca kṛtvaikapakṣibhūtam evedaṃ bhavati 'sārvadhātukārthā eve' ti.*
2. Then it might be like this [in forms which contain both *vikaraṇa* and personal ending]: when the personal ending has the meaning *bhāva* or *karman*, then the *vikaraṇa* will have the meaning *karṭṛ*; when the personal ending has the meaning *karṭṛ*, then the *vikaraṇa* will have the meaning *bhāva* or *karman*.
3. He (Pāṇini) has the following (principle): 'Whether [*abhidhāna* 'designation'] is innate or decreed (cf. Kāty. *vārtt.* 33 to 1.2.64 *abhidhānam punaḥ svābhāvikam*, and the discussion I.363.7 ff.), root and suffix together state the meaning of the suffix, and it isn't possible for one root to go together with two [suffixes of] different [conflicting] meanings (as would be the case in the situation just described by the *ācāryadeśīya*). And after acting (= thinking) in this way, there remains only this one alternative: 'They (*bhāva*, *karman*, *karṭṛ*) are the meanings solely of the *sārvadhātuka* (suffixes)'.

## E. II.58.13-23

2. *nanu cokaṭaṃ 'bhāvakarmakartārah sārvadhātukārthāś ced ekadvibahuṣu nīyamānupapattir atadarthatvād' iti?*
3. *naiṣa doṣaḥ.*  
'*supām karmādayo 'py arthāḥ saṃkhyā caiva tathā tinām' supām tinām ca saṃkhyā caivārthaḥ karmādayaś ca.*  
'*prasiddho nīyamaḥ tatra*'  
*prasiddhas tatra nīyamaḥ.*

'nīyamaḥ prakṛteṣu vā'

*athavā: prakṛtān arthān apekṣya nīyamaḥ.*

2. *ke ca prakṛtāḥ?*
3. *ekatvādayaḥ. ekasminn evaikavacanam, na dvayor, na bahuṣu. dvayor eva dvivacanam, naikasmin, na bahuṣu. bahuṣeva bahuvacanam, naikasmin, na dvayor iti.*
2. But wasn't it taught (in Kātyāyana's first *vārttika*): 'If *bhāva*, *karman*, and *karṭṛ* are the meanings of the *sārvadhātuka* (suffixes), then it isn't possible to restrict them (i.e., the meanings of the *sārvadhātuka* suffixes) to singular, dual, and plural'?
3. This isn't a fault (= correct objection).  
(The following verse is quoted from the discussion on 1.4.21-2.)  
*supām karmādayo 'py arthāḥ saṃkhyā caiva tathā tinām.*

'The meanings of the case endings and of the finite verb endings [are] number and *karman*, etc.'

*prasiddho niyamas tatra*

'The restriction [in the interpretation of 1.4.21–2 as 'only when many, only when two, only when one'] is correctly established [only] under this [supposition] (i.e., is to be applied to the general term 'number' and is not to be understood to exclude *karman*, etc.).'

*niyamah prakṛteṣu vā.*

'Or rather: the restriction [is given] with respect to the things [that are being] discussed.'

2. And which things are being discussed?
3. Singularity, etc.: the singular ending appears when there is one, not when there are two, not when there are many; the dual ending appears only when there are two, not when there is one, not when there are many; the plural ending appears only when there are many, not when there is one, not when there are two.

#### F. II.58.24—59.7; 60.10–1

2. *bhāvakarmaṇor yagvidhāne karmakartary upasaṃkhyānam.* (3)  
*bhāvakarmaṇor yagvidhāne karmakartary upasaṃkhyānam kartavyam: pacyate svāyam eva, paṭhyate svayam eva.*
1. *kiṃ punaḥ kāraṇam na sidhyati?*
2. *vipratishedhād dhi śapo balīyastvam.* (4)  
*vipratishedhād dhi śapo balīyastvam prāpnoti. śapo 'vakāśaḥ: pacati, paṭhati. yako 'vakāśaḥ: pacyata odano devadattena: paṭhyate vidyā devadattena. ihobhayam prāpnoti: pacyate svayam eva, paṭhyate svayam eva. paratvāc śap prāpnoti. yogavibhāgāt siddham.* (5)  
*yogavibhāgaḥ kariṣyate. ciṇ bhāvakarmaṇoḥ. sārvaadhātuke yag bhāvakarmaṇoḥ. tataḥ kartari. kartari ca yag bhavati bhāvakarmaṇoḥ.*
3. *athavācāryapravṛttir jñāpayati 'bhavati karmakartari yag' iti, yad ayaṃ 'na duhasnūnamāṃ yakciṇau' iti yakciṇoḥ pratiśedham śāsti.*
2. *bhāvakarmaṇor yagvidhāne karmakartary upasaṃkhyānam.* (vārtt. 3)  
 (The following is a paraphrase of Kātyāyana's third *vārttika*.) In prescribing *yag* when there is a *bhāva* or a *karman*, an addition should have been made (prescribing *yak* also) when there is a *karṭṛ* which is (also) a *karman* [i.e., in a form with reflexive meaning]: *pacyate svayam eva* 'it cooks itself,' *paṭhyate svayam eva* 'it recites itself.'
1. But why doesn't it result correctly [without this addition being made]?
2. *vipratishedhād dhi śapo balīyastvam.* (vārtt. 4)  
 (The following statement is a paraphrase of Kātyāyana's fourth *vārttika*.) Since, because there is a conflict, greater strength of *śap* would, incorrectly, result (and, hence, according to 1.4.2 *vipratishedhe paraṃ kāryam* 'In a conflict, that which comes later is to be done,' *śap* would be effected. A 'conflict,' which makes the application of 1.4.2 necessary, arises when two operations that each have their own 'domain' [*avakāśa*] are simultaneously

effectable. The following remarks first prove that such 'conflict' actually exists in this case.) The domain of *śap*: *pacati* 'he cooks,' *paṭhati* 'he recites' (formed with *śap*, according to 3.1.68, to designate the *karṭr*); the domain of *yak*: *pacyata odano devadattena* 'a gruel is cooked by Devadatta' (formed with *yak*, according to 3.1.67, to designate the *karman*). In the following case, both (*śap* and *yak*) would incorrectly result: *pacyate svayam eva* 'it cooks itself, *paṭhyate svayam eva* 'it recites itself.' (Here *śap* would have to be effected, according to 3.1.68, to designate the *karṭr*, and *yak*, according to 3.1.67, to designate the *karman*.) Because it is later, *śap* is obtained (incorrectly, by the application of 1.4.2 *vipraṭiṣedhe paraṃ kāryam* 'In a conflict, that which comes later, is to be done': *śap*, prescribed in 3.1.68, is taught later than *yak*, which is prescribed in 3.1.67).

*yogavibhāgāt siddham. (vārtt. 5)*

(The following explains Kātyāyana's fifth *vārttika*, which by dividing 3.1.68 into two sentences, yields the desired reflexive form.) A division of a rule (3.1.68) will be made. *ciṇ bhāvakarmaṇoḥ* (3.166) 'when there is a *bhāva* or a *karman* (to be designated), *ciṇ* (appears).' *sārvadhātuke yag bhāvakarmaṇoḥ* [3.1.67 *sārvadhātuke yak . . . bhāvakarmaṇoḥ* 3.1.66] 'Before a *sārvadhātuka* (suffix), when there is a *bhāva* or a *karman* (to be designated), *yak* (appears).' Then *kartari* [by dividing 3.1.68 *kartari śap*, and referring *kartari* to 3.1.67]: *kartari ca yag bhavati bhāvakarmaṇoḥ* 'And when there is a *karṭr*, *yak* (appears), when there is a *bhāva* or a *karman* (to be designated).'

\* \* \*

3. Or: the teacher's [Pāṇini's] procedure indicates that '*yak* appears when there is a *karṭr*, which is (also) a *karman*', since he teaches the prohibition of *yak* and (the passive aorist morpheme) *ciṇ* in (3.1.89) *na duhasnunamām yak-ciṇau*. ('[The roots] *duh*, *snu*, and *nam* don't have *yak* or *ciṇ*.' This is an exception to the general statement of the reflexive given in 3.1.87 *karmavat karmaṇātulyakriyāḥ* [*kartari*—or rather *kartā* by *vipariṇāma*: 3.1.68] 'A *karṭr* which (also) has the same [relation to an] action as does a *karman*, is [treated] like a *karman*.' By implication, any root other than *duh*, *snu*, or *nam* would have *yak* or *ciṇ*—prescribed in the function of *karman* by 3.1.66–7—when a *karṭr* which is also a *karman* is expressed. Thus Patañjali rejects the division of the rule proposed in Kātyāyana's fifth *vārttika* as unnecessary.)

*yaso 'nupasargāt* (3.1.71) II.60.12–3

1. '*anupasargād*' *iti kimartham?*
2. *āyasyati, prayasyati.*
3. '*anupasargād*' *iti śakyam akartum.*
2. *katham āyasyati, prayasyati?*
3. *saṃyasaś ca ity etan nīyamārthaṃ bhaviṣyati. saṃpūrvād eva yaso nānyapūrvād iti.*
1. Of what purpose is [the expression] *anupasargāt* 'not after a preposition'?

2. *āyasyati, prayasyati*. [When the root *yas* is preceded by a preposition (here, *ā-* and *pra-*), the *vikaraṇa śyan* alone appears after the root. *anupasargāt* extends the scope of the option *śap śyan vā*, described in the root-list of 3.1.70, to *yas*, when it is not preceded by a preposition, e.g., *yāsati, yāsyati*; this option provides for free variation of *śap* and *śyan*.]
3. It is possible to omit '*anupasargāt*'.
2. How about *āyasyati, prayasyati*?
3. '*samyasāś ca*' [3.1.72, which provides for the free variation of *śap* and *śyan* after *yas* preceded by the preposition *sam-*]—this will be for the purpose of (giving) the restriction: only after *yas* preceded by *sam* (but, by implication), not by any other (preposition, is there free variation of *śap* and *śyan*).

*rudhādibhyaḥ śnam* (3.1.78)

#### A. II.60.17-21

1. *kimarthaḥ śakāraḥ?*
2. *sārvadhātukārthaḥ*. '*śitsārvadhātukam*' *iti sārvadhātukasamjñā*, '*sārvadhātukam apid*' *iti nītvam, 'nīti' ti guṇapratīṣedho yathā syāt*: '*bhinatti, chinatti*' *tī*.
1. *naitad asti prayojanam*. *sārvadhātukārdhadhātukayor aṅgasya guṇa ucyate, yasmāc ca pratyaya vidhis tadādi pratyaye 'ṅgasamjñam bhavati, yasmāc cātra pratyayavidhir na tat pratyaye parato, yac ca pratyaye parato na tasmāt pratyayavidhiḥ*.
1. Of what purpose is the sound *ś* [of *śnam*]?
2. It has the purpose of (showing the *vikaraṇa -na-* to be) *sārvadhātuka*. So that there should be: (1) the technical term *sārvadhātuka* by (3.4.113 *tīṇ*) *śīt sārvadhātukam* '*sārvadhātuka* = (the personal endings of the verb and) that which has *ś* as *it*'; (2) (and therefore) the characteristic of having *ñ* as *it* by (1.2.4) *sārvadhātukam apit* [*nīt*: 1.2.1] '*a sārvadhātuka* (suffix), which doesn't have *p* as *it* (has *ñ* as *it*); (3) (and, therefore) prohibition of *guṇa* by (1.1.5k)-*nīti* (*ca* [*guṇavṛddhi*: 1.1.3, *na*: 1.1.4] 'and there is not substitution of *guṇa* or *vṛddhi*) before that which has (*k* or) *ñ* as *it*': *bhinatti, chinatti*. (These examples demonstrate the absence of the *guṇa* substitute *e* for the root vowel *i*.)
1. This isn't the motivation (for the *ś-* of *śnam*). (The substitution of) *guṇa* is taught for the (vowel of the stem called) *aṅga*, before a *sārvadhātuka* or *ārdhadhātuka* (suffix) [7.3.84 *sārvadhātukārdhadhātukayoḥ* (*guṇaḥ*: 7.3.82, *aṅgasya*: 6.1.1)]; now, what begins with that, after which a suffix is prescribed, gets the technical germ *aṅga* 'stem' when it precedes the suffix [1.4.13 *yasmāt pratyayavidhis tadādi pratyaye 'ṅgam*]. That after which the suffix is prescribed here [the roots *rudh*, etc.], however, doesn't occur before that suffix (since the suffix is infixed), and that which *is* before the suffix (the first part of the roots *rudh*, etc.: *ru-* etc.), after *that* the suffix is not prescribed (but after the full roots *rudh*, etc.: it is only the *anubandha -m* which causes it to appear before the last sound of the root, in accordance with 1.1.47 *mīd aco 'ntyāt paraḥ* 'that which has *m* as *it* follows the last vowel').

## B. II.60.21—61.1

2. *idaṃ tarhi prayojanam ārdhadhātukasamjñā mā bhūd iti.*

1. *kiṃ ca syāt?*

2. *valādilakṣaṇa iṭ prasajyeta.*

1. *etad api nāsti prayojanam. valāder ārdhadhātukasyāṅgasyeḍ ucyate, yasmāc ca pratyayavidhis tadādi pratyaye 'ṅgasamjñam bhavati, yasmāc cātra pratyayavidhir na tat pratyaye parato, yac ca pratyaye parato na tasmāt pratyaya-vidhiḥ.*

2. This, then, is the motivation (for the ś- of śnam): that there should not be (applied to śnam) the technical term *ārdhadhātuka*.

1. And what would happen (if it were called *ārdhadhātuka*, i.e., what would be the harm)?

2. *iṭ*, which is caused by an *ārdhadhātuka* suffix beginning with *va* [a consonant other than *y*] would—wrongly—result (by 7.2.35 *ārdhadhātukasyeḍ valādeḥ* 'an *ārdhadhātuka* [suffix] beginning with a consonant other than *y* has *iṭ*').

1. This isn't the motivation, either. 7.2.35 is taught for a stem (*aṅgasya*, 6.1.1, is in force through 7.4.87) which has an *ārdhadhātuka* suffix; now, what begins with that, after which the suffix is prescribed, gets the technical term *aṅga* 'stem' when it precedes the suffix; that, after which the suffix is prescribed here, however, doesn't occur before that suffix, and that which is before the suffix, after that the suffix is not prescribed.

## C. II.61.2–17

2. *ata uttaram paṭhati.*

*śnami śilkarāṇaṃ pvādihrasvārtham. (1)*

*śnami śilkarāṇaṃ kriyate pvādīnām śiti hrasvatvaṃ yathā syāt: 'prṇati, mṇati' ti.*

1. *na vā dhātvanvat. (2)*

*na vā kartavyam.*

2. *kiṃ kārāṇaṃ?*

1. *dhātvanvatvāt. dhātvantaram: prṇimrñi.*

2. *yat tarhi na dhātvantaram: 'yatra bhūmyām vṛṇasé'.*

1. *naiṣa śnam. śna etad hrasvatvam.*

2. *yadi śno hrasvatvaṃ, svaro na sidhyati: 'vṛṇasé'. 'adupadeśāl lasārvadhātukam anudāttaṃ bhavati' ty eṣa svaro na prāpnoti. tasmāc śnam eṣaḥ.*

1. *yadi śnam 'śnasor allopaḥ' iti lopah prāpnoti.*

2. *'upadhāyā' iti vartate; 'nupadhātvaṃ na bhaviṣyati.*

1. *na sa śakya 'upadhāyā' iti vijñātum. iha hi doṣaḥ syāt: 'anṅktaḥ, añjanti'. tasmāc śna eva hrasvatvam.*

2. *svaraḥ katham?*

1. *bahulaṃ pit sārvaadhātukaṃ chandasi. (3)*

*sārvaadhātukasya bahulaṃ chandasi pittvaṃ vaktavyam. pitaś cāpittvaṃ dr̥ṣyate 'pitaś ca pittvam. pitaś tāvad apittvaṃ: 'mātaram pramiṇīmi janitrīm'. apitaḥ pittvam: 'śṛṇota grāvāṇaḥ'.*

2. *tat tarhi hrasvatvaṃ vaktavyam.*

1. *avaśyaṃ chandasi hrasvatvaṃ vaktavyam* ‘*upagāyantu mām patnayo garbhīṇayo yuvataya*’ *ity evamartham.*

2. He (Kātyāyana) recites as a [traditional] answer to that (question, i.e. ‘What purpose does the sound *ś* of *śnam* have?’):

*śnami śitkaraṇaṃ pṛādhirasvartham. (vārtt. 1)*

(The following paraphrases *vārtt. 1* to 3.1.78.) In (teaching) ‘*śnam*’ (in 3.1.78), *ś* is made as *it*, so that (the rule teaching) substitution of a short vowel for (the vowel of the roots) *pū*, etc., before that which has *ś* as *it* (7.3.80 *pṛādī-nām hrasvaḥ [śiti: 7.3.75]*) should apply: *prṇati*, *mṛṇati* (as if *prṇati* and *mṛṇati* < *pī-śnam-tip*, *mī-śnam-tip*. In the *Dhātupāṭha*, all members of the *pū* class are listed in the class which has the *vikaraṇa śnā*, i.e., the ninth class; *pī* is *Dh.P.* 9, 19; *mī* is 9, 22.).

1. *na vā dhātvanyatvāt. (vārtt. 2)*

Or rather, it (the *ś* of *śnam*) need not have been made (for this purpose). (This is an amplification of ‘*na vā*’ in *vārtt. 2*.)

2. Why (not)?

1. (The reply to this question completes the paraphrase of *vārtt. 2*.) Because there are other roots (than assumed above, from which *prṇati* and *mṛṇati* may be derived; i.e., they need not belong to the *pū* class, and the *vikaraṇa* need not be *śnam*, but may be—as demonstrated by the roots cited—the sixth class *śa*). The other roots are *prṇi* and *mṛṇi* (*Dh.P.*, 6,40–1; as if *prṇati*, *mṛṇati* < *prṇ-śa-tip*, *mṛṇ-śa-tip*).

2. Then (*śnam* must be taught with *ś* as *it* for cases), where there isn’t another root [where there can only be a root of the *pū* class]: *yatra bhūmyām vṛṇasé* ‘where you choose on the earth’<sup>31</sup> (as if *vṛṇasé* can only be derived from the root *vṛ*—*Dh.P.* 9,16; 9,20—plus *śnam*: *vṛ-śnam-se* > *vṛṇasé*).<sup>32</sup>

1. This isn’t *śnam*. This is a short substitute for *śnā*.<sup>33</sup>

<sup>31</sup> TA 6.4.2<sup>e</sup> *yatra bhūmyai vṛṇase tatra gaccha*. Kielhorn, in discussing other discrepancies in the Vedic quotations of the *Mahābhāṣya*, says: ‘... the MSS. of the *Mahābhāṣya* and the commentators may be wrong. But there are other cases where it is certain that the texts known to Patañjali differed from the published texts . . .’ (*Vyākaraṇa-Mahābhāṣya*, 3.10).

<sup>32</sup> From the fact that Patañjali does not hesitate to add *śnam* to a root belonging to the ninth class in the *Dhātupāṭha* we can infer that either Patañjali did not know the *Dhātupāṭha* in the form in which we know it (e.g. as in Sāyana’s 14th century *Mādhavīyadhātuvṛtti*; cf. Liebhich, *Zur Einführung III*), or he knew it, but it was not authoritative for him.

<sup>33</sup> Such a substitution is not taught by Pāṇini (as the *śiṣya* points out—II.61.16 *tat tarhi hrasvatvaṃ vaktavyam*. The *ācāryadeśīya* then gives other examples for this substitution.)

A possible justification for Pāṇini’s neglect in not teaching this substitution explicitly can be derived from Patañjali’s interpretation of 3.1.85 *vyatyayo bahulam [chandasi: 3.1.84]*. Patañjali divides 3.1.85, referring *vyatyayo* ‘alternation’ to the preceding rules, which describe the distribution of the *vikaraṇas*; he then interprets 3.1.85 *vyatyayo bahulam [chandasi: 3.1.84]* ‘There is frequently alternation in the sacred literature’ out of context, as a *paribhāṣā* referring to all rules (citing a *kārika*—II.65.5–6—which says that through *bahulam* ‘frequently’ Pāṇini provides for variation of all kinds—endings, consonants, vowels, etc.—in the sacred literature.

This is not the only instance in which Patañjali takes as a universal *paribhāṣā* what



2. If it's a short substitute for *śnā*, the correct pitch isn't obtained—*vr̥ṇasé* (as the following comments show, if *vr̥ṇasé* were derived from *vr̥-śnā[n̄]-se*, the vowel of the ending should be low-pitched, since *se* is a *sārvadhātuka* verbal ending): (6.1.186) [*tāsyānudan̄n̄id*] *adupadeśāl lasārvadhātukam anudan̄tam* [*ahn̄vīnoḥ*] 'after *tāsi*, after that which has a low-pitched vowel or *n̄* as *it*, and] after an element taught in the grammar as ending in *ā*, the vowel of the *sārvadhātuka* personal endings of the verb is low-pitched [except after the roots *hnuñ* and *iñ*]; this [low] pitch isn't (wrongly) obtained. This [the -*na*- of *vr̥ṇasé*] is therefore *śnam*.
1. If (it's) *śnam*, *lopa* is wrongly obtained by (6.4.111) *śnasor allopaḥ* [*āṅgasya*: 6.4.1, *kn̄iti*: 6.4.98] 'There is *lopa*—invisibility—of the *a* of *śnam* and of the root *as* [in a stem (which appears) before that which has *k* or *n̄* as *it*].' [That is, in *vr̥-śnam-se*, the *a* of *śnam* would be lost before *se*, which, since it is *sārvadhātuka* and doesn't have *p* as *it*, has *n̄* as *it*—by 1.2.4; cf. above, Chapter II, s.v. *n̄it*.]
2. (The term) '*upadhāyās*' is valid (from 6.4.89 *ūd̄upadhāyā goh̄āḥ*: i.e. 6.4.111 *śnasor allopaḥ* [*kn̄iti*: 6.4.98, *upadhāyās*: 6.4.89, *āṅgasya*: 6.4.1] 'There is *lopa*—invisibility—of the *ā* of *śnam* and of [the root] *as* [when this *ā* is the *upadhā* (the last but one sound) of a stem (which appears) before that which has *k* or *n̄* as *it*']), and since it (the *ā* of *śnam*) is not the last but one sound [of the stem], it (the *lopa* of the *ā*) will not occur (i.e., *v̄r̄-śnam-se* > *vr̥-ṇa-se*—and, since the *ā* is the last, not the last but one, sound of the stem, it is not lost—whereas, in cases like *rudh-śnam-se* > *ru-na-dh-se* > *rundhse* > *runtse*, the *ā*, being the last but one sound of the stem, is lost).
1. That (rule, i.e. 6.4.111 *śnasor allopaḥ*) can't be understood (under the supposition that '*upadhāyās*' is valid from 6.4.89), for in the following case, an error would result: *an̄ktaḥ*, *añjanti* [*śr̄.am* is added after the last vowel of the root *añj*, but since two sounds follow it, the *ā* is again not the last but one sound of the stem, and yet the *ā* is lost: *a-na-ñj-tas* > *an̄ktas*, *a-na-ñj-anti* > *añjanti*]. Therefore (the -*na*- of *vr̥ṇasé*) can only be a short substitute for *śnā*.<sup>34</sup>
2. How [does] the pitch [result as correct]? (The *ācāryadeśīya* here returns to his objection to the proposed derivation: *vr̥ṇasé* < *vr̥-śnā-se*—an objection

Pāṇini gave in the framework of a limited context. For example, the *paribhāṣā* given in 1.4.2 *vīpratiśedhe param̄ kāryam* 'In a conflict, that which is later is to be done' seems obviously intended to apply only to the section that ends with 2.2.38: 1.4.1 *ākāḍārād ekā sam̄jñā* 'Up to *kaḍāra* [2.2.38 *kaḍārāḥ karmadhāraye*] one technical term (only may apply to what is defined; [1.4.2] if there is a conflict, the term defined later applies).' Kātyāyana, however, invokes this principle in quite another context (3.1.67, *vārtt.* 4—II.59.1), as does Patañjali on 3.1.78 (II.61.20).

<sup>34</sup> It might be countered that the *a* is the next to last sound after the penultimate nasal of the root *añj* is lost—by 6.4.23 *śnān nalopaḥ* 'There is *lopa*—invisibility—of *n* after *śnam*'—but by 6.4.22 *asiddhavad atrā bhāt* 'What is here, up to *bha* [i.e., 6.4.129 *bhasya*] is as if it had not taken effect.' Therefore, one rule (e.g. 6.4.23 *śnān nalopaḥ*) in the section 6.4.22–6.4.129 cannot prevent another in that section (e.g. 6.4.111 *śnasor allopaḥ*) from taking effect.

which has not yet been answered—namely, after *śnā*, the vowel of the suffix *se* should be low-pitched, but it is not in *vr̥ṇasé*.)

1. *bahulaṃ pīt sārvaadhātukaṃ chandasi*. (vārtt. 3)

It must [anyway] be taught that, in the sacred literature, a *sārvaadhātuka* (suffix) frequently has *p* as *it* (and thus a low-pitched vowel, by 3.1.4 *anudāttau suppitau* ‘sup—a collective term for the case-endings—and that which has *p* as *it* have a low-pitched vowel’). The fact of not having *p* as *it* occurs (in the sacred literature) in a place where (in the grammar a *sārvaadhātuka* suffix is taught as having) *p* as *it*, as well as the fact of having *p* as *it* (in the sacred literature) in a place where (in the grammar, a suffix) does not have *p* as *it*.

First, the fact of not having *p* as *it*, in a place where (a *sārvaadhātuka* suffix) has *p* as *it* (in the grammar): *mātaraṃ pramiṇīmi janitrīm*<sup>35</sup> ‘I destroy the mother, the one who gives birth’. [-*mi*, the first person singular suffix, is taught in the grammar as *mīp*, e.g., in 3.4.78. That it cannot have *p* as *it* here is shown by the occurrence of the substitute -*ī*- for the -*ā*- of *śnā*. This substitution is stated in the grammar as occurring before a *sārvaadhātuka* suffix which has *k* or *ṇ* as *it*: 6.4.113 *ī haly aghoḥ* (kñiti: 6.4.88, *sārvaadhātuke*: 6.4.110, *śnābhyastayor ātaḥ*: 6.4.112) ‘(Before a *sārvaadhātuka* suffix which has *k* or *ṇ* as *it* and begins with a consonant) *ī* replaces *ā* (in *śnā* and reduplicated stems) excepting *ghu* (stems formed from the roots *dā* and *dhā*: 1.1.20 *dādhā ghu adāp* “*ghu* = *dā* and *dhā*, but not the *dā* which has *p* as *it*”).’ -*mi*, as a *sārvaadhātuka* suffix, has *ṇ* as *it*, if it does not have *p* as *it* (cf. Chapter II, s.v. *nūt*).]

1. The fact of having *p* as *it*, where (a *sārvaadhātuka* suffix) does not have *p* as *it* (in the grammar): *śṛṇota grāvāṇaḥ* ‘listen, stones!’ (The second person plural imperative suffix is taught as -*ta* in the grammar. Since it doesn’t have *p* as *it*, it has *ṇ* as *it*, and *guṇa* in the preceding syllable—which would otherwise be expected by 7.3.84 *sārvaadhātukārdhadhātukayoḥ* [*guṇaḥ*: 7.3.82] ‘*guṇa* (appears) before a *sārvaadhātuka* or *ārdhadhātuka* (suffix)’—is prohibited by 1.1.5 *kñiti ca* [*guṇavṛddhi*: 1.1.3, *na*: 1.1.4] ‘and *guṇa* and *vṛddhi* are not substituted before that which has *k* or *ṇ* as *it*’. Since *guṇa* does occur in this position in the example given here, *śṛṇota grāvāṇaḥ*, the suffix must have, not *ṇ*, but *p* as *it*. This is the reverse of the preceding, i.e.:

The grammar teaches the suffixes      *mīp*    *ta(ṇ)*

The usage of the sacred literature

forces us to infer also                      *mī(ṇ)*    *ta(p)*

2. Then [granted that the pitch is in order, and that the objection raised above in II.61.7–8—*yadi śno hrasvatvaṃ, svarō na sidhyati*—is invalid] that substitution of a short vowel [to explain -*nā*- for -*nā*-] must be taught.
1. Substitution of a short vowel in the sacred literature must (anyway) necessarily be taught for the purpose of [explaining] *upagāyantu mām patnayo*

<sup>35</sup> AV 6.110.3<sup>d</sup> *mā mātaraṃ pra minīj janitrīm*.

*garbhīṇayo yuvatayaḥ* ‘Let the wives, mothers, and young girls sing to me.’ (There is *guṇa* of the stem-final *-ī* of *patnī-* and *garbhīṇī-* before the nominative plural ending *-as*. Pāṇini, however, teaches *guṇa* only for stems in *-ī*: 7.3.108 *hrasvasya guṇaḥ*, 7.3.109 *jasi ca* ‘and *guṇa* replaces a short vowel before *jas* [the nominative plural ending: 4.1.2]’. Since we must, anyway, teach a Vedic substitution of a short vowel to take care of the quoted plural forms of *patnī-* and *garbhīṇī-*, we need no special rule for this substitution in *vr̥ṇasé*.)

## D. II.61.18–22

2. *viśeṣaṇārthas tarhi*.

1. *kva viśeṣaṇārthenārthaḥ?*

2. ‘*śnān nalopaḥ*’ *iti*. ‘*nān nalopa*’ *ity ucyamāne* ‘*yajñānām*, *yatnānām*’ *ity atrāpi prasajyeta*.

1. *dīrghatve kṛte na bhaviṣyati*.

2. *idam iha sampradhāryam: dīrghatvaṃ kriyatām nalopa iti, kim atra kartavyam? paratvān nalopaḥ syāt. tasmāc śākāraḥ kartavyaḥ*.

1. *atha kriyamāṇe śākāra, iha kasmān na bhavati: ‘viśnānām, praśnānām’ iti?*

2. ‘*lakṣaṇapratipadoktayoh pratipadoktasyaive*’ *ti*.

2. Then it [the *ś* of *śnam*] has the purpose of [giving] a distinguishing mark. [Since *-nā-* in *vr̥ṇasé* can result from the substitution of a short vowel for the *-ā-* of *śnā*, there is left no indisputable example of shortening of *pū*, etc., before *śit*, i.e., the *ś* of *śnam*. And so the *ācāryadeśīya* gives a new answer to the question: *kimarthaḥ śākāraḥ* ‘What is the purpose of the sound *ś*? (II.60.17)]

1. Where is there a purpose [fulfilled] by [an *ś*] that has the purpose of [giving] a distinguishing mark?

2. In [6.4.23] ‘*śnān nalopaḥ*’ [*aṅgasya*: 6.4.1] (‘After *śnam* in a stem, there is *lopa*—invisibility—of *n*’). If ‘*nān nalopaḥ*’ were taught [i.e., ‘after *nā* in a stem, there is *lopa*—invisibility—of *n*’], here too—in the case of *yajñānām* and *yatnānām* [formed from the elements *yaj-na-nām* and *yat-na-nām*]—it [the *lopa* of *n*] would [wrongly] result.

1. After substitution of a long vowel has been made [by 6.4.3 *nāmi* (*aṅgasya*: 6.4.1, *dīrgha*: 6.3.111)] ‘There is substitution, in a stem, of a long vowel before *nām*’, it [the *lopa* of *n*] will not occur [since *n* will now follow *nā*, not *nā*].

2. In this case, the following must be weighed: [both] the lengthening of the vowel [before *nām*, by 6.4.3; the *śiṣya*’s argument] and the replacement of *n* by invisibility [after *śnam*, by 6.4.23; the *ācāryadeśīya*’s argument] are [enjoined] to be done: which, then, must be done here? There would be replacement of *n* by invisibility, since it is later (is taught later in the grammar; the principle here applied is that of 1.4.2 *vīpratiśedhe paraṃ kāryam* ‘In a conflict, that which is later is to be done’). Therefore the sound *ś* must be made [for the purpose of giving a distinguishing mark: if *nān*—instead of *śnān*—*nalopaḥ* were taught, wrong results would be obtained].

1. But now, when the sound *ś* is made, why doesn’t it [the invisibility of *n*] occur

here: *viśnānām*, *praśnānām* (formed from the elements *vich-na-nām*, *prach-na-nām* by 3.3.90 *yajayacayatavicchapraccharakṣo nañ* ‘After [the roots] *yaj*, *yac*, *yat*, *vich*, *prach*, and *rakṣ*, [the suffix] *nañ* appears,’ and 6.4.19 *chvoḥ śūd anunāsike ca* [*aṅgasya*: 6.4.1] ‘*ś* and *ū* take the place of a stem-final *ch* and *v* before a nasal, too’). (That is, the *śiṣya* asks, why doesn’t the invisibility of the *n* of *-śna-* occur in these forms at the stage *viśna-nām*, *praśna-nām*, before the lengthening of the stem-final *a* occurs?)

2. *lakṣaṇapratipadoktayoh pratipadoktasyaiva* ‘[If there are two possible ways] of [understanding a rule or a part of a rule: as referring to] something that results from the application of a grammatical rule or that is taught by naming, only that element which is taught by naming [is to be understood].’ (That is, in *śnān nalopaḥ*, *śnāt* [> *śnān* by sandhi] can be interpreted as the ablative of the combination of sounds *śna*, or as the ablative of the suffix *śnam*. The combination of sounds *śna* in *viśna-nām* and *praśna-nām* results from the application of rules 3.3.90 and 6.4.19, but *śnam* is named—in 3.1.78 *rudhādibhyaḥ śnam*. Therefore, in *śnān nalopaḥ*, *śnāt* must be interpreted as the ablative of *śnam*, and of *śnam* only. This principle of interpretation—*lakṣaṇapratipadoktayoh pratipadoktasyaiva*—is discussed in the *Paribhāṣendu-śekhara* as *paribhāṣā* 105.)

*tanādikṛñbhya uḥ* (3.1.79)

A. II.61.24—62.1

1. *atha kimarthaṃ karoteḥ prthaggrahaṇaṃ kriyate, na ‘tanādibhya’ ity evocyeta.*
2. *anyāni tanotyādikāryāṇi mā bhūvann iti.*
1. *kāñi?*
2. *anunāsikalopādīnī: ‘daivaraktāḥ kiṃśukāḥ’.*
1. *anunāsikābhāvād evānunāsikalopo na bhaviṣyati.*
1. Now why is *karoti* (i.e., *kṛñ*) cited separately; [why] shouldn’t simply ‘*tanādibhyaḥ*’ (i.e., *tanādibhya uḥ*) be taught?
2. (It is cited separately) so that other operations (taught) for *tanoti*, etc. shouldn’t become (applicable to *kṛñ*).
1. Which (operations)?
2. ‘*anunāsikalopaḥ*’, etc.: (e.g.,) *daivaraktāḥ kiṃśukāḥ* ‘The *kiṃśuka* trees are made red by the will of the gods’. (*anunāsikalopaḥ* is a reference to 6.4.37 *anudāttopadeśavanatitanotyādīnām anunāsikalopo jhali kñiti* ‘*lopa*—invisibility—replaces the nasal of that which has a low-pitched vowel [in the form in which it is taught in the *Dhātupāṭha*], of *vanati*, and of *tanoti*, etc. before a suffix beginning with *jhal* [a consonant other than a semivowel or nasal] which has *k* or *ñ* as *i*’. *daivaraktāḥ* is an example to *anudāttopadeśa*: *rañj*, which is taught [*Dh.P.* 1,1048; 4,58] as having a low-pitched vowel, loses its nasal before the participle-forming suffix *kta*: *rañj-kta* > *raj-kta* > *rak-ta*. Similarly, *tan-kta* > *ta-kta* > *ta-ta*.)
1. Since there *isn’t* a nasal (in the root *kṛñ*), there won’t be invisibility of a nasal [anyway] (even if *kṛñ* is included in the class ‘*tan*, etc.’).

## B. II.62.1-8

2. *idaṃ tarhi tanādikāryaṃ mā bhūt: 'tanādibhyas tathāsoḥ' iti.*

1. *nanu ca bhavaty evātra?*<sup>36</sup>

2. *'hrasvād aṅgāt' iti tenaiva yathā syād, anena mā bhūd iti.*

1. *kaś cātra viśeṣas tena vā saty anena vā?*

2. *tena sati, siḥlopasyāsiddhatvāc ciṇvadbhāvaḥ siddho bhavati. anena punaḥ sati, ciṇvadbhāvo na syāt.*

3. *anenāpi sati, ciṇvadbhāvaḥ siddhaḥ.*

2. *katham?*

3. *vibhāṣā luk. yadā na luk, tadā tena lopaḥ. tatra siḥlopasyāsiddhatvāc ciṇvadbhāvaḥ siddho bhavati.*

*tanādītvāt kṛñḥ siddham, siḥlope ca na duṣyati. ciṇvadbhāve 'tra doṣaḥ syāt, so 'pi prokto vibhāṣayā.*

2. Then (*kṛñ* is cited separately in 3.1.69) so that the following operation of 'tan, etc.' shouldn't apply (to *kṛñ*): 2.4.79 *tanādibhyas tathāsoḥ* [*luk*: 2.4.58, *sicaḥ*: 2.4.77, *vibhāṣā*: 2.4.78] '[*luk*—invisibility—may optionally replace *sic*—the aorist *s*] after *tan*, etc., before [the third and second (in Indian terminology, first and second) person singular middle endings] *ta* and *thās*', e.g., *a-tan-sic-ta[n]* > *a-tan-luk-ta[n]* > *atata*.

1. But *doesn't* it [the loss of the aorist *s* before *ta* and *thas*] apply here [after *kṛñ*] (*\*kṛ-sic-ta[n]* > *a-kṛ-ta*)?

2. (*kṛñ*) is cited separately) so that it (the loss of the aorist *s* before *ta* and *thās* after the root *kṛñ*) should occur only by that rule: 8.2.27 *hrasvād aṅgāt* [*lopaḥ*: 8.2.23, *sasya*: 8.2.24, *jhalī*: 8.2.26] 'After a stem ending in a short vowel [there is *lopa*—invisibility—of *s* before *jhal* [a consonant other than a semivowel or nasal], e.g., *a-kṛñ-sic-ta[n]* > *a-kṛñ-lopa-ta[n]* > *akṛta*,' and not by this (one, i.e., 2.4.79 *tanādibhyas tathāsoḥ*).

1. And what is the difference here whether it is (occurs) by that (rule) or by this?

2. If it is by that (rule, i.e., 8.2.27), the process of becoming like *ciṇ* takes place, since the *lopa* of *s* hasn't taken effect. (The *lopa* of *s* hasn't taken effect, since all *sūtras* from 8.2.1 on are 'not in effect' in relation to all previous *sūtras*—by 8.2.1 *pūrvatrāsiddham*. 'The process of becoming like *ciṇ*' is a reference to 6.4.62 *syasicsīyuttāsiṣu bhāvakarmanor upadeśe 'jḥangrahadrśām vā ciṇvad iṭ ca* [*aṅgasya*: 6.4.1] 'Before [the future-forming] *syā*, [the aorist] *sic*, [the precative] *sīyut*, or [the periphrastic future-forming] *tāsi*, when there is a *bhāva* or *karman* (to be designated), a stem called *aṅga*, formed from a root which is taught as ending in a vowel, or from *han*, *grah*, or *drś*, may optionally be like a stem before [the passive aorist-forming] *ciṇ*, and then there is [the *āgama* 'augment'] *iṭ*.' Since there is *vrddhi* before *ciṇ* by 7.2.115 *aco ṇīti* [*vrddhiḥ*: 7.2.114] 'There is *vrddhi* of a vowel before that which has *ñ* or *ṇ* as *iṭ*,' this means that there may be *vrddhi* of the vowel before *syā*, *sic*, *sīyut*, and *tāsi*, after a root ending in a vowel in grammatical instruction, and after

<sup>36</sup> Punctuation vs. Kielhorn.

the roots *han*, *grah*, and *dṛś*, e.g., *kṛ-sic* [which becomes like *ciṇ*]-*ta[n]* > *a-kṛ-iṭ-sic-ta[n]* > *akāriṣṭa*, but, since this rule is taught as optional, also *kṛ-sic-ta[n]* > *a-kṛ-s-ta* > *akṛta*, with *lopa* of the *s* by 8.2.27 *hrasvād aṅgāt*. The *s* is not lost in *akāriṣṭa*, because the stem called *aṅga* is here *akār-*, and does not end in a short vowel.) But if it [the loss of the aorist *s*] is by this (rule, 2.4.79 *tanādibhyas tathāsoḥ*), there wouldn't be the process of becoming like *ciṇ* (since this process, as taught in 6.2.64, presupposes *sic*, and *sic* has been lost by 2.4.79).

3. Even if it (the loss of the aorist *s*) is by this (rule, 2.4.79), the process of becoming like *ciṇ* takes effect.

2. How?

3. *luk* (invisibility—of *sic* by 2.4.79) is optional (by 2.4.78 *vibhāṣā*); when there isn't *luk*, then there is *lopa* (of *s* after *kṛñ*) by that (rule, 8.2.27 *hrasvād aṅgāt*). Since, on this alternative, the *lopa* of *sic* hasn't taken effect (in 6.4.62), the process of becoming like *ciṇ* correctly results (by 6.4.62). (That is: if *kṛñ* were not taught separately in this rule, there would be no difference in the results obtained. Therefore, there is no purpose in its being so taught, and Pāṇini should have formulated this rule, not as '*tanādikṛñbhya uḥ*,' but as '*tanādibhya uḥ*.'

(*kārikā*)

From the fact that there is [the expression] *tanādi-* [used in 3.1.79], [the operation taught in this rule] results correctly [also] for *kṛñ* (and it is not necessary to explicitly teach it, in addition to *tanādi*, as Pāṇini did).

And there arises no fault, if [the forms *akṛta*, *akṛthās* are explained as resulting] by *lopa* of [the aorist-forming element] *sic* [according to 2.4.79] (i.e., if we explain: *kṛ + sic + tañ/thās* > *a-kṛ-ta/thās*, instead of assuming *lopa* of the sound *s* according to 8.2.27: *a-kṛ-s-ta/thās* > *akṛta/akṛthās*).

(objection:) If we adopt this procedure (*atra*), a fault would arise in the application of 6.4.62 (i.e. we should not obtain by this rule the optionally correct forms *akāriṣṭa/akāriṣṭhās* beside *akṛta/akṛthās*, since *sic* would have disappeared by 2.4.79 and we would no longer presuppose, at the time when 6.4.62 is taking effect, a *\*kṛ + sic + tañ/kṛ + sic + thās*).

(answer:) [Not only 6.4.62, but] also the *lopa* of *sic* (i.e., 2.4.79) is taught as optional. (Hence, when 6.4.62 is taking effect, we have both prototypes: *kṛ + sic + tañ/thās* and *kṛ + lopa + tañ/thās*. 6.4.62 can then be applied to the former alternative form.)

*dhinvikṛṇvyor a ca* (3.1.80)

A. II.62.10–3

1. *kvāyam akārah śrūyate?*

2. *na kvacīc chrūyate. lopo 'sya bhavaty: 'ato lopa ārdhadhātuka' iti.*

1. *yadi na kvacīc chrūyate, kimartham atvam ucyate, na lopa evocyeta?*

2. *naivam śakyam. lope hi sati, guṇaḥ prasajyeta. atve punaḥ saty, akāralopasya sthānivadbhāvād guṇo na bhavati.*
1. Where is this sound *a* heard?
2. It's not heard anywhere; *lopa*—invisibility—replaces it by *ato lopa ārdhadhātuke* [6.4.48 *ato lopaḥ* (ārdhadhātuke: 6.4.46) '(Before an ārdhadhātuka [suffix]) *lopa* replaces *ā*'].
1. If it's not heard anywhere, for what purpose is *a* taught? Shouldn't simply '*lopaś*' [i.e., *dhinvikṛṇvyor lopaś ca*] be taught?
2. It isn't possible (to do) so. For, if there were *lopa*, *guṇa* would—wrongly—result (by 7.3.86 *pugantagalaghūpadhasya ca* [aṅgasya: 6.4.1, *guṇaḥ*: 7.3.82, *sārvadhātukārdhadhātukayoḥ*: 7.3.84] '[Before a *sārvadhātuka* or *ārdhadhātuka* (suffix), *guṇa* replaces] the [last] vowel of a stem which ends in [the *āgama* 'augment'] *p*, or which has a light penultimate [i.e., a short vowel followed by a single consonant, by 1.4.10 *hrasvam laghu*, 1.4.11 *saṃyoge guru*]. If *lopa* were substituted for the last sound of the root *dhinv*, when the *vikaraṇa u* is added, the resulting stem *dhin* would have a light penultimate, and there would be substitution of *guṇa* for the *-i-*.) But, if there is *a*, *guṇa* does not come into existence, since the *lopa* (substitute) of the sound *a* becomes like what it takes the place of<sup>37</sup> (that is, like *a*—by 1.1.56 *sthānivad ādeśo* 'nalvidhau 'A substitute is like that, in whose place it stands, except in a rule involving [specific] sounds.' In the resulting stem—*dhina*—there is no light penultimate, and 7.3.86 does not take effect.).

## B. II.62.13–6

1. *nanu ca lope 'pi sati 'na dhātulopa ārdhadhātuke' iti pratiśedho bhaviṣyati?*
2. *ārdhadhātukanimitte lope sa pratiśedho, na caiṣa ārdhadhātukanimitto lopaḥ. api ca pratyākhyāyate sa yogah. tasmin pratyākhyāte, guṇaḥ syād eva. tasmād atvam vaktavyam.*
1. But even if there is (only) *lopa* (and not first *a*), won't the prohibition (of *guṇa*) '*na dhātulopa ārdhadhātuke*'<sup>38</sup> arise? (1.1.4[*iko guṇavṛddhī*: 1.1.3] '*guṇa* and *vṛddhi* do not take the place of *ī*, *ū*, *ṛ*, or *ḷ* before an ārdhadhātuka [suffix], when there is *lopa* of the root.')
2. That prohibition applies when *lopa* is caused by an ārdhadhātuka suffix, and this *lopa* isn't caused by the ārdhadhātuka suffix.<sup>39</sup> And besides, that rule is refuted (in the discussion on 1.1.4—*vārtt.* 7) If that (rule) were refuted, there

<sup>37</sup> There is an implicit *paribhāṣā* here (and it is one that can be justified by common sense, i.e., it is *lokanyāyasiddha*): the *lopa*—invisibility—which is substituted for a part of a stem and which is taught only for that stem functions like what it takes the place of. Since the formal feature is lost, if the function (here, the prevention of *guṇa*) were not retained, there would have been no point in teaching it in the first place.

<sup>38</sup> The suffix *-u-*, not being *śit*, is an ārdhadhātuka.

<sup>39</sup> In Pāṇini's formulation of 3.1.80, the ārdhadhātuka *u* is not given as the cause of the operation, which would only be the case if Pāṇini had explicitly stated 'when [the ārdhadhātuka] *u* follows.'

would, without fail, be *guṇa* (if there were only *lopa* of *v*). Substitution of *a* must, therefore, be taught.

## C. II.62.17–22

1. *atha kimartham numanuṣaktayor grahaṇam kriyate, na 'dhivikṛvyor' ity evocyate?*
2. *'dhivikṛvyor' ity ucyamāne, 'tve kṛte, 'niṣṭe deṣe num prasajyeta.*
1. *idam iha saṃpradhāryam: atvam kriyatām, num iti, kim atra kartavyam?*
2. *paratvān numāgamah.*
1. *antaraṅgam atvam.*
2. *kāntaraṅgatā?*
1. *pratyayotpattisaṃnīyogenātvam ucyata; utpanne pratyaye, prakṛtipratyayāv āśrityāṅgasya numāgamah.*
3. *num apy antaraṅgah.*
2. *katham?*
3. *vakṣyaty etan: 'numvidhāv upadeśivadvacanam pratyayavidhyartham' iti. ubhayor antaraṅgayoh, paratvān numāgamah. tasmād 'dhivikṛvyor' iti vaktavyam.*
1. Now, why (for what purpose) are the two [roots] cited furnished with the *n* infixes? Why shouldn't simply '*dhivikṛvyor*' be taught? (*-n-* would be infixed, anyway, since the root has *i* as *it*—by 7.1.58 *idīto num dhātoḥ [āṅgasya: 6.4.1]* 'A root which has *ī* as *it*, has num [*n* added after the last vowel] [when that root is an *āṅga* 'stem']')
2. If '*dhivikṛvyor*' is taught, when the substitution of *a* is made, num would—wrongly—result, in a place where it isn't wanted. (*a* would be substituted by this rule, 3.1.80; num would be added only later, by 7.1.58. num is added after the last vowel: 1.1.47 *mid aco 'ntyāt paraḥ* 'That which has *m* as *it* appears after the last vowel.' After *a* has been substituted by 3.1.80, the last vowel is *a*, not *i*; if the *n* were then added by 7.1.58, it would follow *a*, and would thus be '*aniṣṭe deṣe*'.)
1. In this case, the following has to be weighed: both the substitution of *a* and the affixation of *n* are [enjoined] to be done. Which, then, should be done?
2. The *āgama* 'augment' num, since it is [taught] later [the substitution of *a* is prescribed by 3.1.80; num is taught in 7.1.58]. (The *ācāryadeśīya* here invokes the principle given in 1.4.2 *vipratīṣedhe paraṃ kāryam* 'In a conflict, that which is later is to be done'.)
1. (But) the substitution of *a* is *antaraṅga*. (For the intricacies involved in the *antaraṅga-bahiraṅga* question, cf. Kielhorn, *Paribhāṣhendusekhara* II.221 ff. and Renou, *Terminologie grammaticale*, s.v. *antaraṅga*. What is essential here, is that the *śiṣya* denies that the resolution of this conflict—whether *a* should be substituted, or *n* infixed—can be obtained by appealing to the principle '*vipratīṣedhe paraṃ kāryam*'. The *śiṣya* proposes, rather, that *a* should be substituted first, since the cause for this phenomenon is *antaraṅga* 'internal' in comparison with the cause for the affixation of *n*, and in a conflict, that



which has a linguistically internal cause takes precedence over that which has a linguistically external cause, i.e., which is *bahiraṅga*.)

2. In what way is it [the substitution of *a*] *antaraṅga* (in relation to the affixation of *num*)?
1. The substitution of *a* is taught in conjunction with the coming into existence of a suffix [*u*]; after the suffix has come into existence, the augment *num* (is added) to the *aṅga* 'stem,' which presupposes root and suffix (according to the definition of *aṅga* in 1.4.13 *yasmāt pratyayavidhis tadādi pratyaye 'ṅgam*).
3. *num* is also *antaraṅga*.
2. How?
3. He (Kātyāyana) will teach this (7.1.58, *vārtt.* 7): 'In the rule teaching *num* (7.1.58), it ought to be taught that, for the purpose of rules on suffixes, (a root to which the affix *num* has been added) becomes like (a root) that is taught in the grammar (i.e., in the *Dhātupāṭha*).' (That is: both the substitution of *a* and the affixation of *num* take effect before any suffix is added to the stem.) Since both are *antaraṅga* (and since, therefore, the conflict brought up by the *śiṣya* cannot be resolved by the *antaraṅga paribhāṣā*, there is left only the *paribhāṣā* '*vipratishedhe paraṃ kāryam*'), the affixation of *num* must be carried out, since it is taught later. (Only after this operation has been carried out, will the substitution of *a* take place.) '*dhivikṛvyor*' ought, therefore, to have been taught (by Pāṇini) [since *dhivi* and *kṛvi* are shorter than *dhinvi* and *kṛnvi* and yet technically sufficient].

halaḥ śnaḥ śānaḥ jhau (3.1.83)

A. II.62.24—63.2

1. *kimarthaḥ śakāraḥ?*
2. '*śit sārva dhātukam*' *iti sārva dhātukasamjñā*, '*sārva dhātukam apid*' *iti nītvam*, '*nīti*' *ti pratishedho yathā syāt*: '*kuṣāṇa*, *puṣāṇe*' *ti. ata uttaram paṭhati*: *śnāvikārasya śitkaraṇānarthakyaṃ sthānivatvāt* (1) *śnāvikārasya śitkaraṇam anarthakam*.
1. What is the purpose of the sound *ś* (in *śānac*)?
2. So that there should be (applied to *śānac*) the technical term *sārva dhātuka* by (*ti*) *śit sārva dhātukam* (3.4.113 '*sārva dhātuka* = the personal endings of the verb, and that which has *ś* as *it*'), (and) so that (therefore) *śānac* should get *n* as *it* by *sārva dhātukam apit* (1.2.4 [*nīti*: 1.2.1] '*A sārva dhātuka* [suffix] which doesn't have *p* as *it* [has *n* as *it*']), (and therefore) the prohibition [*k*] *nīti* [*ca* 1.1.5 (*iko guṇavṛddhi*: 1.1.3, *na*: 1.1.4)] '[and *guṇa* and *vṛddhi* don't replace *ṛ*, *ā*, *ī*, or *ḷ* before that which has *k* or] *n* as *it*': *kuṣāṇa*, *puṣāṇa* [in *kuṣāṇa*, *puṣāṇa*, *guṇa* is not substituted for *-u-* by *sūtras* 7.3.82, 84, 86, since *śānac* has *n* as *it*].

As a [traditional] answer to this (question, i.e. *kimarthaḥ śakāraḥ*), he (Kātyāyana) recites:

*śnāvikārasya śitkaraṇānarthakyaṃ sthānivatvāt* (*vārtt.* 1)

There is no purpose in causing this variant of *śnā* to have *ś* as *it*. (This is a paraphrase of *śnāvikārasya śītkaraṇānarthakya*.)

### B. II.63.2-7

1. *kiṃ kāraṇam?*
2. *sthānivattvāt. śīto 'yam ādeśah; sthānivadbhāvac śīd bhaviṣyati. arthavat tu jñāpakam sārva dhātukādeśe 'nubandhasthānivattvasya (2). arthavat tu śnāvikārasya śītkaraṇam.*
1. *ko 'rthah?*
2. *jñāpakārtham.*
1. *kiṃ jñāpyam?*
2. *etaj jñāpayaty ācāryah: 'sārva dhātukādeśe 'nubandha na sthānivad bhavanti' ti.*
1. *kim etasya jñāpane prayojanam? . . .*
1. Why (not)?
2. Because it is like what it replaces [1.1.56 *sthānivad ādeśo 'nalvidhau* 'A substitute is like what it replaces, except in a rule involving (specific) sounds']. This is a substitute for an element that has *ś* as *it*; it will get *ś* as *it* (anyway), because it is like what it takes the place of. (This is a paraphrase of *sthānivattvāt*.)

*arthavat tu jñāpakam sārva dhātukādeśe 'nubandhasthānivattvasya (vārtt. 2)*

But there *is* a purpose in causing this variant of *śnā* to have *ś* as *it*. (This is a paraphrase of 'arthavat tu'.)

1. What is this purpose?
2. It is for the purpose of giving an indication. (This is a paraphrase of 'jñāpakam'.)
1. What is to be indicated?
2. The teacher (Pāṇini) indicates this: 'When there is a substitute for a *sārva dhātuka* (suffix), the *its* (of the substitute) are not like (the *its* of) what they take the place of.' (This is a paraphrase of '*sārva dhātukādeśe 'nubandhasthānivattvasya*'.)
1. What is the motivation for indicating this? . . .

### C. II.64.5-6

2. *asya jñāpakasya santi doṣāḥ, santi prayojanāni. samā doṣā bhuyāmsa vā. tasmān nārtho 'nena jñāpakena.*
2. That indication has faults, and it has motivations [reasons why it should be made, and reasons why it should not]. The faults are equal or more (to the reasons why it should be made); there is, therefore, no point in making the indication.

## C. THE KĀŚIKĀ ON 3.1.68-84

### 3.1.68 kartari śap

*kartrvācīni sārva dhātuke parato dhātoḥ śapratyayo bhavati. pakārah svarārthah; śakārah sārva dhātukārthah. bhavati, pacati.*

The suffix *śap* appears after a root, when a *sārvadhātuka* [suffix] which designates an agent follows. The sound *p* (of *śap*) has the purpose of (indicating the) pitch; the sound *ś* (of *śap*) has the purpose of (showing the suffix -a- to be) *sārvadhātuka*: (e.g.,) *bhavati*, *pacati*.<sup>40</sup>

### 3.1.69 *divādibhyaḥ śyan*

*divityevamādibhyo dhātubhyaḥ śyanpratyayo bhavati. śapo 'pavādaḥ. nakāraḥ svarārthaḥ; śakāraḥ sārvaadhātukārthaḥ. dīvyati, sīvyati.*

The suffix *śyan* appears after the roots beginning thus [in the *Dhātupāṭha*]: '*div*' (Dh.P. 4,1). (This is) a prevention of *śap*. The sound *n* (of *śyan*) has the purpose of (indicating the) pitch; the sound *ś* (of *śyan*) has the purpose of (showing the suffix -ya- to be) *sārvadhātuka*: (e.g.,) *dīvyati*, *sīvyati*.<sup>41</sup>

<sup>40</sup> Notes to 3.1.68: (1) *kartvācini sārvaadhātuke*—by this paraphrase, the *Kāśikā*, following (and quoting) Patañjali, refers *kartari* to *sārvadhātuke* rather than to *śap*.

(2) *parato*—when a substitution is taught, the genitive indicates the place which the substitute is to occupy, the ablative the place following, and the locative the place preceding (cf. note 8). To show that an ablative in a *sūtra* has this function, the *Kāśikā* cites the form in the ablative, and follows it with *uttarasya* in 3.1.83; in like manner, it cites a form in the locative followed by *paratas* in 3.1.68 and 3.1.83. (Another use of the locative the *Kāśikā* paraphrases with *viṣaye* 'in the domain of' in 3.1.84.) Other instances in these *sūtras* where the ablative or locative have these special functions are not so paraphrased.

(3) *dhātoḥ*—valid from 3.1.22.

(4) *śappratyayo—pratyayaḥ* is valid from 3.1.1.

(5) *pakāraḥ svarārthaḥ*—the reference is to 3.1.4 *anudātau suppitau* '*sup*—the case-endings of the noun—and a suffix which has *p* as *it* have a low-pitched vowel.' This is in exception to 1.1.1-3, in which a suffix (1.1.1 *pratyayaḥ*) is defined as 'what follows' (1.1.2 *paraś ca*) and 'whose first vowel is high-pitched' (1.1.3 *ādyudātaś ca*).

(6) *śakāraḥ sārvaadhātukārthaḥ*—3.4.113 *tiñṣit sārvaadhātukam* '*sārvadhātuka* = *tiñ*—the personal endings of the verb—and a suffix that has *ś* as *it*.' One of the purposes of calling a suffix *sārvadhātuka* is to prevent substitution of *guṇa* in the preceding element if the *sārvadhātuka* is not *pit*: 1.2.4 (cf. *sārvadhātuka*, Chapter II).

<sup>41</sup> Notes to 3.1.69: (1) (*div*)*ityevamādibhyo dhātubhyaḥ*—by this formula the groupings of the *Dhātupāṭha* root-lists are referred to. In all the other instances in this section—i.e., in 3.1.73, 3.1.77, 3.1.78, 3.1.79, and 3.1.81—the root is cited together with the *it* and the meaning as given in the *Dhātupāṭha*. That the bare root '*div*' is cited here may be due to the abnormal length of the gloss given for *div* in the *Dhātupāṭha*, i.e.: *divu kriḍāviḡigīṣavyavahāradhyutistutimodamadasvapnakāntigatiṣu*.

(2) *dhātubhyo—dhātoḥ* is valid from 3.1.22. The substitution of plural for singular ending is an instance of *vipariṇāma* (see Chapter II).

(3) (*śapo*) '*pavādaḥ*—this rule (3.1.69) prevents (*apa* + *vad*), for certain cases, the operation established by the general rule (*utsarga*) 3.1.68, according to the principle formulated in *paribhāṣā* 57: *yena nāprāpte yo vidhīr ārabhyate sa tasya bādhaḥ bhavati* 'A rule which is given (in reference to a particular case or particular cases, to which, or to all of which) another (rule) cannot but apply (or in other words, which all fall already under some other rule), supersedes the latter' (Kielhorn, *Paribhāṣenduṣekhara* II.320.1). An *apavāda* must be distinguished logically from a *pratiśedha*, an explicit 'prohibition' which would have to contain the prohibitive particle *na*; it must also be distinguished from a *vibhāṣā*, an 'optional rule' that would have to contain an expression like *vā*, *vibhāṣā*, *anyatarasyām*. Cf. Renou, *Terminologie grammaticale*, s.v. *apavāda*.

An *apavāda* is, then, a declaration of a nonbasic alternant—here, *śyan*—which is in com-

3.1.70 *vā bhrāśbhlāśbhramukramuklamutrasitruṭiḷaṣaḥ ubhayatra vibhāṣeyam. ṭubhrāśr ṭubhlāśr dīptau, bhramu anavasthāne, bhramu calane—dvayor api grahaṇam—kramu pādavikṣepe, klamu glānu, trasī udvege, truṭi chedane, laṣa kāntau—etebhyo vā śyanpratyayo bhavati. bhrāśate, bhrāśyate. bhlāśate, bhlāśyate. bhramati, bhrāmyati. krāmati, krāmyati. klāmati, klāmyati. trasati, trasayati. truṭati, truṭyati. laṣati, laṣyati.*

This is an option referring to both. *ṭubhlāśr ṭubhrāśr* 'blazing' (*Dh.P.* 1,876–7), *bhramu* 'instability' (*Dh.P.* 4,96), *bhramu* 'motion' (*Dh.P.* 1,903)—the expression ('*bhramu*' in the *sūtra*) is for both of them—*kramu* 'throwing apart of the feet' [i.e., 'making a step'] (*Dh.P.* 1,502), *klamu* 'exhaustion' (*Dh.P.* 4,98), *trasī* 'fright' (*Dh.P.* 4,10), *truṭi* 'cutting' (*Dh.P.* 6,82—*truṭa*), *laṣa* 'desire' (*Dh.P.* 1,937)—after these (roots), the suffix *śyan* may (or may not) appear: (e.g.,) *bhrāśate*, *bhrāśyate*. *bhlāśate*, *bhlāśyate*. *bhramati*, *bhrāmyati*. *krāmati*, *krāmyati*. *klāmati*, *klāmyati*. *trasati*, *trasayati*. *truṭati*, *truṭyati*. *laṣati*, *laṣyati*.<sup>42</sup>

plementary distribution with the basic alternant—here, *śap*; the basic alternant is defined by an '*utsarga*'—here, *sūtra* 3.1.68 *kartari śap*.

(4) *nakāraḥ svarāthaḥ*—the first vowel of a form containing an element which has *n* as *it* is high-pitched by 6.1.197 *ñnity ādir nityam* [*udāttaḥ*: 6.1.159] 'Before that which has *ñ* or *n* as *it*, the first vowel is always high-pitched' (cf. *pīl*, Chapter II).

(5) For the long *ī* of *dīvyati*, see fn. 9.

<sup>42</sup> Notes to 3.1.70: (1) *ubhayatra vibhāṣeyam*—'ubhayatra' seems ambiguous. We should say at first glance that the *vibhāṣā* ('statement of free variation') refers to 'both' *śap* and *śyan*. The *Kāśikā* does not define 'both' explicitly, but one of its examples—*truṭāti*—is an example of *śa* [i.e., of a high-pitched -a- without *guṇa* in the preceding syllable; if it were *śap*, the -a- would be low-pitched and there would be *guṇa* in the preceding syllable].

Jinendrabuddhi, in his commentary on the *Kāśikā*, the *Kāśikāvivaraṇapāñjikā*, shows us how the *Kāśikā* must have interpreted the *vibhāṣā*. Jinendrabuddhi says: '*ubhayatra vibhāṣeyam*' *iti. bhramer anavasthānārthasya klamatrasayoś ca dāivādikatvāt prāpte truteṣ taudādikatvād bhrāśaprabhṛtīṇāṃ bhauvādikatvād aprāpte. "ubhayatra vibhāṣeyam"*: where it [i.e., *śyan*] is obtained (anyway—before this *sūtra* takes effect, i.e., after *bhram* 'instability', *klam*, and *tras*) since *bhramu* in the meaning of 'instability', *klamu*, and *trasi* belong to the class beginning with *div* [the class composed of those roots which are followed by the *vikaraṇa śyan* and where it [*śyan*] is not obtained (before this *sūtra* takes effect, i.e., after the other roots cited in this *sūtra*) since *truṭi* belongs to the class beginning with *tud* [the class composed of those roots which are followed by the *vikaraṇa śa*] (and since *bhrāśa*, etc., belong to the class beginning with *bhū* [the class composed of those roots which are followed by the *vikaraṇa śap*]. That is, the roots listed in this *sūtra* may (or may not) have *śyan*. If they belong to the *div* class, which is characterized by having *śyan* anyway, when they do not have *śyan*, they automatically have the basic *vikaraṇa śap*. If they belong to the *bhū* class, which has *śap*, they have either *śyan* or *śap*; and if they belong to the *tud* class, which has *śa*, they have either *śyan* or *śa*.

(2) *dvayor api grahaṇam*—i.e., *bhramu anavasthāne* (*Dh.P.* 4,96) has *śyan* as *vikaraṇa* since it is a member of the *div* class, but may have *śap* by this option; *bhramu calane* (*Dh.P.* 1,903) has *śap* as a member of the *bhū* class, but may also have *śyan*.

(3) For the -ā- of *bhrāmyati*, cf. note 11.

(4) *krāmati*, *krāmyati*—the long *ā* of *krāmati* and *krāmyati* is taught by 7.3.76 *kramah*

3.1.71 *yaso 'nupasargāt*

*yasu prayatne daivādikaḥ, tasmān nityaṃ śyani prāpte, 'nupasargād vikalpa ucyate. yaso 'nupasargād vā śyanpratyayo bhavati. yasyati, yasati. anupasargād iti kim? āyasyati, prayasyati.*

*yasu* 'exerting effort' (*Dh.P.* 4,101) is a member of (the class) beginning with 'div.' Since *śyan* is always (but wrongly) obtained after that (root *yas*—for which, as a member of the *div* class, *śyan* is prescribed by 3.1.69), an alternative which is valid except after a preposition is taught: after *yas*, when it has no preposition, the suffix *śyan* may (or may not) appear: (e.g.,) *yasyati, yasati*. Why 'anupasargāt'? *āyasyati, prayasyati* [i.e. after a preposition, *śyan* always appears].

3.1.72 *saṃyasaś ca*

*sopasargārtha ārambhah. saṃpūrvāc ca yaser vā śyanpratyayo bhavati. saṃyasyati, saṃyasati.*

The giving [of this rule] is for the purpose (sake) of [*yas*] when *with* preposition: the suffix *śyan* appears optionally after *yas* also when preceded by *saṃ* (in contradiction to the expression *anupasargāt* in 3.1.71): (e.g.,) *saṃyasyati, saṃyasati*.

3.1.73 *svādibhyaḥ śnuḥ*

*ṣuñ abhiṣave, ityevamādibhyo dhātubhyaḥ śnupratyayo bhavati. śapo 'pavādaḥ. sunoti, sinoti.*

After the roots beginning thus [in the *Dhātupāṭha*]: *ṣuñ* 'pressing out' (*Dh.P.* 5,1), the suffix *śnu* appears. (This is) a prevention of *śap*: (e.g.,) *sunoti, sinoti*.

3.1.74 *śruvaḥ śr ca*

*śruvaḥ śnupratyayo bhavati, tatsaṃnīyogena śruvaḥ śr ity ayam ādeśo bhavati. śrṇoti, śrṇutah, śrṇvanti.*

After *śru*, the suffix *śnu* appears; in conjunction with this [suffix], the substitute 'śr' replaces *śru*: (e.g.,) *śrṇoti, śrṇutah, śrṇvanti*.

3.1.75 *akṣo 'nyatarasyām*

*akṣū vyāptau bhavādikaḥ, asmād anyatarasyām śnupratyayo bhavati. akṣṇoti, akṣati.*

*akṣū* 'pervading' (*Dh.P.* 1,684) is a member of the class beginning with *bhū* [the first class]; after this [root *akṣ*], *śnu* appears as an alternative (to *śap*): (e.g.,) *akṣṇoti, akṣati*.

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*parasmaipadeṣu* [dīrghaḥ: 7.3.74 'Before the active endings, there is substitution of a long vowel for the vowel of the root *kram*.']

(5) *klāmati, klāmyati*—the long *ā* of *klāmati*, *klāmyati* is taught by 7.3.75 *sthivuklamu-camām śiti* [dīrghaḥ: 7.3.74] 'Before that which has *ś* as *it*, there is substitution of a long vowel for the vowel of the roots *sthiv*, *klam*, and *cam*.'

3.1.76 *tanūkarane takṣaḥ*

*takṣū tvakṣū tanūkarane, asmāt tanūkarane vartamānād anyatarasyām śnupratyayo bhavati. anekārthatvād dhātūnām viśeṣeṇopādānam. takṣati kṣṣṭham, takṣṇoti kṣṣṭham. tanūkaraṇa iti kim? samtakṣati vāgbhiḥ.*

*takṣū/tvakṣū* ‘making thin’ (*Dh.P.* 1,685–6). After this [root *takṣ*], when used in the sense of ‘making thin,’ the suffix *śnu* appears as an alternative (to the basic *śap*). Because roots have more than one meaning, there is the quoting with the distinguishing mark [i.e., *tanūkarane*]: (e.g.,) *takṣati kṣṣṭham* (and also) *takṣṇoti kṣṣṭham* ‘He makes wood thin (i.e., carves it).’ Why ‘*tanūkarane*’? (For example) *samtakṣati vāgbhiḥ* ‘He hurts (“cuts”) with words’ [i.e., when *takṣ* does not have the meaning ‘making thin’, the suffix *śap* alone appears—never *śnu*].

3.1.77 *tudādibhyaḥ śaḥ*

*tud vyathane, ity evamādibhyo dhātubhyaḥ śapratyayo bhavati. śapo ’pavādaḥ. śakāraḥ sārva dhātukasaṃjñārthaḥ. tudati, nudati.*

After the roots beginning thus [in the *Dhātupāṭha*]: *tud* ‘piercing’ (*Dh.P.* 6,1), the suffix *śa* appears. (This is) a prevention of *śap*. The sound *ś* is for the purpose of [bestowing] the technical term *sārva dhātuka* [on the suffix *-a*]: (e.g.,) *tudati, nudati*.

3.1.78 *rudhādibhyaḥ śnam*

*rudhir āvarane, ity evamādibhyo dhātubhyaḥ śnampratyayo bhavati. śapo ’pavādaḥ. makāro deśavidhyarthah, śakāraḥ śnān nalopa iti viśeṣaṇārthaḥ. runaddhi, bhinatti.*

After the roots beginning thus [in the *Dhātupāṭha*]: *rudhir* ‘obstructing’ (*Dh.P.* 7,1), the suffix *śnam* appears. (This is) a prevention of *śap*. The sound *m* has the purpose of teaching the place [where the suffix has to be put] (1.1.47 *mid aco ’ntyāt paraḥ* ‘That which has *m* as *it* appears after the last vowel’); the sound *ś* has the purpose of a distinguishing mark (i.e., to distinguish this suffix *-na-* from any other occurrence of the sound combination *na*) in ‘*śnān nalopah*’ (6.4.23 [*aṅgasya*: 6.4.1] ‘In a stem, after *śnam*, there is *lonā*—invisibility—of *n*’): (e.g.,) *runaddhi, bhinatti*.

3.1.79 *tanādikṛñbhya uḥ*

*tanu vistāre, ity evamādibhyo dhātubhyaḥ krñāś ca upratyayo bhavati. śapo ’pavādaḥ. tanoti, sanoti, kṣaṇoti. krñāḥ khalv api. karoti. tanādipāṭhād eva upratyaye siddhe karoter upādānam niyamārtham, anyat tanādikāryam mā bhūd iti. tanādibhyas tathāsor iti vibhāṣā sico lug na bhavati. akrta, akrthāḥ.*

After the roots beginning thus [in the *Dhātupāṭha*]: *tanu* ‘spreading’ (*Dh.P.* 8,1) and after *krñ* (*Dh.P.* 8,10), the suffix *u* appears. (This is) a prevention of *śap*: (e.g.,) *tanoti, sanoti, kṣaṇoti*. And after *krñ*, too: (e.g.,) *karoti*. While the suffix *u* would correctly result [as to be added after the root *krñ*] from the fact that it is recited [in the *Dhātupāṭha*] among the roots *tan*, etc. (*Dh.P.* 8) [even if 3.1.79

had read only *tanādi-* instead of *tanādikṛñ-*, the [explicit] quoting of the root *kṛñ* [in 3.1.79] (beside the expression *tanādi-*) has the purpose of [establishing] the restriction that any other operation taught for the roots *tan*, etc., should not take place [in the case of the root *kṛñ*, even though it is a '*tanādi-*']. [E.g.] the optimal invisibility of [the aorist-forming element] *sic* [taught] by 2.4.79 (*tanādibhyas tathāsoḥ* [luk: 2.4.58, *sicah*: 2.4.77, *vibhāsā*: 2.4.78]) after the roots *tan*, etc., does not take place after the root *kṛñ*: *akṛta*, *akṛthās* (these are not formed with *luk* of *sic* by 2.4.79, but with *lopa* of the sound *s* after a stem ending in a short vowel when a suffix starting with a consonant other than a semi-vowel or a nasal follows, by 8.2.27 *hrasvād āṅgāt* [lopaḥ: 8.2.23, *sasya*: 8.2.24, *jhalī*: 8.2.26]).

### 3.1.80 *dhinvikṛṇvyor a ca*

*hivi dhivi jivi prīṇanārthaḥ, kṛvi himsākaraṇayoḥ, ity etayor dhātvor upratyayo bhavaty akāraś cāntādeśaḥ. dhinoti, kṛnoti. ato lopasya sthānivadbhāvād guṇo na bhavati.*

After these two roots: (1) *hivi dhivi jivi*, which have the meaning 'pleasing' (*Dh.P.* 1,622–5; *dhivi* alone is meant here, but the three form a unit in the *Dhātupāṭha*, in that the meaning for all three is the same, and is given only after *jivi*), (2) *kṛvi* 'harming [and] doing' (*Dh.P.* 1,629), the suffix *u* appears, and the sound *a* substitutes for the final (sound of the roots *dhiv* and *kṛv*): (e.g.,) *dhinoti, kṛnoti. guṇa* does not appear, since the invisibility of *a* becomes like what it takes the place of [by 1.1.57].<sup>43</sup>

### 3.1.81 *kṛyādibhyaḥ śnā*

*ḍukṛñ dravyavinimaya ity evamādibhyo dhātubhyaḥ śnāpratyayo bhavati. śapo 'pavādaḥ. śakāraḥ sārva dhātukasamjñārthaḥ. kṛñāti, prīñāti.*

After the roots beginning thus [in the *Dhātupāṭha*]: [ḍukṛñ 'buying' (literally: 'exchanging of objects') (*Dh.P.* 9,1), the suffix *śnā* appears. (This is) a prevention of śap. The sound ś has the purpose of [bestowing] the technical term *sārvadhātuka* [on the suffix *-nā-*]: (e.g.,) *kṛñāti, prīñāti*.

### 3.1.82 *stambhustumbhuskambhuskumbhukuñbhyaḥ śnuś ca*

*ādyāś catvāro dhātavaḥ sautrāḥ. skuñ āpravāṇe. etebhyaḥ śnāpratyayo bhavati, śnuś ca. stabhnāti, stabhnoti. stubhnāti, stubhnoti. skabhnāti, skabhnoti. skubhnāti, skubhnoti. skunāti, skunoti. udittvapratijñānāt sautrānām api dhātūnām sarvārthatvaṃ vijñāyate. naitad vikaraṇaviśayatvaṃ eva.*

The first four roots [listed in 3.1.82, *stambhu*, *stumbhu*, *skambhu* and *skumbhu*] are *sūtra* roots (occurring only in the *sūtras*, not in the *Dhātupāṭha*); *skuñ* 'jumping' (*Dh.P.* 9,6): after these (roots), the suffix *śnā* appears, and also *śnu*:

<sup>43</sup> Notes to 3.1.80: (1) *akāraś cāntādeśaḥ*—cf. note 13.

(2) *ato lopasya sthānivadbhāvād guṇo na bhavati* is almost an exact quotation from Patañjali—cf. *akāralopasya sthānivadbhāvād guṇo na bhavati*, II.62.12–3.

(e.g.,) *stabhnāti*, *stabhnoti*; *stubhnāti*, *stubhnoti*; *skabhnāti*, *skabhnoti*; *skubhnāti*, *skubhnoti*; *skunāti*, *skunoti*. From the recognition that *ū* is *it* (in the first four roots of this *sūtra*) it can be recognized that even the roots belonging (only) to the *sūtras* are given for the purpose of all [operations taught for roots], [and] that they do not have as their domain [of occurrence] just this *vikaraṇa* [*śnu*].<sup>44</sup>

### 3.1.83 *halaḥ śnaḥ śānaj jhau*

*hala uttarasya śnāpratyayasya śānajādeśo bhavati hau parataḥ. muṣāṇa, puṣāṇa. 'hala' iti kim? krīṇīhi. 'hav' iti kim? muṣṇāti. 'śnā' iti sthāninirdeśa ādeśasaṃpratyayārthaḥ. itarathā hi pratyayāntaram eva sarvaviśayaṃ vijñāyeta.*

The substitute *śānac* appears instead of the suffix *śnā* when it follows a consonant [and] precedes *hi*: (e.g.,) *muṣāṇa*, *puṣāṇa* (< *muṣ-āna-hi*, *puṣ-āna-hi*; *hi* is lost after *ā* by 6.4.105 *ato heḥ* [luk: 6.4.104] 'luk—invisibility—replaces *hi* after *ā*). Why 'after a consonant'? *krīṇīhi* [i.e., before *hi*, but after a vowel, here the *ī* of *krī*, *śānac* is not substituted for *śnā*]. Why 'before *hi*'? *muṣṇāti* [i.e., after a consonant, but not before *hi*, *śānac* isn't substituted for *śnā*, either]. The [explicit] pointing out (*nirdeśa*) of that in whose place [*śānac*] is to be substituted (the '*sthānin*') by the expression *śnas* ('in place of *śnā*')<sup>45</sup> has the purpose of making it understood that [*śānac*] is a substitute [only for *śnā*]. Otherwise, [*śānac*] would be taken as just another suffix [to be added, under specific conditions, after the roots named in 3.1.81–2], having as its domain all [occurrences where a consonant precedes and *hi* follows (i.e. we should get *stabhāna* not only instead of \**stabh-nā-hi*, but also instead of *stabh-na-hi*)].

### 3.1.84 *chandasi śāyaja api*

*chandasi viśaye śnaḥ śāyajādeśo bhavati, śānaj api. grbhāya jihvayā madhu. śānac khalv api. badhāna paśum.*

In the field of sacred literature, the substitute *śāyac* appears in place of *śnā*; *śānac* also (appears in place of *śnā*): (e.g.,) *grbhāya jihvayā madhu* (RV 8.17.5<sup>c</sup>; AV 20.4.2<sup>c</sup>). And *śānac*, too: *badhāna paśum* (cf. Kaus. 62.21<sup>a</sup> *badhāna vatsam*).

<sup>44</sup> *udittvapratijñānāt*—*ū* as *it* indicates that these roots occur also before the gerund-forming *-tvā* by 7.2.56 *udīto vā* [ktvi: 7.2.55, *ārdhadhātukasyeḍ valādeḥ*: 7.2.35] 'An *ārdhadhātuka* (suffix) which begins with *val* [any consonant except *y*] and which has *ū* as *it*, may (or may not) have *it* before *tvā*.' It not only the *vikaraṇa*, but also this suffix *-tvā* occurs after such roots, it may be assumed that any other suffix will also occur here.

<sup>45</sup> '*śnaḥ*' is the genitive of *śnā*; cf. note 8.



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