व्याकरणपरिपृच्छा

व्याकरणपरिपृच्छा

Editors

George Cardona
Hideyo Ogawa

Contents

Preface

This volume presents fifteen articles, selected after careful consideration, of the contributions submitted for publication in the proceedings of the vyākaraṇa section of the sixteenth World Sanskrit Conference, held in Bangkok, Thailand, from June 28th to July 2nd 2015.

These contributions deal with various topics in the general sphere of Pāṇini's grammar (*śabdānuśāsana*) and its tradition, from textual issues to technical questions involving derivation within the Pāṇinian system and the history of thought concerning certain questions.

Three articles concern in particular the study of texts, their contents and textual history. Udayana Hegde deals with a sample of verbal bases (*dhātu*) which are not included in Pāṇini's dhātupāṭha but the existence of which is vouchsafed through their mention in sūtras of the Aṣṭādhyāyī and by commentators, both Pāṇinian and non-Pāṇinian. Sowmya Krishnapur introduces a unique text on Patañjali's Mahābhāṣya, Prayāga Veṅkaṭādri Bhaṭṭa's Vidvanmukhabhūṣaṇa, a brief work that deals with āhnikas three to nine of the Mahābhāṣya in ninety-seven verses. The important study by Malhar Kulkarni, Anuja P. Ajotikar, Tanuja P. Ajotikar, and Eivind Kahrs deals with manuscript sources and the testimonia of Jinendrabuddhi's Kāśikāvivaraṇapañjikā—alias Nyāsa—and Haradatta's Padamañjarī for the Kāśikāvṛtti on Pāṇini's fourteen sūtras listing a catalogue of sounds.

In a related vein, several authors deal with particular textual issues. Tanuja P. Ajotikar, Malhar Kulkarni, and Peter Scharf consider ways in which counterexamples (*pratyudāharaṇa*) relative to provisions made in Pāṇinian rules are presented in the Kāśikāvṛtti and propose a general principle: a counterexample should lack only one of the conditions for the application of the rule which it concerns. Sharon Ben-Dor treats of issues surrounding the relation of the Kāśikāvṛtti to the Mahābhāṣya. He seeks in particular to explain how the authors of the Kāśikāvṛtti differ on occasion from the opinions presented in the Mahābhāṣya, and confronts the point of view that the authors of the Kāśikāvṛtti followed a tradition independent from the one followed by Patañjali. Another work that does not always accord with Patañjali is the Bhaṭṭikāvaya. Yūto Kawamura consid-

ers discussions in the Kāśikāvṛtti and the Mahābhāṣya centering on two
middle aorists of the base *ṛ*: one with a sigmatic stem (e.g., 3du. pl.
neg. imper. *mā samṛṣātām, mā samṛṣata* 'let them not come together'),
the other with a stem in *-a* (e.g., 3pl. indic. *samāranta* 'have been ful-
filled'). After a thorough treatment of the discussions, including evidence
from the Cāndravyākaraṇa, Kawamura suggests that Bhaṭṭi made use of
an early vṛtti in which A 3.1.56 (*sarttiśāstyṛtibhyaś ca*) received an in-
terpretation different from the one Patañjali adopted, thus accounting for
samāranta in Bhaṭṭikāvaya 8.16. Tōru Yagi considers the use of certain
terms with the suffix *tasi*, such as *āditas* 'at the beginning', accounted for
in Kātyāyana's first vārttika (*tasiprakaraṇa ādyādibhya upasaṅkhyānam*)
on A 5.4.44 (*pratiyoge pañcamyās tasiḥ*), and *svaratas* 'with respect to ac-
cent' and *varṇatas* 'with respect to a sound', used in a verse that Patañjali
quotes in the introductory section of the Mahābhāṣya. He proposes a par-
ticular interpretation of how the last terms are to be accounted for.

Other scholars deal with more technical theoretical issues. Two papers
deal with nominal composition in Pāṇini's system. Starting from arguments
presented in the Mahābhāṣya, Masato Kobayashi takes up instances of pos-
sible conflict such that, for example, a compound is derived as a member
of the avyayībhāva or the bahuvrīhi class, and argues that the same general
principles which operate elsewhere in the Aṣṭādhyāyī apply also for com-
position rules, which, nevertheless, also are stated in the section headed
by A 1.4.1–2 (*ā kaḍārād ekā sañjñā, vipratiṣedhe paraṅ kāryam*), so that
they also can involve extrinsic ordering. Peter Scharf takes up nominal
compounds called *upapadasamāsa*: obligatory compounds consisting of a
nominal pada that includes a derivate formed from a verbal base with a kṛt
affix and a syntactically cooccurring pada (*upapada*). He proposes a way
of accounting for an apparent conflict: the choice of nominal ending in an
upapada is governed by the occurrence of a kṛt affix, but the introduction of
such an affix may require the occurrence of a nominal ending in an upapada.
Resolving a conflict is also the subject treated by Anuja P. Ajotikar, Malhar
Kulkarni, and Peter Scharf. Here the conflict is between a replacement rule
and an accentual rule in deriving a form such as *pacànti* (3pl. pres. act.)
'they cook, are cooking': A 6.1.97 (*ato guṇe* [*apadāntāt* 97, *pararūpam*

94, *ekaḥ pūrvaparayoḥ* 84]) and A 6.1.186 (*tāsyanudāttenṅidadupdeśāl lasārvadhātukam anudāttam ahnviṅoḥ*). At the outset of deriving *pacànti*, the base *pac*, with a high-pitched vowel (A 6.1.162: *dhātoḥ* [*anta udāttaḥ* 159]), is followed by *laṭ* (A 3.2.123: *vartamāne laṭ*); this affix is replaced by *jhi* (A 3.4.78: *tiptasjhi ...* [*lasya* 77]), whose vowel is high-pitched (A 3.1.3: *ādyudāttaś ca*); consequently, the initial vowel of *anti*, gotten by replacing *jh* with *ant* (A 7.1.3: *jho'ntaḥ* [*aṅgasya* 6.4.1]), could also be high-pitched. In accordance with a general principle, the accent of this ending would supersede the base accent: *pac-ánti* instead of *pác-anti*. The ending also conditions the introduction of the stem affix *śap* (A 3.1.68: *kartari śap* [*sārvadhātuke* 67]), which is low-pitched (A 3.1.4: *anudāttau suppitau*): *pac-a-ánti*. It is necessary now to determine which of two operations should apply: (a) a possible sequence -*a á*- is replaced by the second vowel alone, according to A 6.1.97; or (b) the sārvadhātuka affix *anti* following *pac-a*-, which ends in a vowel that is low-pitched from the outset, is given a low-pitched initial vowel, so that the high pitch of the base vowel is not superseded: *pác-a-anti*. If (b) takes precedence, (a) subsequently applies, so that the two vowels -*a a*- are then both replaced by the latter, giving a final form with high pitch on the base vowel: *pac-ànti*. If, on the other hand, (a) applies first, (b) cannot then apply, since *pacánti* does not have an ending following a discrete vowel of a stem. In his Svara-prakriyā, Rāmacandra Śeṣa argues that (a) does in fact take precedence, and he proposes ways of still arriving at the appropriate result. Ajotikar, Kulkarni, and Scharf present the main part of Rāmacandra's argumentation, disagree with him, and suggest another resolution to the conflict. Małgorzata Sulich-Cowely takes up the problems mentioned by Pāṇinīyas concerning one sūtra, A 8.2.3 (*na mu ne*), and proposes a novel solution: the sūtra itself is redundant.

Two other studies take us farther afield. Junichi Ozono deals with the way Pāṇini treats verbal suppletion, with particular emphasis on the suppletive bases *ad* and *ghas* ('eat, consume'), and considers not only Pāṇini's grammar but also its Vedic background. Yūki Tomonari treats the type of listing, referred to as *ākṛtigaṇa*, in which instances of a type are given instead of an exhaustive ordered set of items. He deals in particular with what

the Mīmāṁsaka Prabhākara has to say concerning ākṛtigaṇas.

Finally, two studies concern historical relations between the earliest Pāṇi-
nīyas represented by Kātyāyana and Patañjali and later thinking represented
by Bhartṛhari. Maria Piera Candotti proposes to recognize a switch in the
conceptualization of zero (*lopa*: *adarśanaṁ lopaḥ* [A 1.1.60] 'the absence
[of an entity is called] *lopa*') among Pāṇinian grammarians: from zero
being intended to meet the requirements of semantic compositionality to
its becoming a device for identifying the specific limits of zero-derivation.
Hideyo Ogawa considers the derivation of *tādṛś/tādṛśa* 'similar to x' and
associated semantic issues. The base *dṛś* included in the derivates *dṛś* (*dṛś-
kvin) and *dṛśa* (*dṛś-**kañ***) of such compounds can be considered to mean
simply 'see, look'. However, the derivates *-dṛś* and *-dṛśa* cannot be consid-
ered to signify an agent, as is the norm for kṛt affixes (A 3.4.67: *kartari kṛt*),
if the base has these meanings, so that Pāṇini specifies that *dṛś* not be used
in the sense of perceiving (*anālocane*). One may surmise that Pāṇini con-
sidered *dṛś* in such derivates to have a different conventional sense, 'appear-
ing'; Pāṇinīyas such as Bhaṭṭoji consider that, despite the fact that Pāṇini
does derive compounds like *tādṛś/tādṛśa*, these are actually unanalyzable
conventional items with a particular meaning. Now, under the assump-
tion that *dṛś* in these derivates signifies an act of perceiving, Kātyāyana
objects that the agentive meaning required is not possible, and suggests in-
stead that *tādṛś/tādṛśa* be treated as derivates with taddhita suffixes in the
sense 'like' (*ivārthe*). On the other hand, Patañjali proposes to treat these
as derivates referring to an agent which was earlier an object (*karmakartṛ*
'object-agent'). This presupposes a semantic analysis of *dṛś* which allows
one to assume, for example, related utterances (1) *tam ivemaṁ paśyanti
janāḥ* 'people (*janāḥ*) perceive (*paśyanti*) X (*imam* "this one" [acc. sg.])
as like Y (*tam iva* "like that one"),' (2) *so'yaṁ sa iva dṛśyamānas tam
ivātmānaṁ paśyati* 'X (*so'yam* "this one" [nom. sg.]), while being per-
ceived (*dṛśyamānaḥ*) as like Y (*sa iva*), shows himself (*ātmānam*) as like
Y (*tam iva*).' The person referred to by *tādṛk* (nom. sg. masc.) 'simi-
lar to that' is the one referred to as an object relative to the act of seeing
in (1) and as the agent of showing himself in (2), where *paśyati* is equiv-
alent to a causative: he causes people to view him as being like another

person. Bhartṛhari elaborates on this theme in a series of verses in the Sādhanasamuddeśa of the Vākyapadīya. Ogawa gives us a thorough and careful presentation of what Bhartṛhari says, together with its background in the Mahābhāṣya.

The studies included in this volume thus clearly offer a rich array of topics that should interest students of Indian thinking in linguistics and language philosophy.

On behalf of Hideyo Ogawa and myself, I express sincere thanks for the cooperation of contributors to this volume during the rather long exchanges involving their articles. I personally also wish to extend my deep thanks to Hideyo Ogawa, not only for his collaboration in the editorial process and communications with authors but also for having taken upon himself the task of composing the final text in LaTex. We both hope that this volume will serve to extend and deepen studies in vyākaraṇa.

George Cardona
July 2016

Acknowledgments

<div align="right">

Hideyo Ogawa
July 2016

</div>

Contributors

ANUJA P. AJOTIKAR	Indian Institute of Technology Bombay
	The Sanskrit Library
	Department of South Asian Studies, Harvard University
	anujaajotikar@gmail.com
TANUJA P. AJOTIKAR	Indian Institute of Technology Bombay
	The Sanskrit Library
	Department of South Asian Studies, Harvard University
	gtanu30@gmail.com
SHARON BEN-DOR	Department of World Cultures, University of Helsinki
	sharonbendor@yahoo.com
MARIA PIERA CANDOTTI	Section de langues slaves et de l'Asie du Sud, Université de Lausanne
	mariapiera.candotti@unil.ch
UDAYANA HEGDE	Faculty of Languages, Karnataka Samskrit University
	udayanahegde@gmail.com
EIVIND KAHRS	Queens' College, University of Cambridge
	egk1000@cam.ac.uk
YŪTO KAWAMURA	Department of Indological Studies, Graduate School of Letters, Kyoto University, Kyoto University
	ykawamura0619@gmail.com
MASATO KOBAYASHI	Department of Linguistics, Graduate School of Humanities and Social Sciences, University of Tokyo
	masatok@L.u-tokyo.ac.jp
SOWMYA KRISHNAPUR	Department of Sanskrit, University of Madras
	sowmya.krishnapur@gmail.com

MALHAR KULKARNI	Department of Humanities and Social Sciences, Indian Institute of Technology Bombay
	malhar@iitb.ac.in
	malharku@gmail.com
HIDEYO OGAWA	Department of Indian Philosophy, Graduate School of Letters, Hiroshima University
	hogawa@hiroshima-u.ac.jp
JUNICHI OZONO	Department of Indology and History of Indian Buddhism, Graduate School of Arts and Letters, Tohoku University
	junichiozono@gmail.com
PETER M. SCHARF	The Sanskrit Library
	Indian Institute of Technology Bombay
	Department of South Asian Studies, Harvard University
	scharf@sanskritlibrary.org
MAŁGORZATA SULICH-COWLEY	Faculty of Oriental Studies, University of Warsaw
	malgorzata_sulich@yahoo.it
YŪKI TOMONARI	The Nakamura Hajime Eastern Institute
	mitriibhaavii@gmail.com
TŌRU YAGI	Osaka Gakuin University
	tyagi@ogu.ac.jp

On the Resolution of Conflict between Accentual Rules and Other Rules of Derivation in Pāṇinian Grammar

Anuja P. Ajotikar, Malhar Kulkarni,
and Peter M. Scharf

Abstract: Pāṇini accounts for accent in ordinary Sanskrit as well as in
Vedic. He includes rules concerned with vowel pitch along with
rules concerned with other morphological and phonetic changes in
the regular derivation of speech forms. Yet modern scholars have
paid relatively little attention to to this important area. In this pa-
per, we discuss issues related to conflicts between accent rules and
other derivational rules. In particular, we briefly treat the conflict
between *A.* 6.1.186 *tāsy anudāttenṅidadupadeśāl lasārvadhātukam
anudāttam ahnviṅoḥ* and *A.* 7.1.3 *jho 'ntaḥ*, and discuss in depth the
conflict between *A.* 6.1.186 and *A.* 6.1.97 *ato guṇe* in the deriva-
tion of the active 3rd pl. pres. verbal form पचन्ति. The paper ana-
lyzes the description of the latter conflict and the two solutions to it
proposed by Rāmacandra in his *Svaraprakriyā*. Although we agree
with his conclusion that the accentual rule must take priority over
the other rule of derivation, we find unsatisfactory the two solutions
he proposes. One solution depends on treating a single replacement
as its substituends (*sthānivadbhāva*), the other on granting prior-
ity to a rule stated later than a competing rule in the *Aṣṭādhyāyī*
(*paratva*). We conclude instead that the mention of the word *upa-
deśa* in *A.* 6.1.186 indicates that the accent rule applies prior to a
rule that otherwise alters the phonetic shape of an affix.

Keywords: Sanskrit, linguistics, Pāṇini, accent, derivation, pacanti,
A. 6.1.186, *A.* 6.1.97, *A.* 7.1.3

1 Introduction

According to the *Oxford English Dictionary*, accent is "A distinct emphasis given to a syllable or word in speech by stress or pitch."[1] In Sanskrit, it is pitch that is accent, not stress. Accent is an inseparable part of grammar generally, and Pāṇinian grammar is no exception. When Pāṇini describes the derivation of words, he does so along with instruction concerning their accent. The rules of accentuation in Pāṇini, however, have not received much attention. As Cardona (1976: 212, 228) mentions, although the topic has received little attention, Fowler (1973) treated accent rules, and Aufrecht (1847) and Sankaran (1934–35) dealt with the accentuation of compounds. Recently, Scharf (2013) discussed verbal accent. In this paper, we study an important issue in this neglected branch of grammar primarily on the basis of a manual devoted entirely to accentuation, namely, Rāmacandra's *Svaraprakriyā*. The discussions that we find in works such as this are valuable for analyzing the accentuation process and its relationship with other rules. We look specifically at techniques of conflict resolution in accentuation. For it is often the case that the same conditions can be interpreted as input for two different operations that yield different results. In such cases, priority needs to be established. When rule conflict is met with in the process of derivation, it is generally solved by resorting to well-known principles such as *paratva*, *nityatva* and *antaraṅgatva* (See Cardona 1997: 401–427). On the other hand, when it affects accentuation, there are a few metarules that serve to resolve the conflict. These include the following: The metarule *A.* 6.1.158 *anudāttaṁ padam ekavarjam* requires that "a pada contains no high-pitched vowel (*anudāttam*) save one (*ekavarjam*)" (Cardona 1997: 376). The principle *satiśiṣṭasvarabalīyastvam anyatra vikaraṇebhyaḥ* (Abhyankar 2001: 9) provides for "the comparatively superior strength of a subsequent accent which prevails by the removal of the accent obtaining before in the process of the formation of a word" (Abhyankar and Shukla 1986: 412) except in the case of verbal stem-forming affixes. Finally, *svaravidhau vyañjanam avidyamānavat* provides that in the process of accentuation a consonant is considered as if it did not exist.

---

[1]S.v. *accent*, definition 2.

However, when the conflict affects two operations, one of which is related to accentuation and the other of which is related to other phonetic changes, we hardly find detailed discussions in the traditional commentaries on how to overcome the conflict, except in the *Svaraprakriyā* and the *Svaramañjarī*. The question we want to raise, therefore, is the following: which principles should we use to determine priority in a conflict between accentuation and other rules of derivation?

In a previous paper, Ajotikar and Kulkarni (2013) attempted to answer this question by studying the word पराचः, the accusative plural of an upa-pada-tatpuruṣa compound, and concluded that the rule of accentuation has priority over the other rule of derivation. They phrased this conclusion as the following metarule in Sanskrit: स्वरवार्णकार्ययोः स्वरविधिर्बलीयान्. In the present paper, we discuss the derivation of पचन्ति as presented in the *Svaraprakriyā*, an independent commentary devoted to Pāṇinian rules on accentuation, written by Rāmacandrapaṇḍita within a hundred years after the *Vaiyākaraṇasiddhāntakaumudī* of Bhaṭṭojī Dīkṣita (first half of the 17th century).[2]

2 Accentuation and the derivation process

It is well known that accentual adjustment takes place at every step in the derivation of a word (Cardona 1997: 376–400). The accentual principles referred to above require that whenever a new speech form containing a vowel that bears a high pitch or circumflex is added to a string, that vowel alone is permitted its accent; the high pitches or circumflexes on all other vowels previously in the string are replaced by low pitches. An example of this shift of accent may be seen in the derivation of the verbal form तुदति in Table 1.

Here, at the first step, the verbal root *tud* is termed *dhātu*. With reference to that term, the root obtains high pitch on the last vowel by A. 6.1.162 *dhā-toḥ*. After introducing the stem-forming affix (*vikaraṇa*) *śa*, which has high pitch by the general rule A. 3.1.3 *ādyudāttaś ca*, that element alone bears the acute accent while the high-pitched vowel of the root is replaced by the

---

[2]Abhyankar 2001: 13.

Table 1
Accent of the verbal form तुदति॑ [3rd sing. present]

	Form	Derivation	Accentuation
1.	तुद्	भूवादयो धातवः 1.3.1	धातोः 6.1.162
2.	तुद् लट्	वर्तमाने लट् 3.2.123	
3.	तुद् तिप्	तिप्तस्झि…3.4.78	अनुदात्तौ सुप्पितौ 3.1.4
4.	तुद् ति	हलन्त्यम् 1.3.3, तस्य लोपः 1.3.9	
5.	तुद् श ति	तुदादिभ्यः शः 3.1.77	आद्युदात्तश्च 3.1.3
6.	तुद् अ ति	लशक्वतद्धिते 1.3.8, तस्य लोपः 1.3.9	
7.	तुदति॑		उदात्तादनुदात्तस्य स्वरितः 8.4.66

corresponding low-pitched vowel. The final form has the acute accent on the middle vowel as shown in step 7. In this way, an accentual adjustment is made such that there will be only one acute accent in the derived word.

The accentual principles discussed so far, however, would allow forms with incorrect accent where the vowel of the root should retain its high pitch after accented affixes are added, such as in the present active third person dual and plural verb forms पच॑तः and पच॑न्ति॑. To avoid this undesired result in such forms, Pāṇini provides a special rule: *A.* 6.1.186. The next section describes the application of this rule.

3 *A. 6.1.186*

Cardona (1997: 379-380) explains the meaning of *A.* 6.1.186 *tāsy anudā-ttenṅidadupadeśāl lasārvadhātukam anudāttam ahnviṅoḥ* as follows:

> a sārvadhātuka affix (A 3.4.113,117) that replaces an L-affix (*lasārvadhātukam*: A 3.4.77–78, 3.2.124, 126) has a low-pitched vowel or vowels (*anudāttam*) if it follows *tāsi* (A 3.1.33), a verb with a low-pitched vowel marker (*anudāttet*), one marked with *ṅ* (*ṅit*) excluding *hnū́ṅ* 'hide' and *iṅ* (*adhi i*) 'study, learn' (*ahnviṅoḥ*) or a unit with *a* at the stage when no grammatical or phonological operations have applied (*adupadeśāt*).

This rule is an exception to the general rule *A.* 3.1.3 *ādyudāttaś ca*. As Cardona (1997: 378) explains the latter rule,

> According to
> **A** 3.1.3: श्राद्युदात्तश्च । (*ādyudāttaś ca*)
> an item that gets the class name *pratyaya* (A 3.1.1 [**15**]) not only regularly follows the element to which it is introduced (**A** 3.1.2), it also has high pitch on its first vowel (*ādyudāttaḥ*) when it is introduced.

A. 6.1.186, on the contrary, teaches that under certain conditions personal endings and their substitutes are unaccented. An example of this is shown in Table 2 where the personal ending *tas* in the third person dual verbal form पचतः is low-pitched.

At the first stage, the verbal root *pac* is termed *dhātu*. In step 3, with reference to that term, the root obtains high pitch on its last vowel by *A.* 6.1.162 *dhātoḥ*, just as the root *tud* did in the derivation of तुदति in Table 1. The third person dual termination *tas*, which replaces the *l*-suffix and which is termed *pratyaya* by *A.* 3.1.1, is not marked with *p*. Therefore, by the general rule *A.* 3.1.3 *ādyudāttaś ca*, it will have an initial high pitch. The rule *A.* 6.1.186, however, is applicable to those replacements of an *l*-suffix which do not have *p* as a marker and which are termed *sārva-dhātuka*. *A.* 6.1.186 blocks the application of *A.* 3.1.3, so *tas* is accented

Table 2
Accent of the verbal form पचतः [3rd du. present]

	Form	Derivation	Accentuation
1.	पच्	भ्वादयो धातवः 1.3.1	धातोः 6.1.162
2.	पच् लट्	वर्तमाने लट् 3.2.123	
3.	पच् तस्	तिप्तस्झि…3.4.78	
4.	पच् शप् तस्	कर्तरि शप् 3.1.68	अनुदात्तौ सुप्पितौ 3.1.4
5.	पच् अ तस्	लशक्वतद्धिते1.3.8 हलन्त्यम् 1.3.3, तस्य लोपः 1.3.9	तास्यनुदात्तेन्ङिददुपदेशाल्ल- सार्वधातुकमनुदात्तमह्निङोः 6.1.186
6.	पचतः	खरवसानयोर्विसर्जनीयः 8.3.15	
7.	पचतः		उदात्तादनुदात्तस्य स्वरितः 8.4.66

low-pitched. Hence the final form पचतः retains the initial high pitch of the verbal root as shown in step 7.

Important commentaries such as the *Kāśikāvṛtti* and *Vaiyākaraṇasiddhā-ntakaumudī* initially cite only third person dual verbal forms ending in *tas* such as पचतः as examples under *A.* 6.1.186. But when this rule is applicable to other forms, such as the third person plural present form पचन्ति, a conflict between accentuation and other phonological replacements arises. In the following section, we will examine the exact nature of this conflict.

4 Conflict between accentuation and other phonological replacements

To understand the conflict between accentuation and other phonological replacements, we shall first examine the derivation of पचन्ति '[they] are cooking', 3rd pl. present of the root *pac* 'cook'. The derivation is shown in Table 3. The verbal root gets acute accent on its final vowel by *A.* 6.1.162 *dhātoḥ.* After the *l*-suffix *laṭ* is introduced, the *l* is replaced with the third person plural verbal termination *jhi.* By virtue of the fact that this affix is termed *pratyaya* and has no marker *p*, its initial vowel would be high-pitched by *A.* 3.1.3; however, *A.* 6.1.186 serves as an exception to this general rule, even though the conditions for *A.* 6.1.186 are met only after additional steps of derivation. Before the conditions of *A.* 6.1.186 are met, the *jh* of the suffix is replaced by *ant* by *A.* 7.1.3 *jho 'ntaḥ* in step 4; and in step 5, the stem-forming affix *śap* is introduced and is low-pitched by *A.* 3.1.4 because it is marked with *p*. In step 7, the exception to *A.* 3.1.3 is realized: the suffix *anti* obtains grave accent by *A.* 6.1.186. Thus the final form of the verbal root retains high pitch on the initial vowel as prescribed in step 1. The final form is shown in step 9.

The example of पचन्ति is discussed in the *Svaraprakriyā* on *A.* 6.1.186 *tāsyanudāttenṅidadupadeśāl lasārvadhātukam anudāttam ahnviṅoḥ* where Rāmacandra examines a conflict that arises between *A.* 6.1.97 and *A.* 6.1.186 in steps 7–8. The next section cites and translates the relevant passage.

Table 3
Accent of the verbal frorm पचन्ति [3rd pl. present]

	Form	Derivation	Accentuation
1.	पच्	भूवादयो धातवः 1.3.1	धातोः 6.1.162
2.	पच् लट्	वर्तमाने लट् 3.2.123	
3.	पच् झि	तिप्तस्झि...3.4.78	
4.	पच् अन्ति	झो ऽन्तः 7.1.3	
5.	पच् शप् अन्ति	कर्तरि शप् 3.1.68	अनुदात्तौ सुप्पितौ 3.1.4
6.	पच् अ अन्ति	लशक्वतद्धिते 1.3.8, हलन्त्यम् 1.3.3 तस्य लोपः 1.3.9	
7.	पच् अ अन्ति		तास्यनुदात्तेन्ङिददुपदेशाल्ल सार्वधातुकमनुदात्तमह्न्विङोः 6.1.186
8.	पच् अन्ति	अतो गुणे 6.1.97	
9.	पचन्ति		उदात्तादनुदात्तस्य स्वरितः 8.4.66

4.1   The description in the *Svaraprakriyā*

In the *Svaraprakriyā* (Abhyankar 2001: 11–12), Rāmacandra describes the conflict between *A*. 6.1.97 and *A*. 6.1.186 by presenting objections, shown in I, and then proposing two solutions to them in II:

I. ननु पच् झि इति स्थिते परत्वादायन्नादिष्वुपदेशवचनं स्वरसिद्ध्यर्थमिति वचनादन्तरङ्गत्वाच्चान्तादेशे कृते शपि कृते पच अन्ति इति स्थिते ऽदुप-देशात्परस्यान्तेरनुदात्तत्वं बाधित्वा वर्णमात्राश्रितत्वेन अन्तरङ्गत्वादतो गुण इत्येकादेशः प्राप्नोति।तस्मिन्कृते व्यपवर्गाभावादयं स्वरो न प्राप्नोति। न च

अन्तादिवद्भावेन व्यपवर्गः। उभयत आश्रये तन्निषेधात्। .... तस्मादेकादे-
शस्यादिवद्भावात्प्रत्ययाद्गुदात्तत्वेन मध्योदात्तं पचन्तीति प्राप्नोति।तस्मादत्र
गतिर्वक्तव्या इति चेद्

II. उच्यते—स्थानिवद्भाव एव गतिः।तथा हि।परो ऽन्तिस्तन्निमित्त एकादेशस्ते-
नादिष्टादचो ऽन्तेरकारात्पूर्वो यः श्रबकारस्तस्मात्परस्यान्तेरनुदात्तत्वे कर्तव्ये
स्थानिवद्भवतीति सिद्धो व्यपवर्गः।न च स्वरे कर्तव्ये न स्थानिवदिति निषे-
धः शङ्क्यः स्वरदीर्घयलोपेषु लोपाजादेश एव न स्थानिवदित्युक्तेः।वस्तुतस्तु
कृतितुग्ग्रहणादसिद्धं बहिरङ्गमिति परिभषाया अनित्यत्वादप्रवृत्तेः परत्वाद-
स्मिन्स्वरे कृत एकादेशः प्रवर्तते।

I. [Objection] When पच् is followed by the third person plural suffix भि,
भि will be replaced by अन्त् because of the principle of posteriority,
on the basis of the vārttika, 'With respect to (the replacements) आयन्
etc. (for affixes beginning with फ् etc.), a statement (must be made
that they take effect) at the stage at which the affix is introduced in or-
der to achieve proper accentuation' (*āyanādiṣūpadeśavacanaṁ sva-
rasiddhyartham A. 7.1.2*, vt. 1, Kielhorn 1972: III.240), and because
it is interiorly conditioned. Then after शप् is introduced by *A. 3.1.68
kartari śap*, one obtains the sequence पच अन्ति. At this stage the
suffix अन्ति would obtain low pitch (*anudātta*) by *A. 6.1.186 tāsyanu-
dāttenṅidadupadeśāl lasārvadhātukam anudāttam ahnviṅoḥ* because
the unit पच ends in अ (*adupadeśa*). However, single substitution for
two vowels (*ekādeśa*) by *A. 6.1.97 ato guṇe* blocks *A. 6.1.186* since
it is interiorly conditioned because it depends only on sounds (*varṇa-
mātrāśrita*). (After) this (single substitution) has been done, this ac-
cent (namely the one prescribed by *A. 6.1.186*) does not obtain due
to the absence of separation (of the initial vowel of the verbal termi-
nation and the final vowel of the stem). Nor is there separation by the
metarule *A. 6.1.85 antādivac ca* because of the treatment of a sin-
gle replacement as the final sound of a preceding element and initial
sound of the subsequent element (*antādivadbhāva*) is negated when
it depends simultaneously on both the final of the preceding and the
initial of the following. . . . . Hence, because the single substitute is
as if the initial part of the suffix, in accordance with the provision
(by *A. 3.1.3*) that the initial vowel of the suffix be high-pitched, the

middle vowel would be high-pitched thus: *पचन्तिॅ.

II. [Reply] We reply: The solution is simply to treat the replacement as having the same status as its substituend (*sthānivadbhāva*). Because, in this way, a distinction (between the vowel of the stem and the initial vowel of the affix) is established because the single replacement (of the अ of शप्), is conditioned by the अ of अन्ति which follows it. So when low pitch accent has to be applied to the verbal termination अन्ति (by *A*. 6.1.186), which follows the अ of शप्, which precedes the अ of अन्ति which is taught (as the single replacement by *A*. 6.1.97), the single replacement has the status of its substituend (by *A*. 1.1.57 *acaḥ parasmin pūrvavidhau*). And it is not to be suspected that the negation of the treatment of a replacement as its substituend (by *A*. 1.1.58 *na padāntadvirvacanavareyalopasvarasavarṇānusvā-radīrghajaścarvidhiṣu*) is to be considered when accent has to be applied, because it has been stated (in *A*. 1.1.58 vt. 1 *pratiṣedhe sva-radīrghayalopeṣu lopājādeśo na sthānivat* [Kielhorn I.152.16]) that, with regard to accentuation, lengthening, and deletion of a vowel इ or अ, only the replacement by zero is not to be treated as its sub-stituend (*sthānivat*). But, in reality, due to the mention of *kṛt* and *tuk* in *A*. 8.2.2 (*nalopaḥ supsvarasañjñātugvidhiṣu kṛti*), the metarule *asiddhaṁ bahiraṅgam antaraṅge* is not obligatory, so it does not operate; hence, because (*A*. 6.1.186) is posterior (to *A*. 6.1.97) in the sequence of rules, the (low pitch) accent applies, and the single replacement operates (only) after it has been effected.

4.2   Description of the problem

At the first step in the derivation of पचन्तिॅ shown in Table 3, the final vowel of the verbal root is made high-pitched. The ऌ of the affix लट्, provided in step 2, is replaced by the third person plural verbal termination झि in step 3. Now a conflict arises between two operations, namely: (1) replacement of झि with अन्त् by *A*. 7.1.3 *jho 'ntaḥ*, and (2) accentuation by *A*. 6.1.186, despite the fact that its conditions are not met until the stem-forming affix *śap* has been introduced in subsequent steps. Conflict with *A*. 6.1.186

must be considered when the general rule of affix accentuation *A.* 3.1.3 comes into play because the former is an exception to the latter. The former must be considered an exception to the latter rather than an accent alteration rule that applies later because if it applied later there would be no mechanism to restore the high-pitched vowel of the root. Proper accentuation is achieved only if the root retains its high-pitched vowel as initially provided by *A.* 6.1.162. Now, concerning the conflict between *A.* 7.1.3 and *A.* 6.1.186, the replacement of भि by *A.* 7.1.3 is subsequent (*para*) to *A.* 6.1.186 providing accent. On the other hand, the replacement taught by *A.* 7.1.3 has as its only condition झ्. This replacement, therefore, takes precedence over the accentuation. Once अन्त् has replaced झ् in step 4, and शप् has been introduced after the verbal root in step 5, the form is पच् अ अन्ति, as shown in step 6. Since the stem ends in अ (*adupadeśa*) and अन्ति is a replacement of an ल् suffix which is termed (*sārvadhātuka*), all the conditions stated for the application of *A.* 6.1.186 are fulfilled; hence it is ready for application. At the same time, however, the अ of शप् is followed by the अ of अन्ति, which is the condition for the application of the single replacement prescribed by *A.* 6.1.97 *ato guṇe*. Therefore *A.* 6.1.97 is also now ready to apply. At this point, a conflict arises between *A.* 6.1.97 *ato guṇe* and *A.* 6.1.186 *tāsyanudāttenṅidadupadeśāl lasārvadhātukamanudāttamhnviṅoḥ*. The question is which one should take precedence over the other? To analyze this, let us compare the conditions required for the application of these two rules.

Bhaṭṭojī Dīkṣita explains the conditions for the application of *A.* 6.1.97 *ato guṇe* saying, अपदान्तादकारादगुणे परतः पररूपमेकादेशः. Vasu (1906: vol. I, 97) translates as follows: "Also when the short *a*, not being final in a pada, is followed by a guṇa letter, then in the room of both the precedent and the subsequent—the single substitute is the form of the subsequent i.e. the Guṇa." This rule is applicable where the vowel अ of शप् is followed by the guṇa vowel अ in अन्ति at step 6 in Table 3.

The relevant condition required for the application of *A.* 6.1.186 is that an affix termed *sārvadhātuka* that replaces an L-affix follow a stem ending in अ. This rule is applicable where the verbal stem ends in the अ of the stem-forming affix शप् and is followed by the suffix अन्ति which is termed

sārvadhātuka and which is a replacement of an L-affix, also at step 6 in Table 3.

Considering the conditions for the application of these two rules, *A.* 6.1.97 *ato guṇe* depends only on the sequence of the two sounds (*varṇamātrāśritatva*). *A.* 6.1.186, on the other hand, depends on additional conditions, namely, that the subsequent अ belong to a verbal termination that replaces an L-affix and be termed *sārvadhātuka*. Because *A.* 6.1.186 depends on more conditions than *A.* 6.1.97, the latter is considered more internally conditioned and hence would prevail in accordance with the principle that a more internally conditioned rule prevails over one that is more externally conditioned *asiddhaṃ bahiraṅgam antaraṅge* (paribhāṣā 50 in the *Paribhāṣenduśekhara*). In one of his explanations of this principle, Nāgeśa writes that what depends upon less is more internal and what depends on more is external (*alpāpekṣam antaraṅgaṃ bahvapekṣaṃ bahiraṅgam*, Kielhorn 1985: 23).

If *A.* 6.1.97 provided single replacement first in accordance with the antaraṅga principle, then there would be only one *a* remaining. One would no longer be able to distinguish the parts of a single replacement into preceding and following elements one of which follows the other. Moreover, because in the case of the single replacement of the sequence of two vowels provided by *A.* 6.1.97 it is the *subsequent* vowel (*pararūpa ekādeśa*) that is the replacement, the *a* that would remain would be just the *a* of the *suffix anti*, not the *a* of the stem. The preceding vowel would no longer be present at all, so the verbal stem would no longer end in the vowel *a* so would not satisfy the condition *adupadeśa*. Therefore, there would be no scope for the application of *A.* 6.1.186.

The single replacement rules are governed by the metarule *A.* 6.1.85 *antādivac ca*. Cardona (1997: 68) explains this metarule saying, "the single replacement *c* is then treated as the final segment of the item that ends with *a* and as the initial segment of the item that begins with *b* (*antādivat*)." On the basis of this metarule, it may be argued that this single replacement can be considered as the final part of the preceding unit as well as the initial part of the following unit. However, this metarule is negated by another metarule *ubhayata āśrayaṇe nāntādivat*, "the single replacement is

not treated both as part of the preceding and as part of the following unit at the same time." Hence the single replacement *a* will not be accepted as part of the preceding as well as of the following.

For this reason, if *A.* 6.1.97 were applied prior to *A.* 6.1.186, it would be difficult to establish that the single replacement अ is part of the preceding unit and to consider this unit as ending in अ (*adupadeśa*). Hence there would be no scope for the application of *A.* 6.1.186. Therefore, the general rule *A.* 3.1.3 *ādyudāttaś ca* would apply, and the form पचन्ति would be accented high-pitched on the middle vowel, not on the initial one as it should.

To remedy this problem and to derive the correct accent, Rāmacandra, the author of the *Svaraprakriyā*, proposes the following two solutions:

1. application of the principle of *sthānivadbhāva*, and
2. priority of the subsequent rule (*paratva*).

In the first solution, he suggests treating the single replacement as its two substituends to reinstate the distinction between the final अ of the verbal stem and the verbal termination. He proposes that the *sthānivadbhāva* apply by *A.* 1.1.57 *acaḥ parasmin pūrvavidhau*. Cardona (1997: 59) explains the meaning of this rule as follows:

> [I]f a vowel undergoes substitution in a right context (*parasmin* 'before a following element': **A** 1.1.66 [**90**]), the replacement for that vowel (*acaḥ [ādeśaḥ]*) has the status of the original sound in respect of an operation relative to an element that precedes (*pūrvavidhau*) this original sound prior to substitution.

Now, in order for *A.* 1.1.57 to be relevant to the present derivation, it requires an interpretation that breaks with tradition. Cardona's explanation of the rule accords with that given both in the *Kāśikāvṛtti* and in the *Siddhāntakaumudī*. The *Kāśikāvṛtti* interprets the rule as follows: अजादेशः परनि-मित्तकः पूर्वविधौ कर्तव्ये स्थानिवद्भवति, which means that a replacement of a vowel conditioned by a following element has the status of its substituend when a rule is applicable to a preceding sound. The *Siddhāntakaumudī* interprets the rule even more explicitly as follows: परनिमित्तो ऽजादेशः स्था-निवत्स्यात्स्थानिभूतादचः पूर्वत्वेन दृष्टस्य विधौ कर्तव्ये (*SK.* 50; Vasu 1906:

vol. 1, 32), which means that a replacement of a vowel should be treated as its substituend, provided that the condition for the replacement follows the vowel, and a rule is applicable to a present sound preceding the vowel which is the replacement. In these traditional interpretations, treatment of the vowel as its substituend requires that the applicable rule concern a sound that precedes the vowel. In contrast, Rāmacandra wants the rule to apply to a sound that follows the vowel.

There can be no mistake that traditional commentators require that the applicable rule concern a preceding sound because they explicitly analyze the terms used to justify their interpretation. Bhaṭṭojī Dīkṣita analyzes the compound पूर्वविधि in *A.* 1.1.57 with the words पूर्वत्वेन . . . विधौ. Jinendrabuddhi, in particular, is very explicit. Commenting on the *Kāśikāvṛtti* (Pullela and Viṭhaladevuni 1985: 62.26–30), he interprets पूर्वविधि as a ṣaṣṭhītatpuruṣa compound पूर्वस्य विधिः. He offers two interpretations of this compound: (1) The ṣaṣṭhī is a śeṣaṣaṣṭhī subordinate to the term *vidhi* understood in the sense of that which is provided (कर्मसाधनः । विधीयत इति विधिः ।). (2) The ṣaṣṭhī is a direct object (*karman*) subordinate to the term *vidhi* understood in the sense of a provision (भावसाधनो वा। विधानं विधिः ।). Under the first option, sthānivadbhāva applies when an operation in relation to an already existing preceding sound is to be performed (पूर्वस्य व्यवस्थितस्य लब्धसत्ताक-स्य सम्बन्धिनि कार्ये कर्त्तव्य इत्यर्थः). Under the second option, sthānivadbhā-va applies when a preceding sound is to be brought about by the provision (पूर्वस्यापरिनिष्पन्नस्य विधाने कर्त्तव्य इत्यर्थः).

We infer that, in direct opposition to these interpretations, Rāmacandra interprets the compound *pūrvavidhau* in *A.* 1.1.57 as *pūrvasmāt vidhiḥ* 'a rule that applies after *x*' when he states [§4.1 (p. 9)], तस्मात्परस्यान्तेरनुदा-त्तत्वे कर्त्तव्ये "when low-pitch accent is to be applied to श्रन्ति which follows that (*tasmāt parasya*)." Because Rāmacandra uses the direction word *para* after the ablative *tasmāt*, according to his interpretion, *A.* 1.1.57 means that a replacement of a vowel should be treated as its substituend, provided that the condition for the replacement follows the vowel, and a rule is applicable to a sound *subsequent* to that vowel. Rāmacandra applies this rule in the derivation of पचन्ति after the श्र of शप् and the श्र of श्रन्ति have been replaced by the latter as their single replacement by *A.* 6.1.97, reversing the order of

steps 6 and 7 in Table 3. At this stage it is clear that the verbal termination अन्ति, which follows, was the cause of the single replacement, that that replacement is in place of vowels, namely the अ of शप् and the initial अ of अन्ति, and that an operation will apply to this single vowel replacement if indeed *A*. 6.1.186 is to apply. According to Rāmacandra, *A*. 6.1.186 is applicable at this stage if the initial vowel अ of the verbal termination अन्ति follows the vowel अ of the stem-forming affix शप्. It does if sthānivadbhāva applies. Rāmacandra says that the अ, which is the single replacement (एका-देशः) should be considered as having the status of its substituend (स्थानिव-द्भवति) because the initial अ of अन्ति follows the vowel of शप् and *A*. 6.1.186 is applicable to the अ of अन्ति which is subsequent to that vowel of शप्.

Once the single replacement has the status of its substituends, the sequence of two distinct vowels is established (सिद्धो व्यपवर्गः). Now, because the sārvadhātuka verbal termination अन्ति is preceded by an अ, the conditions are met for *A*. 6.1.186 *tāsyanudātteṅnidadupadeśāl lasārvadhātukam anudāttam ahnviṅoḥ* to apply. By this rule, the अ of अन्ति will be low-pitched, and, in accordance with *A*. 6.1.158 *anudāttaṁ padam ekavarjam*, the अ of the root पच् will remain high-pitched as shown in the final two steps of Table 3. Thus concludes Rāmacandra's first solution to achieve the desired initial acute accent of this verbal form in the *Svaraprakriyā*.

In his second and preferred solution, Rāmacandra argues that the subsequent of the two rules *A*. 6.1.97 and *A*. 6.1.186, namely the latter which provides the accent, applies first, and that the former, which provides the single replacement of the final vowel of the stem and the initial vowel of the verbal termination, applies once the accent rule has applied. While his reference to the principle that the subsequent rule takes priority is brief (प-रत्वात्), he obviously applies the metarule stated in *A*. 1.4.2 *vipratiṣedhe paraṁ kāryam* throughout the *Aṣṭādhyāyī*. This metarule states that where two rules, each of which has its own domain of application, share a domain, the latter applies first.[3] The application of this metarule would be preempted if one of the rules were rendered non-existent (*asiddha*) by the principle that a rule that is more externally conditioned is non-existent with respect to one that is more internally conditioned (*asiddhaṁ bahiraṅga-*

---

[3]Scharf (2011) analyzes criteria for rule selection in the *Aṣṭādhyāyī*.

m antaraṅge, paribhāṣā 50 in the *Paribhāṣenduśekhara*). As discussed in
§4.2 (p. 12), Rāmacandra considers *A.* 6.1.97 more internally conditioned
than *A.* 6.1.186 because the latter depends on the technical term *sārva-
dhātuka* and on the vowel being part of an affix that replaces an L-affix in
addition to strictly phonetic conditions. In this solution, he argues that the
principle *asiddhaṁ bahiraṅgam antaraṅge* does not apply because it is not
obligatory due to the mention of *kṛt* and *tuk* in *A.* 8.2.2 *nalopaḥ supsva-
rasañjñātugvidhiṣu kṛti* (वस्तुतस्तु कृतितुग्ग्रहणादसिद्धं बहिरङ्गमिति परिभाषाया
अनित्यत्वादप्रवृत्तेः).

A. 8.2.2 is a restriction of *A.* 8.2.1 *pūrvatra asiddham*. *A.* 8.2.1 is a
heading rule which teaches that each of the subsequent rules stated in the
tripādi section does not exist for the preceding rule. Cardona (1997: 346)
explains the meaning of the restriction *A.* 8.2.2 as follows,

> A 8.2.7, which serves to delete -*n* (*nalopaḥ*), is suspended only
> with respect to particular rules, namely those that provide op-
> erations connected with nominal endings (*sup*), those which let
> particular accents (*svara*) or class names (*sañjñā*) take effect,
> and the sūtra that lets the final augment *tuk* occur (*supsvarasa-
> ñjñātugvidhiṣu*) before a *kṛt* affix (*kṛti*: A 6.1.71).

A. 8.2.7 *nalopaḥ prātipadikāntasya* (*padasya* 8.1.16), which, as Cardona
mentions, provides deletion of the final *n* of a nominal base, applies only to
a nominal base that is also termed *pada* due to the recurrence of that term
from *A.* 8.1.16. A nominal base followed by any of the affixes beginning
with the nominal terminations taught in *A.* 4.1.2 is termed *pada* by *A.* 1.4.17
svādiṣv asarvanāmasthāne. Consider for example, the form वृत्रहभ्याम्. The
nominal base वृत्रहन् is formed with the kṛt affix क्विप् provided by *A.* 3.2.87
brahmabhrūṇavṛtreṣu kvip. After the dual third–fifth-triplet nominal ter-
mination भ्याम् is provided by *A.* 4.1.2, वृत्रहन् is termed *pada* by *A.* 1.4.17,
and its final न् is deleted by *A.* 8.2.7. Now, *A.* 6.1.71 *hrasvasya piti kṛti tuk*
provides the augment तुक् to the end of a speech form that ends in a short
vowel. After the deletion of its final न्, the nominal base, now वृत्रह, would
be subject to this rule, if the operation provided by *A.* 8.2.7 were effected
(*siddha*).

The principle *asiddhaṁ bahiraṅgam antaraṅge* would prevent the deletion of final न् because clearly the conditions for deletion by *A.* 8.2.7 are external compared with those of the provision of the augment तुक्. *A.* 6.1.71 requires only that a *kṛt* affix follow a root ending in a short vowel while *A.* 8.2.7 requires the term *pada* which depends on a nominal termination provided after the nominal base वृत्रहन्, which is itself a compound whose final constituent is the root हन्. Because the antaraṅga principle would already achieve the object of preventing *A.* 8.2.7 from being effected with respect to the provision of the augment तुक्, there would be no use for the restriction stated in *A.* 8.2.2. The fact that Pāṇini states *A.* 8.2.2 indicates that the antaraṅga principle is not obligatory (*anitya*). In general, an operation is not considered to be external just on the basis of a *sañjñā*. As Nāgeśa states in his *Paribhāṣenduśekhara*, the deletion of न् is not considered to be more external just because it depends on the term *pada* because one does not resort to externality created by a technical term (सञ्ज्ञाकृतबहिरङ्गत्वस्यानाश्रयणात् Kielhorn 1985: 24; See also Kaiyaṭa's *Pradīpa* on *A.* 8.2.2 पदत्वमात्रनिबन्धनान्नात्र बहिरङ्गो नलोपः Bal Śastrī 1987: vol. VII-VIII, 83). Moreover, the dependence of the technical term *pada* on the subsequent nominal termination भ्याम् is not relevant because externality is not transitive (परम्परया निमित्तत्वमादाय बहिरङ्गत्वाश्रयणे तु न मानम्). Therefore, because an operation is not considered to be more externally conditioned just because it depends on a technical term, in the derivation of the form पचन्ति, *A.* 6.1.186 can not be considered externally conditioned just because it depends on the technical term *sārvadhātuka*. Since the antaraṅga principle does not apply, *A.* 6.1.186 will take precedence over *A.* 6.1.97 because it is stated later in the *Aṣṭādhyāyī*. Therefore, first *A.* 6.1.186 will provide that the verbal termination अन्ति be low-pitched and then *A.* 6.1.97 will provide single replacement as indicated in steps 7–8 in Table 3.

5 Conclusion

We presented an example of the derivation of a third person plural thematic present verb form in which a conflict arises between (a) the replacement of the final vowel of the stem and the initial vowel of the verbal termination by

a single sound and (b) the provision of low pitch to the verbal termination. The conflict between these rules arises because the latter rule depends upon the distinction between the two vowels which the previous rule replaces by one. We analyzed Rāmacandra's solutions, the first of which attempted to solve the problem by applying a metarule that would treat the single replacement as its substituends (*sthānivadbhāva*), and the second of which resorted to the principle that the rule stated subsequently takes priority (*vipratiṣedhe paraṁ kāryam*). Rāmacandra concludes that the accentual rule *A.* 6.1.186 applies prior to the single replacement rule *A.* 6.1.97.

We find difficulties with Rāmacandra's arguments. In his first solution, he appears to interpret the metarule *A.* 1.1.57 *acaḥ parasmin pūrvavidhau* in a manner inconsistent with traditional interpetations. Under its traditional interpretation, there is no scope for the application of this metarule to the case to which Rāmacandra applies it. Moreover, there does not appear to be any need for applying sthānivadbhāva because the accentual rule *A.* 6.1.186 explicitly refers to the final vowel of the stem in initial instruction (*upadeśa*). Nṛsiṁhasūri argues in the *Svaramañjarī* that the mention of *upadeśa* permits one to access the prior state in which there is a sequence पच अन्ति even if *A.* 6.1.97 applies first (अदुपदेशात्परस्य लसार्वधातुकस्य स्थाने यो ऽयमेकादेशस्तस्य स्वरः। Devasthali 1985: 8). Rāmacandra himself similarly adduces the mention of *upadeśa* as a reason for the application of *A.* 6.1.186 to a state prior to the application of *A.* 7.3.101 *ato dīrgho yañi*, even if the latter applies first, in the derivation of first person dual and plural thematic presents such as पचामः (पचावः पचामः पचावहे पचामहे इत्यत्र परत्वादतो दीर्घो यञीति दीर्घत्वे कृते ऽप्यदुपदेशादित्युपदेशग्रहणादयं स्वरो भवत्येव। Abhyankar 2001: 13). Hence it is incomprehensible that he does not refer to initial instruction in the derivation of पचन्ति.

His second solution regarding the priority of the subsequent rule is problematic because the metarule *A.* 1.4.2 *vipratiṣedhe paraṁ kāryam* is properly restricted to the section of rules headed by *A.* 1.4.1 *ākaḍārād ekā saṁjñā*, i.e. *A.* 1.4.1–2.2.38. The application of this metarule is not required either, for the same reason it was not required in his first solution: because of the explicit mention of the final vowel of the stem in initial instruction. Yet, rather than resort to Nṛsiṁhasūri's procedure of accessing the state of

derivation prior to single replacement, by virtue of reference to the state of initial instruction, we consider it to be simpler to take the mention of *upadeśa* to indicate that *A.* 6.1.186 should apply as soon as the stem-forming affix is introduced. Hence, the preferable procedure to achieve correct accentuation is to apply the accent rule prior to a rule that otherwise alters the phonetic shape of an affix. Surely, reference to the final vowel of the stem in the state in which it is initially provided implies reference to it prior to its replacement by *A.* 6.1.97 or any other rule with the exception of deletion by *A.* 2.4.72 (*luk*) and 75 (*ślu*).

References

Ajotikar, Anuja and Kulkarni, Malhar

    2013   On the accent of the word पराचः as stated by A 6.2.52. In *Vyākaraṇa across the Ages (Proceedings of the Vyakarana Section of the 15th World Sanskrit Conference)*, edited by George Cardona, 55–72. Delhi: D. K. Printworld.

Abhyankar, K. V.

    1974   स्वोपज्ञव्याख्यासहिता स्वरप्रक्रिया: श्रीशेषकुलोद्भवनागाह्वयपण्डितसु-नुरामचन्द्रपण्डितविरचिता, काशिनाथ वासुदेवशास्त्रिन् अभ्यंकरइत्येतैः प्रस्तावनापाठभेदसूत्रसूच्यादिभिरलङ्कृत्य संशोधितम्. Ānandāśrama Sanskrit Series 138. Pune: Anandashram Samstha. Reprint, 2001.

Abhyankar, K. V. and J. M. Shukla

    1977   *A Dictionary of Sanskrit Grammar*. Gaekwad's Oriental Series 134. Baroda: Oriental Research Institute. Reprint, 1986.

Cardona, George

    1976   *Pāṇini: A Survey of Research*. The Hague: Mouton.

    1997   *Pāṇini, His Work and Its Traditions. Volume I: Background and Introduction*. 2nd ed. Delhi: Motilal Banarsidass.

Devasthali, G. V.

    1985   स्वरमञ्जरी of श्रीनृसिंहसूरी. Bhandarakar Oriental Research Institute Research Unit Series No. 6. Poona: Bhandarakar Oriental Research Institute.

20　　　　　　　　　Anuja Ajotikar, Kulkarni, and Scharf

Kielhorn, F.

1972　　　*The Vyākaraṇa Mahābhāṣya of Patañjali*. Third edition. Revised and furnished with additional readings, references, and select critical notes by K. V. Abhyankar. Vol. III: Adhyāyas VI, VII, and VIII. Poona: Bhandarkar Oriental Research Institute.

1985　　　*Paribhāṣenduśekhara of Nāgojibhaṭṭa*. Parimal Sanskrit Series 20. Delhi: Parimal Publications.

पुल्लेल, श्रीरामचन्द्रुडु and विठलदेवुनि सुन्दरशर्मन्

1981　　　श्रीहरदत्तमिश्रविरचिता पदमञ्जरी वामनजयादित्यविरचितायाः काशिका-याः व्याख्या. द्वितीयो भागः, 5–8 अध्यायाः. Sanskrit Academy Series 26. Hyderabad: Sanskrit Academy, Osmania University.

1985–1986　न्यासापराख्या काशिकाविवरणपञ्जिका. 2 vols. प्रथमो भागः, 1–4 अध्यायाः; द्वितीयो भागः, 5–8 अध्यायाः. Sanskritparishad Granthamala 33, 35. Hyderabad: Sanskrit Parishad, Osmaniya University.

Scharf, Peter M.

2011　　　Rule selection in the *Aṣṭādhyāyī* or Is Pāṇini's grammar mechanistic? In *Studies in Sanskrit Grammars (Proceedings of the Vyākaraṇa Section of the 14th World Sanskrit Conference*, edited by George Cardona, Ashok Aklujkar, and Hideyo Ogawa, 319–350. New Delhi: D. K. Printworld.

2013　　　Teleology and the simplification of accentuation in Pāṇinian derivation. In *Vyākaraṇa across the Ages (Proceedings of the Vyakaraṇa Section of the 15th World Sanskrit Conference)*, edited by George Cardona, 31–53. Delhi: D. K. Printworld.

Sharma, Aryendra, Kanderav Deshapande, and D. G. Padhye

1970　　　*Kāśikā: A commentary on Pāṇini's Grammar Part II (Adhyāyas 5-8) by Vāmana and Jayāditya*. Sanskrit Academy Series 20 (A 17). Hyderabad: Sanskrit Academy, Osmania University.

Shastri, Bal

1987　　　*Mahābhāṣya of Patañjali with the Commentaries Mahābhāṣya-pradipodyota of Śrī Nāgoji Bhaṭṭa* and *Mahābhāṣya-Pradīpa by Kaiyaṭa*. Vol. IV, adhyāyas 6–8, edited by Guruprasad Śastri. Second edition, revised by Bal Shastri. Varanasi: Vani Vilas Prakashan.

Vasu, Srisa Chandra

1897   *The Aṣṭādhyāyī of Pāṇinī, Translated into English*. Vol. II. Allahabad: The Panini office.

1905   *The Siddhāntakaumudī of Bhaṭṭojī Dīkṣita, Edited and Translated into English*. Vol. III. Allahabad: The Panini office. Reprint, 1995.

1906   *The Siddhāntakaumudī of Bhaṭṭojī Dīkṣita, Edited and Translated into English*. Vol. I. Allahabad: The Panini office. Reprint, 1995.