

Tiziana Pontillo
pontillo@unica.it
(University of Cagliari, Italy)

The Rejection of the Variationist System

How Commentators Interpreted Pāṇini's General Rule on *taddhita*-derivations¹

ABSTRACT: On the basis of Bhate 1989 and Pontillo 2013, A 2.1.1 is assumed to create a variationist system between the phrase mentioned or hinted at in the wording of the single formation rule used to teach *taddhitas* and the output of the rule itself. This variationist system is hierarchically superordinate to other single optionality phenomena taught by *vā*, *vibhāṣā*, *anyatarasyām*.

The present paper aims to understand how this variationist system, which is consequently introduced by A 4.1.82 *samarthānām pathamād vā*, was rejected by commentators from Patañjali onwards by resorting to a morphologically oriented reading of A 4.1.82.

KEYWORDS: *taddhita*, *samartha*, *nityatva*, Pāṇini, Kātyāyana, Patañjali

¹ All translations are by the author, unless explicitly stated otherwise. Only quotations of texts are accented. I would like to explicitly recognize my debt to the anonymous reviewers, who suggested some important improvements.

1. Introduction: the common interpretation of the general *taddhita* rule (A 4.1.82)

Before dealing with the general rule that teaches what is called *taddhita* derivation in the title, it is worth recalling that the technical term *taddhita* is commonly used to designate not only secondary derivative nominal affixes, but also secondary derivative nominal stems, which should be more literally called *taddhitāntas* (i.e. [nominal stems] ending with a *taddhita* affix). In this paper, the term is mainly used with the second meaning: thus, a denominal stem such as *vaiyākaraṇā-* “the one who studies grammar”, will be called a *taddhita*, since it is a nominal stem ending with a *taddhita* affix, namely *-ā* (= *āN*), which applies to the etymon² *vyākāraṇa-* “grammar” (with the specific ablaut *vrddhi ai* in place of the *i* of the first syllable of the nominal base). Analogously a patronymic name such as *aupagava-* derives from its etymon *upagu-* as “Upagu’s descendant”, through the affix *-a* (with the specific *vrddhi* ablaut of the initial vowel of the nominal base).

The general *taddhita* rule reads as follows:

A 4.1.82: *samarthānām prathamād vā* [*taddhitaḥ* 76].

The common translation of this rule considers the genitive *samarthānām* as a *nirdhāraṇa śaṣṭhī vibhakti*, i.e. as a partitive genitive (“among the *samartha* items”):

- “A *taddhita* affix is introduced optionally after the first *pada*³ syntactically (and semantically) connected with others (provided by the rules themselves”) (tr. Katre 1987: 418).

² i.e. to the lexeme that supplies the linguistic material on which the derivative morpheme depends.

³ *pada* is the term used to designate each constituent of the syntactical combination used to analyse a *taddhita*- derivative stem or a compound etc. It must be translated as ‘inflected word’ in accordance with A 1.4.14: *suptināntam padam* “a *pada* is a [linguistic expression] ending in a nominal or a verbal ending”.

- “An affix termed *taddhita* occurs (from here on, prior to 5.3.1 *prāg diśo vibhaktiḥ* after the first among syntactically related (*samartha*) nominal stems” (tr. Sharma 1987–2003, 4: 78).
- “(the *taddhita* suffixes are) preferably (added) to the first among the semantically equivalent words” (tr. Bhate 1989: 2).
- “The rule would then provide that elements to be specified occur, optionally, after the first of semantically and syntactically related items.” (Cardona 1997: 15).
- “An affix introduced in the following rules occurs optionally after the first of syntactically connected words.” (Scharf 2021: 128).

In brief, the rule is interpreted as if it taught that, given a pair of related *padas*, a *taddhita* occurs after the first of the two related *padas*. Let us see a couple of single *taddhita* rules read within the perspective of the most common interpretation.

A 4.1.92 *tasyāpatyam* [*taddhitaḥ* 4.1.76 *vā* 4.1.82 *aṅ* 4.1.83]

This rule is supposed to teach that the *taddhita* affix *aṅ* occurs after a nominal stem ending in the genitive case to denote a descendant, so that for instance after the nominal stem *upagu-* inflected in the genitive case (*upagoḥ*) the affix *-a* occurs, to form the derivative stem *au-pagava-*, which conveys the sense of “Upagu’s descendant”.

A 4.2.1 *tena raktam rāgāt* [*taddhitaḥ* 4.1.76 *vā* 4.1.82 *aṅ* 4.1.83]

Analogously this rule is supposed to teach that the *taddhita* affix *aṅ* occurs after a nominal stem ending in the instrumental case denoting a colour to express the sense of dyeing, so that for instance after the nominal stem *kuṅkuma-* “saffron”, inflected in the instrumental case (*kuṅkumena*), the affix *-a* occurs, to form the derivative stem *kaṅkuma-*, which denotes “a cloth dyed with saffron”.

Note that the demonstrative pronoun in these rules represents a variable (X), which must be replaced with any lexeme under the specific

constraint of each single rule. In A 4.1.92 *tasya* represents this variable, for which any name of a human being may be substituted. Analogously, in A 4.2.1 *tena* can be replaced by any noun denoting a *rāga* “a dye”.

2. Which problems do commentaries address with this rule?

Kātyāyana indeed rejects rule A 4.1.82 in its entirety because his criticism concerns all three segments of the wording.

2.1 The first two problems

Vt. 1 on A 4.1.82 (M 2.234 l. 4):

samarthavacanam anarthakaṃ, na hy asamarthenārthābhīdhānam

The mention of *samartha* is purposeless, because the [desired] meaning [of the *taddhita* affix] is not expressed, [if it is combined] with an a-*samartha* item.

Patañjali introduces this Vt. by explaining that *samartha* is mentioned with the aim of allowing the *taddhita* affix to occur after a *samartha* item, and not after a non-*samartha* item.⁴ The example is *upagor apatyam* and the counterexample is *kambala upagor apatyam devadattasyeti*. *upagoḥ* is *samartha* with respect to *apatyam* in the mentioned phrase, which means “Upagu’s descendant”. On the contrary, in the counterexample, *upagoḥ* is *samartha* with respect to the preceding word, i.e. *kambalaḥ*, to convey the sense of “Upagu’s shawl”. Instead, *upagoḥ* is contiguous but not *samartha* with respect to *apatyam*, which is in turn *samartha* with respect to *devadattasya*, to convey the sense of “Devadatta’s descendant”.

⁴ M 2.234 ll. 2–3 *ad* A 4.1.82: *samarthavacanam kim artham. samarthād utpattir yathā syāt. upagor apatyam. asamarthān mā bhūd iti. kambala upagor apatyam devadattasyeti.*

This leads one to ask exactly what meaning Patañjali assigns to *samartha*: on the basis of these two easy examples, it is clear that *samartha* is a qualifier used for items that are related to each other. There is indeed a long discussion on the definition of this term in Patañjali's commentary on A 2.1.1 *samarthaḥ padavidhiḥ*.

Let us now read some authoritative translations of this very important rule and note that *padavidhiḥ* is interpreted as if it were a *padakāryam* “a grammatical operation prescribed for an inflected word”. Moreover, the translation of the nominative *samarthaḥ* appears to be forced in an unexpected manner.

- “An operation on *padas* [takes effect] only when they are semantically and syntactically connected” (Katre 1987: 105).
- “An operation concerning fully inflected words is to be syntactically related” (Sharma 1987–2003: 3: 1).
- “An operation pertaining to *padas* applies to *padas* that are syntactically and semantically related” (Cardona 1997: 66).
- “An operational rule concerning finished words takes effect only if the elements to which the rule refers are *samarthaḥ* ‘semantically (and syntactically) connected’” (Houben 1997: 94).
- “An operation that pertains to inflected words ending in nominal or verbal terminations (*padas*) applies to words that are syntactically and semantically related.” (Scharf 2021: 143).⁵

The unexpected syntactical interpretation of the nominative *samarthaḥ* depends on Vt. 18 *ad* A 2.1.1 (*siddhaṃ tu samarthānām iti vacanāt*), which establishes that it should be read as a plural genitive (*samarthānām*). But what is the origin of this common interpretation of *samartha* as a qualifier for constituents that show a semantic and syntactic connection? This is also the common modern interpretation

⁵ The original assumption that the *samartha* label should be extended to the so-called “networks” of semantic syntactic relations, “networks” whose boundary is governed by pitch, in accordance with A 8.1.28 (which states that “an inflected verbal word [is *anudatta*] after an inflected non-verbal word”) is crucially due to Deshpande (1980: 14–20; 1987: 58–71).

of the term as can be seen in the translation of A 4.1.82. It mainly depends on the fact that A 2.1.1 is classified as an *adhikāra*, i.e. as a heading rule that only applies to the compounding section of the grammar.⁶ Within such a perspective a couple of alternative interpretations of the term *samartha* are discussed at length, either as ensuring *ekārthībhāva*, i.e. the “merging [of the constituents] in a single integrated meaning”⁷ or as being characterised by *vyāpekṣā*, i.e. ‘mutual expectancy’ [of the constituents].⁸ *ekārthībhāva* is brought about when the matching compound *rājapuruṣaḥ* is obtained from the combination of two inflected words such as *rājñāḥ puruṣaḥ*.⁹ *vyāpekṣā* is the relation between the genitive form *rājñāḥ* and the constituent which is modified by it, i.e. *puruṣaḥ*.¹⁰ By contrast there is no mutual expectancy between *rājñāḥ* and *puruṣaḥ* in a sentence such as *bhāryā rājñāḥ puruṣo devadattasya*,¹¹ where the genitive form *rājñāḥ* is a modifier

⁶ Kātyāyana and Patañjali (see especially M 1.359 ll. 4–8 ad A 2.1.1) already tackled the problem of the right classification of A 2.1.1 as a heading-rule (i.e. as an *adhikāra*) limited to the compounding section or as a metarule (i.e. as a *paribhāṣā*) as a general statement aimed at helping the correct interpretation of the whole text to be extended to at least all the types of the so-called *vṛttis*, i.e. traditionally compounds, deverbal and denominal derivative nominal stems, deverbal derivative verbal stems and elliptic dual/plurals (i.e. *samāsas*, *kṛts*, *taddhitas*, *sanādyanta-dhātus*, *ekaśeṣas*—see e.g. the commentary on VLK 909 = A 2.1.4: *kṛttaddhitasamāsaikaśeṣasanādyantadhāturūpāḥ pañca vṛttayaḥ*). Finally Patañjali argues that A 2.1.1 is an *adhikāra*, even though he is conscious that treating this rule as a *paribhāṣā*, could make the rule more consistent, less vulnerable (M 1.359 ll. 15–16 ad A 2.1.1): *tatraikārthībhāvaḥ sāmāthyam paribhāṣā cety evaṃ sūtram abhinnatarakaṃ bhavati* “Among these alternatives, (if we accept) that ‘semantic connection’ is (here) ‘single integrated meaning’ and (the rule is) a *paribhāṣā*, then the rule can be better kept as it is (than in other alternative interpretations)” (transl. Joshi 1968: 10).

⁷ M 1.361 l. 26 Vt. 1 ad A 2.1.1: *prthagarthānām ekārthībhāvaḥ samarthavacanam* “The expression *samartha* is the merging in a single integrated meaning of words having separate objects.”

⁸ M 1.365 l. 9 Vt. 4 ad A 2.1.1: *parasparavyapekṣā sāmāthyam eke* “Some [maintain that] the semantic connection is mutual expectancy”.

⁹ M 1.361 l. 28 ad Vt. 1 ad A 2.1.1.

¹⁰ M 1.365 l. 10 ad Vt. 4 ad A 2.1.1.

¹¹ M 1.361 ll. 15–16 ad A 2.1.1.

of *bhāryā* to convey the sense of ‘the king’s wife’ and *devadattasya* is a modifier of *puruṣaḥ* (“Devadatta’s attendant”).

The counterexample is very close to *kambala upagor apatyam devadattasya*, i.e. the example used by Patañjali¹² in order to explain Vt. 1. By means of Vt. 1 in fact Kātyāyana maintains that the *samartha* constraint is purposeless in 4.1.82, because A 2.1.1 is sufficient to block the formation of *aupagava-* on the basis of the sentence *kambala upagoḥ*. This is because indeed a given *taddhita* affix, in the case a patronymic *taddhita* affix, cannot convey the desired meaning, when the nominal stem to which it should apply is not *samartha* with respect to the other combined word. So, the *taddhita* affix cannot appear after *upagu-* in combinations of words like *kambala upagor apatyam devadattasya*.

All in all, Kātyāyana rejects the word *samartha* in the general *taddhita*-rule because the meaning of the affix is intrinsically connected with a *samartha* item and not an *asamartha* one.

The second Vārttika on A 4.1.82 rejects the word *prathama-*.

M 2.234 l. 9 Vt. 2 ad A 4.1.82:

prathamavacanam anarthakaṃ na hy aprathamenābhidhānam.

The mention of *prathama* is purposeless because there is not the [desired] denotation [of the *taddhita* affix] [if it is combined] with an item which is not the first (in the input phrase).

Indeed, before introducing this Vt. 2, Patañjali explains that the ablative *prathamāt* is used in the sense of a qualifier of the *prakṛti*, i.e. of the nominal base, so that the *taddhita* affix arises after the first word (i.e. the nominal stem which constitutes the etymon of the derivative stem) and not after a nominal base which is not the first, i.e. e.g. after the word *apatyam* in the input phrase *upagor apatyam*.¹³

¹² See above, fn. 3.

¹³ M 2.234 ll. 7–8 ad Vt. 1 ad A 4.1.82: *atha prathamavacanam kim artham. prathamavacanam prakṛtiviśeṣaṇārtham. prathamāt pratyotpattir yathā syād aprathamān mā bhūt. upagor apatyam iti apatyaśabdān.*

In other words, the desired denotation cannot be conveyed by a *tad-dhita* affix after an item which is not the first in the input phrase, because for instance the meaning of the patronymic affix is intrinsically connected with the first word included in the input phrase and not with the second one.

2.2 The third problem

The final Vārttika on A 4.1.82 is devoted to the word conveying the sense of optionality, namely *vā*, which is of course crucial for the research question tackled in the present paper.

M 2.234 l. 13 Vt. 3 ad A 4.1.82:

vāvacane cōktam

And it has [already] been said about the mention of *vā*.

Kātyāyana maintains that this word *vā* is also purposeless on the basis of something explained elsewhere (*uktam* lit. “[already] said”), which according to Patañjali’s commentary is a Vārttika on the rule teaching to form desiderative verbal bases, which also includes the mention of *vā*, namely Vt. 9 ad A 3.1.7.¹⁴ A desiderative verbal form such as *cikīrṣati* “he wants to do” is optional (preferable according to Pāṇini) with respect to its input *kartum icchati*, which conveys the same sense. Kātyāyana maintains that such a case of optionality is purposeless.

¹⁴ A 3.1.7: *dhātoḥ karmanāḥ samānakartṛkād icchāyām vā* [san 5] “[The affix *saN*] preferably occurs after a verbal base which denotes [an action] which is the object of another verbal base sharing the same agent in the sense of desire.” According to this rule, for instance, *cikīrṣati* (‘he wants to do’) is formed by applying the affix *-sa* to the verbal base *kṛ-* (with reduplication and other phonic replacements taught by A 7.4.60; 62; 66; 79; 6.4.16, 7.1.100, 8.2.76), when this verbal base is the patient of another verbal base which shares the same agent. In the input phrase *kartum icchati* it is clear that “the action of doing” (conveyed by the verbal base *kṛ-*) is the patient of the verb *icchati* ‘he wants’ and the agent of *kartum* is the same as that of *icchati*.

Vt. 9 ad A 3.1.7:

vāvacanārthakyaṃ ca tatra nityatvāt sanaḥ

And here the mention of *vā* is purposeless due to the permanence of the affix *-sa*.

Patañjali explains the sentence *tatra nityatvāt sanaḥ* as follows: “There are two alternatives, that of the *ṛtti*¹⁵ and that of the non-*ṛtti*, i.e. the complex synthetic form and the analytical one.¹⁶ And this is by nature (*svabhāvataḥ* lit. “due to its own condition”), i.e. due to their intrinsic features.¹⁷ There are both the sentence (e.g. *kartum icchati*) and the affix (*-sa*). Here, since the domain of the *ṛtti* is natural (*svabhāvika-*), the affix is permanently obtained. What else can be connected with it except for the designation (of the affix, i.e. its technical name)? But the presence and absence of the designations are not desired. Therefore, there is no purpose in saying *vā*.”¹⁸

As a matter of fact, if *samartha* is interpreted as ensuring *ekārthi-bhāva* (“merging [of the constituents] in a single integrated meaning”), *ṛttis* (conveying a single meaning) and analytical strings of words (conveying separate meanings) can be used at will, since they are completely independent of each other.

Thus, this expression *svabhāvataḥ* indicates the independent application of any further provision to the desiderative verbal bases. Nevertheless, there are at least two possible interpretations of the expression

¹⁵ The secondary verbal bases are included in the group of the so-called *ṛttis*. See above fn. 5.

¹⁶ The matching analytical sentence also works as a constituent-analysis of the *ṛtti*, i.e. as a *vigraha*. The noun *vigraha-* m. may designate “the procedure of replacing certain synthetic expressions (i.e. certain compounds and certain words formed by means of suffixes) by analytical ones” (Thieme 1982: 30).

¹⁷ As for the grammatical use of the term *svabhāva-* see Candotti and Pontillo 2010; Candotti and Pontillo 2015.

¹⁸ M 2.14 ll. 4–7 ad Vt. 9 on A 3.1.7: *vāvacanārthakyaṃ kiṃ kāraṇam. tatra nityatvāt sanaḥ. iha dvau pakṣau ṛttipakṣaś cāvṛttipakṣaś ca. svabhāvataś caitad bhavati. vākyam ca pratyayaś ca. tatra svabhāvike ṛttiviśaye nitye pratyaye prāpte vāvacanena kim anyac chakyam abhisambandhum anyad ataḥ saṃjñāyāḥ. na ca saṃjñāyā bhavābhāvau iṣyete. tasmān nārtho vāvacanena.*

svabhāvataḥ, which clearly emerge in another two similar passages by Patañjali. His commentary on vt. 3 on the general *taddhita* rule (A 4.1.82) is identical to the commentary on Vt. 3 on A 3.1.7 except for the use of the general term *pratyaya* instead of the specific desiderative affix *-sa* at the beginning and *ṛttis* instead of *pratyayaḥ* when they are contrasted with the sentence.¹⁹

An analogous reflection is proposed in the commentary on Vt. 2 on A 2.1.1. Vt. 3 on A 4.1.82 might hint at this Vārttika and not at Vt. 3 on A 3.1.7, as instead Patañjali maintained. In Vt. 2 on A 2.1.1 Kātyāyana himself uses the expression *svabhāva* instead of *nitya*, seemingly in close relation with each other. All three *ṛttis* analysed in these passages are considered as a given datum, i.e. a permanent feature of the language.

M 1.364 l. 1 Vt. 2 on A 2.1.1: *vāvacanānarthakyam ca svabhāvasiddhatvat*
And the mention of *vā* is purposeless because of its being established by nature.

Here too, Patañjali's explanation is identical to the commentary on Vt. 3 on A 3.1.7 except for the mention of the compound instead of the affix *-sa* both at the beginning and when the analytical sentence (*vākya*) is opposed to the *ṛtti*, when *samāsa-* is used instead of *pratyayaḥ*.²⁰ However, it is clear that Kātyāyana considers the relationship

¹⁹ M 1.264 ll. 14–18 ad Vt. 3 ad A 4.1.82: *kim uktam. tatra tāvad uktam vāvacanānarthakyam. ca tatra nityatvāt sana iti. ihāpi vāvacanam anarthakyam. kiṃ kāraṇam. tatra nityatvāt pratyayasya. iha dvau pakṣau ṛttipakṣaś cāvṛttipakṣaś ca. svabhāvataś caitad bhavati. vākyaṃ ca ṛttiś ca. tatra svabhāvike ṛttiviśaye nitye pratyaye prāpte vāvacanena kim anyac chakyam abhisambandhum anyadataḥ saṃjñāyāḥ. na ca saṃjñāyā bhavābhāvau iṣyete. tasmān nārtho vāvacanena.*

²⁰ M 1.364 ll. 2–5 ad Vt. 2 ad A 2.1.1: *vāvacanānarthakyam. kiṃ kāraṇam. svabhāvasiddhatvāt. iha dvau pakṣau ṛttipakṣaś cāvṛttipakṣaś ca. svabhāvataś caitad bhavati vākyaṃ ca samāsaś ca. tatra svabhāvike ṛttiviśaye nitye samāse prāpte vāvacanena kim anyac chakyam abhisambandhum anyad ataḥ saṃjñāyāḥ. na ca saṃjñāyā bhāvābhāvau iṣyete. tasmān nārtho vāvacanena.*

between *vr̥ttis* and analytical phrases as something which is definitely beyond the grammar domain.

Thus, Kātyāyana uses these three Vārttikas to completely reject rule A 4.1.82. As a result, the *taddhita* section of Pāṇini's grammar simply becomes a list of *taddhita* affixes taught after a nominal stem (which is the etymon) with some special morphological or semantic constraints, with no relation of equivalence with the matching analytical phrase. This leads one to wonder whether some sort of relationship actually existed in this kind of grammar between the traditional *vigraha* of each *taddhita* form and the *taddhita* form itself.

Patañjali (M 2.234 ll. 19–23) does not reject rule A 4.1.82. He confirms that the mention of the word *samartha* in the wording of the rule is mandatory to ensure that the *taddhita* affix appears after a *samartha* [*pada*] and not after a non-*samartha* [*pada*].²¹ Then, he wonders again what is said to be *samartha* and the answer is that *samartha* is the [*pada*] fit to express a given meaning, namely that whose sounds are realised in regular order.²²

He therefore quotes two examples, namely *sautthitiḥ* and *vaikṣamāṇiḥ*,²³ which are two patronymic names derived from the names *sūtthitaḥ* and *vīkṣamāṇaḥ* according to A 4.1.95 by applying the *taddhita* affix *-i* (*iñ*). Indeed these two examples are used in Patañjali's commentary on A 4.1.2,²⁴ in order to show how the *antarāṅga* operations

²¹ M 2.234 ll. 19–20: *athaitatsamarthagrahaṇaṃ naiva kartavyam. kartavyaṃ ca. kiṃ prayojanam. samarthāḍ utpattir yathā syād asamarthān mā bhūt.*

²² Although the meaning Patañjali attributes to the term here is neither etymological nor in common usage, but rather seems to have been assigned *ad hoc*, later tradition has retained it without question. See e.g. Bhaṭṭoji Dīkṣita (SK 1072), who (with reference to the etymon of a *taddhita* derivative stem) defines *sāmarthyam* as the status of being completed, i.e. the status of having undergone the sandhi replacements (*sāmarthyam pariniṣṭitatvam. kṛtsandhikāryatvam iti yāvat*).

²³ M 2.234 ll. 20–21: *kiṃ punaḥ samartham. arthābhidhāne yatsamartham. kiṃ punas tat. kṛtavarnānupūrvikaṃ padam. sautthitiḥ vaikṣamāṇir iti.*

²⁴ M 1.306 ll. 21–22: *vr̥ddher ekādeśaḥ. vaikṣamāṇiḥ sautthitiḥ. vr̥ddhiś ca prāpnoty ekādeśaś ca. paratvād vr̥ddhiḥ syāt. ekādeśo bhavaty antarāṅgataḥ*—“A single

(i.e. those whose application is grounded on linguistic items which exclusively lie within the *pada*-boundary) take priority over the *ba-hiraṅga* operations (i.e. those whose application is grounded on linguistic elements that cross the *pada*-boundary). For instance, when the affix *-i* (*iṅ*) applies to the *prātipadika* *vīkṣamāṇa*-,²⁵ two mutually exclusive rules become applicable, namely A 6.1.101 *akāḥ savarṇe dīrghaḥ*, “An *a*, *i*, *u*, *r*, *l* and the following homogeneous vowel are replaced by a single long homogeneous vowel” and A 7.2.117: *taddhi-teṣv acām ādeḥ* “A *vṛddhi* vowel replaces the first vowel of the nominal pre-suffixal base before the *taddhita*-affixes [with markers *Ṇ* or *Ṛ* 115]”. A 6.1.101 is an *antaraṅga* operation and is applied first. Then the *vṛddhi* replacement takes place according to A 7.2.117.

Finally, Patañjali wonders whether the word *vā* has to be eliminated, but without any *vā* rule—he points out—A 4.1.82 would only allow the *taddhita* derivative stem excluding the analytical sentence to be formed. The purpose of *vā* is to allow speakers to use the *a-vṛtti* form i.e. the analytical phrase.²⁶ Thus, even though Patañjali attributes a questionable and unprecedented morphological meaning to the term

substitute sandhi replacement (A 6.1.101) takes priority over (lit. is *balīyaḥ* “stronger than” + ablative— see M 1.306 l. 12 ad A 1.4.2) a *vṛddhi* replacement (A 7.2.117). See e.g. *vaikṣamāṇiḥ* ‘Vīkṣamāṇa’s descendant’ and *sautthitiḥ* ‘Sūtthita’s descendant’. Both the *vṛddhi* replacement and the single substitute sandhi replacement risk obtaining. Due to its being *para*- (according to A 1.4.2) the *vṛddhi* replacement should take place [first]. [Nonetheless,] the single substitute sandhi replacement is realised due to its being *antaraṅga*.”

²⁵ The *prātipadika* *vīkṣamāṇa*- is a compound obtained by combining two *padas*, namely the indeclinable *vi*- with the nominative singular participle *īkṣamāṇaḥ* [(*vi*- + *-s0*) + (*īkṣamāṇa*- + *-s0*)]. The nominative ending (*-s*) of the indeclinable is replaced with zero in accordance with A 2.4.82 *avyayād āpsupaḥ* [luk 58] “After an indeclinable, [LUK zero-replacement] occurs in the place of a feminine *āP* affix or of a nominal ending.” However, this nominative ending would have been replaced with zero in the same way that the nominative singular ending *-s* of the participle is replaced with zero according to A 2.4.71.

²⁶ M 2.234 ll. 21–23 *ad* vt. 3 *ad* A 4.1.82: *atha tad vāvacaṇaṃ naiva kartavyam. kartavyaṃ ca. kiṃ prayojanam. nityāḥ śabdāḥ. nityeṣu śabdeṣu vākyasyānena sādhitvaṃ anvākyāyate*—“Then, this mention of *vā* has not to be made. It has to

samartha in A 4.1.82—which suggests that he did not understand its meaning in line with the other occurrences in the *Aṣṭādhyāyī*—he is well conscious that the optionality of the *taddhita* derivative stems with respect to the matching analytical sentences is something indispensable for grammar.

3. *Candrvyākaraṇa* and the traditional reading of *taddhita* rules

In line with Kātyāyana's *Vārttikas*, which reject the whole rule A 4.1.82 word by word, in the *Candrvyākaraṇa*, which was probably the earlier re-reading of Pāṇini's grammar based on the proposals by Kātyāyana and Patañjali and dating back to the 5th c. CE, the general *taddhita* rule A 4.1.82 has been *de facto* eliminated. Thus, in this grammar, the interpretation of the single *taddhita* rules is in line with Kātyāyana's choice of considering the use of *taddhita* rules, at least from the semantic point of view, as something autonomous from the matching analytical phrases. Such a peculiar interpretation also occurs in the *Kāśikāvṛtti* and did indeed influence the most accepted way of reading these rules, as can easily be seen in the current translations of Pāṇini's grammar, such as those by Katre and Sharma. Let us now read *Candrvyākaraṇa*'s *Vṛtti* on the rule matching A 4.1.92 *tasyāpatyam*, namely *Candrvyākaraṇa* 2.4.16:

śaṣṭhyantād apatyē yathāvihitam aṇādayo bhavanti. aupagavaḥ, daityaḥ, bārhaspatyaḥ

After a form ending in the genitive case ending, (the *taddhita* affixes) *aṇ* and the like occur in the sense of “descendant”, in accordance with the grammatical provision. [For instance,] *aupagavaḥ* [is formed by applying the affix *aṇ* after the nominal form ending in the genitive case—*upagoḥ*], *daityaḥ* [...*diteḥ*], *bārhaspatyaḥ* [...*brhaspateḥ*].

be made. What is the purpose? Words are permanent. Since words are permanent, by this [word *vā*] the [matching] sentence is acknowledged as correct usage.”

In the *Kāśikāvṛtti* this pattern of explanation even occurs in the commentary on rule A 4.1.82 which has instead not been eliminated:

prathamād iti kim. saṣṭhyantād yathā syāt prathamāntād mā bhūt

Why after the first [*samartha* item]? so that [the *taddhita* affix may occur] after a word ending in the genitive case (i.e. in the classic example, *upagoḥ* which is the first *samartha* item mentioned—and not after the word ending in a nominative case i.e. *apatyam*).

In line with this reading of the linguistic phenomenon of the *taddhita* derivation, most modern translations indicate the *taddhita* rules as commonly involving just a nominal stem, i.e. the etymon of the derivative stem and an affix. The second *samartha* item becomes a semantic constraint for what could be called the head of the new synthetic formation. The general rule A 2.1.1 is considered as a simple tool that prohibits the combination of words that are not syntactically and semantically connected. The first *samartha* item indicates the etymon which is considered as a unique matrix conveying a relation with the other element in the input phrase that is provided by the rule itself. This means that there should be no mention of any equivalence of meaning between the *taddhita* formations and the matching analytical phrase in *taddhita* rules.

For instance, Katre's (1987: 380) translation of A 4.1.92 *tasyāpatyam*, reads as follows:

The *taddhita* affix *aN* is introduced after a nominal stem ending in the sixth nominal triplet to denote a descendant.

Analogously Sharma's (1987–2003: 4: 91–92) translation reads as follows:

A *taddhita* affix, namely *aN*, is taught to denote the sense of *apatya* after the first syntactically related nominal stem which ends in *ṣaṣṭhī* 'genitive'.

4. Pāṇini teaches something more than a morphological derivation

Of course, the mentioned translations are not wrong, especially because—as we have seen above—rule A 4.1.82 was interpreted in this way by the grammatical tradition from the very beginning. And it is precisely within this traditional framework that one can appreciate the importance attached to the supposed conflict between A 4.1.82 and the heading rule A 4.1.1 (*nyāpprātipadikāt* “[An affix taught in the present section] occurs after a nominal base or a word form ending in [a feminine affix] -ī or -ā”) both by Bhate (1989: 2–3) and by Scharf (2021). In fact the latter rule (which governs the entire section devoted to *taddhita* formations) requires to apply *taddhita* affixes to a nominal base (i.e. after a *prātipadika*), whilst the former (which governs *taddhita* formations up to the end of the second Pāda of the fifth Adhyāya) requires to apply the affixes after an inflected word (i.e. after a *pada*).²⁷

Within such an authoritative and traditional perspective, A 4.1.82 is explained as a rule that positions the affix after the *pada* that occurs as a value of the inflected pronoun mentioned in each single *taddhita* rule (e.g. *tasya* in A 4.1.92). According to Scharf (2021: 130), for instance, rule A 4.1.92 “specifies that applicable affixes occur after a word that ends in a sixth-triplet nominal termination (*ṣaṣṭhī vibhakti*) in the sense of an offspring of the person denoted by the word.”

Nonetheless, I believe that due to A 4.1.82 each of Pāṇini’s *taddhita* rules contains much more than such simple and mainly morphological

²⁷ Bhate (1989: 3) brilliantly solved the problem, by advancing a combined interpretation of the two rules as follows: *samarthānām prātipapadikaprakṛtikāt prathamāt subantāt vā* “(the *tad.* suffix) is preferably added to the first among the semantically equivalent case-inflected words whose stems is a noun”. After analysing several traditional interpretations of this conflict, Scharf (2021: 166) also concludes that “the provision of *taddhita* affixes after *padas* [...] succeeds without problems”. In particular, as mentioned above, A 2.4.71 provides a zero-replacement of the ending of the *pada* after which the *taddhita* affix applies. Moreover, as far as the designation of the etymon as an *aṅga* which could risk being blocked by its designation as a *pada*, Scharf (2021: 166) maintains that “one is required to accept that the term *aṅga* provided by A. 1.4.13 [...] retains applicability even where the term *pada* [...] is applicable” in line with Cardona (1970: 46–48).

data. A 2.1.1 has to be read as something different from the mentioned constraint. There are in fact two points in the interpretation of A 2.1.1 which need to be changed:²⁸ first of all, on the basis of Pāṇini's *usus scribendi*, *samartha* means *tulyārtha* “meaning-equivalent”,²⁹ which the *Kāśikāvṛtti* also records in a commentary on one of its four occurrences in Pāṇini's grammar itself. Saroja Bhate (1989: 2) in her translation of A 4.1.82 (see above § 1) already interpreted *samartha* as “semantically equivalent word”. Joshi and Roodbergen (1994: 70–71; 1996: 1) advanced this explanation for the term *samartha* in A 2.1.1 even justifying the form with short vowel *samartha-* instead of **samārtha-* from *sama-* “equal” + *artha-* “meaning”) with the penultimate *ā*, on the basis of the replacement of *samāna-* “equal” with *sa-* in various contexts, taught in rules A 6.3.84–87.³⁰ Moreover, *samartha-* in rule A 2.1.1 is singular and agrees with *padavidhiḥ* and hence there is no reason to abandon such a syntactical structure. Thus, the mentioned Vt. 18 ad A 2.1.1 which interprets the nominative singular *samarthaḥ* in A 2.1.1 as if it were a genitive plural form has to be rejected. Second, again on the basis of the Pāṇini's *usus scribendi*, and especially based on the survey of all the *Aṣṭādhyāyī* occurrences of compounds with *vidhi-* as right-hand constituent Candotti and Pontillo 2004 realised that *padavidhi-* is “a provision that depends on *padas*” (almost by mentioning them).

For instance, the following rule is a *pada-vidhi* because it depends on the two *padas* mentioned in the rule:

A 2.1.37:

pañcamī bhayena

[A *pada* 4 ending with] a fifth case-ending combines with the word *bhaya* [to form a *tatpuruṣa* compound 22].

²⁸ This hypothesis was presented in Pontillo 2012 and then various aspects were clarified in Pontillo 2018 and Candotti and Pontillo 2026.

²⁹ See A 1.3.42, 2.3.57, 3.3.152; 8.1.65 and KV on A 1.3.42 where *samartha* is overtly explained as such.

³⁰ In this text the two authors emphasise their substantial deviation from the translation of the term adopted by Joshi (1968: 1).

In other words, *bhayena* stands for itself and constitutes the so-called head of the compound, while the non-head *pañcamī*, i.e. the *upasarjana* in Pāṇini's terms, is a more generic indication for a *pada* inflected in the ablative case, which can be represented by whatever lexeme at the surface level of the formation. Therefore, the compound *vrkṣa-bhaya-* has the same meaning as *vrkṣebhyaḥ bhayam*, where *vrkṣebhyaḥ* is merely a *pada* inflected in the ablative case in accordance with the mentioned provision. This is something more than a simple rule teaching that *bhayam* is combined to form a *tatpuruṣa* compound with a nominal stem inflected in a given case. In actual fact, here an extremely important semantic constraint is being taught.

The translation of A 2.1.1 *samarthaḥ padavidhiḥ* adopted here is the following:

“A provision which depends on inflected words denotes the same object [of the output of rule, i.e., of the words formed in accordance with the rule itself].”³¹

The focus of this rule will consequently shift to the concurrence between

- syntagms (*vākya*) and
- morphological syntagms (*samāsa*, *taddhita*, secondary verbal bases, *ekaśeṣa*)

and to a functional comparison between

- word-formation-rules (metalinguistic input) and
- relevant linguistic forms (linguistic output).

Furthermore, the analytical phrase which is the *padavidhi* is also a practical tool for checking whether the derivation is correct on the basis of equivalent meaning. All in all, a sort of *laukika* replacement³²

³¹ Cf. Joshi and Roodbergen's (1996: 1): “An operation involving finished words conveys the same meaning.”

³² i.e. not a case of replacement governed by all the specific rules taught by A 1.1.56 etc., rather a spontaneous substitution pattern. Nevertheless, this sort of substitution taught by the single *taddhita* rules cannot be described in the terms used by

of the analytical phrase with the synthetic form—based on the shared meaning—is suggested within a typical variationist pattern. There is only one meaning input but more than one realisation. This variationist system is hierarchically superordinate to the several phenomena of optionality taught by *vā*, *vibhāṣā*, *anyatarasyām* as reconstructed by Kiparsky 1979, because it is based on a paradigmatic relation between the “input phrase” and its linguistic output, taught by A 2.1.1.

This is the reason why the general rule A 4.1.82 *samarthānām pathamād vā* in my opinion has to be interpreted as follows: “In the place of the [*padas*] which convey the same meaning, [a *taddhita* affix] is preferably introduced after the first [*prātipadika*].”

In this way, on the one hand, the ablative *prathamād* is regularly linked to the ablative *prātipadikāt* of the heading rule A 4.1.1, in line with the following Bhate’s (1989: 3) crucial explanation: “The word *prātipadikāt* is thus a qualifier of *prathamāt* and means *prātipadikaprakṛtikāt* ‘after that which has a noun as its base’.” On the other hand, the term *samartha* is associated with A 2.1.1, as expected, in its sense of “meaning-equivalent”, a sense which potentially applies both to a *vṛtti* (in this case the derivative *taddhita* stem) and, symmetrically, to the matching analytical phrase introduced by the rule itself. As such, the plural form of the term in A 4.1.82 refers to the two or more *padas* which constitute the meaning-equivalent input phrase as a variant of the *taddhita* stem. The domain of the heading rule of A 4.1.82 is automatically extended up to the end of the second Pāda of the fifth Adhyāya of the *Aṣṭādhyāyī* and not beyond (as emphasised by KV ad A 4.1.82), because the following *taddhita* rules do not involve two or more *padas* as an input phrase for the *taddhita* formation.

In this way, each *taddhita*-rule would not merely indicate a nominal stem and a case-relationship linking the affix (which is the head) and

Scharfe (2009: 157), when he writes as follows: “[...] a so-called *taddhita*-suffix is attached to the first of these integrated nouns, replacing the second noun while expressing its meaning in a more general or abstract way.” The whole combination of *padas* suggested by each *taddhita* rule is rather replaced by the whole *taddhita* formation.

the etymon (which is the non-head of the *taddhita* derivative stem), but it would provide a whole analytical sentence which is a distributive variant of the derived nominal stem. Thus, let us see a couple of examples showing how the single *taddhita* rules could be read if the present proposal were accepted:

A 4.2.1: *tena raktam rāgāt* [*prātipadikāt* 1 *taddhitaḥ* 76 *vā* 82 *aṅ* 83]

[The *taddhita* A 4.1.76 affix *aṅ* A 4.1.83] preferably occurs [after the nominal stem X A 4.1.1] which conveys the sense of dyeing in place of the phrase “dyed with X”.

An easy example is *kaunkuma-*, which is a *taddhita* derivative stem, whose meaning is equivalent to the phrase *kuṅkumena raktam*. It thus conveys the sense e.g. of [*vastra-*], i.e. [a cloth] “dyed with saffron”, which the matching *padavidhi* realised on the basis of A 4.2.1.

Analogously, the traditional example *aupagava-* is meaning equivalent to *upagor apatyam* “Upagu’s descendant” and this equivalence is based on A 4.1.92, which in my opinion has to be read as follows:

A 4.1.92 *tasyāpatyam* [*prātipadikāt* 1 *taddhitaḥ* 76 *vā* 82 *aṅ* 83]

[The *taddhita* A 4.1.76 affix *aṅ* A 4.1.83 preferably occurs [after a nominal stem X A 4.1.1] in place of the phrase “descendant of X”.

References

Primary Sources

- A [Aṣṭādhyāyī] = Sharma, R. N. (ed., transl.). 1987–2003. *The Aṣṭādhyāyī of Pāṇini*. 6 vols. New Delhi: Munshiram Manoharlal.
- Candrayākarana* = Chandra Chatterji, K. (ed.). 1953. *Candrayākarana of Candragomin*. Poona: Deccan College Postgraduate and Research Institut.
- KV [Kāśikāvṛtti] = Sharma, A. et al. (ed.). 1969; 1970. *Kāśikā*, a Commentary on Pāṇini’s Grammar by Vāmana and Jayāditya. 2 vols. Hyderabad: Sanskrit Academy, Osmania University.

- M [Mahābhāṣya] = Kielhorn, F. (ed.). 1880–1885. *The Vyākaraṇa-Mahābhāṣya of Patañjali*. 3 vols. Bombay: Government Central Press. Quoted according to the third edition revised by K.V. Abhyankar. Poona: Bhandarkar Oriental Research Institute, 1970.
- Vt [Vārttikas] = Kātyāyana's *Vārttikas* quoted according to M. [according to the third edition revised by K.V. Abhyankar]
- VLK [Laghusiddhāntakaumudī] = Ballantyne, J. R. (ed.). 1961. *The Laghukaumudī: a Sanskrit Grammar of Varadarāja with an English version*. Delhi: Motilal Banarsidass.
- SK [Siddhāntakaumudī] = Panashikar, V. L. S. 2002. *Siddhānta-Kaumudī* with the Tattvabodhinī Commentary of Jñānendra Sarasvatī and the Subodhinī Commentary of Jayakṛṣṇa. Delhi: Chaukhamba Sanskrit Pratishthan.

Secondary Sources

- Candotti, M. P. and T. Pontillo. 2004. Substitution as a Descriptive Model in Pāṇini's Grammar. Towards an Opposition between Phonological and Morphological Level? In: R. Ronzitti and G. Borghi (eds). *Atti del Secondo Incontro Genovese di Studi Vedici e Pāṇiniani* (Genova, 23 luglio 2003–15 ottobre 2003). Recco: Le Mani: 1–45.
- . 2010. The Autonomous Process of Denotation: Kātyāyana and Patañjali on the Limits of Analysis. In: P. Caracchi et al. (eds). *Tīrthayātrā. Essays in Honour of Stefano Piano*. Alessandria: Edizioni dell'Orso: 41–61.
- . 2015. *svabhāva* in Grammar: Notes on the Early History of a Philosophical Term. In: R. Torella and G. Milanetti (eds). *The Human Person and Nature in Classical and Modern India*. Proceedings of the International Conference held at Roma, La Sapienza–Museo Nazionale di Arte Orientale 'Giuseppe Tucci' (MNAO) 14–15 marzo 2013, Supplemento 2 alla Rivista di Studi Orientali N. Serie, 88. Pisa–Roma: Fabrizio Serra Editore: 85–110.
- . 2026. Binary Structure of Pāṇini's Syntax. In: V. D'Avella et al. *Essays in Honour of S.L.P. Anjaneya Sarma*. Pondichéry: Institut Français de Pondichéry: 19–49.
- Cardona, G. 1970. Some Principles of Pāṇini's Grammar. In: *Journal of Indian Philosophy* 1(1): 40–74. <https://doi.org/10.1007/BF02346508>.

- . 1997. *Pāṇini. His Work and Its Tradition. Background and Introduction*. Delhi: Motilal Banarsidass.
- Bhate, S. 1989. *Pāṇini's Taddhita Rules*. Poona: University of Poona.
- Deshpande, M. M. 1980. *Evolution of Syntactic Theory in Sanskrit Grammar: Syntax of the Sanskrit Infinitive -tumUN* (Linguistica Extransea, Studia 10). Ann Arbor: Karoma Publishers.
- . 1987. Pāṇinian Syntax and the Changing Notion of Sentence. *Annals of the Bhandarkar Oriental Research Institute* 68(1/4): 55–98. <https://www.jstor.org/stable/41693313>.
- Houben, J. 1997. The Sanskrit Tradition. In: W. Van Bakkum et al. (eds). *The Emergence of Semantics in four Linguistic Traditions. Hebrew, Sanskrit, Greek, Arabic*. Amsterdam-Philadelphia: John Benjamins Publishers: 51–145.
- Joshi, S. D. (ed.). 1968. *Patañjali's Vyākaraṇa-Mahābhāṣya. Samarthāhnika* (P. 2.1.1. (Publications of the Centre of Advanced Study in Sanskrit Class C no. 3). Poona: University of Poona.
- Joshi, S. D. and J. A. F. Roodbergen. 1994. *The Aṣṭādhyāyī of Pāṇini*. Vol. 3. New Delhi: Sahitya Akademi.
- . 1996. *The Aṣṭādhyāyī of Pāṇini*. Vol. 5. New Delhi: Sahitya Akademi.
- Katre, S. M. (ed., transl.). 1987. *Aṣṭādhyāyī of Pāṇini*. Austin: University of Texas Press.
- Kiparsky, P. 1979. *Pāṇini as a Variationist*. S. D. Joshi (ed.). Cambridge (Mass.)–Pune: MIT–Centre of Advanced Study in Sanskrit.
- Pontillo, T. 2013. “Where the Sense is Intended although the Corresponding Speech Unit Is Not Employed”: The *ekaśeṣa* Case. In: G. Cardona (ed.). *Vyākaraṇa across Ages*. Proceedings of the 15th World Sanskrit Conference, Delhi, 5th–10th January 2012. Vol. 2 (Vyākaraṇa Session). New Delhi: DK Printworld: 97–132.
- . 2018. From the More Iconic to the Less Iconic Linguistic Form: Morphological Syntagms in Pāṇini. In: *Atti Del Sodalizio Glottologico Milanese* 12 n.s.: 123–139. <https://doi.org/10.13130/1972-9901/11432>.
- Scharf, P. M. 2013. Linguistic in India. In: K. Allan (ed.), *The Oxford Handbook of the History of Linguistics*. Oxford: Oxford University Press: 227–257.

- . 2021. Are taddhita Affixes Provided after prātipadikas or after padas? In: P. M. Scharf (ed.). *Śabdānugamaḥ. Indian Linguistic Studies in Honor of George Cardona*. Vol. 1. Vyākaraṇa and Śabdabodha. Providence: The Sanskrit Library: 125–169.
- Scharfe, H. 2009. *A New Perspective on Pāṇini*. Torino: AIT.
- Thieme, P. 1982. Meaning and Form of the Grammar of Pāṇini. In: *Studien zur Indologie und Iranistik* 8–9: 3–34.