

**Boundaries and Domains:
Understanding Optionality in Buddhappiya's Rūpasiddhi***

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ABSTRACT

Since the publication of Paul Kiparsky's *Pāṇini as a Variationist* (1979), the discussion on optionality in Indian *vyākaraṇa* has been largely polarised into two views: Kiparsky's thesis defends the idea that Pāṇini used different words to indicate different degrees of optionality; others deny Kiparsky's claim and maintain that the exact scope of grammatical options can only be determined by the context. Whereas Sanskrit grammarians do not substantiate Kiparsky's claims, the Pali *vyākaraṇa* tradition of the Kaccāyana school recognises two different types of options. In this paper I will focus on the treatment of option markers in Buddhappiya's Rūpasiddhi (South India, twelfth century). The Rūpasiddhi is based on the Kaccāyana grammar, but it takes an innovative approach towards the general structure of the rules. It also alters the mechanisms of optionality in a way that allows for higher accuracy in the process of word derivation. As a step forward in our understanding of the rich Pali grammatical tradition, this article provides a definition and classification of markers *vā*, *kvaci*, *navā*, and *vibhāsā* in the Rūpasiddhi. It also shows that the understanding of

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option markers in Kaccāyana classical scholarship differs significantly from Kiparsky's understanding of linguistic variation.

I. INTRODUCTION

1.1. In the Pali language, one single word can adopt various correct forms. For instance, the ablative singular of the word *buddha* may be *buddhā*, *buddhamhā*, *buddhasmā*, or *buddhato*, and the third person singular optative can be *care* or *careyya*. In order to account for such multiplicity of derivations, Pali grammarians use a set of markers inherited from the Sanskrit tradition. The most prominent among them are option markers, such as *vā* or *kvaci*. Option markers delimit the domain of a rule; they draw the boundary line between what is general and what is exceptional, thus distinguishing what is allowed in terms of derivation from what is not.¹ Therefore, understanding how option markers work is essential for the correct interpretation of classical Pali grammars.

1.2. The study of option markers has received considerable attention in Sanskrit scholarship, especially after Paul Kiparsky's publication of *Pāṇini as a Variationist* (1979). In this monograph Kiparsky challenges the received opinion concerning the function of option markers in Pāṇini's *Aṣṭādhyāyī*:

To indicate that a rule is to be applied optionally, Pāṇini uses 106 times *vā*, 112 times *vibhāṣā*, and 93 times *anyatarasyām*. Why this variety, when one word would do? This question has a surprising answer, which has remained unknown for over two thousand years. Not even the oldest commentators Kātyāyana and Patañjali have any inkling of it.²

¹ Kahrs (1992: 233) compares Pāṇini's grammar with a map describing a territory that is the language: "If we have a map — and I think it is justified to call the linguistic descriptions of the ancient Indian grammarians a map — it will tell us a great deal about those who made the map. A basic question is this: What features of the territory are represented on the map? If the territory is absolutely uniform, nothing would be represented on the map except the borders of the territory. Otherwise, what will be represented on the map is really *differences* of various kinds."

² Kiparsky 1979: 1.

Kiparsky's "surprising" answer is that these three technical terms express three different levels of optionality: *vā* "or rather", "preferably"; *vibhāṣā* "or rather not", "preferably not"; *anyatarasyām* "either way".¹ Kiparsky understands that preferred options reflect a wider linguistic usage, and less preferred options reflect marginal, or perhaps dialectal, usage. Among Sanskrit *vyākaraṇa* specialists there is a divide concerning the validity of Kiparsky's thesis.² But regardless of our judgement, the importance of his question seems undeniable. For economy of language is one of the cardinal principles of *vyākaraṇa*, and if all option markers mean the same: why use many and not one?

1.3. The same question may be asked about option markers in Pali classical³ grammar, where virtually the same technical terms are used. So far, there has been little research in this area. Émile Senart, who published the first European integral edition and translation of the Kaccāyana grammar, openly condemns the manner in which Kacc uses option markers. The same goes for R.O. Franke.⁴ More constructively, Helmer Smith analyses option markers in the Saddanīti in a useful sketch in his *Cospectus Terminorum* (§7.3.2.3), although no further discussion is given. Ole Pind observes that, in the Kaccāyana and the Kaccāyana-vutti, the terms *vā* and *kvaci* "are apparently used interchangeably, thus making the exact scope of a rule difficult to interpret,"⁵

¹ Kiparsky 1979: 1.

² Strong reservations regarding Kiparsky's thesis are presented in Palsule 1982, Devasthali 1983, and Cardona 2004: 162ff. Other distinguished reviewers, however, have accepted the thesis: Bronkhorst 1982: 273; Smith 1982: 185. For a middle-way assessment, see Deshpande 1984.

³ By "classical" Pali grammar I mean the Kaccāyana, the Moggallāna, and the Saddanīti, along with their commentaries and offshoots. I use the term *classical* in its meaning "exemplary". For overviews of classical grammatical scholarship in Pali, I refer to Franke 1902, Pind 2012, Deokar 2008, Gornall and Gunasena 2018, and see also von Hinüber 1983, and Gornall and Ruiz-Falqués 2019; for an overview of the Kaccāyana tradition, see Ruiz-Falqués 2016.

⁴ For Kacc *sutta* as lacking a systematical approach, see Senart 1871:14; see also Franke 1902: 14; for the wrong use of *vā*, see Senart 1871: 93.

⁵ Pind 2012: 83.

but he also notes that the Rūpasiddhi applies some corrections concerning optionalily of *kvaci* and *na vā*.¹ Mahesh Deokar includes optionality in his thorough comparative study *Technical Terms and Technique of the Pali and the Sanskrit Grammars* (2008). Deokar points out that the minute distinctions that are observed in Sanskrit grammars “are not observed so rigorously by the Pali grammarians”.² Some translators of the Kaccāyana do not reflect any difference of meaning between different option markers;³ others are more careful and try to distinguish them, e.g. Nandisena’s translation.⁴ Among all translations and studies known to me, only those by Thiab Malai and Nandisena acknowledge the traditional system of reading option markers.⁵ The intricacies of this system, however, remain to be properly elucidated. The present article is intended as a contribution to the vastly unexplored field of Pāli *byākaraṇa* studies. It focuses on one of the major grammars of the Kaccāyana school, namely the Rūpasiddhi, composed in South India by Coḷa Buddhappiya⁶ around the twelfth century CE.⁷

1.4. Buddhappiya’s Rūpasiddhi is a recast of the Kaccāyana (Kacc) grammar.⁸ It uses practically all the *suttas* of Kacc, but their sequence is dramatically altered. Furthermore, the old Kaccāyana-vutti (Kacc-v) is replaced by Buddhappiya’s own commentary. In the introductory stanzas Buddhappiya briefly justifies his project. He states that he has

¹ Ibid.

² Deokar 2008: 367, 369.

³ For instance, in his notes to the *ākhyāta* chapter of the Rūpasiddhi, Grünwedel translates both *kvaci* and *vā* as “arbiträr”, but he is obviously aware of the levels of optionality of the *vavatthitavibhāsā* “bestimmte *vibhāshā*” (Grünwedel 1883: 52); Ashin Thitzana (2016), translates the four main option markers in Kacc *vā*, *kvaci*, *na vā*, *vibhāsā* as “sometimes”, cf. Thitzana 2016: 129 n.11.

⁴ D’Alwis (1863: 25–26), for instance, translates *vā* as “optionally” and *kvaci* as “sometimes.”

⁵ Malai 1997: 105; Nandisena 2005: 48.

⁶ For the most up-to-date biographical sketch of Buddhappiya, see Gornall 2020: 69ff.

⁷ Rachiwong 1995: 10; Gornall and Gunasena 2018: 33; Gornall 2020: 24.

⁸ For a critical edition of Kaccāyana and Kaccāyanavutti, see Pind 2013.

composed a work that is *byattam* “clear” and *sukaṇḍam* “well-arranged”. According to the commentary, “*clear (byattam)* means that it is particularly clear, easy to see, because of its clarity both in the delimitation of the domain of the rules and the derivation of what is prescribed by the rules”.¹ This is a direct reference to Buddhappiya’s innovative system, which represents a significant improvement in the use of option markers. As for the adjective *sukaṇḍam* it refers to a topic-wise arrangement that makes the Kacc easier to grasp, much like *kaumudī* grammars did with Pāṇini.² Despite the obvious advantages of the new topic-wise arrangement, the alteration of the original sequence of rules inevitably disrupts the mechanisms of *anuvutti* (“recurrence”) that control option markers. Buddhappiya solves this problem by explicitly indicating which words, including option markers, recur in a *sutta*. And more importantly, he incorporates the concept *vavatthitavibhāsā* (“restricted option”) to the repertoire of option markers. In doing so, he achieves higher accuracy than his predecessor Vimalabuddhi when it comes to delimiting the domains and boundaries of options. In the following sections I will offer a preliminary examination of how this system of optionality works.

2. OPTIONALITY IN BUDDHAPPIYA’S RŪPASIDDHI

2.1. Classical Pali grammarians distinguish two main levels of optionality: one for an open “alternative” (*vikappa*) and one for exceptions to a larger rule. The general principle to interpret optional markers in the Kaccāyana Pali grammar is laid out in Vimalabuddhi’s *Mukhamattadīpanī* (Mmd), otherwise known as *Nyāsa*, composed around the tenth century CE).³ According to Vimalabuddhi, the option markers *kvaci* and *navā* (or *na vā*) have the same meaning; they generally express the correctness of one form, dismissing the other. In contrast, the terms *vā* and *vibhāsā*, which also have the same meaning,⁴ generally express an

¹ Rūp-ṭ B^e 4.3–5 *byattam* *lakkhaṇavisayavavatthānassa, lakkhiyābhinipphattiyā ca paribhāsitā abhivattam supākaṭam*.

² Gornall and Gunasena 2018: 34.

³ Pind 2012: 71.

⁴ For the unclear relationship between the terms *bhāsā* “language” and *vibhāsā* “dialect” see von Hinüber 2001: 102–103. Von Hinüber provisionally accepts

open option (*vikappa*) in which it is possible to derive two forms.¹ The main issue at stake here is whether a word is correct in terms of derivation or not. In Pali, option markers have nothing to do with frequency of usage in the literature, although they are supposed to reflect forms that are attested in the literature (*āgama*). They are only concerned with grammatical correctness, what Sanskrit grammarians call *sādhutva*.² Aside from the general principle that has been described, option markers do not work exactly in the same manner in every Pali grammatical treatise. But exactly how they differ, and why grammarians modify the system, is something that requires further research.

2.2. As a grammar belonging to the Kaccāyana school,³ the Rūpasiddhi uses virtually the same set of option markers: *vā* 154 times, *kvaci* 54 times, *navā* 6 times, *vibhāsā* 4 times (5 if we include *saha vibhāsā* in the *vutti* of Rūp §351).⁴ To this list we may also include other words

Kiparsky's conjecture that *vibhāsā* could mean "zu meiden (als Alternative" (i.e. an alternative to be avoided) versus *vā* "zu bevorzugen" (i.e. to be preferred).

¹ Vimalabuddhi's discussion is in the context of Kacc §21 *ivaṇṇo yaṃ navā* and it is about reading *navā* as one word (Mmd 32,2*aff.*), see also Malai 1997: 105. Note that in his critical edition Pind reads *na vā* always. The principle of the two levels was synthesised by Guṇasāgara of Pagan (c. thirteenth century) in the Mukhamattasāra (unedited work), and is quoted in Kacc-nidd B^c 154,10–11; C^c 150,13–14, for the context, or lack of context, of this quotation, see Ruiz-Falqués 2015: 142. Guṇasāgara's stanza is quoted by Nandisena (2005: 48) via a quotation found in the Kaccāyana-vaṇṇanā (16th c. CE, Burma).

² Pas III §§46–55; Joshi and Roodbergen 1968: 70–78. In the discussion on 1.1.44 *naveti vibhāsā*, Patañjali quotes the *iṣṭhi*: *sādhvanuśāsane asmin yasya vibhāsā tasya sādhitvam* "In this teaching of correct [words], correctness applies to that which is optional" (MBh I 104,8).

³ This is the interpretation of the Rūpasiddhi-ṭīkā, problematically ascribed to Buddhappiya himself (see 5.4).

⁴ The numbers include instances in the *sutta* and the gloss (*vutti*) properly speaking, that is to say the first line of the commentary in which the expanded formulation of the *sutta* is given, including the *anuvutti* (information recurring from previous *suttas*). Option markers in further sections of the *vutti* are excluded from this count. These sections are no doubt relevant to the study of optionality and variation, e.g. the word *ca* introduces a *kvaci* option in Rūp

that control optionality, e.g. *ca* (= *vikappa* Rūp § 117 = *vā*; = *aniya-mattha* = *vā* § 664), *ṭhāne* (= *kvaci* Rūp §§ 40, 42), *tu* (= *kvaci* Rūp §§ 125, 226), *vikappena* (Rūp § 117), *niccam* “always” (Rūp §§ 135, 195, 196) and *yebhuyyena* “generally” (Rūp § 36). Keeping with the structure of *Kacc* and *Kacc-v*, the proper option markers remain *vā*, *kvaci*, *navā*, and *vibhāsā*.

2.3. Buddhappiya accepts Vimalabuddhi’s two levels of optionality, but he refines the system in the following manner:

vā “or” has two meanings:

- *vikappa* “open option”
- *vavatthitavibhāsā*¹ “restricted option” (used 42 times),² which involves three sub-domains:
 - (a) *nicca* “mandatory” [Ø option]
 - (b) *anicca* “not mandatory” [= *vikappa*]
 - (c) *asanta* “inapplicable” [≈ *kvaci/navā* see below 4.6.]

kvaci “in some places” indicates exceptions

navā “or not” is glossed as *kvaci* (Rūp § 21)

vibhāsā “optionally” is glossed as *vā* (Rūp-ṭ ad Rūp § 360)

§ 27, or Rūp § 488, invoked a number of times in the elaborations of the *vutti*, e.g. Rūp §§ 470, 488, 489, 492, 500. A more detailed study on option markers, including all the sections of the Rūp commentary and other *Kaccāyana* commentaries, is in preparation.

¹ This term is known in Sanskrit grammatical literature. Patañjali uses it in his *Mahābhāṣya* (ad Pāṇini 2.4.56, 3.2.124 and 7.1.56). It becomes part of the system of interpretation in later works such as the *Kāśikāvṛtti* (cf. *Kāś* ad Pāṇ 1.3.70 *tad asmin viṣaye nityam, anyatra vikalpaḥ. vyavasthītavibhāṣā hi sā*; or *Kāś* ad Pāṇ 2.3.17 *vyavasthītavibhāṣāvijñānād eva na bhavati*). The *Kātantra-vṛtti* also uses this term, especially in relation with *navā*: *Kāt-v* 1.4.2, 1.5.5; and see *Kāt-v* 4.6.83: *svariṣyatīti paratvād vikalpo na syād vyavasthītavāvacanāt*; in *Kāt-v* 4.1.72 we can observe the triple domain used in Rūp: *nityam, na syāt* (= *na bhavati*) and *vā* (= *vibhāṣā*).

² In cases such as Rūp § 207 or § 259, the *vutti* suggests that *vā* is being used in the sense of *vavatthītavibhāṣā*, but that is not explicitly stated in the main paraphrase of the *sutta*; therefore, we exclude such cases from the present study (see n. 24).

2.4. There are some exceptions: $vā = kvaci$ in Rūp § 676 and probably in § 207; $vā = sampiṇḍana$ in Rūp § 595 (alternatively interpreted as *vikappa*) and Rūp § 187, glosses by Rūp-ṭ as *pakatīvikappana*; $vā = katthacīvikappanāttha$ Rūp § 190; $kvaci = vavattitavibhāsā$ Rūp § 461. The relatively rare occurrence of anomalies shows that the general theory is quite consistently observed. In the following sections I am going to briefly examine of how these markers function.

3. *VĀ* AND *VIBHĀSĀ*

3.1. The words $vā$ and *vibhāsā* express *vikappa* (Skt. *vikalpa*) “open option”. Whether these terms are explicitly glossed as *vikappena* or not, they indicate an option in which the alternation is unrestricted. For instance, in Rūp § 30 *jhalānaṃ iyuvā sare vā* “before a vowel, masc. neut. endings i/\bar{i} and u/\bar{u} may optionally be replaced with iy and uv respectively”. The word $vā$ is not glossed, but a series of free alternatives are listed as examples, e.g. *bhikkhuvāsane bhikkhu āsane vā* (“[one can write/say] *bhikkhvāsane* or *bhikkhu āsane* [indistinctly]”). Similarly, in Rūp § 116 *nāmi rañṇā vā*, we are given two possibilities for each word, e.g. *rājena/rañṇā*. Accordingly, we can form the sentences *rañṇā kataṃ* or *rājena kataṃ*.¹

The same type of option is expressed by the marker *vibhāsā*. For example, Rūp § 360 *vibhāsā rukkha-tiṇa-pasu-dhana-dhañña-jana-padādīnañ ca* allows couplets of coordinative compounds that refer, for instance, to species of trees: *assatthakapitthaṃ assatthakapitthā vā* (“fig and wood-apple [trees]”). The word $vā$ is used as the gloss of *vibhāsā*.

Eventually it may be possible to derive more than two forms, e.g. Rūp § 197 gives a triple option: *kammunā, kammanā, kammēna*.

3.2. The word $vā$ is often glossed as *vavattitavibhāsā* (Skt. *vyavasthita-vibhāṣā*), which means “restricted option”.² Buddhappiya is the earliest

¹ In reality, *rājena* only appears as part of a compound (*dhammarājena, devarājena*, etc.), never in a sentence such as *rājena kataṃ* (cf. Oberlies § 45, 2b).

² “Option limitée” (Smith 1949: 1146, § 7.3.2.3), “bestimmte *vibhāsā*” (Grünwedel 1983: 52).

recorded Pali grammarian to use this term.¹ The usage may have been borrowed from the Cāndra tradition of Sanskrit grammar.² The standard expression of Rūp is *vavatthitavibhāso' yaṃ vāsaddo* “this word *vā* represents a restricted option”. This means that the word *vā* is a *vikappa* only to a certain extent. This is explained in Rūp § 15 *vā paro asarūpā*:

In the same way that the preverb *ā* expresses an inclusive limit or an exclusive limit, the word *vā* in some places expresses an open option (*vikappa*) and in some places expresses the delimitation (*pariggaha*) of certain word-forms (*rūpa*) according to a specific restriction (*yathāvavatthita*). In the present *sutta*, the latter applies. Therefore the word *vā* here illustrates a grammatical operation (*vidhi*) which involves [simultaneously] a mandatory (*nicca*) domain, a non-mandatory (*anicca*) domain, and an inapplicable (*asanta*) domain.³

¹ For the relative date of the Rūpasiddhi, older than the Moggallāna-byākarāṇa (1165 CE), see Gornall and Gunasena 2018: 34, n.1. As for the relative dates of the Rūpasiddhi and the Saddanīti, they are problematic. Some scholars assume that the Sāsanavaṃsa's dating of Sadd, 1154 CE, is correct (e.g. Franke 1902: 25ff.; von Hinüber 2001, § 62). Other Burmese sources, as little reliable as the Sāsanavaṃsa, point to the thirteenth century CE (cf. Tin Lwin 1991). Aggavaṃsa seems to rely on his predecessors for the understanding of the term: *vavatthitavibhāsāyaṃ vāsaddappayogo ācariye payirupāsivā gahetabbo* “The usage of the word *vā* in the sense of restricted option (*vavatthitavibhāsā*) should be adopted respecting the teachers” (Sadd 889,2–3 and n. 2). For a detailed examination of the relative chronology: Rūpasiddhi > Nyāsappadīpa > Saddanīti, I refer to my forthcoming monograph on Guṇasāgara's Mukhamattasāra.

² Gornall 2017: 479: “Au début de sa discussion du chapitre sur les *kāraka*, le commentaire singhalais sur la Rūpasiddhi affirme que Buddhappiya, auteur de la Rūpasiddhi, s'est appuyé sur la Cāndrapañcīkā de Ratnamati dans son interprétation du mot ‘*vā*’ (‘facultativement’) dans les Sūtra de Kaccāyana.” I thank Alastair Gornall for calling my attention to this important point. It is possible, too, that the term *vavatthitavibhāsā/vyavasthitavibhāsā* was borrowed from the Kātantra tradition, where it is widely used, see below § 3.3.

³ Rūp 9,1–4: *yasmā pana mariyādāyaṃ abhividhimhi ca vattamāno ā-upasaggo vīya vāsaddo dvidhā vattate, katthaci vikappe, katthaci yathāvavatthitarūpapariggaha. idha pana pacchime. tato niccam aniccam asantañ ca vidhim ettha vāsaddo dīpeti*. The word *asanta* literally means “non-existent”, i.e.

The option prescribed by Rūp § 15 is mandatory. For instance, if we apply sandhi to the expression *yassa idāni*, only the elision of the second vowel is allowed: *yassa 'dāni*. The option *yass' idāni* is not contemplated.¹ The same holds true for *cakkhu indriyaṃ*, which can only undergo the ligature *cakkhundriyaṃ*, never **cakkhindriyaṃ*. This type of option is called *nicca* “mandatory”. Other cases fall under the category *anicca* “not mandatory”, equivalent to *vā = vikappa*, for example: *moggallāno asi* or *moggallāno 'si*. This is a case of “either ... or ...”, but note that the option is not between eliding the first vowel or eliding the second, but between eliding the second or not eliding at all. Finally, the category *asanta* “non-existent” or “inapplicable” is glossed as *idha na bhavati* (“here [the phenomenon of option 2] does not exist [i.e. does not apply]”),² for example: *pañca indriyāni > pañc' indriyāni*, never **pañca 'ndriyāni*.

3.3. Following a method that reminds us of the Kātantra tradition,³ Buddhappiya frequently synthesises the details of the restricted option in “versified summaries” (*saṅgahagāthās*), a sort of *śloka-vārttikas*,

instances of the rule are not found. See also Rūp-ṭ 14,21–15,6: *yasmā ā-upasaggo viya vāsaddo dvidhā vattate, kvaci vikappe, yathā vā ṇapacce ti ādīsu, kathaci yathāvavathitānaṃ udāharaṇarūpānaṃ pariggahe, yathā vaggantaṃ vā vagge ti ādīsu imasmiṃ sutte paranayena yathāvavathitarūpa-pariggahe vattati, tato niccaṅ ca aniccaṅ ca asantaṅ ca vidhim atra vāsaddo dīpetī ti yojanā* “The connection (*yojanā*) is the following: Because like the preverb *ā*, the word *vā* operates in two ways: somewhere in the sense of option, as in *vā ṇapacce* [Rūp § 361, Kacc § 346], and in some places as the adoption (*pariggahe*) of the example forms as they have been determined (i.e. restricted), as in *vaggantaṃ vā vagge* [Rūp § 49, Kacc § 31], in this *sutta* it operates as adopting the restricted form by taking the following [speech-sound] (*paranayena*), therefore the word *vā* here illustrates an operation that is mandatory, and also not mandatory, and also non-existent.”

¹ I have only been able to find one exception to this rule in the Burmese edition of Sāriputta’s sub-commentary on the Aṅguttara Nikāya, twelfth century CE (cf. A-ṭ B° II 179). I could not find any instance in canonical or *aṭṭhakathā* texts. Rūp GRETEL ed. p.15 *yassadāni yassidāni*, is a wrong reading for *yassa dāni, yassa idāni*.

² In Sanskrit grammars we find an equivalent expression in *na syāt*.

³ Cf. Grünwedel 1883: 69.

supplementary rules in verse,¹ apt for easy memorisation along with the *sutta*. For instance, in Rūp § 15 we read:

*bhavati ca vavatthitavibhāsāya:
avaṇṇato saro 'dānīṭīvevādiṃ vinā paro,
na luppāt' aññato dīgho āsevādivivajjito.*

And there is also [the following stanza being the summary] of the restricted option:

After *a-vaṇṇa* [= *a, ā*], the vowel that follows is not elided, except in cases such as *idāni, iti, iva, eva*.

After a vowel other than *a-vaṇṇa* [i.e. after *i, ī, u, ū, e, o*], the following long vowel is not elided. Exception is made in cases such as *āsi eva* [where no elision at all takes place].²

We may turn now to Rūp-ṭ to clarify the purport of the stanza:

In the summary stanza, the syntax (*sambandha*) is the following: “after *a-vaṇṇa* [= *a/ā*], when it is not homogeneous [with the next vowel], and when it is the cause (*hetu*) of the restricted option (*vavatthitavibhāsā*), the next vowel — i.e. *i-vaṇṇa* [*i/ī*], *u-vaṇṇa* [*u/ū*], etc. — is not elided, except when [it is the first vowel] of words such as *idāni, iti, iva, eva*, etc.” Herein, the word *ādi* includes examples such as *evaṃ kira me* [cf. M III 25,2]. The long vowel that follows a non-homogenous vowel like *i-vaṇṇa*, etc., is not elided, except in cases such as *āsi eva* [cf. Vin IV 74 (?)].³

Another example of a summary stanza that clarifies the scope of a restricted option is found in Rūp § 69 *sabbayonīnam ā e*, “All forms *yo* (nom./acc. pl.) and *ni* (nom./acc. n. pl.) [can be optionally] replaced with *ā* and *e* [respectively].” Buddhappiya indicates in the *vutti* that *vā* recurs. Then he continues:

¹ Cf. DSG s.v. *śloka-vārttika*.

² Rūp B^e 9,18–20.

³ Rūp-ṭ B^e 15,1–6: *saṅgahagāthāya vavatthitavibhāsāya hetunā asarūpabhūtā avaṇṇato paro ivaṇṇuvaṇṇādiko saro ṭhapetvā idāni iti iva eva icc evam ādikaṃ na luppātī ti sambandho. etth' ādisaddena evaṃ kira me ti ādi saṅgahyati. aññasmā asarūpabhūtā ivaṇṇādito paro dīgho saro āsi eva icc ādivivajjito na luppātī.*

The word *vā* here has the meaning of a restricted option, that is why, with regard to this rule, it is stated:

“The word *vā* illustrates the operational rule in this manner: It is mandatory (*nicca*) in the masculine; not mandatory (*anicca*) in the neuter; inapplicable (*asanta*) in masculine/neuter *i/ī* stems when they operate as *a*-endings.”¹

Thus we always find nom. pl. *purisā* and acc. pl. *purise*, but never nom./acc. pl. **purisayo*. Neuter words replace *ni* with *ā* and *e*, but not mandatorily, thus: nom./acc. pl. *cittāni*, but also nom. pl. *cittā*, acc. pl. *citte*. Finally, the rule is not applicable to the masculine/neuter stems in *i/ī* such as *aggi* “fire”: nom./acc. pl. *aggayo*, but never *aggā* and *agge*.

3.4. The option marker *vā*² is used sometimes “for the purpose of blocking” (*nivattanattham*) other option markers. See for instance Rūp § 190, where the term *vā* is not explicit in the rule, but its governance is invoked: *vādhikāro katthacinivattanattho* “the governance of *vā* is in order to prevent the application of *katthaci*”.³ In its equivalent rule in the Kaccāyana grammar (Kacc § 239), the governance of *vā* is missing because the author of Kacc/Kacc-v understands that the effect of optionality has already ceased, and the rule should be understood as a simple injunction.

3.5. Furthermore, in Rūp §§ 155, 226, and 440, *ca* is used also as *katthacinivattanattham*; in § 201 as *katthacipaṭisedhanivattanattham*; and in § 141 as *kvacinivattanattham*. The words *katthaci*^o and *kvacinivattanattham* appear to be synonymous. In § 155, for instance, the effect of *ca*, glossed as *katthacinivatthanattham*,⁴ is precisely to cancel the

¹ Rūp B^e 45,23ff.:

*vāsaddo 'yaṃ vavattitavibhāsatto, tena c' ettha:
niccam eva ca pulliṅge, aniccañ ca napuṃsake;
asantaṃ jhe katatte tu, vidhiṃ dīpeti vāsuti.*

² The different meanings of *vā* are stated in an appendix on *nipātapadas* at the end of the Nāmakaṇḍa, cf. Rūp B^e 132–36.

³ Rūp B^e 88,10–14.

⁴ With the alternative gloss *noggahaṇānuvattanattham* (“for the sake of triggering the recurrence of the ending *no* [from § 151 *yonam no*]). This is simply a different way of stating the same thing.

exceptional nature of the rule and make it open in some cases. The same rule is affected by the option marker *vā*, recurring from the *vutti* of Rūp § 153. This *vā* yields the following *vavatthitavibhāsā*:

*bhikkhuppabhutito niccaṃ; voyonaṃ hetu-ādito
vibhāsā; na ca vo no ca amuppabhutito bhava.*

[The ending *yo* for nom./acc. pl.] is mandatory in words such as *bhikkhu*, etc.

[The ending *yo* for nom./acc. pl.] can optionally (*vibhāsā*) take *vo* or *yo* in words such as *hetu*, etc.

[The endings] *vo* and *no* [for nom./acc. pl.] do not apply to words such as the [pronoun] *amu*, etc.¹

Note that the role of *ca* as blocker of an exception gives, as a result, the *vibhāsā* described in the summary stanza: one can form the plural of *hetu*: *hetuyo* or *hetuno*. Thus, one and the same rule can have more than one option marker in the interpretation, and these option markers have different roles.

4. *kvaci* and *navā* “exceptionally”²

4.1. In the Rūpasiddhi there are fifty-six rules involving *kvaci*, of which forty-five, the large majority, express exceptions of some sort. Seven more rules could be called exceptions too, but the role of *kvaci* is not entirely transparent (§§ 43, 45, 109, 111, 260, 350, 588); in three cases *kvaci* seems to mark *vikappa* (§§ 39, 266, 502); and once it is glossed as *vavatthitavibhāsā* (§ 461).

4.2. The function of *kvaci* as exception marker is illustrated in Rūpasiddhi-ṭīkā ad Rūp § 466. The commentary explains that the insertion of *i* is allowed in *asabbadhātuka*³ verbal roots when the

¹ Rūp B^e 72,7ff.

² Deokar 2008: 368–69 *navā* interpreted as “rarely”.

³ That is to say, “non-*sabbadhātuka*”. In Pāṇinian grammar, *sārvadhātuka* refers to a specific set of affixes marked with the letter *ś* (DSG s.v. *sārvadhātuka*). In the Kaccāyana school the term is defined in Kacc § 433 (= Rūp § 458) *hiyattanīsattamīpañcamīvattamānā sabbadhātukaṃ* “the technical term *sabbadhātuka* denotes the finite verbal endings of *hiyattanī* (imperfect), *sattamī* (optative), *pañcamī* (imperative), and *vattamānā* (present)” (trans.

following *vibhatti* begins with a consonant, but not when it begins with the vowels *a* or *i*, and he adds: “It should be understood that this distinction (*viseso*) is established by the governance of the word *kvaci*” (*ayaṃ pana viseso kvacī ti adhikārato siddho ti veditabbo*).¹ According to this statement, the term *kvaci* indicates a case that is special or particular (*visesa*) as opposed to a general state of affairs. Thus, *kvaci* is often found as a blocker of a more general option marked with *vā*. It should not come as a surprise, then, that the function of the word *kvaci* can also be carried out by its synonym *navā*, i.e. “the *vā* [open option] does not (*na*) [apply]” (see below 4.5.).²

4.3. As stated above (3.5), the terms *kvaci* and *vā* (= *vikappa*) may both affect one and the same rule. Even in such cases they are explicitly described as performing different functions. Consider for instance Rūp §336:

*na pañcamyāyam ambhāvo kvacī ti adhikārato,
tatiyāsattamīchaṭṭhīnan tu hoti vikappato.*

Due to the governance of *kvaci*, the ending *aṃ* is not there before the fifth case ending,
but it may be there optionally (*vikappato*) before the third, seventh, and sixth case endings.³

The stanza makes clear that there are two different poles of optionality, one is *kvaci*, the other is *vikappa*. The commentary explains: “Because of the governance of the word *kvaci*, there is no *aṃ* for the fifth *vibhatti*,

Deokar 2008: 205); its negation, *asabbadhātuka*, is used in Kacc §518 (= Rūp §466) *ikārāgamo asabbadhātukamhi* “in non-*sabbadhātukas*, [there is] augment *i* [obtains];” see Deokar 2008: 206: “In Pali grammars, the main function of these two terms [*sabbadhātuka* and *asabbadhātuka*] is to distinguish between the finite verbal endings which take an augment *i* from those which do not.”

¹ Rūp-ṭ B^e 191,4ff.

² See Kiparsky 1979: 3: “*Vibhāṣā* is defined by *na vā* in 1.1.44 *na veti vibhāṣā*. *Na vā* is not used otherwise, apart from the cases when it arises implicitly from the combination of a *na* continued by *anuvṛtti* with an overt *vā* stated in a rule.”

³ B^e 180,22ff.

but *am* is optional for the third, seventh and sixth *vibhattis*.¹ From this statement we understand that the function of *kvaci* is to isolate an exception from the main rule, which may or may not be a *vikappa*.² This makes *kvaci* different from *nicca* “mandatory”, as *kvaci* could probably be translated as “mandatorily no option is allowed”. The term *nicca* does not presuppose any previous option, whereas *kvaci* does. In the end, however, both terms lead to one single derivation pathway.

4.4. Another clear example of *kvaci* functioning as a marker of exception is found in Rūp §35 *sare kvaci*. Buddhappiya explains that *kvaci* (“in some places”), means “in those places where prosody is broken, or pronunciation is difficult, and also in those instances where sandhi is neglected. The point is that elision (*lopa*), replacement (*ādesa*), and modification (*vikāra*) do not obtain [in those cases].”³

4.5. The term *navā* appears six times in the Rūpasiddhi (§§ 21, 28, 246, 247, 256). In § 21 Buddhappiya explicitly glosses it as a synonym (*pariyāya*) of the word *kvaci*.⁴ This is in line with the interpretation of Vimalabuddhi (see 2.1). The other five cases of *navā* do not clearly attest to this equivalence. If it is true that *navā* and *kvaci* have the same meaning, the question naturally arises as to why Rūp § 21 *ivaṇṇo yaṃ navā* (= Kacc § 21) does not use the word *kvaci*. According to Vimalabuddhi, the use of *navā* in Kacc § 21 serves the purpose of

¹ Rūp-ṭ B^e 135,24–26: *kvacī ti adhikārato ambhāvo pañcamyā vibhattiyā na hoti, tatiyāsattamīcattāṭṭhīnaṃ ambhāvo pana vikappena hotī ti yojanā.*

² See also the stanza in Rūp § 466 (Rūp 276,19ff.), where *vā* and *kvaci* control different domains:

*asabbadhātuke byañjanādīmhe vā 'yam āgamo
kvacādhikārato byañjanādo pi kvaci no siyā.*

³ Rūp B^e 22,5–7: *kvaci chandabhedāsukhuccāraṇaṭṭhāne sandhicchārahita-ṭṭhāne ca, na lopādesavikāram āpajjante ti attho.* Similarly, euphony and metre mark *kvaci*-type exceptions in Rūp § 35 (Rūp 22,18ff.: *kvacī ti kim? itismiṃ chandānurakkhaṇe sandhi hoti*), Rūp § 37 (24,18ff.: *sukhuccāraṇa-chandarakkhaṇaṭṭhānesu* and Rūp § 38 (25,11ff.) *chandānurakkhaṇe*. And see also Rūp §§ 53, 54, 57.

⁴ Rūp § 21 (B^e 14,6ff.): *navāsaddo kvacisaddapariyāyo*; see also Malai 1997: 105. Note that it does not say *ayaṃ navāsaddo* “this particular *navā*”, but simply *navāsaddo*, “the word *navā* [in general]”.

blocking a former *kvaci*. It thus marks an exception to an exception. It seems that Buddhappiya has silently accepted Vimalabuddhi's solution, although we should keep in mind that Rūp-ṭ is quite critical of Vimalabuddhi's methods regarding optionality.¹

4.6. The recurrence of *navā* can only be studied in a string of three *suttas* beginning in Rūp § 234. This rule allows the pronominal replacements *tavaṃ mamaṃ* for the acc.sg. It is followed, with “a frog's leap” (*maṇḍūkapluti*), by § 246, which allows *vo no* for acc./dat./gen. pl., and subsequently by § 247, which allows *te, me* for acc./dat./gen. sg. In this case the word *navā* is not blocking any other option marker. In fact, if we look at the Kaccāyana parallel (Kacc § 144), *navā* is glossed by Vimalabuddhi as “*vikappena*”.² There are reasons to believe, however, that Vimalabuddhi has missed the mark, and here *navā* is not equivalent to *vikappa*, but to *kvaci*, in accordance with the general criterion postulated by Vimalabuddhi himself. The Rūpasiddhi, once more, clarifies the point:

Why [does the sutta state] *navā*? [Consider the counter examples:³] *idaṃ cīvaram tuyaṃ vikappanattāya dammi* “I give these robes to you for the sake of assigning”; and: *suṇātha vacanaṃ mama* “listen to my words”.

Here [Rūp §§ 246–47], due to the governance of *navā* [from Rūp § 234], these [pronominal] forms, namely *vo, no, te, and me*,

¹ Cf. Rūp-ṭ B^e 21,5–16. Furthermore, in Rūp-ṭ ad Rūp § 35, the author of the commentary disparages Mmd for understanding *kvaci* as a synonym of *vā* in the commentary upon Kacc § 24 *sare kvaci*.

² Mmd B^e 138,28.

³ It is customary in Kacc and Rūp to give counter-examples by showing how the desired result would not be there if a word was missing. The counter examples are introduced by the question tag *kiṃ*, and thus they are called *kimudāharaṇa* “examples of why [a certain word needs to be used in the *sutta*]”. The question could be also rephrased: “What would happen if the word X was missing in the *sutta*?” The first attestation of the term *kimudāharaṇa* in the sense of “counter-example” is in Vimalabuddhi's Mmd, cf. Mmd 26,23; 34,27; 35,20; 39,26, and *passim*.

do not apply at the beginning of a verse (*pāda*),
or when they precede particles such as *ca*, *vā*, *eva*, etc.¹

The expression *na honti te* (lit. “those [instances] do not exist”) tells us that *navā* is here a marker of an *asanta*-type exception. What the word *navā* means in this string of rules, then, is that the cited pronominal forms are forbidden in certain contexts.²

4.7. The last occurrence of *navā* is found in Rūp §256 *catūpapadassa lopo t’ uttarapadādi cassa cu-co pi navā*. This rule addresses the behaviour of the numeral *catu* (“four”) in compounds that express other numerals, such as *cuddasa* (“fourteen”). Let us look at Buddhappiya’s paraphrase in order to unpack the full meaning of the rule:

When it expresses a numeral and precedes the word *dasa* (“ten”) in a compound, the word *catu* (“four”) suffers the elision of the syllable *tu*, and the remaining *ca* may exceptionally (*navā*) be replaced with *cu* or *co*. [Examples:] *cuddasa*, *coddasa*, *catuddasa* (“fourteen”).

On account of the mention of the word *api*, even when *catu* is not the first word of a compound, if it expresses a numeral, the initial syllable *ca* is elided; and, exceptionally (*navā*), *cu* or *co* are there [i.e. replace *ca*]. For instance: *tālīsaṃ*, *cuttālīsaṃ*, *cottālīsaṃ*, *cattālīsaṃ* (“forty”).³

The idea here is that *navā* expresses an exception to the main rule formulated in the first half of the *sutta*. The procedure seems to have two stages: First, a mandatory elision of *tu*, and second, an exceptional replacement of the remaining *ca* with *cu* or *co*. The interpretation of *api*

¹ Rūp B^e 116,3–8: *navā ti kiṃ? idaṃ cīvaraṃ tuyhaṃ vikappanathāya dammi, suṇātha vacanaṃ mama.*

*navādhikārato c’ ettha, vo no te me ti ye ime;
pādādo ca ca-vā-evā-diyoge ca na honti te.*

² Cf. Rūp-bh-ṭ I 276.

³ Rūp B^e 119,6–12: *gaṇane dasassādimhi ʔhitassa catu icc etassa upapadassa tusaddo lopo hoti, uttarapadādimhi ʔhitassa catūpapadassa cakārassa cu-coādesā honti navā. cuddasa, coddasa, catuddasa. apiggahaṇena anupapadassāpi gaṇane padādicakārassa lopo, cu-co honti navā, yathā tālīsaṃ, cuttālīsaṃ, cottālīsaṃ, cattālīsaṃ.*

is not relevant to our discussion, but it confirms the use of *navā* as a marker of a special case within a general state of affairs.

5. CONCLUSION

5.1. A preliminary examination of option markers in Buddhappiya's Rūpasiddhi has shown that the system of two levels of optionality, originally postulated by Vimalabuddhi in ca. the tenth century CE, seems to be functional on the *suttas* of Kaccāyana and suffers from few exceptions. The claim that Kaccāyana grammarians use option markers randomly (see 1.3), therefore, needs to be corrected. It is important to note, too, that each grammarian may tweak the system according to his needs. Thus, Buddhappiya's system is an improved version of Vimalabuddhi's, and the improvements have to do with the radically new approach that Buddhappiya adopted towards the sequencing of the rules. Later grammarians of the same school do not hesitate to apply Buddhappiya's refined system to the old sequence of rules in Kacc.¹ Future studies on vernacular commentaries, such as the Rūpasiddhi-sannaya, will no doubt amplify and correct what has been stated in this paper.

5.2 To conclude, let us go back to Kiparsky's innovative approach of option markers in Pāṇini, and how it may be related to Pali grammarians. Unlike the Pāṇinian *vyākaraṇa* tradition in Sanskrit, Pali grammarians openly discuss the role of different option markers. Their description of these technical terms, however, does not fit Kiparsky's thesis, which posits different degrees of "preference". Rather, Kaccāyana grammarians seem to favour a type of analysis that is more in line with Kiparsky's critics.² Indeed, the distinction of option levels does not seem to be related to frequency of use, or any preference of the users of the language, but simply to a hierarchy of domains. It has nothing to do with the outside world, so to say. It has to do with the very structure of a grammatical treatise composed in the *sūtra* style. For the sake of

¹ Chapaṭa Saddhammajotipāla, commenting on the old *suttapāṭha* of Kaccāyana, uses the terms *nicca*, *anicca*, and *asanta*, cf. Kacc-nidd B^e 12,5–10; C^e 10,24–11,6.

² Notably Palsule 1982 and Cardona 2004, cf. n.3.

parsimony, a basic contraposition is established between the general rule (*utsarga*) and the particular or exceptional rule (*apavāda*).¹ In-between we find what is generally called an alternative or open option. To put it in other words: a general rule will state that only X form is possible. An open option will posit that both X and Y forms are possible. A particular or exception rule will state that only Y is possible. Thus, we have three different possible domains. These domains are not related to statistical occurrence, or to any preference of usage, but simply to the sheer possibility of achieving the “perfection of a [word-] form” (*rūpasiddhi*). Accordingly, Pali grammarians use *vā* and *vibhāsā* to derive an optional form that is as correct as a form given in a general rule previously promulgated, and they use *kvaci* and *navā* to mark an exception to the option marked by *vā/vibhāsā*. It is not by chance, perhaps, that Buddhappiya compares the option marker par excellence, namely *vā*, with the preverb *ā* in the sense of “limit” or “boundary”, both inclusive and exclusive. This comparison subtly suggests a parallel with the inclusive option-boundary (*vibhāsā*) and the exclusive option-boundary (*kvaci*). For, as we have shown in this article, option markers are not only capable of indicating variation, but they can also indicate whether the variation occurs within the general domain of a rule, or beyond its boundaries.

¹ For a detailed introduction to the dialectics between general rules and exceptions in Pāṇinian *vyākaraṇa*, see Cardona 1997: 404–12; for the descriptive model that combines general and particular rules in Pāṇini, see Kahrs 1992: 232–33.

ABBREVIATIONS

For Pali texts, I adopted the list of abbreviations of the *Epilegomena* to *A Critical Pāli Dictionary*: <http://cpd.uni-koeln.de/intro/>

B[°] = Burmese edition

C[°] = Cinghalese edition

DSG = *A Dictionary of Sanskrit Grammar*, Abhyankar, 1961

GRETIL = Göttingen Register of Electronic Texts in Indian Languages
(<http://gretil.sub.uni-goettingen.de/gretil.html>)

Kacc = *Kaccāyana*

Kacc-v = *Kaccāyana-vutti*

Kāt = *Kātantra*

MBh = *Mahābhāṣya*

Mmd = *Mukhamattadīpanī*

Mmd-pt = *Mukhamattadīpanī-pūrāṇa-ṭīkā*

Mmd-sāra = *Mukhamattasāra*

Mogg = *Moggallāna*

Mogg-v = *Moggallāna-vutti*

Mogg-p = *Moggallāna-pañcīkā*

MW = *Sanskrit-English Dictionary*, Monier Williams, 1899

Pāṇ = Pāṇini's *Aṣṭādhyāyī*

Pas = *Paspaśāhṇika*, ed. Joshi and Roodbergen, 1969

PED = (Pali Text Society's) *Pali-English Dictionary*, Rhys Davids and Stede, 1921

Rūp = *Rūpasiddhi*

Rūp-ṭ = *Rūpasiddhi-ṭīkā*

Rūp-bh-ṭ = *Rūpasiddhi-bhāṣā-ṭīkā*

Sadd = *Saddanīti*

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C[°] *The Kaccāyanasuttaniddesa by the Venerable Neruttikācariya Chappada Mahāthere, Revised and Edited by the Rev. Mabopitiye Medhankera Bhikkhu*, Colombo: Vidyabhusana Press, 1915

Kātantra = Eggeling, 1874

Kāśikāvṛtti = Sharma et al., 1969

Mahābhāṣya = Kielhorn, 1880

- Mukhamattadīpanī* = *Nyāsapāṭh*. Rangoon: Sudhammavati Press, 1913
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- Rūpasiddhi-bhāsā-tīkā* = Ashin Janakābhivamsa, *Rūpasiddhi-bhāsā-tīkā*, Mandalay: First Book Press, 2001
- Saddanīti* = Smith, 1930

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