

Māgadhābhāsā (Pāḷi)

A Compendious Grammar on
the Language of Pāḷi
Buddhism

Second Edition

A. Bhikkhu
Vihāra Erwitte Nord &
Sāsanārakkha Buddhist Sanctuary (SBS)

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About Sāsanārakkha Buddhist Sanctuary

Founded in the year 2543 BE (Buddhist Era; i.e. 2000 CE), it throughout has been the main objective of Sāsanārakkha Buddhist Sanctuary (SBS) to provide high-quality theoretical and practical tutelage to bhikkhus of the Theravāda. It is a sanctuary for the protection (*ārakkho*) of the Buddha's teaching (*buddhasāsanam*), heightening knowledge and wisdom in theory and practice. Suitably for these ends, SBS is situated within an extended primary forest near Taiping city in north-western Malaysia. Tailored individual spiritual consultations are offered besides guidance in the form of readings and discussions of the four main *nikāyas* and selected texts from the *Khuddakanikāya*, periodical *vinaya* classes and manual skills courses (sewing, broom making etc.) relating to the craft (*sippam*) of a bhikkhu. The rules and regulations as found in the Pāli *vinaya* (monastic discipline; i.e. the *Bhikkhuvibhaṅga* and the *Khandhakas*) comprise the most fundamental community guidelines for monastics residing at SBS.

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Abbreviations

- Ap: *Apadāna*
AN: *Aṅguttaranikāya*
Ay: *Aniyata*
B^e: Burmese edition
E^e: European edition
Bv: *Buddhavaṃsa*
Bv-a: *Buddhavaṃsa-aṭṭhakathā (Madhuratthavilāsini)*
Cp: *Cariyāpiṭaka*
Dhp: *Dhammapada*
Dhp-a: *Dhammapada-aṭṭhakathā*
DN: *Dīghanikāya*
DOP I [Cone, M., 2001]: A dictionary of Pāli (Vol. I)
DOP II [Cone, M., 2013]: A dictionary of Pāli (Vol. II)
It: *Itivuttaka*
Jā: *Jātaka*
Jā-a: *Jātaka-aṭṭhakathā*
Kacc: *Kaccāyanabyākaraṇa*
Lat.: Latin
Kkh-nṭ: *Kaṅkhāvitaraṇī-abhinavaṭṭikā*
MIA: Middle Indo-Aryan
Mhv: *Mahāvaṃsa*
Mil: *Milindapañha*
MN: *Majjhimanikāya*
Mogg: *Moggallānavyākaraṇaṃ*
Moh: *Mohavicchedanī*
Mp: *Manorathapūraṇī (Aṅguttaranikāya-aṭṭhakathā)*
Mp-ṭ: *Manorathapūraṇīṭṭikā (Sāratthamañjūsā)*
MW: Monier-Williams: A Sanskrit-English dictionary
OIA: Old Indo-Aryan

Abbreviations

Pālim-nt: *Vinayālankāraṭīkā*

Pār: *Pārājika*

Pd I: *Paramatthadīpanī I (Udāna-aṭṭhakathā)*

Pd III: *Paramatthadīpanī III (Vimānavatthu-aṭṭhakathā)*

Pd IV: *Paramatthadīpanī IV (Petavatthu-aṭṭhakathā)*

Pj II: *Paramatthajotikā II (Suttanīpāta-aṭṭhakathā)*

PED: The Pali Text Society's Pali-English dictionary

PTS: Pali Text Society

Rūp: *Padarūpasiddhi*

Sadd I: *Saddanītipakaraṇaṃ – padamālā*

Sadd II: *Saddanītipakaraṇaṃ – dhātumālā*

Skt.: Sanskrit

SN: *Samyuttanikāya*

Sp: *Samantapāsādikā*

Sv-pt: *Sumaṅgalavilāsinīpurāṇaṭīkā*

(*Līnatthapakāsini I; Dīghanikāyaṭīkā*)

Th: *Theragāthā*

Vibh-a: *Vibhaṅga-aṭṭhakathā (Sammohavinodanī)*

Vin: *Vinayaṭīkā*

Vmv: *Vimativinodanīṭīkā*

Māgadhabhāsā (Pāli): A Compendious Grammar on the Language of Pāli Buddhism

Introduction

Grammar and phonetics are a vital part of the indigenous Buddhist traditions, right from the era of the Teacher's (i.e. the Buddha's) floruit and throughout history up until modernity, constituting not only the foundation for preaching the *dhamma* to the people but also for understanding the subtleties of it in the first place (Subhūti, 2018: 4). Thus, we find evidence that those disciplines were invested with integral significance already in the nearly ubiquitously accepted earliest layers of Buddhist lore, to quote the *Aṅguttaranikāya*:

These two things, bhikkhus, lead to the confusion and disappearance of the good *dhamma* (*saddhammo*), which two? Badly- (or “wrongly,” “incorrectly”) settled words and syllables (or “letters”) and misinterpreted meaning. Bhikkhus, the meaning of badly-settled words and syllables is misinterpreted [...]. These two things, bhikkhus, lead to the continuance of the good *dhamma*, what two? Well-settled words and syllables and well-interpreted meaning. Bhikkhus, the meaning of well-settled words and syllables is well interpreted (AN II: 7 [AN 2.20]).¹

Bearing that in mind, the attempt to elucidate, elaborate upon and enrich the grammar of the Pāli language as undertaken with the present work seems a meaningful endeavor.

This Māgadhabhāsā (Pāli) grammar, as it is named, was originally not intended to reach the extent it has now. The initial prospect was to create

¹ *Dveme, bhikkhave, dhammā saddhammassa sammāsāya antaradhānāya saṃvattanti. katame dve? dunnikkhittaṅca padabyañjanaṃ attho ca dunnīto. dunnikkhittassa, bhikkhave, padabyañjanassa atthopi dunnayo hoti [...]. dveme, bhikkhave, dhammā saddhammassa ṭhitiyā asammāsāya anantaradhānāya saṃvattanti. katame dve? sunikkhittaṅca padabyañjanaṃ attho ca sunīto. sunikkhittassa, bhikkhave, padabyañjanassa atthopi sunayo hoti [...].*

an informal and more or less makeshift conglomerate of relevant material mainly for personal studies and general use. However, the inspiration roused by the thought about the spiritual merit (*puññaṃ*) gained by creating and sharing something more fundamental and reliable by investing just some extra labor (quite a bit in the end actually) led to the initial makeshift design being worked upon to lose its rough edges and growing in bulk.

With that, the aims, methods and rationales of the present Pāḷi grammar are as follows: (a) Lubricating access to the information contained in numerous modern Pāḷi grammars written in English by collating the dispersed material contained within them. People who wish to learn about grammatical rules and principles – either on a broader spectrum or at all – are compelled to track them down in the thicket of the widely scattered grammar inventories as separately given by the various available grammars. These works, mostly fine and outstanding works of scholarship in their own right, each individually often contain valuable data and perspectives not found in the other ones, and these are attempted to be distilled and presented with this Pāḷi grammar. (b) Facilitating identification of and providing explicit reference to most of the grammatical rules contained in the *Kaccāyanavyākaraṇaṃ*² (*Kaccāyana*), the oldest extant Pāḷi grammar, as well as to selected ones from other traditional grammars. The complete lack of or just sporadic referencing to the indigenous gram-

² Also *Kaccāyanavyākaraṇaṃ*: *kaccāyana* + *vyākaraṇaṃ* → *kaccāyanavyākaraṇaṃ* (“the grammar of *Kaccāyana*”). The 19th century Sri Lankan scholar bhikkhu Subhūti (2018: 4) explains: “*Vyākaraṇa* is the science of writing and speaking a language without fault and of understanding the intentions of texts by knowing all the divisions and syntactic relations of a language’s expressions. *Vyākaraṇa* is not exclusive to one language but is for all languages. Some languages that were used in former times, however, do not have complete grammars since the principal users of these languages were uncivilised and were of weak intellect. The existence of a very complete and pristine grammatical literature in Sanskrit and Pāḷi, by contrast, is a testament to the sharp intellects of the users of these languages.”

grams – a commendable exception to this being Collins’s *A Pali Grammar for Students* (2006) – is not a trifling defect. Not to say that the content which is tendered in such manner is thereby flawed per se, but it possibly presents disbenefits for a variety of individuals, such as those who wish to gain familiarity also with the source grammars or those who are more skeptical by nature about the validity of unreferenced material. To my knowledge, neither such a blend as attempted here nor the consistent referencing to classical grammars has been effected as of this writing, so that some benefit – however small – might hopefully be derived for the reader from the following pages. This potential benefit will, it is hoped as well, not suffer much from the following limitations of the present grammar.

- It does not throughout throw into relief the different ancient grammarian’s views and presentations (that of Moggallāna, Aggavaṃsa etc.).
- Some informative modern grammars have not been taken into consideration.
- It does not deal with prosody.

The structure is primarily modelled after that of Kaccāyana and references (incl. page numbers) to works in the Pāḷi language as well as quotations from them are directed to and from the *Chaṭṭhasaṅgāyana* editions (PDF files) of the Vipassana Research Institute, Igatpuri, India, also commonly known as the Burmese edition (B^e), with the exception of two quotations from European editions (E^e). Since traditionally proper names and titles of books are not capitalized in the Pāḷi language, this practice is continued here for the actual Pāḷi texts quoted; however, it is, for obvious reasons, discontinued for such individual Pāḷi words contained in the running text written in English.

Those who are not interested in word formation and derivation but mainly wish to have an avenue quickening access to specific rules – and

thereby to the Pāḷi texts themselves – may skip entire chapters³ and/or the sections on formation contained within most of the remaining ones. They may directly proceed to those parts of the book discussing actual usage, holding the most relevant information for comprehending the syntax and meaning of the Pāḷi text they wish to understand. Let it be finally remarked, however, that a proven way to gain a broader and deeper grasp of the Pāḷi language is to get also familiar with word formation and derivation principals; therefore, it is recommended.

Pāḷi – Historical Backdrop

Pāḷi is one of the Middle Indo-Aryan (MIA) languages, itself part of the Indo-Aryan language family. The broad classification of Indo-Aryan languages can, on linguistic grounds,⁴ be chronologically subdivided in the following way (Das, 2006: 3; Gair, 2007: 847; Oberlies, 2007: 164; Witzel, 2009: 47):

1. 1500 BCE – 600 BCE: Old Indo-Aryan – Vedic (Ṛgvedic Sanskrit and its dialects), Classical and Epic Sanskrit.
2. 600 BC – 1200 CE: Middle Indo-Aryan – Pāḷi, Prākṛt (Prakrit), Ardha-Magadhī, Māharāṣṭrī, Gāndhārī, Sinhala Prakrit, Buddhist Hybrid Sanskrit etc.
3. 1200 CE – present: New Indo-Aryan – Hindu/Urdu, Sinhala, Dardic, Panjabi, Dogri, Nepali, Bengali etc.

The corpora of early Buddhism have initially and in the first few centuries after the demise of the Teacher been transmitted in four of these Indic languages at a minimum: (1) Pāḷi, (2) Classical Sanskrit, (3) Gāndhārī and (4) Buddhist Hybrid Sanskrit (Edgerton, 1953: 1). As the title of this book suggests, only the Pāḷi language will be singled out and considered in the expositions contained in this grammar.

³ Primarily the chapters “Sandhi,” “Morphology,” “*Kita* and *Taddhita* Affixes” and “*Uṇādi* Affixes.”

⁴ This classification scheme is not strictly applicable on historical grounds; MIA languages are older than Classical Sanskrit.

Basing himself upon morphological and lexical features, Oberlies (2007: 164) states that Pāḷi cannot be a direct continuation of Vedic, but Geiger (1916/1956: 1) and Pischel (1957: 4) stress its closer relation to Vedic rather than Classical Sanskrit, the latter from which Pāḷi, they maintain, cannot directly be derived. Wackernagel (as quoted by Karpik, 2019: 55) and others (Karpik: 55; Oberlies: 161) argue for a parallel development of Vedic and the Prakrits in general, among which Pāḷi and the other Middle Indo-Aryan dialects are sometimes classified (Geiger: 1; Norman, 1983: 7). Pischel (p. 4) maintains that “[...] it does not seem probable that all the Prakrit dialects sprang out from one and the same source.” Woolner (1999: 3) and von Hinüber (2001: 43), on the other hand, see them as (essentially) derived from Vedic. For Levman (2019: 96, n. 32) “the actual answer appears to lie in the middle.” In any case, the antiquity of Pāḷi among the Middle Indo-Aryan languages and largely Sanskrit-independent grammatical traditions were given as reasons to let Pāḷi stand apart from the Prakrits (Klein et al., 2017: 319).

Pāḷi – Derivation and Orthography

The word “Pāḷi”⁵ (also “Pāli,” “Paḷi” and anglicized “Pali”) was stated to be a Dravidian loanword meaning “row,” “line” and in the Pāḷi Buddhist tradition later also “norm,” “text” (Levman, personal communication, April 28, 2020; Mallik, 1970: 78, 81; PED, s.v. “Pāli/Pāḷi”), being an equivalent to *tanti*, meaning “string,” “sacred text.” We also find medieval and modern attempts to derive it from within the indigenous grammatical system of the Pāḷi language itself as well as from Sanskrit. The dictionary reference provided above sees a connection with Sanskrit *pāli*⁶ (“dam,” “dike,” “bridge”), but Gombrich (2018: 11) suggests a derivation from Sanskrit *√paṭha* (“to recite”) instead. The autochthonous Pāḷi grammar of Moggallāna,⁷ however, maintains a connection to the Pāḷi *√pāla*, ex-

⁵ IPA: /pa.li/; abbr. “pi” (ISO 639-1) or “pli” (ISO 639-2 and 3).

⁶ Skt. *√pāla*.

⁷ Fl. ca. 1165 CE (Jayawardhana, 1995: 156).

plained as having the meaning of “protecting,” as it has in Sanskrit⁸ (Mogg: 147). It explains: *atthaṃ pāti rakkhatīti pāḷi* – “Pāḷi: ‘It protects and keeps watch over the meaning.’” Childers (s.v. “Pāḷi”) quotes an anonymous grammatical work being along the same lines as Moggallāna just referred to: *saddatthaṃ pāletīti pāḷi*, which he renders as: “Text is so called because it protects the sense of the words.” If we accept Jayawickrama’s (2003) claim that it is not possible to derive “Pāḷi” from Sanskrit *pāṭha* ($\sqrt{paṭha}$) since no such phonological change is attested, the constructions of Moggallāna and the dictionary explanations are the preferred choice.

Pāḷi – the Name of a Language

Nowhere in the canon (*pāḷi*), its commentaries (*aṭṭhakathā*) or subcommentaries (*ṭīkā*) preserved within the Pāḷi tradition is mention made of a language with the name “Pāḷi.”⁹ In the *aṭṭhakathā*, it is used solely in the sense of “text” and predominantly as “canonical text,” but not exclusively (Norman, 1983: 1; von Hinüber, 1977/1994: 85). This can be understood from the numerous commentarial expressions making a clear distinction between canon and *aṭṭhakathā*.¹⁰ The *aṭṭhakathā* and *ṭīkā* literature termed the language of the *tipiṭaka* etc. in the following ways (not exhaustive):¹¹

- *Māgadhabhāsā* – “the language of Magadha” (Mp-ṭ II: 178):
“Surely, when the the Perfectly Enlightened One committed

⁸ *Pāto ḷi. pātismā ḷi hoti. atthaṃ pāti rakkhatī ti pāḷi tanti* – “ḷi after the [verbal base] *pā* ‘to protect’. *ḷi* occurs after the [verbal base] *pā* ‘to protect’. It protects (*pāti*), [i.e.] guards (*rakkhati*), the meaning, therefore, it is *pāḷi*, [i.e.] a sacred text (*tanti*)” (Alastair Gornall [Trans.]; personal communication, May 4, 2020).

⁹ It is also unknown to non-Buddhist traditions (von Hinüber, 1977/1994: 85).

¹⁰ E.g.: [...] *pāḷiyaṃ avuttampi aṭṭhakathāyaṃ vuttavasena gahitaṃ* – “[...] but it is not said in the canon (*pāḷi*) but taken here vis-à-vis the commentary” (Sp I: 300). See also Childers (s.v. “Pāḷi”) for a decent summary of further occurrences.

¹¹ See also von Hinüber (1977/1994) for further discussion.

the Buddha Word, the *tipiṭaka*, to the canon, it was done just by means of the language of Magadha (*māgadhabhāsāya*).¹²

- *Māgadhavohāro* – “the common (or ‘popular,’ ‘current’) speech of Magadha”¹³ (Kkh-nt: 39).
- *Māgadhiko vohāro* – “the common speech belonging to Magadha”¹⁴ (Sp IV: 23).
- *Māgadhiḱā bhāsā* – “the language belonging to Magadha”¹⁵ (Moh: 75).
- *Ariyako* – “Aryan [language].”
- *Ariyavohāro* – “the current Aryan speech”¹⁶ (Sp I: 94).

This nomenclature landscape makes for the rationale behind selecting the title of the present grammar as it stands, despite most (but not all) scholars’ dislike of adopting that name for the language in which the lore of Pāli Buddhism was transmitted and in which it has been committed to writing – a language which was possibly even used by the Buddha himself (more on that further below in the section “Pāli – What is it?”). How, then, did it come about that we nowadays know that language under the name “Pāli” in the first place and not as it was known throughout, likely already in the nascent years of Buddhism?

¹² *Sammāsambuddhopi hi tepiṭakaṃ buddhavacanaṃ tantiṃ āropento māgadhabhāsāya eva āropesi.*

¹³ E.g.: *ettha ca ariyakaṃ nāma māgadhavohāro*. Levman on the term *vohāro* (personal communication, April 28, 2020): “The word *vohāro* is derived from OI [Old Indian] *vy-ava + hr*, meaning ‘to carry on business,’ ‘trade,’ ‘deal in,’ ‘exchange,’ ‘have intercourse with’ etc. In other words, the very word *vohāro* confirms the existence of this koine.” What this “koiné” is referring to is elaborated upon further down below.

¹⁴ [*S*] *akāya niruttiyāti ettha sakā nirutti nāma sammāsambuddhena vuttappakāro māgadhiko vohāro.*

¹⁵ *Sabhāvaniruttīti ca māgadhiḱā bhāsā, yāya sammāsambuddhā tepiṭakaṃ buddhavacanaṃ tantiṃ āropenti* – “‘The natural tongue’: the language belonging to Magadha, with which the Perfectly Enlightened Ones commit the Buddha Word – the *tipiṭaka* – to the canon.”

¹⁶ E.g.: [*T*] *attha ariyakaṃ nāma ariyavohāro, māgadhabhāsā.*

Introduction

Norman (1983: 1) figures it probable that a misunderstanding of the compound word *pāḷibhāsā* (“language of the canon [*pāḷi*]”), is responsible for the inception of the word “Pāḷi” as being used to denote the name of a language. He points to facts indicating a usage of the term “Pāḷi” in that confused sense in 19th century Sri Lanka and Burma (the work quoted mentioning *pāḷibhāsā*), in the case of the latter Burmese work likely even earlier. Cousins (2015: 119) draws attention to a few ambiguous instances of *pāḷibhāsā* in the *ṭikā* literature as denoting the name of a language but follows eventually von Hinüber (1977/1994: 90), who made it evident that the first attested use of the word “Pāḷi,” as referring to the language in which the Pāḷi Buddhist scriptures were handed down, was in the 17th century CE, both pointing to a letter (d. 1672 CE) of M. Laneau (as cited by Pruitt, 1987: 123–4) which relates his successful learning Siam and Pāḷi (Baly). Lastly, von Hinüber (p. 90) gives the 15th century CE as the terminus ante quem the term Pāḷi (or *pāḷibhāsā*) was not used in the sense it is nowadays and proposes a commencement at some time between the 15th and 17th centuries CE. He cites a Sinhalese work, which lists four languages among which is also the one of “Magada” [*sic*].

For Norman (1983: 2), it seems unlikely that this usage arose independently in all three major Buddhist countries. In any case, in traditional Buddhist countries both senses – i.e. the earlier commentarial and the somewhat later confounded sense – existed parallel to each other up to the present day; thus, to use the traditional nomenclature as elaborated upon above as well as the widespread modern variant seem uncontroversial and permissible in nearly all respects. However, scholars continue to hold certain reservations as to the legitimacy of allocating much linguistically relevant weight on a potential link between the Pāḷi language and languages or dialects as they were spoken in ancient Magadha, at least the Māgadhī dialect proper, and have proposed quite a plethora of opinions on what Pāḷi is and how and from what it developed – more on that in the subsequent paragraphs.

Pāḷi – What is it?

The *Handbook of Comparative and Historical Indo-European Linguistics* (Klein et al., 2017: 318) states: “It is generally accepted that Pāḷi as known from the Theravāda texts was a lingua franca, not a single individual language particular to one dialect area.” However, the scholarly discussions on the subject matter that have been consulted are of course somewhat more nuanced than that generalizing statement in its depiction of the status quo. They state, more specifically, that Pāḷi is either (a) some form of either a lingua franca,¹⁷ koine¹⁸ or standard dialect (Geiger, 1916/1956: 4–6; Karpik, 2019: 67; Oberlies; 2007: 183; Roth, 1980: 78; Wynne, 2019: 9–10), (b) some form of a vernacular (Childers, 1875: xiv; Roth, 1980: 78; Warder, 1970/2000: 294) or (c) based upon one of these (Levman, 2019: 64–5, n. 1; Lüders, as quoted by Waldschmidt in Lüders, 1954: 8; Norman, 1989: 66; Rhys Davids, 1911: 53–4). There is also a dissensus as to the question if Pāḷi predominantly constitutes an artificially crafted language (Gombrich, 2018: 84–5;¹⁹ Norman: 65; von Hinüber, 1996: 5²⁰) or had developed mainly by natural means (Pischel, 1957: 5). It also has to be noted that the first-mentioned views under (a) above premise some actually spoken basis underlying the Pāḷi language, having been significantly morphed or superseded by contrived structures in the course of time – at least in part – and that the second-mentioned view does not assume that the language was safe from any form of change as it relates to redaction, transmission errors etc. Not one text-critically involved scholar, as far as

¹⁷ Merriam Webster (“Lingua franca,” n.d.): “[A]ny of various languages used as common or commercial tongues among peoples of diverse speech.”

¹⁸ Merriam Webster (“Koine,” n.d.): “[A] dialect or language of a region that has become the common or standard language of a larger area.”

¹⁹ Gombrich holds that the Buddha was the progenitor of the Pāḷi language or at least a principle figure as it relates to its creation.

²⁰ Commenting on von Hinüber’s assessment of Pāḷi as an artificial language, Prof. Oberlies remarks: “The ‘artificial language’ of Mr. von Hinüber goes too far also for me” – “Die ‘Kunstsprache’ von Herrn von Hinüber geht auch mir zu weit” (personal communication, May 3, 2020).

I am aware of, is of the opinion that the Pāli as we know it has undergone no changes whatsoever.

The above-presented traditional accounts, reporting the language as found in the texts of the Pāli Buddhist tradition to be *māgadhabhāsā* etc., are by and large considered incorrect by modern scholars. They adduce, inter alia, the peculiar features of the Māgadhī dialect proper as inferred from the Aśokan inscriptions and the medieval descriptions of it by the Indian grammarians and determined these features to be (a) *l* instead of *r* (e.g. *lāja* – *rāja*), (b) *a*-stems in *e* for *o* (e.g. *lāje* – *rājo*) and (c) palatal *ś* for dental *s*. However, based upon inscriptional and other evidence, Norman (1980: 68–9) demonstrated that these features were found merely within a relatively restricted area and that it is feasible to regard the home of Pāli as being outside the region where the true Māgadhī was spoken but still within Magadha, somewhat in the center of the east-Indian region, not far from Kalinga. He considers it feasible that Māgadhī – as depicted within the *aṭṭhakathā* tradition as the language of the *tipiṭaka* – is a variant of the Māgadhī dialect proper and that the Buddhist tradition can thus be correct. To similar conclusions came already Winternitz (1908/1981: 40), seeing the Māgadhī dialect proper at the base of Pāli, and Geiger (1916/1956: 4), to quote the latter:

A consensus of opinion regarding the home of the dialect on which Pāli is based has therefore not been achieved. Windisch therefore falls back on the old tradition—and I am also inclined to do the same—according to which Pāli should be regarded as a form of Māgadhī, the language in which Buddha himself had preached.

What emerges from the above is that the traditional narrative should not be and has not been dismissed outright.

Commentaries, Sub-Commentaries and Pāli Grammatical Literature

The *aṭṭhakathā* and *ṭīkā* traditions take the language of Magadha (*māgadhabhāsā*) to be a natural language – a delightful language indeed (Sv-ṭṭ: 10)

6).²¹ As presented already above, the *Samantapāsādikā vinaya aṭṭhakathā* (Sp IV: 23) proffers the following annotation of the phrase *sakāya niruttiyā* as used by two Brahmins in the context of one cardinal (as it relates to linguistics) incident recorded in the *vinaya*, where they, still attached to things Vedic, complain about the way or language by adopting or use of which the Buddha’s teaching was spoiled: “[...] ‘own tongue’ means the common speech belonging to Magadha (*māgadhiko vohāro*) in the manner spoken (*vuttappakāro*) by the Perfectly Enlightened One.”²² The 12/13th century CE *Vimativinodanīṭikā* (Vmv: 125) interprets the relevant portion of the episode thus: “They ruin (*dūsentī*) the word of the Buddha with their own language (*sakāya niruttiyā*) as it relates to the canon (*pāli*): ‘Surely, those of inferior birth who have learned [memorized; i.e. the *buddhava-cana*] corrupt the language of Magadha (*māgadhabhāsāya*) to be spoken by all with ease (*sabbesaṃ vattuṃ sukaratāya*)’ – this is the meaning.”²³ The *Vinayālaṅkāraṭīkā* (Pālim-ṅ: 180) from the 1600’s CE in turn as succinctly as possible glosses *sakāya niruttiyā* as *māgadhabhāsā*, the “language of Magadha.”²⁴ The *Samantapāsādikā* (Sp I: 94), on another occasion, equates *māgadhabhāsā* seemingly with the Aryan language as a whole, thereby possibly referring to a supra-regional language.²⁵ The indigenous Pāli grammars basically concur with the above. The *Padarūpasiddhi*, for example, mentions explicitly that the Buddha spoke a tongue belonging to Magadha (*māgadhika*), as recorded in the *tipiṭaka*²⁶ (Rūp: 32) – for a detailed discussion concerning themes related to the last-mentioned point,

²¹ *Manoramaṃ bhāsanti māgadhabhāsaṃ.*

²² [...] *sakā nirutti nāma sammāsambuddhena vuttappakāro māgadhiko vohāro.*

²³ *Pāliyaṃ sakāya niruttiyā buddhavacanaṃ dūsentīti māgadhabhāsāya sabbesaṃ vattuṃ sukaratāya hīnajaccāpi uggaṇhantā dūsentīti attho.*

²⁴ *Sakāya niruttiyāti māgadhabhāsāya.*

²⁵ [T]attha *ariyakam* nāma ariyavohāro, māgadhabhāsā.

²⁶ *Adhikāroyaṃ. tattha pañca māre jītavāti jīno, buddho. jīnassa vacanaṃ jīnavacanaṃ, tassa jīnavacanassa yuttaṃ jīnavacanayuttaṃ, tepiṭakassa buddhavacanaṃ māgadhikāya sabhāvaniruttiyā yuttaṃ anurūpamevāti idaṃ adhikāratthaṃ veditabbaṃ.*

see Gornall (2014). The above is, as we have already seen at the beginning of this chapter, a sensible account of what language the Buddha employed, at least *primarily*.

In this connection, it appears relevant to mention that the *aṭṭhakathā* tradition is not just an alternative scholarly opinion but rather constitutes strong additional evidence (cf. Karpik: 74), as Norman (1983: 119) spelled it out:

[...] some parts of the commentaries are very old, perhaps even going back to the time of the Buddha, because they afford parallels with texts which are regarded as canonical by other sects, and must therefore pre-date the schisms between the sects. As has already been noted, some canonical texts include commentarial passages, while the existence of the Old Commentary in the Vinaya-piṭaka and the canonical status of the Niddesa prove that some sort of exegesis was felt to be needed at a very early stage of Buddhism.

Furthermore, Buddhaghosa's *Samantapāsādikā* contains over 200 quotations of earlier material, according to the indigenous tradition harkening back in parts to the first council (*paṭhamasaṅgīti*) held shortly after the demise of the Buddha (von Hinüber, 1996: 104). Surely, Geiger (1916/1956: 4–6) must have based his deliberations to some extent upon the exegeses of the *aṭṭhakathā*, *ṭīkā* and grammatical traditions showcased throughout this section when he wrote:

[...] Pāli should be regarded as a form of Māgadhī [...]. Such a *lingua franca* naturally contained elements of all the dialects [...]. I am unable to endorse the view, which has apparently gained much currency at present, that the Pāli canon is translated from some other dialect (according to Lüders, from old Ardha-Māgadhī). The peculiarities of its language may be fully explained on the hypothesis of (a) a gradual development and integration of various elements from different parts of India, (b) a long oral tradition extending over several centuries, and (c) the fact that the texts were written down in a different

country. I consider it wiser not to hastily reject the tradition altogether but rather to understand it to mean that Pāḷi was indeed no pure Māgadhi, but was yet a form of the popular speech which was based on Māgadhi and which was used by Buddha himself.

Whatever the case may be when it comes to the nature of Pāḷi, perhaps Bodhi (2020: 3) is right when suggesting: “If by some unexpected miracle transcripts of the original discourses should turn up in the exact language(s) in which they were delivered, one who knows Pāḷi well would be able to read them with perhaps 90 percent accuracy.”²⁷ In thus manner, the scope of modern scholarly assessments concerning the nature of Pāḷi partially extends, but a brief survey of the sociological environment and conditioning of the Buddha will conclude the account on the nature of Pāḷi as a language with the following section.

Pāḷi and the Buddha

The Pāḷi canon does not contain any record about which language the Buddha spoke, either as his native tongue, regarding potential standard dialects, a lingua franca or a koine. As a Sakyan, having possibly been nothing less than “junior allies”²⁸ of the Kosalan kingdom, he possibly

²⁷ I am indebted to Ā. Bodhi (aka Bhikkhu Bodhi) for sharing the above text with me prior to the book release and Bryan Levman for directing my attention to this passage in the first place.

²⁸ That this term might be a viable alternative rendering for the commonplace “vassals” to denote the relationship between the Sakyan crowned republic and the Kosalan kingdom might be gathered from Pj II (Bodhi [Trans.], 2017: 867): “[**Ruled**] by one native to the Kosalans (*kosalesu nīketino*): Saying this, he rejects its rule by a subordinate ruler; for a subordinate ruler is not said to be native. But one for whom a particular country has been his place of residence by way of succession from early times is said to be native to it, and Suddhodana was such a king. By this, he shows, too, that it excels in wealth that has come down in succession.” DOP II (s.v. “nīketi(n)”: “having a home; (one) who has a long connection with.” Although the *Dīghanikāya* speaks of the Sakyans as being *anuyuttā* to king Pasenadi of Kosala, this does not have to refer to vassalage. The past participle *anuyuttā*, functioning as a predicate substantive noun in the text, can mean:

spoke an eastern Indic dialect as his native tongue but having received a thoroughgoing education in an aristocratic or royal family, he in all likelihood was multilingual (cf. Edgerton, 1953: 2; Karpik, 2019: 21; Levman, personal communication, April 28, 2020; Rhys Davids, 1911: 153; Warder, 1970/2000: 200). There is also evidence that his clan – the Sakyas – spoke Munda (part of the Austroasiatic language family) and/or Dravidian (Levman, 2019: 64). Be that as it may, as Warder (p. 201) and others pointed out, the Buddha spent most of his time in the kingdom of Kosala and much less so in the Magadhan or others, and it is outside of Magadha where Buddhism at first in the main spread,²⁹ although it expanded significantly already during his lifetime and reached nearly all other ancient Indian countries before the Magadhan supremacy (ca. 410 BCE³⁰ and

(a) “applying oneself to,” “given to,” (b) “following,” “attending on,” “obedient (as a vassal or inferior king),” with the textual variant for *anuyuttā* (i.e. *anantarā anuyantā*) designating the following: *anantarā* (“immediately after,” “next”); *anuyantā*, from *anuyāti* (“to follow,” “to go along through,” “then”).

This much suffices to understand that “vassal” is a rendering which misses out on a number of possible nuances. The respective glosses found in the *Sumaṅgalavilāsini* and its *ṭīkā* make a rendering as “junior ally” even more compelling. The former explains *anuyuttā* with *vasavattino* (“wielding power,” “dominating”), but the latter clarifies this term – commenting on the textual variant – to mean *anuvattakā* (“siding in with,” “one who follows or acts according to”). Bryan Levman (personal communication, July 11, 2020) suggest that: “here *vasa* must have the meaning of OI *vaśa* ‘willing, submissive, obedient, subject to or dependent on’ (MW),” but finds that the traditional exegeses represents a “commentarial apology” and that it is “trying to make palatable something unpalatable.” It appears to me, however, that the matter, as pictured above, does not seem to justify probative statements.

²⁹ An analysis of the four main *nikāyas* of the Pāḷi canon yields the following: 78 % in Kosala and 12 % in Magadha when including larger cities (such as Sāvatti); 41 % in Kosala and 20 % in Magadha excluding such (Karpik, 2019: 22–5).

³⁰ Reckoned on the basis of the so-called corrected long chronology, which places the Buddha’s demise at ca. 486 BCE. This dating remains a viable alternative to the median chronology, which has gained widespread appeal at present (placing this event at around 400 BCE) and even appears preferable, especially given the review and symposium of Narain (1993; 2003), including critical as-

onwards; Warder: 202). Thus, although we cannot be certain what kind of language the Buddha habitually employed, it is at least safe to assume that he was multilingual. It is also well possible that he made regular use of a more universally established and widespread form of language – such as a pan-Indic high language, koine or lingua franca, the existence of which some scholars have argued for as we have come to see in the foregoing sections. This indeed might have been the Pāḷi language as preserved in the voluminous scriptures of Pāḷi Buddhism as we know them today, described by the tradition throughout under various names, such as *māgadhabhāsā*. Of that language the following grammar is a study.

sessments of several highly influential deductions of scholarly works presented during the Göttingen symposia on the subject (Bechert, 1991; 1992; 1997).

The Pāḷi Alphabet or Orthography (*saññā*)

There are 41 phonemes to be found in the Pāḷi language, with the sequential order of them being as follows (Thitzana, 2016: 119): *a, ā, i, ī, u, ū, e, o, ka, kha, ga, gha, ṇa, ca, cha, ja, jha, ña, ṭa, ṭha, ḍa, ḍha, ṇa, ta, tha, da, dha, na, pa, pha, ba, bha, ma, ya, ra, la, va, sa, ha, ḷa, aṃ* (*niggahītaṃ*).

(a) The vowel *a* is appended traditionally to the consonants for ease of utterance, but a representation without them is also acceptable, perhaps even preferable (Thitzana, 2016: 121). **(b)** By dint of affixing this inherent vowel, one may also correctly state that the Pāḷi language does not possess an alphabet – Gornall (2014: 511) called it a syllabary, but it rather represents a so-called abugida/syllabic alphabet (Ānandajoti, personal communication, July 15, 2020).

Pāḷi Alphabet Classification

(a) In the traditional classification system, we find, to facilitate reference, a division into five groups – called *vaggā* (pl.) in Pāḷi – of the majority of consonants, according to the position of the tongue in producing the respective sounds (Ñāṇadhaja, 2011: 9; Thitzana, 2016: 122). **(b)** Kaccāyana and other traditional grammars divide all letters into vowels and consonants, the latter of which includes the *niggahītaṃ* (Kacc 2–3, Vidyabhusana, S. & Punnananda, 1935: 3). **(c)** One distinct sound is assigned to each letter of the Pāḷi alphabet. **(d)** In Roman transliterations of Pāḷi letters, the aspirates (*cha, tha* etc.) are represented as digraphs – i.e. two letters standing for one sound (Warder, 1963/2001: 1). **(e)** Conjunct consonants (sing. *saṃyogo*) are combinations of consonants without intervening vowels, either with similar (e.g. *kkh, dda, ss*) or dissimilar consonants (e.g. *ndh, nd, mba*) respectively (Kacc 2–3, 6–7; Thitzana: 53; Vidyabhusana, S. & Punnananda: 3). **(f)** Within the traditional Pāḷi grammatical system, the technical term *saṃyogo* encompasses also geminate³¹ consonants (Rūp: 2–3).

³¹ Gemination refers to the prolongation in the case of sonorant and fricative consonants (i.a. /l/, /m/, /n/ and /s/, /z/ respectively) or unreleased consonants in the case of stops (i.a. /t/, /p/, /d/, /g/; “Gemination,” n.d.; “Geminate consonants,” n.d.).

(g) The aspirated letters are not to be regarded as conjunct consonants since they only represent one separate phoneme or sound each (Ānandajoti, 2004: 16).

Vowels (*sarā*) – 8

- *a, ā, i, ī, u, ū, e, o.*

Consonants (*byañjanā*) – 33

- *ka*-group (*kavaggo*) – *ka, kha, ga, gha, ṇa.*
- *ca*-group (*cavaggo*) – *ca, cha, ja, jha, ña.*
- *ṭa*-group (*ṭavaggo*) – *ṭa, ṭha, ḍa, ḍha, ṇa.*
- *ta*-group (*tavaggo*) – *ta, tha, da, dha, na.*
- *pa*-group (*pavaggo*) – *pa, pha, ba, bha, ma.*
- Ungrouped (*avaggā*)³² – *ya, ra, la, va, sa, ha, ḷa.*
- *aṃ.*

(a) Only the first and second and the third and fourth letters of the same class (in that order; e.g. *ka* + *kha* but not *kha* + *ka*) can be conjoined to form a conjunct consonant (here geminates only). **(b)** The fifth letter (nasal) of each class can be appended to any consonant of the same classification – including itself – to form conjuncts. An exception is the letter *ṇi*, which cannot form a geminate consonant with itself (Yindee, 2018: 45). **(c)** The letters of the five groups are articulated with strong contact (cf. Rūp: 2; Ñāṇadhaja: 14).

Pāḷi Alphabet – General Descriptions

Vowels

(a) Short (*rassaṃ*) or light (*lahu*) are: *a, i, u* generally as well as *e* and *o* before geminate consonants (*kkh, cch, kk, yy* etc.; e.g. *bhāseyya* – “He should speak”). Exception for *e* and *o*: Occurrences before conjuncts with end-group nasals are long (e.g. *meṇḍo* – “sheep”; *soṇḍo* – “drunkard”; see above the last letters of each group for the end-group nasals). **(b)** Accord-

³² As per Ñāṇadhaja (2011: 8).

ing to the so-called law of *mora*, long vowels are usually not followed by conjunct consonants (one exception out of many is: *svākkhāto* – “well taught”) – *mora* being a translation of the Pāli term *mattā* (“measure”). **(c)** One *mattā* denotes the time it takes to pronounce one short vowel; two *mattā* it takes for a long one as well as a short vowel before geminate and conjunct consonants (e.g. *nakkhamati* – “He does not approve of,” Sp V: 56; Kacc 602; Rūp: 2; Ñāṇadhaja, 2011: 6–8; Oberlies, 2001: 17). **(d)** In verse compositions, however, the short vowels take one and a half *mattā* to be vocalized: “In reference (*gahaṇa*) to **light [form]**: herein, however, it might be one and a half *mattā* as the employed (*gahaṇa*) use if it relates to verse”³³ (Rūp: 2). **(e)** Regarding the long vowels, the same length “of one and a half *mattā* is also a well-supported use”³⁴ (Rūp: 2). **(f)** “Short” is said because it takes only a short time to speak one *mattā*, corresponding to the time it takes to blink only once (Kacc 4; Rūp: 2; Ñāṇadhaja: 6–8).

(a) Long³⁵ (*dīgham*) or heavy (*garu*) are: *ā*, *ī*, *ū* generally as well as *e* and *o* at the end of words (e.g. *vane* – “in the forest”; *putto* – “son”), before single consonants (e.g. *kāmesu* – “regarding sensuality”; *odanaṃ* – “rice”) and, again, the nasal conjuncts mentioned just above (Sp V: 56; Ñāṇadhaja, 2011: 7). **(b)** “Long” is said since it takes a long time to articulate two *mattā*. **(c)** The time passage of these long vowels equals that of two short ones; i.e. to blink twice (Sp V: 6; Ñāṇadhaja: 7). **(d)** All vowels are voiced in the Pāli language (Duroiselle, 1906/1997: 4).

There are differences in opinion regarding the points just mentioned, even among the ancient grammarians. Kaccāyana, for example, mentions *e* and *o* as only being long (Kacc 5; Thitzana, 2016: 120), whereas Buddhapiya (Rūp: 12) in his medieval Pāli grammar *Padarūpasiddhi* – being part of the Kaccāyana tradition – maintains their shortness before gemi-

³³ *Lahuggahaṇaṅcetha chandasi diyadḍhamattassāpi gahaṇatthaṃ*. The short vowel *a*, *i*, *u* are explained to be “light” (*lahu*).

³⁴ *Aññaggahaṇaṃ diyadḍhamattikānampi saṅgahaṇatthaṃ*. The long vowels are referred to as “others” (*añña*).

³⁵ The diacritic sign called a “macron” (ˉ) above a vowel indicates its length.

nate but not conjunct consonants (as above) without allowing exceptions. However, Moggallāna asserts, in contradistinction to the Kaccāyana tradition, that short vowels *e* and *o* count as separate letters and therefore reports a total of 43 phonemes to be existent in the Pāḷi language.³⁶ See Ñāṇadhaja (2011: 7) for an account of the again differing views held by modern grammarians. Here we mainly take the explanations of Kaccāyana, Buddhappiya and Ā. Ñāṇadhaja (aka Ledi Sayadaw) as the basis for our expositions on phonetics (cf. Gornall, 2014: 516–7).

With modern examples based upon American English pronunciation (whenever possible), the following lists tender illustrations of articulating letters in accordance with the parameters as found in the Pāḷi language. The letters in parentheses are International Phonetic Alphabet (IPA) symbols (“Pali,” n.d.), modelled after the explanations of the ancient grammarian as to the place (*ṭhāṇaṃ*), instrument (*karaṇaṃ*) and mode of articulation (*payatanaṃ*), given here to broaden the avenues for identification. The underlined parts of the example words used below correspond phonetically or approximate.

Consonants

(a) Consonants are said to indicate the meaning. **(b)** Standing by themselves, they take half a *mattā* to enunciate, with a short vowel one and a half *mattā* and with a long vowel two and a half (Rūp: 2; Ñāṇadhaja, 2011: 8, Oberlies, 2001: 17). **(c)** In Pāḷi, there are aspirated (e.g. *kha*) and unaspirated consonants (e.g. *ka*). **(d)** When letter *h* arises together with the letters of the groups (represented by an *h* in the digraphs, as in *kh*), or with *ya*, *ra*, *la*, *va*, it is said to be chest-born (*uraja*) – **(e)** it symbolizes aspiration (Geiger, 1916/1994: 2; Ñāṇadhaja: 12). Though most English speakers generally do not notice the difference, there are aspirated and unaspirated

³⁶ “At the end of his discussion, Moggallāna rejects Buddhappiya’s standpoint by arguing that ‘e’ and ‘o’ cannot have a long duration and then, in certain situations, be short. If ‘e’ and ‘o’ are ever short these sounds must be acknowledged as completely different sounds from long ‘e’ and ‘o’” (Gornall, 2014: 519).

sounds in the English language too, and it might be helpful to briefly elaborate on that at this juncture. **(f)** The transcriptions of the various English words are oftentimes “broad,” which means that they do not disclose as much detail as a so-called “narrow transcription” would. With the latter, it becomes possible to discern aspiration in the written word, as can be seen a little further below. **(g)** To give an illustration of what is meant by aspiration in English: When respectively speaking “skirt” and “keen” closely into the palm of one’s hand, an air puff becomes palpable when producing the [k^h] in “keen” (represented by the aspiration modifier letter “^h”) but not so with the [k] in “skirt” (showing that it is unaspirated). To clearly instance the pronunciation of the Pāli language, the relevant English examples are given according to a narrow transcription. **(h)** Note that only voiceless stops (*p, t, k*) occur as aspirated in English – and this just under certain conditions – not so voiced ones (*b, d, g*; Andersen, n.d.). **(i)** Double consonants are pronounced as two distinct syllables, with a noticeable pause (e.g. *panna* – “fallen,” “gone” ~ “unnecessary”; *phassa* – “contact” ~ “pus, sir”; Dhammajoti, 2018: 2; Warder, 1963/2001: 4).

Pāli Alphabet: Articulation

Gutturals (kaṇṭhaja)³⁷

(a) The letters of this group are *a, ā, ka, kha, ga, gha, ṇa, ha* and their articulation takes place in the region of the throat, being gutturals (Rūp: 1; Ñāṇadhaja, 2011: 11) – the end-group nasal is, in addition to the throat, also produced in the nose (*nāsikaṭṭhānaja*; Rūp: 2). **(b)** Unvoiced (*aghosa*)³⁸ letters of the gutturals are: *ka, kha*, with the voiced (*ghosa*)³⁹ ones being: *a, ā, ga, gha, ṇa, ha* (Kacc 9; Duroiselle, 1906/1997: 4; Vidyabhusana, S. & Punnananda, 1935: 5). **(c)** As already explained above, the letters of the five groups are articulated with strong contact (cf. Rūp: 2; Ñāṇadhaja: 14).

³⁷ Lit. “throat-born.”

³⁸ Unvoiced: without vibration of the vocal cords.

³⁹ Voiced: with vibration of the vocal cords.

- *a* [ɐ] = nut.
- *ā* [a:] = calm.
- *ka* [k] = luck.
- *kha* [k^h] ~ keel, with stronger breath pulse.
- *ga* [g] = gear.
- *gha* [g^h] ~ gear, with breath pulse as with *kha*.
- *ṇa* [ɳ] = thing.
- *ha* [h] = behind.

Palatals (tāluja)⁴⁰

(a) The letters of this group are *i*, *ī*, *ca*, *cha*, *ja*, *jha*, *ṇa*, *ya* and their articulation takes place on the palate with the tongue’s middle (instead of its tip) in contact with it (Rūp: 1-2; Ñāṇadhaja, 2011: 11) – the end-group nasal is, in addition to the palate, also produced in the nose (*nāsikaṭ-ṭhānaja*; Rūp: 2). (b) The letters *ca* and *cha* of the palatals are unvoiced but voiced are: *ja*, *jha*, *ṇa*, *ya* (Kacc 9; Vidyabhusana, S. & Punnananda, 1935: 5). (c) Letter *ya* is formed by somewhat touching, with slight contact (Rūp: 2; Ñāṇadhaja: 14).

- *i* [i] = sit.
- *ī* [i:] = seek.
- *ca* [tʃ] = which.
- *cha* [tʃ^h] ~ check, with stronger breath pulse.
- *ja* [dʒ] = range.
- *jha* [dʒ^h] ~ range, with breath pulse as with *cha*.
- *ṇa* [ɳ] = señor.
- *ya* [j] = yes.

Cerebrals/Retroflexes (muddhaja)⁴¹

(a) The letters of this group are *ṭa*, *ṭha*, *ḍa*, *ḍha*, *ṇa*, *ḷa*, *ra* and engendered with near the tip of the tongue, curled back at the roof of the

⁴⁰ Lit. “palate-born.”

⁴¹ Lit. “head-born.”

mouth's interior (Rūp: 2; Ñāṇadhaja, 2011: 11) – the end-group nasal is, in addition to that, also produced in the nose (*nāsikaṭṭhānaja*; Rūp: 2). **(b)** Of these, *ṭa* and *ṭha* are unvoiced letters, whereas *ḍa*, *ḍha*, *ṇa*, *ḷa*, *ra* are all voiced (Kacc 9). **(c)** The letter *ra* is formed by somewhat touching, with slight contact (Rūp: 2; Ñāṇadhaja: 14). **(d)** The intervocalic letter *ḷa* usually represents *ḍa*, and *ḷh* may occur for *ḍh*, but only rarely. Often interchanged are *ḷ* and *l* (Collins, 2006: 2). **(e)** The way of pronouncing the letters of this class represents the typical Indian way of articulating the English alveolars, regular /t/, /d/ etc. (Warder, 1963/2001: 1). **(f)** However, when /r/ precedes /t/ and /d/ in American English, they manifest usually as retroflexes (see below for examples and, to further aid correct implementation, Figure 1 above).

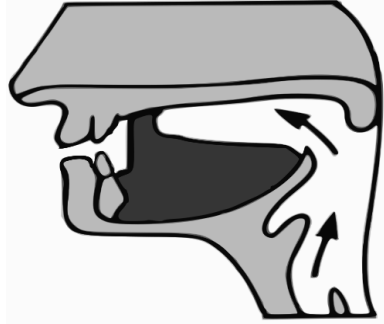


Figure 1. Tongue position while pronouncing cerebral/retroflex sounds. Source: Retroflex consonant (n.d.). In: Wikipedia – The free encyclopedia.

- *ṭa* [t̪] = heart̪.
- *ṭha* [t̪ʰ] ~ bar̪ter, with stronger breath pulse.
- *ḍa* [d̪] = ward̪er.
- *ḍha* [d̪ʰ] ~ ward̪er, with breath pulse as with *ṭha*.
- *ṇa* [ɳ] = barn̪.
- *ḷa* [l̪] = cur̪l̪.
- *ra* [r̪] = ram̪.

Dentals (*dantaja*)⁴²

(a) The letters of this group are *ta*, *tha*, *da*, *dha*, *na*, *la*, *sa* and sounded with the tip of the tongue in contact with the edge of the row or line of the teeth (Rūp: 2; Ñāṇadhaja, 2011: 11) – the end-group nasal is, in addition to the teeth, also produced in the nose (*nāsikaṭṭhānaja*; Rūp: 2). **(b)** The

⁴² Lit. “tooth-born.”

unvoiced letters here are *ta*, *tha* and *sa*. Voiced forms are given as *da*, *dha*, *na*, *la* (Kacc 9). **(c)** Letter *la* is formed by somewhat touching, with slight contact (Rūp: 2; Ñāṇadhaja: 14). **(d)** The sibilant *sa* produces a hissing sound and is unvoiced (Kacc 9; Duroiselle, 1906/1997: 5). **(e)** Pāḷi has no [z] sound as found in English (e.g. “zone”; Warder, 1963/2001: 3). **(f)** An English equivalent of tongue positioning for these dentals would be in the formation of dental fricative /th/ ([ð]; [θ] – e.g. “this”; “thin” respectively) but with a plosive sound instead of the natural fricative pronunciation (Warder: 2–3). **(g)** For illustration purposes, it is worth mentioning that consonants before the mentioned /th/ tend to become dentals naturally (e.g. letter “d” in “rod thin”). **(h)** Thus, we can gather that this class of letters does not represent the regular alveolars as articulated with the tongue on the alveolar ridge – i.e. the noticeable ridge between just behind the upper teeth and the hard palate – as with /t/, /d/ etc. **(i)** In the following, the Pāḷi dentals with equivalents and approximations in English:

- *ta* [t̪] = hit this.
- *tha* [t̪ʰ] ~ attack, with stronger breath pulse and the tongue in dental position.
- *da* [d̪] = rod thin.
- *dha* [d̪ʰ] ~ den, with breath pulse as with *tha* and the tongue in dental position.
- *na* [n̪] = tenth.
- *la* [l̪] = wealth.
- *sa* [s] = salt.

Labials (oṭṭhaja)⁴³

(a) The letters of this group are *u*, *ū*, *pa*, *pha*, *ba*, *bha*, *ma* and spoken in contact with both lips (Ñāṇadhaja, 2011: 12) – the end-group nasal is, in addition to that, also produced in the nose (*nāsikaṭṭhānaja*; Rūp: 2); how-

⁴³ Lit. “lip-born.”

ever, the lips should be open when articulating *u*, *ū* (Ñāṇadhaja: 14). **(b)** The unvoiced and voiced letters form this class are *pa*, *pha* and *u*, *ū*, *ba*, *bha*, *ma* respectively (Kacc 9; Duroiselle, 1906/1997: 4; Vidyabhusana, S. & Punnananda, 1935: 5). **(c)** The lips should have strong contact when forming the labials, excepting the vowels (Ñāṇadhaja: 14).

- *u* [u] = put.
- *ū* [u:] = fruit.
- *pa* [p] = stop.
- *pha* [p^h] ~ prawn, with stronger breath pulse.
- *ba* [b] = hub.
- *bha* [b^h] ~ hub, with breath pulse as with *pha*.
- *ma* [m] = moon.

Gutturo-palatal (kaṇṭhatāluja)

(a) The letter is *e*, and its articulation happens in the throat (as with all other vowels) and the palate (Ñāṇadhaja, 2011: 12), with open lips (Rūp: 2). **(b)** It was stated already that all vowels are voiced in the Pāli language (Duroiselle, 1906/1997: 4).

- *e* [ɛ] = fell.
- *e* [e:] = Seele (German).⁴⁴

Gutturo-labial (kaṇṭhoṭṭhaja)

(a) The letter is *o* and is produced in the throat (as with all other vowels) and the lips, with an effort to keep the lips open (Rūp: 2; Ñāṇadhaja, 2011: 12, 14). **(b)** Again, all vowels need to be voiced in the Pāli language (Duroiselle, 1906/1997: 4).

- [o] = oko (Czech).⁴⁵
- [o:] ~ home (hoom; corresponding to [o] before the sound change to [ʊ]).

⁴⁴ I am not aware of any American English equivalent.

⁴⁵ See previous footnote.

Dento-labial (*dantoṭṭhaja*)

(a) The letter is *va* and is generated with the teeth and the lips (Ñāṇadhaja, 2011: 12), voicing occurs (Kacc 9; Vidyabhusana, S. & Punna-
nanda, 1935: 5). (b) It is formed by *somewhat* (*tholaṃ*) touching, with slight
contact (Rūp: 2; Ñāṇadhaja: 14). (c) Duroiselle (1906/1997: 6) and Warder
(1963/2001: 3) mention that when this letter is preceded or combined with
another consonant (e.g. as in *tvā*), it is instead pronounced as a pure la-
bial.

- *va* [v] = vine.
- *va* [w] = wind.

The Pure Nasal (*niggahītaṃ*)

(a) This letter (*aṃ*)⁴⁶ is called *niggahītaṃ* or *anunāsiko* in Pāḷi⁴⁷ (Kacc 8)
and is listed by all Pāḷi grammarians as a consonant (Kacc 6; Rūp: 3; Deo-
kar, 2008: 113). (b) It is never of long duration when pronouncing it (Gei-
ger, 1916/1956: 63) and is described as neither voiced nor unvoiced (Deo-
kar, 2009: 179). (c) Traditionally it is held that a dot (*bindu*) after a short
vowel⁴⁸ or the dot itself represent the *niggahītaṃ* – with the *ṃ* being a
transliteration of the dot, referring to some traditional orthographical
representations of the phoneme (e.g. in the Sinhala script), equal to the
anusvāraḥ and *anunāsikaḥ* in Sanskrit⁴⁹ (Mogg: 42; Rūp: 3; Deokar, 2008:
114, 116; cf. “Anusvāra,” n.d.). (d) In fact, manuscripts vary greatly in rep-
resenting this letter; thus, we find, for example, variants for the word
“other” as *aṃṇo*, *aṇṇo* or for the word “question” as *paṃha*, *paṇṇha* and *paṇ-*

⁴⁶ The letter *a* is, again, just added for ease of pronunciation.

⁴⁷ In Pāḷi, there is no difference between the *anunāsiko* and the *niggahītaṃ*,
both can be used interchangeably. This can be gathered from numerous passages
where the *anunāsiko* stands for the *niggahītaṃ*. To quote the *Paramatthajotikā I*
(p. 63) as an example, relating that the *anunāsiko*, there clearly representing the
niggahītaṃ, was inserted for metrical reasons: ***sabbattha sotthiṃ gacchantīti [...]***
anunāsiko cettha gāthābandhasukhatthaṃ vuttoti veditabbo.

⁴⁸ If a long vowel falls before a *niggahītaṃ*, it is shortened (“Pali,” n.d.).

⁴⁹ It depends, however, which definition one refers to (cf. Deokar, 2009: 180).

ha (Frankfurter, 1883: 7). **(e)** In the different modern American Standard Code for Information Interchange (ASCII) transliteration schemes, it is represented in a number of alternative ways – this, nevertheless, makes no difference whatsoever as to pronunciation. In the following, a selection of the more popular schemes:

- International Alphabet of Sanskrit Transliteration (IAST): ṃ.⁵⁰
- International Organization for Standardization (ISO; ISO 15919): ṁ.⁵¹
- Indian Languages Transliteration (ITRANS): M; N; .m.
- Velthuis: .m.

(a) The *niggahītaṃ* is capable of forming homorganic nasals, i.e. the place of articulation when pronouncing the *niggahītaṃ* is assimilated to that of the end-group nasals in the Pāli alphabet, thereby being displaced by them, these and the *niggahītaṃ* thus becoming distinct phonetically (Kacc 31, 466, 537; Rūp: 28; cf. Deokar, 2008: 113; Levman, 2020: 29; Thit-zana, 2016: 52). **(b)** These are the respective parameters for the assimilation of the *niggahītaṃ* to the end-group nasals:

- *ṇ* before a velar stop (*k, kh, g, gh*).
- *ṅ* before a palatal stop (*ca, cha, ja, jha*).
- *ṇ* before a retroflex stop (*ṭa, ṭha, ḍa, ḍha*).
- *n* before a dental stop (*ta, tha, da, dha*).
- *m* before a labial stop (*pa, pha, ba, bha*).

(a) The place of articulation in the case of the *niggahītaṃ* is the nose (*nāsikaṭṭhānaja* – “born in the place of the nose” or *nāsikaja* – “nose-born”; Rūp: 2; Nāṇadhaja, 2011: 12). **(b)** The place for the pronunciation of the end-group nasals is twofold: they are verbalized in the place of the nose (*nāsikaṭṭhānaja*), as is the *niggahītaṃ*, but in addition to that also in their

⁵⁰ As in the Romanized editions of the *Chaṭṭhasaṅgāyana* (Sixth Buddhist Council) and also in those of the later Pali Text Society.

⁵¹ This rendition also corresponds to the Unicode character.

“own place” of articulation (*sakaṭṭhānaja*), as elaborated above. **(c)** For example, the labial [m] is verbalized in the place of the nose (*nāsikaṭṭhānaja*) and with the lips (*oṭṭhaja* – “lip-born”; Rūp: 2; Ñāṇadhaja: 12). **(d)** This demonstrates that the end-group nasals and the *niggahītaṃ* are distinct from each other.

(a) The *Padarūpasiddhi* mentions that this phoneme is called *niggahītaṃ* because the instrument of articulation (*karaṇaṃ*) is restrained (*niggahīta*, past passive participle of *niggaṇhāti* – “press,” “repress”) by an obstructed opening (*mukhenāvivaṭena*) and because it is based upon (*nissāya*) the short vowels *a*, *i*, *u*, taking them up (*gayhati*, passive form of *gaṇhāti* – also “seize,” “acquire,” “grasp”; Rūp: 3; Deokar, 2008: 113; Warder, 1963/2001: 4). **(b)** In fact, the 17th century CE *Kaccāyana-vañṇanā* (as cited by Deokar, 2009: 178, 181, n. 6) explains that the nose is defined as the articulatory organ (*nāsikāsāṅkhātaṃ karaṇaṃ*) – and that this is what is restrained when pronouncing the *niggahītaṃ*. **(c)** This process of restraining, as per that text, also refers to the phrase “by an obstructed opening” (*mukhenāvivaṭena*). **(d)** This must refer to the partial occlusion instanced by the soft palate, restricting parts of the open airflow of an released (*vimutta*) or oral vowel and allowing parts to escape through the nose and the mouth respectively, since a full occlusion would produce end-group nasals, as discussed above (e.g. [m] when closing the lips or [ŋ] with occlusion of the oral cavity’s back by the tongue). **(e)** As a technical term, *vimutta* stands in direct opposition to the *niggahītaṃ* and denotes denasalization (Deokar, 2008: 118). **(f)** This must inform our understanding of the commentarial contrast of oral vowels with the *niggahītaṃ*: “**Released (vimutta)**’: that which, not having nasalized, is spoken with an unobstructed opening, having let loose, [and] unrestrained (*aniggahetvā*) the articulatory organs [...] ‘*pattakallaṃ*’ should be spoken having nasalized with obstructed opening, [but] ‘*pattakallā*’ is called an utterance freed (*vimuttavacanāṃ*) from the *niggahītaṃ* [i.e. ‘the restrained’], having not nasalized by

an unobstructed opening”⁵² (Sp V: 56). On this contrast, see further also Deokar (pp. 112–3, 116–8).

(a) Scholars who investigated the phonetic reality of the *niggahītaṃ* now also seem to regard it as a nasalization of the short vowels *a*, *i*, *u* (Collins, 2006: 1; Deokar, personal communication, July 3, 2020; Geiger, 1916/1956: 61; Levman, personal communication, July 8, 2020). (b) Therefore, the most likely pronunciation of the *niggahītaṃ* corresponds to nasalized vowels as they occur in French, that is:

- *aṃ* [ã] = “genre.”
- *iṃ* [ĩ] = “vin.”
- *uṃ* [ũ] = “un.”

(c) That this phenomenon of vowel nasalization is the correct interpretation is furthermore corroborated by the probability of it not having been a foreign element in the major autochthonous language groups present during the floruit of the Buddha. (d) These groups are the ancestral prototypes of modern languages in which this is a recognized feature (as in Dravidian Tamil or Santali). (e) In a similar way, this holds true for nasal assimilation (see above).

(a) What emerges from the above is that the pronunciation of the *niggahītaṃ* as it is commonly realized in the traditional Buddhist countries (in Sri Lanka and Thailand as [ŋ] and in Burma as [m]) does not reflect early usage. (b) However, to dismiss these articulations offhand would be too rash an approach, as can be gleaned from the instructions on what the proper methods for giving the Three Refuges (*tisaraṇaṃ*) within the bounds of the going forth as a *sāmanera* (*sāmaṇerapabbajjā*) and the ordination as a bhikkhu (*upsampadā*) imply: “But with the giving these ‘*buddhaṃ saraṇaṃ gacchāmi*’ as being joined as one (*ekasambandhāni*), they

⁵² *Vimuttanti yaṃ karaṇāni aniggahetvā vissajjetvā vivaṭeṇa mukhena anunāsikaṃ akatvā vuccati. [...] pattakallā’ti avivaṭeṇa mukhena anunāsikaṃ katvā vat-tabbe ‘pattakallā’ti vivaṭeṇa mukhena anunāsikaṃ akatvā vacanaṃ niggahitassa vimuttavacanaṃ nāma.*

should be given having nasalized the end [of each word]; ‘*buddhaṃ saraṇaṃ gacchāmi,*’ having broken up [the words] (*vicchinditvā*), they should be given, having produced the letter *m*” (Sp III: 10). **(c)** Within the field of monastic legislation (*vinaya*), these two methods represent different but equally valid approaches to giving the Three Refuges during the mentioned procedures.⁵³ **(d)** However, it is important to note that fastidious attention and adherence to proper pronunciation – apart from the just-provided instance of leeway – is an essential part of Theravāda legislative speech (*kammavācā*), insofar that an invalidation happens if “instead of an unaspirated sound [e.g. *ka, pa, ba*] an aspirated sound [*kha, pha, bha*], instead of an aspirate an unaspirate one, instead of an oral one (*vimutta*) a *niggahītaṃ*, instead of a *niggahītaṃ* an oral one is produced [...]”⁵⁴ (Sp V: 55–6). **(e)** So, the statement of Deokar (2009: 181) that “convention always supersedes grammar” might be a good principle to adopt for monastic activities such as chanting but less so for legislative speech.

⁵³ From a linguistic standpoint, however, articulating an [m] at the end of a Middle Indic (MI, incl. Pāli) word does not constitute regular pronunciation. According to the operant rules of MI, it changes into the *niggahītaṃ*.

⁵⁴ [...] *sithile kattabbe dhanitaṃ, dhanite kattabbe sithilaṃ, vimutte kattabbe niggahitaṃ, niggahite kattabbe vimuttanti imāni cattāri byañjanāni antokammavācāya kammaṃ dūsentī*. However, other confusions of letters such that of long *ā* for short *a* do not upset (*kuppati*) legislative speech. There is also a difference of opinion between the *suttanta* and *vinaya* elders in that the former group accepts a confusion of *da* for *ta*, *ta* for *da*, *ca* for *ja*, *ja* for *ca*, *ya* for *ka* and *ka* for *ya*, but for legislative speech this is not suitable, whence the latter group avoids these faults (Sp V: 55–6).

Sandhi

(a) Sandhi denotes the process of euphonic (or “pleasing,” “harmonious”) changes that may occur when two letters meet during the formation of words and compound words (Duroiselle, 1906/1997: 6; Thitzana, 2016: 35; Perniola, 1997: 7) and may be translated as “euphonic combination,” “union,” “junction” or “connection.” **(b)** The changes transpire by means of elisions, substitution, augmentation etc. (Yindee, 2018: 46). **(c)** When it occurs within a word, it is called *akkharasandhi* (“sandhi of letters,” aka “internal sandhi”) and *padasandhi* (“sandhi of words,” aka “external sandhi”) when two words meet, either to form compound words or to remain separate (Gair & Karunatilake, 1998: 9; Nhu Lien, 2007: 28) – examples for internal sandhi: *saṃ + yuttaṃ → saññuttaṃ*; and external sandhi: *tassa + iti → tassāti*. **(d)** There are four types of sandhi:

- Vowel sandhi (*sarasandhi*): meeting of two vowels, as final and initial member.
- Consonantal sandhi (*byañjanasandhi*): meeting of final vowel and initial consonant.
- *Niggahīta* sandhi: meeting of the *niggahītaṃ* (*ṃ*) as final member and vowel or consonant as following initial.
- Natural sandhi (*pakatisandhi*): retention of the structural pattern with no union taking place.

(a) The rules for the blending of two consonants also belong to the category of sandhi (Duroiselle, 1906/1997: 6) but will be dealt with here in the following chapter “Morphology.” **(b)** Let it be remarked that all the necessary morphological procedures to be elucidated in this chapter are on occasions applicable for the verbs of all roots (Kacc 517). **(c)** The references to Kaccāyana are as indicated after the rules, others are positioned next to the section headings. **(d)** Guide to the following section on sandhi:

- → = “becomes,” “changes into,” “results in.”
- → ∅ = elision.
- ∅ → = insertion.
- / = “in the environment of.”

- + = meeting.
- # = word boundary.
- [] = optionality (only after symbols).
- (Ṽ) = short vowel.
- (V̄) = long vowel.
- (C) = consonant.
- (CC) = double consonant.

(a) The underscores (__) indicate the position in the environment where the action happens that is expressed as a rule before the slash; for example, the formula: “vowel \rightarrow (Ṽ) [usually] / __ vowel [same class]” says that any vowel (vowel) in the environment *before* another vowel (/ __ vowel) of the same class is usually lengthened (\rightarrow (Ṽ) [usually]). **(b)** If it should express that the lengthening would happen after (instead of before) another vowel, one would simply change the element “/ __ vowel” as above to “/ vowel __,” with the underscores in the posterior position. **(c)** If there is some additional rule after a comma, following the element which occurs after the slash, that indicates that it applies to this element when the change of the pre-slash rule has occurred or simultaneously (e.g. “vowel \rightarrow \emptyset [occasionally] / __ vowel, vowel \rightarrow (V̄)”) means after the vowel has been elided – which happens occasionally – when coming before another vowel, that last-mentioned vowel is also lengthened (vowel \rightarrow (V̄)). **(d)** To give two other general examples to facilitate comprehension:⁵⁵ “vowel \rightarrow \emptyset [usually] / o __” signifies that a vowel is usually elided in the environment after the vowel *o*. Formula “ $v \rightarrow b$ / # __” means that *v* changes into *b* after the beginning of a word – in the following the respective rules in full.

Vowel Sandhi (*sarasandhi*) (Duroiselle, 1906/1997: 7–12)

1. Vowel \rightarrow \emptyset / __ vowel (e.g. *yassa + indriyāni* \rightarrow *yassindriyāni*; Kacc 12).

⁵⁵ For exemplification of explicit instances, see just below.

2. Vowel / __ dissimilar vowel, dissimilar vowel → ∅
(e.g. *cakkhu + indriyaṃ → cakkhundriyaṃ*; Kacc 13).
3. Vowel → ∅ [occasionally] / __ vowel, vowel → (Ṽ)
(e.g. *tatra + ayaṃ → tatrāyaṃ*; Kacc 15).
4. Vowel (Ṽ) → (Ṽ) [occasionally] / __ vowel, vowel → ∅
(e.g. *vi + atimānenti → vītimānenti*; Kacc 16).
5. *a* or *ā* → ∅ [occasionally] / __ *i* or *ī*, *i* or *ī* → *e*
(e.g. *upa + ikkhati → upekkhati*; Kacc 14).
6. *a* or *ā* → ∅ [occasionally] / __ *u* or *ū*, *u* or *ū* → *o*
(e.g. *canda + udayo → candodayo*; Kacc 14).

Exceptions:

- *a* → (Ṽ) / __ *iti*, *i* → ∅ (e.g. *tassa + iti → tassāti*).
 - *a* / __ *i*, *i* → ∅ (e.g. *pana + ime → paname*).
 - *ā* → ∅ / __ *i* (e.g. *seyyathā + idaṃ → seyyathidaṃ*).
7. Vowel (Ṽ, Ṽ) → (Ṽ) [usually] / __ vowel [same class]
(e.g. *a + a → ā*; *i + ī → ī*; *ū + u → ū*).
 8. Vowels before particles beginning with *a*, *i*, *e*
(e.g. *atha*, *iva*, *eva*) follow the rules of sandhi thus:
 - *itthī + iti → itthīti*.
 - *e* / __ *e*, *e* → ∅ (e.g. *sabbe + eva → sabbeva*).
 - *o* → ∅ / __ *e* (e.g. *so + eva → sveva*).
 - *a* → ∅ / __ *ettha* (e.g. *na + ettha → nettha*).
 9. *e* → ∅ / __ dissimilar (Ṽ) (e.g. *me + āsi → māsī*).
 10. *e* → ∅ / __ dissimilar (Ṽ) followed by (CC)
(e.g. *sace + assa → sacassa*).
 11. Vowel → ∅ [usually] / *o* __ (e.g. *cattāro + ime → cattārome*).
 12. Vowel (Ṽ) → (Ṽ) [occasionally] / __ *eva*, *eva* → *ri*
(e.g. *yathā + eva → yathariva*; Kacc 22).
 13. *abhi* → *abbh* / __ dissimilar vowel (e.g. *abhi + uggacchati → abbha uggacchati → abbhugacchati*; Kacc 44, 46).

14. *ti* → *c* [occasionally], *c* → *cc* (e.g. *iti* + *etaṃ* → *iccetamaṃ*; Kacc 19, 28, 47).
15. *di* → *jj* / __ dissimilar vowel (e.g. *nadī* + *ā* → *najjā*).
16. *adhi* → *ajjha* / __ dissimilar vowel (e.g. *adhi* + *okāse* → *ajjhokāse*; Kacc 45).

Transformation into Semi-Vowels (ādeso)⁵⁶

17. *i* → *y* / __ dissimilar vowel (e.g. *vi* + *ākāsi* → *vyākāsi*; Kacc 21).
18. *e* [of *me*, *te*, *ke*, *ye* etc.] → *y* / __ *a* followed by (CC) (e.g. *ke* + *assa* → *kyassa*).
19. *e* [of *me*, *te*, *ke*, *ye* etc.] → *y* / __ *a* followed by (C), *a* → (Ṽ) (e.g. *me* + *ahaṃ* → *myāhaṃ*; cf. Kacc 17).

Exceptions:

- *e* → Ø / __ vowel (Ṽ) (e.g. *me* + *āsi* → *māsi*).
 - *e* → Ø / __ vowel (Ṽ) followed by (CC) (e.g. *sace* + *assa* → *sacassa*).
 - *e* / __ vowel, vowel → Ø (e.g. *te* + *ime* → *teme*).
 - *e* → Ø / __ *a* → (Ṽ) (e.g. *sace* + *ayaṃ* → *sacāyaṃ*).
20. *u* → *v* [occasionally] / __ dissimilar vowel (e.g. *anu* + *eti* → *anveti*; Kacc 18).
 21. *o* → *v* [occasionally] / __ dissimilar vowel (e.g. *yo* + *ayaṃ* → *yvāyaṃ*; Kacc 18).

Exceptions:

- *u* → Ø / __ dissimilar vowel (e.g. *sametu* + *āyasmā* → *sametāyasmā*).
- *u* → (Ṽ) / __ *i* (e.g. *sādhū* + *iti* → *sādhūti*).
- *o* → Ø [usually] / __ vowel (Ṽ) followed by (CC).

⁵⁶ This term also refers to the transformation of one vowel into another (Thitzana, 2016: 570).

- $o \rightarrow \emptyset$ / __ vowel (ṽ) followed by (CC)
(e.g. *kuto + ettha* → *kutettha*).

Consonantal Insertion (āgamo)

22. To avoid a hiatus, not seldom the following letters are inserted between two vowels: $y, v, m, d, n, t, r, l (= \text{ḷ}), h$ (e.g. *na + imassa* → *nayimassa*; $\sqrt{bhū} + ādāya$ → *bhūvādāya*; *idha + āhu* → *idhamāhu* etc.; Kacc 35).
23. Vowel → \emptyset / __ consonant, $\emptyset \rightarrow o$ [occasionally]
(e.g. *para + saḥassaṃ* → *parosaḥassaṃ*; Kacc 36).
24. Vowel / __ vowel or consonant, $\emptyset \rightarrow \eta$
(e.g. *ava + siro* → *avamsiro*; Kacc 37).
25. *Putha*, $\emptyset \rightarrow g$ [occasionally] / __ vowel
(e.g. *putha + eva* → *puthageva*; Kacc 42).
26. \bar{a} [of *pā*] → (ṽ), $\emptyset \rightarrow g$ [occasionally] / __ vowel
(e.g. *pā + eva* → *pageva*; Kacc 43).

Consonantal Sandhi (byañjanasandhi) (Duroiselle, 1906/1997: 15–6)

1. Vowel (ṽ) → (ṽ) [occasionally] / __ consonant (e.g. *yiṭṭhaṃ vā huttaṃ vā loke* → *yiṭṭhaṃ va huttaṃ va loke*; Kacc 26).
2. Vowel (ṽ) → (ṽ) / __ consonant (e.g. $\sqrt{su} + rakḥhaṃ$ → *sūrakḥhaṃ*).
3. Vowel (ṽ) / __ consonant, (C) → (CC) (e.g. *idha + pamādo* → *idhappamādo*; usually after: *u, upa, pari, ati, pa, a, anu*, etc.).
4. Vowel (ṽ) → (ṽ) [occasionally] / __ consonant
(e.g. *muni + care* → *munī care*; Kacc 25).
5. Vowel → \emptyset and is replaced by *a* [occasionally] / __ consonant
(e.g. *eso dhammo* → *esa dhammo*; Kacc 27).
6. Vowel → *bb* / __ *v* (e.g. *ni + vānaṃ* → *nibbānaṃ*).
7. Vowel / __ consonant, consonant (C) → (CC)
(e.g. *idha pamādo* → *idhappamādo*; Kacc 28).
8. Vowel (ṽ) [of particles] → (ṽ) [usually] / __ reduplicated consonant (e.g. *ā + kamati* → *akkamati*).

9. *o* [of *so, eso, ayo, mano, tamo, paro, tapo* and a few others] → *a* [occasionally] / __ consonant (e.g. *esa dhammo; sa attho; ayapattaṃ*).
10. *ava* → *o* [occasionally] / __ consonant
(e.g. *ava + naddha* → *onaddha*; Kacc 50).
11. *dha* → *da* [occasionally] / __ vowel
(e.g. *ekaṃ + idha + ahaṃ* → *ekamidāhaṃ*; Kacc 20).
12. *dha* → *ha* [occasionally] (e.g. *rudhira* → *ruhira*; Kacc 20).
13. *d* → *t* (e.g. *sugado* → *sugato*; Kacc 20).
14. *t* → *ṭ* (e.g. *pahato* → *pahaṭo*; Kacc 20).
15. *t* → *k* (e.g. *niyato* → *niyako*; Kacc 20).
16. *t* → *dh* (e.g. *gantabba* → *gandhabbo*; Kacc 20).
17. *tt* → *tr* (e.g. *attaḷo* → *atraḷo*; Kacc 20).
18. *tt* → *cc* (e.g. *batto* → *bacco*; Kacc 20).
19. *g* → *k* (e.g. *hatthupaga* → *hatthupaka*; Kacc 20).
20. *r* → *l* (e.g. *paripanno* → *palipanno*; Kacc 20).
21. *y* → *j* (*gavayo* → *gavajo*).
22. *y* → *k* (e.g. *saye* → *sake*; Kacc 20).
23. *vv* → *bb* (e.g. *kuvvato* → *kubbato*; Kacc 20).
24. *k* → *y* (*sake pure* → *saye pure*).
25. *j* → *y* (*nijaṃputtaṃ* → *niyaṃputtaṃ*; Kacc 20).
26. *k* → *kh* (*nikamati* → *nikhamati*; Kacc 20).
27. *p* → *ph* (e.g. *nipatti* → *niphatti*; Kacc 20).
28. *pati* → *paṭi* [occasionally] / __ vowel (Kacc 48).
29. *putha* [inter alia] → *puthu* / __ consonant (Kacc 49).

Niggahīta Sandhi (Duroiselle, 1906/1997: 14–5)

1. *ṃ* / __ consonant (e.g. *taṃ dhammaṃ kataṃ*).
2. *ṃ* → respective nasal: *ṇi, ñi, ṇi, ni, m* [occasionally] / __ consonant
(e.g. *raṇaṃ + jaho* → *ranaṇjaho*; *taṇhaṃ + karo* → *taṇhaṅkaro*;
saṃ + ṭhito → *saṅṭhito*; Kacc 31).
3. *ṃ* → *l* / __ *l* (e.g. *paṭi + saṃ + līno* → *paṭisallīno*;
saṃ + lekko → *sallekko*).

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4. $\eta \rightarrow \tilde{n}$ [occasionally] / __ e [or h] (e.g. *taṃ + eva* → *taññeva*; *evaṃ + hi* → *evañhi*; Kacc 32; for doubling of the consonant, see under “Consonantal Sandhi (*byañjanasandhi*),” pt. 7.; Kacc 28).
5. $\eta \rightarrow \tilde{n}$ [occasionally] / __ y (e.g. *saṃ + yuttaṃ* → *saññuttaṃ*; Kacc 33; for doubling of the consonant, see under “Consonantal Sandhi (*byañjanasandhi*),” pt. 7.; Kacc 28).
6. $\eta \rightarrow d$ [occasionally] / __ vowel (e.g. *etaṃ + attho* → *etadattho*; Kacc 34).
7. $\eta \rightarrow m$ [occasionally] / __ vowel (e.g. *taṃ ahaṃ* → *tamaḥaṃ*; Kacc 34).
8. $\eta \rightarrow \emptyset$ [occasionally] / __ consonant (e.g. *ariyasaccānaṃ + dassanaṃ* → *ariyasaccānadassanaṃ*; Kacc 39).
9. $\eta \rightarrow \emptyset$ [occasionally] / __ vowel (e.g. *tāsaṃ + ahaṃ santike* → *tāsāhaṃ santike*; Kacc 38).
10. Vowel → \emptyset [occasionally] / η __ (e.g. *kiṃ + iti* → *kinti*; Kacc 40).
11. Vowel → \emptyset , consonant (CC) → consonant (C) / η __ (e.g. *evaṃ assa* → *evaṃsa*; Kacc 41).
12. $\emptyset \rightarrow \eta$ / __ vowel [or consonant] (e.g. *ava siro* → *avaṃsiro*; Kacc 37).

Natural Sandhi (*pakatisandhi*)

1. Vowel / __ consonant (e.g. *mano + pubbaṅgamā* → *manopubbaṅgamā*; Kacc 23).
2. Vowel / __ vowel (e.g. *ko imaṃ*; Kacc 24).
3. i [and u] / __ any verb w/ vowel initial (e.g. *gāthāhi ajjhabhāsi*).
4. i [and u] / __ any verb.
5. Vowel / __ vocative case (e.g. *kassapa etaṃ*).
6. Final long vowel remains unchanged if not followed by *iti* or not being compounded.
7. Vowel / __ particle w/ initials other than a, i, e (e.g. *atha kho āyasmā*).

Morphology

(a) The following morphological changes happen mostly in the formation of the passive, past passive participle, the stems built from the third class root affixes, of the infinitive, absolutive, the future passive participle and in the formation of the desiderative – also under the influence of certain affixes in the derivation of nouns.⁵⁷ (b) Regressive assimilation (←) is the more common. (c) The *ṇ* placed traditionally before all causative affixes to denote vowel increase (*vuddhi*) in the root (see below the chapter “Vowel Gradation”) is always to be elided (e.g. $\sqrt{kara} + \text{ṇaya} + \text{ti} \rightarrow \text{kārayati}$; Kacc 523). (d) References to Kaccāyana are again as indicated – others are placed next to the section headings. (e) The paradigms are as follows (Duroiselle, 1906/1997: 17–8):

1. Mute⁵⁸ → mute / mute __ (e.g. $\sqrt{saja} + \text{ta} \rightarrow \text{satta}$).
2. Dental → guttural / guttural __ (e.g. $\sqrt{laga} + \text{na} \rightarrow \text{lagna} \rightarrow \text{lagga}$).
3. Dental voiceless → retroflex / palatals __ (e.g. $\sqrt{maja} + \text{ta} \rightarrow \text{maṭṭha}$ or maṭṭa); *j* and *c* → *t* [occasionally] / __ *t* (e.g. $\sqrt{bhujā} + \text{ta} \rightarrow \text{bhutta}$; $\sqrt{muca} + \text{ta} \rightarrow \text{mutta}$).
4. Dental voiceless → retroflex / retroflex __ (e.g. $\sqrt{kuṭṭa} + \text{ta} \rightarrow \text{kuṭṭha}$).
5. Dental → consonant / __ consonant (e.g. $\sqrt{uda} + \text{gaṇhāti} \rightarrow \text{uggaṇhāti}$).
6. Voiced aspirate → voiced unaspirate / __ *t*, *t* → *dh* (e.g. $\sqrt{rudhi} + \text{ta} \rightarrow \text{rud} + \text{dha} \rightarrow \text{ruddha}$).
7. Voiceless unaspirated guttural or labial → voiceless dental / __ voiceless dental (e.g. $\sqrt{tapa} + \text{ta} \rightarrow \text{tatta}$).
8. Voiced or voiceless unaspirated dental → labial / __ labial (e.g. $\text{tad} + \text{purisa} \rightarrow \text{tappurisa}$).

⁵⁷ See chapters “*Kita* and *Taddhita* Affixes” and “*Uṇādi* Affixes.”

⁵⁸ Mute because they require closure or contact (*phasso*) in their place of articulation and the stopping of the breath. Not to be confused with surd; i.e. unvoiced consonants. They are: *k, kh, g, gh, c, ch, j, jh, ṭ, ṭh, ḍ, ḍh, t, th, d, dh, p, ph, b, bb*. As with the letters in the alphabet, the *a* appended to the Pāli roots provided is just for ease of utterance.

9. $n \rightarrow \emptyset$ [occasionally m] / __ *ta* (of past passive participle; e.g. $\sqrt{mana} + ta \rightarrow mata$).

Assimilation of y ⁵⁹ (Duroiselle, 1906/1997: 19–20)

10. Consonant $\leftarrow y$ (e.g. $\sqrt{divu} + ya \rightarrow divva \rightarrow dibba$), also in the middle of a compound word (e.g. $api + ekacce \rightarrow apyekacce \rightarrow appekacce$).
11. $vv \rightarrow bb$ (e.g. $\sqrt{divu} + ya \rightarrow divva \rightarrow dibba$).
12. \bar{a} [of $\sqrt{d\bar{a}}$, $\sqrt{p\bar{a}}$, $\sqrt{h\bar{a}}$, $\sqrt{m\bar{a}}$ and $\sqrt{\bar{n}\bar{a}}$] $\rightarrow eyya$ [occasionally] / __ *ya* (e.g. $\sqrt{d\bar{a}} + ya \rightarrow deyyam$ – “something to give”; Kacc 544).
13. $\emptyset \rightarrow ya$ [occasionally] / *da-* and *dha-*ending roots __ *tuna*, *tvāna* and *tvā* [suffixes] (e.g. $u + pada + ya + tvā \rightarrow uppajjivā$; Kacc 606).
14. $ty \rightarrow cc$ (e.g. $\sqrt{sata} + ya \rightarrow satya \rightarrow sacca$).
15. $dy \rightarrow jj$ (only after \sqrt{mada} and \sqrt{vada} ; e.g. $\sqrt{mada} + ya \rightarrow madya \rightarrow majja$; Kacc 544).
16. $dhy \rightarrow jjh$ (e.g. $\sqrt{rudha} + ya \rightarrow rudhya \rightarrow rujjha$).
17. $thy \rightarrow cch$ (e.g. $tath + ya \rightarrow tathya \rightarrow taccha$).
18. $my \rightarrow mma$ (Kacc 544).
19. $jy \rightarrow gga$ (e.g. $\sqrt{yuja} + ya \rightarrow yogga$; Kacc 544).
20. $y \rightarrow$ sibilant / sibilant __ (e.g. $\sqrt{pasa} + ya \rightarrow pasya \rightarrow passa$).
21. $v \rightarrow b / \#$ __ (e.g. $vi + \bar{a}karaṇam \rightarrow vy\bar{a}karaṇam \rightarrow by\bar{a}karaṇam$).
22. Dental $\rightarrow y$ / __ *y* (e.g. $\sqrt{ud} + yuñjati \rightarrow uyyuñjati$).
23. $u \rightarrow (\bar{V})$ [of \sqrt{guha} and \sqrt{dusa}] / __ causative affixes (e.g. $\sqrt{guha} + aya + ti \rightarrow gūhayati$ – “causes to protect,” “hide”; Kacc 486).
24. $ya \rightarrow abba$ / $\sqrt{bhū}$ __ (e.g. $\sqrt{bhū} + ya \rightarrow bhabbo$; Kacc 543).
25. a and v [of \sqrt{vaca} , \sqrt{vasa} , \sqrt{vaha}] $\rightarrow u$ [occasionally] / __ *ya* (e.g. $\sqrt{vaca} + ya + ti \rightarrow vuccati$; Kacc 487).
26. Initial vowels [of $\sqrt{d\bar{a}}$, $\sqrt{dh\bar{a}}$, $\sqrt{m\bar{a}}$, $\sqrt{ṭh\bar{a}}$, $\sqrt{h\bar{a}}$, $\sqrt{p\bar{a}}$, \sqrt{maha} , \sqrt{matha}] $\rightarrow \bar{i}$ / __ *ya* (e.g. $d\bar{a} + ya + ti \rightarrow dīyati$; Kacc 502).
27. Consonant y [of \sqrt{yaja}] $\rightarrow i$ / __ *ya* (e.g. $\sqrt{yaja} + ya + ti \rightarrow ijate$ – “He is worshipped”; Kacc 503).

⁵⁹ Assimilation of this type happens mostly in the formation of the passive voice, absolutes, verbal bases/stems of the third class and derived nouns.

Assimilation of r (Duroiselle, 1906/1997: 21)

28. $r \rightarrow \emptyset$ / __ mute (e.g. $\sqrt{kara} + ta \rightarrow kata$).
29. $r \rightarrow \emptyset$, $a \rightarrow (\bar{V})$ / __ mute (incl. lengthening of preceding a ;
e.g. $\sqrt{kara} + tabba \rightarrow k\bar{a}tabba$).
30. $n \rightarrow \bar{n}$ / r __, $r \rightarrow \bar{n}$ (e.g. $\sqrt{cara} + na \rightarrow carn\bar{a} \rightarrow ci\bar{n}\bar{n}a$).
31. $r \rightarrow l$ / __ l (e.g. $dur + labho + si$ [o] $\rightarrow dullabho$).
32. When any r -morpheme is appended to a root, the first component vowel of that root and its last consonant are usually elided as well the vowel and the r of the r -morpheme (Kacc 539).

Assimilation of s (Duroiselle, 1906/1997: 21–2)

33. $j + sa \rightarrow kkh$ / __ sa (e.g. $bubhuj + sa \rightarrow bubhukkha$).
34. $p + sa \rightarrow cch$ / __ sa (e.g. $jigup + sa \rightarrow jiguccha$).
35. $t + sa \rightarrow cch$ / __ sa (e.g. $tikit + sa \rightarrow tikiccha$).
36. $s + sa \rightarrow cch$ / __ sa (e.g. $jighas + sa \rightarrow jighaccha$).
37. $y \rightarrow s$ [occasionally] / sa __ (e.g. $\sqrt{nasa} + ya \rightarrow nassa$;
 $alasa + ya + si$ [$a\bar{m}$] $\rightarrow \bar{a}lasya\bar{m}$).
38. $t \rightarrow \bar{t}$ / s __ (e.g. $\sqrt{kasa} + ta \rightarrow ka\bar{t}\bar{t}ha$).
39. Dental $\rightarrow s$ / __ s (e.g. $\sqrt{uda} + s\bar{a}ha \rightarrow uss\bar{a}ha$).
40. $s \rightarrow t$ / __ t (e.g. $\sqrt{jhasa} + ta \rightarrow jhatta$).
41. $s \rightarrow tth$ / __ t (e.g. $\sqrt{vasa} + ta \rightarrow vuttha$).

Assimilation of h (Duroiselle, 1906/1997: 22–3)

42. Consonant \rightarrow aspirated consonant / __ h
(e.g. $\sqrt{uda} + harati \rightarrow uddharati$).
43. $h\bar{n} \rightarrow \bar{n}h$ / __ \bar{n} (e.g. $\sqrt{gaha} + \bar{n}a \rightarrow gah\bar{n}a \rightarrow ga\bar{n}ha$).⁶⁰
44. $h \rightleftharpoons y$ and in some instances $ya \rightarrow la$ (e.g. $oruh + ya \rightarrow oruyha$; Kacc 488).
45. $h \rightleftharpoons v$ (e.g. $jihv\bar{a} \rightarrow jivh\bar{a}$).
46. $h \rightarrow y$ [seldom] / __ y (e.g. $leh + ya \rightarrow leyya$).

⁶⁰ Kacc 490 explains it like this: h [of \sqrt{gaha}] $\rightarrow \emptyset$ when $\emptyset \rightarrow \bar{n}h\bar{a}$ (e.g. $ga\bar{n}h\bar{a}ti$).

47. $h \rightarrow gh$ [occasionally] / # __ (e.g. *hammati* → *ghammati*).
48. $h + t \rightarrow ddh$ (e.g. $\sqrt{duha} + ta \rightarrow duddha$).
49. $h + t \rightarrow dh$ (sometimes; e.g. $\sqrt{liha} + tuṃ \rightarrow ledhuṃ$).

Reduplication⁶¹ (Duroiselle, 1906/1997: 83)

1. The second and fourth consonants of the consonant groups (sing. *vaggo*) are added to the first and third respectively (e.g. *yatra* *ṭhitam* → *yatraṭṭhitam*; Kacc 29).⁶²
2. Initial vowel [of roots] → (\bar{V}) (e.g. $\sqrt{ah} \rightarrow \bar{ā}ha$).
3. The reduplicated vowels → *i*, \bar{i} and *a* [occasionally] (e.g. *jigucchati*; Kacc 465).
4. A guttural is reduplicated by its corresponding palatal (e.g. $\sqrt{kita} + cha + ti \rightarrow cikicchati$; Kacc 462).
5. An unaspirate is always reduplicated by an unaspirate (e.g. $\sqrt{chida} \rightarrow ciccheda$ – “It was cut”; Kacc 458, 462).
6. An aspirate is reduplicated by its unaspirate (e.g. $\sqrt{bhujā} \rightarrow bubhukkhati$; Kacc 458, 461).
7. The initial *h* of a root is reduplicated by *j* (e.g. $\sqrt{hā} \rightarrow jahāti$; Kacc 464).
8. *v* is reduplicated by *u* [usually] (e.g. $\sqrt{vasa} \rightarrow uvāsa$).
9. *a* or \bar{a} takes *a* (e.g. $\sqrt{dhā} \rightarrow dadhā$; Kacc 460).
10. *i* or \bar{i} takes *i* [occasionally] (e.g. $\sqrt{kita} \rightarrow cikicchā$; Kacc 460).
11. *u* or \bar{u} takes *u* but occasionally *a* (e.g. $\sqrt{bhū} \rightarrow babhuva$).
12. *i* → *e* [occasionally] (e.g. $\sqrt{chida} \rightarrow ciccheda$).
13. *u* → *o* [occasionally] (e.g. $\sqrt{suca} \rightarrow susoca$).
14. *a* [of a root] → (\bar{V}) (e.g. $\sqrt{vada} \rightarrow uvāda$).
15. *m* [of $\sqrt{māna}$] → *v* [occasionally] / __ reduplicated vowel (e.g. *vīmaṃsati*; Kacc 463).

⁶¹ Mainly doubling of the first root consonant together with a following vowel in the formation of the active base/stem of the third class of conjugation.

⁶² Exceptions: *idha*, *cetaso*, *dalham*, *gaṇhāti*, *thāmasā*.

16. $\sqrt{māna} \rightarrow maṃ$ [occasionally] / reduplicated vowel __ *sa*
(e.g. *vīmaṃsati*; Kacc 467).
17. $\sqrt{pā} \rightarrow vā$ [occasionally] / reduplicated vowel __ *sa*
(e.g. *pivāsati*; Kacc 467).
18. Reduplicated *k* [of \sqrt{kita}] $\rightarrow t$ / __ reduplicated vowel
(e.g. *tikicchati*; Kacc 463).
19. $\emptyset \rightarrow ṃ$ [occasionally] / reduplicated vowel __
(e.g. *caṅkamati*; Kacc 466).

Further Morphological Changes

1. $\sqrt{pā} \rightarrow pivā$ [occasionally] (e.g. $\sqrt{pā} + ā + ti \rightarrow pivati$; Kacc 469).
2. $\sqrt{ñā} \rightarrow jā, jaṃ, nā$ [occasionally]
(e.g. $\sqrt{ñā} + a + ti \rightarrow jānāti$; Kacc 470).
3. $\sqrt{disa} \rightarrow passa, dissa, dakkha$ [occasionally]
(e.g. $\sqrt{disa} + a + ti \rightarrow passati$; Kacc 471).
4. $\sqrt{hara} \rightarrow gī$ / __ *sa* (e.g. *jigīsati*; Kacc 474).
5. $\sqrt{brū}$ and $\sqrt{bhū}$ change into *āha* and *bhūva* respectively / __
perfect endings (e.g. $\sqrt{brū} + a \rightarrow āha$; Kacc 475).
6. *m* [of \sqrt{gamu}] $\rightarrow cch$ [occasionally] / __ all conjugational root af-
fixes (e.g. $\sqrt{gamu} + a + māna + si$ [o] $\rightarrow gacchamāno$; Kacc 476).
7. Initial vowel [of \sqrt{vaca}] $\rightarrow o$ / __ aorist suffix
(e.g. $\sqrt{vaca} + uṃ \rightarrow avocum$; Kacc 477).
8. \bar{u} [of $\sqrt{hū}$] $\rightarrow eha, oha, e$ [occasionally] / __ future tense suffix,
future tense suffix may $\rightarrow \emptyset$ (e.g. $\sqrt{hū} + ssati \rightarrow hehiti$; Kacc 480).
9. \sqrt{kara} may $\rightarrow kāha$ [occasionally] / __ future tense suffix,
future suffix $\rightarrow \emptyset$ (Kacc 481).
10. \bar{a} [of $\sqrt{dā}$] $\rightarrow aṃ$ / __ present tense suffixes *mi* and *ma*
(e.g. $\sqrt{dā} + mi \rightarrow dammi$; Kacc 482; $ṃ \rightarrow m$ by Kacc 31).
11. Non-conjunct root vowels \rightarrow increase⁶³ [usually] / __
non-causative affixes (e.g. $\sqrt{hū} + a + ti \rightarrow hoti$; Kacc 485).

⁶³ See below the chapter “Vowel Gradation” for details.

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12. $\emptyset \rightarrow kha, cha, sa$ [occasionally] / $\sqrt{tija}, \sqrt{gupa}, \sqrt{kita}$ and $\sqrt{māna}$ __
(e.g. $\sqrt{tija} + kha + ti \rightarrow titikkhati$ - “He forbears [or ‘endures’]”;
Kacc 433).
13. $\sqrt{gaha} \rightarrow ghe$ / __ affix *ppa* (e.g. *gheppati*; Kacc 489).
14. $\sqrt{kara} \rightarrow kāsa$ [occasionally] / __ aorist suffix
(e.g. $\sqrt{kara} + \bar{i} \rightarrow akāsi$; Kacc 491).
15. Suffix *mi* $\rightarrow mhi$ [occasionally] / \sqrt{asa} __
(e.g. $\sqrt{asa} + mi \rightarrow amhi$ - “I am”; Kacc 492).
16. Suffix *ma* $\rightarrow mha$ [occasionally] / \sqrt{asa} __
(e.g. $\sqrt{asa} + ma \rightarrow amha$ - “We are”; Kacc 492).
17. Suffix *tha* $\rightarrow ttha$ [occasionally] / \sqrt{asa} __, *s* [of \sqrt{asa}] $\rightarrow \emptyset$
(e.g. $\sqrt{asa} + tha \rightarrow attha$ - “You are”; Kacc 493).
18. Suffix *ti* $\rightarrow tthi$ [occasionally] / \sqrt{asa} __
(e.g. $\sqrt{asa} + ti \rightarrow atthi$ - “[there] is”; Kacc 494).
19. Suffix *ti* $\rightarrow ssa$ / \sqrt{asa} __ (e.g. $\sqrt{asa} + ti \rightarrow assa$ -
“It should be”; Kacc 571).
20. $\emptyset \rightarrow i$ / $\sqrt{brū}$ __ *ti* (e.g. $\sqrt{brū} + a + ti \rightarrow braviti$ - “He says”; Kacc 520).
21. Suffix *tu* $\rightarrow tthu$ [occasionally] / \sqrt{asa} __
(e.g. $\sqrt{asa} + tu \rightarrow atthu$ - “Let it be”; Kacc 495).
22. *s* of [of \sqrt{asa}] $\rightarrow \emptyset$ when nominative suffix *si*⁶⁴ is appended
to \sqrt{asa} (e.g. $\sqrt{asa} + si \rightarrow asi$ - “You are”; Kacc 496).
23. Aorist suffixes $\bar{i} \rightarrow ttha$ / \sqrt{labha} __
(e.g. $\sqrt{labha} + \bar{i} \rightarrow alattha$; Kacc 497)
24. *iṃ* $\rightarrow ttham$ / \sqrt{labha} __ (e.g. $\sqrt{labha} + iṃ \rightarrow alattham$; Kacc 497).
25. Aorist suffix $\bar{i} \rightarrow cchi$ / \sqrt{kusa} __, *s* [of \sqrt{kusa}] $\rightarrow \emptyset$
(e.g. $\sqrt{kusa} + \bar{i} \rightarrow akkocchi$ - “He reviled”; Kacc 498).
26. $\sqrt{dā} \rightarrow dajja$ [occasionally] (e.g. $\sqrt{dā} + eyya \rightarrow dajjeyya$; Kacc 499).
27. $\sqrt{vada} \rightarrow vajja$ [occasionally]
(e.g. $\sqrt{vada} + eyya \rightarrow vajjeyya$; Kacc 500).

⁶⁴ This nominative suffix undergoes changes to *o*, *aṃ* etc. in other cases.

28. √*gamu* → *ghamma* [occasionally]
(e.g. √*gamu* + *a* + *tu* → *ghammatu* – “Let him go”; Kacc 501).
29. Aorist suffix *uṃ* → *iṃsu* / all roots __ (Kacc 504).
30. √*jara* → *jīra* or *jīyya* [occasionally]
(e.g. √*jara* + *a* + *ti* → *jīrati*; Kacc 505).
31. √*mara* → *miyya* [occasionally]
(e.g. √*mara* + *a* + *ti* → *miyyati*; Kacc 505).
32. Initial vowel *a* [of √*asa*] → ∅ [occasionally] / __ all suffixes
(e.g. √*asa* + *a* + *anti* → *santi*; Kacc 506).
33. √*asa* → *bhū* [occasionally]
(e.g. √*asa* + *a* + *ssanti* → *bhavissanti*; Kacc 507).
34. Optative suffix *eyya* → *iyā* or *ñā* / √*ñā* __ (Kacc 508).
35. Affix *nā* (fifth class active base root affix) → ∅ or *ya*
[occasionally] / √*ñā* __ (Kacc 509).
36. Affix *a* (first class active base root affix) → ∅ or *e*
[occasionally] (e.g. √*vasa* + *a* + *mi* → *vademi*; Kacc 510).
37. Affix *o* (seventh class active base root affix) → *u* [occasionally] /
√*kara* __ (e.g. √*kara* + *o* + *te* → *karume* – “He does”; Kacc 511).
38. Component vowel *a* [of √*kara*] → *u* [occasionally]
(e.g. √*kara* + *o* + *ti* → *kurute* – “He does”; Kacc 511, 512).
39. The increase morpheme *o* → *ava* / √*bhū*, √*cu* etc. __ vowel
(e.g. √*cu* + *a* + *ti* → *cavati*; Kacc 513).⁶⁵
40. The increase morpheme *e* → *aya* / √*nī*, √*ji* etc. __ vowel
(e.g. √*ji* + *a* + *ti* → *jayati*; Kacc 514).
41. Increase vowel *o* → *āva*, *e* → *āya* / __ causative affix [*e*, *ya*]
(e.g. √*lū* + *e* + *ti* → *lāveti*; Kacc 515).
42. ∅ → *i* / root consonant __ *asabbadhātuka* suffixes⁶⁶
(e.g. √*gamu* + *ssati* → *gamissati*; Kacc 516).

⁶⁵ See also below the chapter “Vowel Gradation” for details.

⁶⁶ Suffixes of the perfect (*parokkhā*), aorist (*ajjatani*), future indicative (*bhavis-santi*) and conditional (*kālātipatti*) are meant (Kusalagñāṇa, 2012: 161).

43. Last component vowel [of polysyllabic roots] → ∅
[occasionally] (e.g. √*mara* + *a* + *ti* → *marati*; Kacc 521).
44. Consonants *s* and *m* [of √*isu*, √*yamu*] → *cch* [occasionally]
(e.g. √*isu* + *a* + *ti* → *icchati*; Kacc 522).
45. *ima* → *a*, *samāna* → *sa* / *ima*, *samāna*, *apara* __ suffixes
jja, *jju*, *jja*, *jju* (e.g. *ima* + *jja* → *ajja* – “today”).
46. *Kita* affix *ta* → *cca* or *ṭṭa* / √*naṭa* __ (e.g. √*naṭa* + *ta*
+ *si* [*aṃ*] → *naccaṃ* – “dancing”; Kacc 571).
47. Regarding *kita* affix *ta*:
- i. √*sāsa*, √*disa* → *riṭṭha* / __ *ta* (e.g. √*disa* +
ta → *diṭṭha* – “seen”; Kacc 572).
 - ii. *ta* → *ṭṭha* [together with final root consonant] / √*puccha*,
√*bhanja*, √*hansa* and roots ending in *s* etc. __
(e.g. √*bhanja* + *ta* → *bhaṭṭha*; Kacc 573).
 - iii. *ta* → *uṭṭha* [together with final *s* of the root] / √*vasa* __,
v → *u* [occasionally] (e.g. √*vasa* + *ta* → *vuṭṭha*; Kacc 574–575).
 - iv. *ta* → *dha* and *ḍha* respectively / *dha*, *ḍha*, *bha*, *ha* __ (e.g.
√*budha* + *ta* + *si* [*o*] → *buddho* – “the Awakened One”; Kacc 576).
 - v. *ta* → *gga* [together with final *j* of the root] / √*bhanja* __
(e.g. √*bhanja* + *ta* → *bhagga* – “broken”; Kacc 577).
 - vi. *ta* → (CC) / √*bhanja* etc. __, final root consonant → ∅
(e.g. √*caja* + *ta* → *catta* – “given up”: Kacc 578).
 - vii. *ta* → (CC) / √*vaca* __, *v* [of √*vaca*] → *u* [occasionally], *c* → ∅
(e.g. √*vaca* + *ta* → *utta* – “said”; Kacc 579).
 - viii. *ta* → (CC) / √*vaca* __, *v* [of √*vaca*] → *u* [occasionally],
c → ∅, ∅ → *v* (e.g. √*vaca* + *ta* → *vutta* – “said”; Kacc 579).
 - ix. *ta* → (CC) / √*gupa* etc. __, final root consonants → ∅
(e.g. √*lipa* + *ta* → *litta* – “annointed”; Kacc 580).
 - x. *ta* → *iṇṇa* / √*tara* etc. __, final root consonants → ∅
(e.g. *saṃ* + √*pūra* + *ta* → *sampuṇṇa* – “well filled”; Kacc 581).
 - xi. *ta* → *inna*, *anna*, *iṇa* / √*bhida* etc. __, final root consonants → ∅
(e.g. √*bhida* + *ta* → *bhinna* – “broken”; Kacc 582).

- xii. *ta* → *nta* [occasionally] / prefix *pa* etc. + √*kamu* etc. __, final root consonants → ∅ (e.g. *pa* + √*kamu* + *ta* → *pakkanta*; Kacc 584).
- xiii. *ta* → *kkha* and *kka* / √*susa*, √*paca*, √*saka* etc. __, final root consonants → ∅ (e.g. √*susa* + *ta* → *sukkha* – “dried”; Kacc 583).
- xiv. *ta* → *ha* / *ha*-ending roots (except √*daha* and √*naha*) __, *h* [of the roots] → *ḷ* (e.g. √*baha* + *ta* → *bāḷha* – “grown”; Kacc 589).
48. Initial *a* [of √*yaja*] → *i* / __ *ṭṭha* (morphological resultant of *ta*; e.g. √*yaja* + *ta* → *yiṭṭha*; Kacc 610; see also pt. ii above for changes which result in *ṭṭha*).
49. Final consonants [of *ha*, *da*, *bha* of √*naha*, √*kudha*, √*yudha*, √*siddha*, √*labha*, √*rabbha* etc.] → *da* / __ *dha* (morphological resultant of *ta*; e.g. √*labha* + *ta* → *laddha* – “obtained”; Kacc 611; see also pt. iv above for changes which result in *dha*).
50. Final component consonants *ha*, *ḍha* [of √*daha*, √*wadha*] → *ḍa* / __ *ḍha* (morphological resultant of *ta*; e.g. √*daha* + *ta* → *dadḍha* – “burnt”; Kacc 612; see also pt. iv above for changes which result in *ḍha*).
51. Regarding *kita* affixes *ta* and *ti*:
- i. Initial vowel [of √*jana*] → *ā* / __ *ta* or *ti* (e.g. √*jana* + *ta* → *jāta* – “born,” “arisen”; Kacc 585).
 - ii. Final root consonant [of √*gamu*, √*khanu*, √*hana*, √*ramu* etc.] → ∅ [occasionally] / __ *ta* or *ti* (e.g. √*khanu* + *ti* → *khati* – “digging”; Kacc 586). Exception: ∅ → *i* as per pt. 67 below (Kacc 617).
 - iii. Final *r* [of √*kara*, √*sara* etc.] → ∅ / __ *ta* or *ti* (e.g. *pa* + √*kara* __ *ti* → *pakati* – “original [or ‘natural’] form”; Kacc 587).
 - iv. Vowel *ā* [of √*ṭhā*, √*pā* etc.] → *i* or *ī* respectively / __ *ta* or *ti* (e.g. √*pā* + *ti* → *pīti* – “act of drinking”; Kacc 588).

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52. *ta* [of *kita* affix *tabba*] → *raṭṭha* / $\sqrt{sāsa}$, \sqrt{disa} etc. __ (e.g. \sqrt{disa} + *tabba* + *si* [*aṃ*] → *daṭṭhabbaṃ*; Kacc 572, elision of *r* according to Kacc 539).
53. *tuṃ* suffix → *raṭṭhum* / $\sqrt{sāsa}$, \sqrt{disa} etc. __ (e.g. \sqrt{disa} + *tuṃ* = *daṭṭhum*; Kacc 573; elision of *r* according to Kacc 539).
54. Regarding *kita* affix *ṇa*:
- i. *nja* [of \sqrt{ranja}] → *j* / __ *ṇa* (Kacc 590).
 - ii. \sqrt{hana} → *ghāta* / __ *ṇa* (e.g. *go* + \sqrt{hana} + *aka* + *si* [*o*] → *goghātako* – “the one who kills cows”; Kacc 591).
 - iii. \sqrt{hana} → *vadha* / __ *ṇa* (e.g. \sqrt{hana} + *ṇa* + *si* [*o*] → *vadho* – “the one who kills”; Kacc 592).
 - iv. vowel *ā* [of *ā*-ending roots] → *āya* / __ *ṇa* (e.g. $\sqrt{dā}$ + *aka* + *si* [*o*] → *dāyako* – “a donor”; Kacc 593).
55. \sqrt{kara} → *kha* / *pura*, *saṃ*, *upa* and *pari* __ (e.g. *saṃ* + \sqrt{kara} + *ta* → *saṅkhata* – “conditioned,” “prepared”; Kacc 594).
56. \sqrt{kara} → *kā* / __ *kita* suffixes *tave* and *tuna* (e.g. \sqrt{kara} + *tuna* → *kātuna* – “having done”; Kacc 595).
57. *m* and *n* [of \sqrt{gamu} , \sqrt{khanu} , \sqrt{hana} etc.] → *n* [occasionally] / __ *kita* affixes *tuṃ* and *tabba* (e.g. \sqrt{gamu} + *tabba* + *si* [*aṃ*] → *gantabbaṃ* – “that which should be done”; Kacc 596).
58. *Kita* suffixes *tuna*, *tvāna*, *tvā* etc.:
- i. → *ya* [occasionally] / after all roots __ (e.g. *ā* + $\sqrt{dā}$ + *tvā* → *ādāya*; Kacc 597).
 - ii. → *racca* [occasionally] / all *ca*- and *na*-ending roots __ (e.g. *vi* + \sqrt{vica} + *tvā* → *vivicca* – “having renounced,” “being far from”; Kacc 598).
 - iii. → *svāna*, *svā* [occasionally] / \sqrt{disa} __ (e.g. *ā* + \sqrt{disa} + *tvā* → *disvā*; Kacc 599).
 - iv. → *mma*, *yha*, *jja*, *bbha*, *ddha* [occasionally] *ma*-, *ha*-, *da*-, *bha*-ending roots __ (e.g. *ā* + \sqrt{gamu} + *tvā* → *āgamma* – “having come”; Kacc 599).

59. $\emptyset \rightarrow i$ / root __ all affixes (*ririya*, *tabba*, *ta*, *tvā* etc.; e.g. $\sqrt{\text{vida}} + \text{tabba} \rightarrow \text{viditabba}$; Kacc 605).
60. The first *n* [of some roots] $\rightarrow \eta$ (e.g. $\sqrt{\text{ranja}} + \eta + \text{si}$ [o] $\rightarrow \text{raṅgo}$ – “act of coloring”; Kacc 607).
61. $\sqrt{\text{ge}} \rightarrow \text{gī}$ [whenever appropriate] (e.g. $\sqrt{\text{ge}} + \text{ta} + \text{si}$ [aṃ] $\rightarrow \text{gītama}$ – “music”; Kacc 608).
62. $\sqrt{\text{sada}} \rightarrow \text{sīdā}$ [always] (e.g. *ni* + $\sqrt{\text{sada}} + \text{a} + \text{ti} \rightarrow \text{nisīdati}$; Kacc 609).
63. $\sqrt{\text{gaha}} \rightarrow \text{ghara}$ [occasionally] / __ affix *ṇa* (e.g. $\sqrt{\text{gaha}} + \eta + \text{si}$ [aṃ] $\rightarrow \text{ghama}$ – “house”; Kacc 613).
64. *da* [of $\sqrt{\text{daha}}$] $\rightarrow \text{ḷa}$ [occasionally] / __ affix *ṇa* (e.g. *pari* + $\sqrt{\text{daha}} + \eta + \text{si}$ [o] $\rightarrow \text{pariḷāho}$ – “burning”; Kacc 614).
65. Final consonant [of a root] $\rightarrow \emptyset$ / __ *kita* affix *kvi* (i.e. other roots themselves; Kacc 615).
66. $\emptyset \rightarrow \bar{u}$ / $\sqrt{\text{vida}}$ __ *kita* affix *kvi* (e.g. *lokavidū* – “the knower of the world”; Kacc 616).
67. **(a)** When an inserted *i* (as per Kacc 605) is already positioned, the final consonants [of $\sqrt{\text{hana}}$, $\sqrt{\text{gamu}}$, $\sqrt{\text{ramu}}$, $\sqrt{\text{saka}}$, $\sqrt{\text{kara}}$ etc.] are not elided with *ta* affixes. **(b)** Applicable affixes are: *tabba*, *tuṃ*, *tvā* and *tvāna*. **(c)** Inapplicable exceptions are: *tave*, *tāye*, *tavantu*, *tāvi* and *teyya* (Kacc 617; Thitzana, 2016: 756).
68. *r* [of $\sqrt{\text{kara}}$] $\rightarrow t$ / __ *tu* (e.g. $\sqrt{\text{kara}} + \text{ritu} + \text{si}$ [$\rightarrow \emptyset$] $\rightarrow \text{kattā}$ – “the one who does”; Kacc 619).
69. *r* [of $\sqrt{\text{kara}}$] $\rightarrow t$ [occasionally] / __ *tuṃ*, *tuna*, *tabba* (e.g. $\sqrt{\text{kara}} + \text{tuna} \rightarrow \text{kattuna}$; Kacc 620).
70. The final component consonant *c* [of $\sqrt{\text{paca}}$ etc.] and *j* [of $\sqrt{\text{yaja}}$ etc.] $\rightarrow k$ and *g* respectively / __ affix *ṇa* (e.g. $\sqrt{\text{yuja}} + \eta + \text{si}$ [o] $\rightarrow \text{yogo}$; Kacc 623) but not / __ *ṇvu* affixes (Kacc 618).

Uṇādi Rules

1. Initial vowel [of $\sqrt{\text{gaha}}$] $\rightarrow \text{ge}$ [occasionally] (e.g. $\sqrt{\text{gaha}} + \text{a} + \text{si}$ [aṃ] $\rightarrow \text{gehaṃ}$ – “house”; Kacc 629).

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2. *su* [of stem *masu*] → *cchara* or *cchera* (e.g. *masu* + *kvi* + *si* [o] → *maccharo* – “jealousy”; Kacc 630).
3. √*cara* → *cchariya*, *cchara* or *cchera* / *ā* __, *ā* → (Ṽ)
(e.g. *ā* + √*cara* + *kvi* + *si* [aṃ] → *accharam*; Kacc 631).
4. *tha* [of √*matha*] → *la* (e.g. √*matha* + *a* + *si* [o] → *mallo* – “wrestler”; Kacc 634).
5. Some roots which end in *c* and *j* → *k* and *g* respectively / __ *ṇ*-initial affix (e.g. √*sica* + *ṇa* + *si* [o] → *seko* – “pouring”; Kacc 640).
6. *una* [of stem *suna* – “dog”] → *oṇa*, *vāna*, *uvāna*, *ūna*, *unakha*, *una*, *ā* or *āna* (Kacc 647).
7. Stem *taruṇa* → *susu* (Kacc 648).
8. *uva* [of stem *yuva*] → *uvāna*, *una* or *ūna*
(e.g. *yūno* – “youth”; Kacc 649).
9. *ū*, *u* and *asa* [of √*sū*, √*vu*, √*asa*] → *ata*, ∅ → affix *tha*
(√*sū* + *tha* + *si* [aṃ] → *sattham* – “a weapon”; Kacc 660).
10. √*hi* → *heraṇ* or *hīraṇ* / *paṭi* __ (e.g. *paṭi* + √*hi* + *kvi* + *si* [aṃ] → *pāṭihīram* or *pāṭiheram* – “miracle”; Kacc 662).
11. Stem *putha* → *puthu*, *patha*, ∅ → affix *ama*⁶⁷ [occasionally]
(e.g. *putha* + *kvi* [→ ∅] + *si* [→ ∅] → *pathavī* – “earth”; Kacc 666).

⁶⁷ For an example, refer to the section “Ordinal Numerals.”

Vowel Gradation

(a) Root vowels may vary in “strength” or appear in various “grades,” which means that they are changed into another vowel sound. **(b)** This process is called “strengthening” or “vowel gradation” and occurs regularly in the formation of verbal stems, non-finite verbs (i.e. infinitives and absolutes) and in the derivation of words while appending certain affixes (see chapters “*Kita* and *Taddhita* Affixes” and “*Uṇādi* Affixes”; Dhammajoti, 2018: 20; Duroiselle, 1906/1997: 23). **(c)** Three grades exist in Pāḷi, named and following a generic paradigm as illustrated in Table 1 below.

(a) The ancient grammarians explain these processes as an absence and prefixing (or “increase”) of the letter *a* respectively (Dhammajoti, 2018: 20; Warder, 1963/2001: 12) or as the replacement of *i* and *u* by *e* and *o* respectively (Kacc 401). **(b)** These processes can also be reversed; an instance of such is called *viparīto* (“reversal”; Thitzana, 2016: 569). **(c)** Examples of vowel gradation can be conveniently given with the words *bhūta* (unstrengthened form), *bhavati* and *hoti* (strengthened form), *bhāveti* (increased form), which are all formed from $\sqrt{bhū}$. **(d)** The increase morpheme $o \rightarrow ava$, $e \rightarrow aya$ / $\sqrt{bhū}$, \sqrt{cu} etc. / __ vowel (e.g. $\sqrt{cu} + a + ti \rightarrow cavati$; Kacc 513–514). **(e)** Vowel $o \rightarrow āva$, $e \rightarrow āya$ / __ causative affix [*e, ya*] (e. g. $\sqrt{lū}^{68} + e + ti \rightarrow lāveti$; Kacc 515).

Table 1. *Vowel Gradation*

Unstrengthened (<i>avuddhika</i>)	Strong (<i>guṇa</i>)	Increase (<i>vuddhi</i>)
–	<i>a</i>	<i>ā</i>
<i>i, ī</i>	<i>e, aya</i>	<i>e, āya</i>
<i>u, ū</i>	<i>o, ava</i>	<i>o, āva</i>

⁶⁸ The \bar{u} of $\sqrt{lū}$ has previously been strengthened to *o*.

Parts of Speech (*padajāti*)

1. Nouns – incl. adjectives and pronouns (*nāmāṇi*).
2. Verbs (*ākhyātāni*).
3. Indeclinable prepositions and prefixes (*upasaggā* or *upasārā*).
4. Indeclinable particle – conjunctions, prepositions, adverbs and all other indeclinables (*nipātā*).

Sentence Structure and Syntax

(a) The main collections (sing. *nikāyo*) of Pāli Buddhist texts employ an idiom which usually bears a close affinity to the syntax of Vedic, thereby manifesting a closer linguistic connection to Indo-European than Classical Sanskrit; however, marked divergences from Vedic nevertheless exist (cf. Hendriksen, 1944: 81; Wijesekera, 1936/1993: 6). **(b)** In the Pāli language, the usual order within sentences is: subject (S; *kattā* – lit. “agent”) + object (O; *kammaṃ*) + verb (V; *kamma kiriyā*; e.g. *bhagavā* (S) *dhammaṃ* (O) *deseti* (V) – “The Blessed One teaches the *dhamma*,” DN III: 41 [DN 28]), with the verb at the end of the sentence (Yindee, 2018: 69). **(c)** An adjective normally precedes the noun it qualifies and a modifying adverb its verb. **(d)** “Adverbs of time always come first in the sentence” (Duroiselle, 1906/1997: 52).

(a) A regular yet not universal feature of prose portions in the Pāli language (as well as Vedic and Buddhist Hybrid Sanskrit) is the grouping of word elements with related or identical meaning (e.g. synonyms), a remnant of the oral style of composition and transmission, facilitating memory (Allon, 1997: 191; Anālayo, 2009: 740–1). **(b)** It is commonplace to encounter two, three or more adjectives qualifying the same substantive noun and to find a body of substantive nouns functioning as the sentence subjects or objects; the same principle of aggregation holds also true for verbs and adverbs (Allon: 191). **(c)** The arrangement of all these parts of speech is determined by the so-called Waxing Syllable Principle, influencing the sequential order according to the syllable length of the word strings: each subsequent element stays either equal in syllable length or increases; waning does not occur (e.g. *bhūto samviggō lomahaṭ-*

thajāto [syllable count: 2 + 3 + 6] – “frightened, agitated and gotten horripilation,” DN I: 24 [DN 2]; Anālayo: 740). **(d)** Exceptions to this are groupings of items which *must* belong together due to similar grammatical and morphological form, related meaning and doctrinal content (e.g. regarding the items of the noble eightfold path [*ariyo aṭṭhaṅgiko maggo*]; Allon: 191; Anālayo: 741). **(e)** When a sentence has two subjects, the last one determines the person for the corresponding verbs (Kacc 409). **(f)** The enclitics *me* and *te* are, as a rule, found in the second position of a sentence (Oberlies, 2019: 265). **(g)** Clauses are conjoined in the following ways (Periniola, 1997: 384, 390–1):

- They simply follow each other.
- Relative clauses and phrases:
 - ❖ With relative pronouns, adjectives or adverbs as the sentence initial of the subordinate clause, in correlation with a demonstrative pronoun, adjective or adverb introducing the main clause (e.g. *yo dhammaṃ passati so buddhaṃ passati* – “He who sees the *dhamma* is the one who sees the Buddha,” Mil: 35).
 - ❖ With a participle functioning as an adjective, agreeing with a noun (e.g. *addasā kho āyasmā rāhulo bhagavantaṃ dūratova āgacchantaṃ* – “Ā. Rāhula saw the Blessed One, who was coming from afar,” MN II: 40 [MN 61]).
 - ❖ With dependent-determinative, descriptive-determinative or attributive compounds⁶⁹ (e.g. *evaṃ kho, kassapa, bhikkhu sīla-sampanno [tappurisa compound] hoti* – “thus, Kassapa, is a bhikkhu one who is possessed of virtue,” DN I: 81 [DN 8]).
- With the introduction of adverbs or adverbial phrases of time and space (e.g. *tadā* – “at that time”; *tattha* – “there”;

⁶⁹ See chapter “Compounds (*samāsā*)” for details.

bhūtapubbaṃ – “formerly”; *ekaṃ samayaṃ* – “at one time”; *tena samayena* – “at that time”; *atha kho* – “now then” etc.).

- With particles *ca* (copulative) and *vā* (disjunctive).
- Phrase *kuto pana* (“still less”) and words *pageva* (“still more”), *aññādatthu* (“except”; all adversative).
- With *seyyathāpi* (“just as”) contrasted with *evameva* (“just so”) and *yathā* (“just as”) contrasted with *tathā* (“so”; all comparatives).
- Consecutive and connected verbs may stand in the absolutive with the finite verb being placed last.

(a) It may often happen that the verb “to be” is not expressed but only implicitly understood (e.g. *rūpaṃ aniccaṃ* – “Form is impermanent”). **(b)** In the end, there are no hard and fast regulations about the sentence structure – the subject, to proffer an example, remains the subject even if it succeeds the object (e.g. *dhammaṃ buddho [S] deseti* – “Dhamma teaches the Enlightened One [S]”; Dhammajoti, 2018: 9, 12). **(c)** The word order is rarely of grammatical significance but in terms of style and emphasis rather relevant (Warder, 1963/2001: 15). **(d)** The vocative is unable to stand as sentence initial (Palistudies, 2018b). **(e)** Regarding case endings (see below), the *Padarūpasiddhi* (Rūp: 29) and Duroiselle (1906/1997: 24) mention that at times whole syllables are elided for the sake of meter or to facilitate simplicity (e.g. *abhiññāya sacchikatvā* → *abhiññā sacchikatvā*).

Nouns (*nāmāni*)⁷⁰

Kinds of Nouns (cf. Thitzana, 2016: 184–5)

1. Substantive Nouns (*nāmanāmāni*).
 - i. Common nouns (*sādhārananāmāni*).
 - ii. Proper nouns (*asādhārananāmāni*).
2. Adjectives (*guṇanāmāni*).
3. Pronouns (*sabbanāmāni*).
4. Compound nouns (*samāsanāmāni*; Kacc 601).
5. Nouns formed from *taddhita* affixes (*taddhitanāmāni*, incl. numerical nouns; Kacc 601).
6. Nouns formed from *kita* affixes (*kitanāmāni*; Kacc 601).⁷¹

General Characteristics

(a) In the Pāli language, there are no fundamentally distinct classes of substantive nouns, adjectives and pronouns, all being united under the broad category of *nāmaṃ* (noun), but individual differences nonetheless exist (Pandita, n.d.; Warder, 1963/2001: 7). **(b)** Substantive nouns and adjectives share declensions (see Table 3 in the “Tables” section) and are also part of the *samāsanāmāni*, *taddhitanāmāni* and *kitanāmāni* classes; e.g.:

- *Sāriputto; arindamo* (*nāmanāmaṃ, kitanāmaṃ* and *samāsanāmaṃ*).
- *Kaccāyano* (*nāmanāmaṃ* and *taddhitanāmaṃ*).⁷²

(a) Although adjectives bear the name of *guṇanāmaṃ* (“quality noun”) – indicating that they are a class of nouns qualifying other nouns – the lack of an absolute distinction between substantive nouns and adjectives

⁷⁰ Sing. *nāmaṃ*.

⁷¹ The last three-mentioned items are dealt with in separate chapters.

⁷² I am indebted to Ā. Kovida (Myanmar, aka Sayadaw U Kovida) for initially clarifying the concept for me and providing the examples (personal communication, April 11, 2020).

can be seen in many instances; for example, the word *kusala* (“wholesome,” “skillful”) can stand as a substantive noun: *kusalaṃ* (“the wholesome”) or operate as an attribute of another noun, as in *kusalo dhammo* (“the good *dhamma*”). **(b)** Compound nouns are simply combinations made up of members from the above-given noun classes (see the respective chapters for details). **(c)** Although particles (sing. *nipāto*) and prefixes (sing. *upasaggo* or *upasāraṃ*) cannot be classified under the rubric of nouns – possessing no gender and number – they can be subject to the rules of nouns when standing as independent words in a sentence; these are, however, exceptional cases (Thitzana, 2016: 185). **(d)** It should be noted that the case endings in these unusual instances are not permitted to remain attached to these words (Thitzana: 323).

General Formation

The formation of nouns in the Pāḷi language comes about in the following manner, conjoining two or more of these elements:

- Prefix (*upasaggo* or *upasāraṃ*).
- Root (*dhātu*).
- *Kita* affix (*kitapaccayo*).
- *Taddhita* affix (*taddhitapaccayo*).
- Interfix (*āgamo*).
- Suffix (*paccayo* or *vibhatti*), expressing:
 - ❖ Case.
 - ❖ Number.
 - ❖ Gender.

(a) For example, the substantive noun *āvāso* is formed from these elements: *ā* (*upasaggo*) + \sqrt{vas} + *a* (*kitapaccayo*) form the stem to which *si* [o] (*vibhatti*; singular nominative case masculine suffix) is appended; thus, finally \rightarrow *āvāso* (“home,” “dwelling place”). **(b)** Another example to illustrate how an interfix is applied is given with the following. The adjective *mānasika* is broken up like this: $\sqrt{māna}$ + *s* (*āgamo*) + *ika* (*taddhitapaccayo*)

→ *mānasika* (“related to mind”) or + *si* [*aṃ*] (singular nominative case neuter suffix – “that which is related to mind”) when functioning as a substantive noun. **(c)** Another interfix, consonant *n*, is added in the formation of numerical nouns with dative suffix *naṃ* (e.g. *dvinnaṃ* – “two”; Kacc 67). **(d)** The rules of sandhi and morphology are regularly applied (i.e. assimilation, elision, insertion and reduplication; e.g. √*ana* + *ya* [*taddhitapaccayo*] → *añña* [pronoun] – “other,” “another”).⁷³

Gender, Number and Case

(a) In the Pāḷi language, three genders (sing. *liṅgaṃ*) exist for nouns: masculine (*pulliṅgaṃ*), feminine (*itthiliṅgaṃ*) and neuter (*napuṃsakaliṅgaṃ*; Kacc 52; Oberlies, 2019: 199); two numbers: singular (*ekavacanaṃ*) and plural⁷⁴ (*bhuvacanaṃ*; Buddhadatta, 1937/1997: 3; Warder, 1963/2001: 7); three persons (sing. *puriso*): first (*paṭhamapuriso*), second (*majjhimapuriso*) and third (*uttamapuriso*),⁷⁵ with the indigenous grammatical tradition recognizing seven cases. Seven cases because it treats the vocative as standing apart from the rest (cf. Yindee, 2018: 58–9), although in modern grammars, we may find it included among the total count, there-with amounting to eight cases (Collins, 2006: 18–9). **(b)** Substantive nouns usually assume only one gender, whereas adjectives and pronouns are capable of standing in all three – variably corresponding to the gender, number and case of the nouns of which they are the attribute or correlate

⁷³ See chapters “Sandhi,” “Morphology” and “*Kita* and *Taddhita* Affixes” for details and for explanations on the characteristics of roots and stems the section “General Formation” in the chapter “Verbs (*ākhyātāni*).”

⁷⁴ The plural has basically replaced the dual in Pāḷi; only a few forms can be found (Oberlies, 2019: 201).

⁷⁵ This is the schema of the traditional Pāḷi grammarians – first and third persons given therein are the exact opposites in English (e.g. English first persons “I” and “we” are each classed as third person [*uttamapuriso*] in Pāḷi, and English third persons “he/she/it” and “they” each correspond to the first person [*paṭhamapuriso*] in Pāḷi); however, to forestall confusion, occurrences of grammatical numbers in Pāḷi – within the bounds of the present grammar – correspond, henceforth, to English usage.

respectively. **(c)** However, a substantive noun, without changing form, can also possess two or all three genders (e.g. *kumāra* [“boy,” “prince”] can assume masculine [*kumāro*] as well as feminine forms [*kumārī*], and *kuddaka* [“belly”] can occur in the masculine [*kuddako*], neuter [*kuddakam*] and feminine [*kuddakā*]; Geiger, 1916/1994: 67–8; Yindee: 58).

Substantive Nouns (*nāmanāmāni*)

As mentioned above, this classification includes common and proper nouns (cf. Buddhadatta, 1937/1997: 48).

- Common nouns: a group of unspecified people (*vāṇijo* – “merchant”), animals (*hatthī* – “elephant”), places (*nagaraṃ* – “city”), things (*rukko* – “tree”) and ideas (i.e. abstract nouns; *dhammo* – “norm,” “nature”).
- Proper nouns: specific persons (*sāriputto* – right-hand chief disciple of Lord Buddha), places (*rājagaho* – an ancient Indian city with that name) and organizations.

(a) As single entities, substantive nouns have usually merely one gender (of the three, as mentioned above), but as final members of attributive compounds⁷⁶ substantive nouns can also assume all three genders – in which case they are used adjectivally (Collins, 2006: 17; Buddhadatta, 1937/1997: 4). **(b)** As mentioned in the previous section, a substantive noun may possess altogether two or even all three genders.

Adjectives (*guṇanāmāni*)⁷⁷

(a) As adverted to earlier, adjectives bear the name of *guṇanāmāni* (“quality nouns”), indicating that they are a class of nouns modifying other nouns, providing more information about them (Yindee, 2018: 55). **(b)** Adjectives are capable of standing, as mentioned above, in all three genders – assuming the gender, number and case of the nouns of which

⁷⁶ See chapter “Compounds (*samāsā*)” for details.

⁷⁷ For the different stems of substantive nouns and adjectives as well as their declensions, see Table 3 in the section “Tables” at the end of this book.

they are the attributes. They themselves lack intrinsic gender (Dhammajoti, 2018: 9). **(c)** If an adjective qualifies two or more nouns, it may agree with the sum (being plural then) or with the nearest. **(d)** The qualified words may also taken to be collective with the adjective in singular. **(e)** In case of gender conflict, the masculine has precedence over the feminine and the neuter over both. **(f)** They usually precede the qualified noun, but in the case of several adjectives modifying a noun, one adjective may precede and the rest follow. **(g)** An adjective following a substantive noun *usually* indicates the predication of it, with the attribute being emphasized and translated by a relative clause “who/which is ...” or an adjectival predicate (i.e. an adjective that follows a linking verb, such as “am,” “is,” “are,” “has been”), modifying the sentence subject (e.g. *vedanā aniccā* – “feeling is impermanent,” MN I: 146 [MN 35]; cf. Bodhi, 2020: 32–3). **(h)** Without a verb in the sentence (i.e. in equational sentences), this predication may take place regardless of the adjective’s positioning (cf. Warder, 1963/2001: 60–1). **(i)** The distinction between substantive nouns and adjectives is not an absolute, as previously explained (Warder: 62).

(a) Pronouns or pronominal adjectives are used as adjectives (Ānandamaitreya, 1993/2012: 25). **(b)** Almost all pronouns become adjectives when they are used before a substantive noun of the same gender, number and case. **(c)** They are pronouns when they stand alone in a sentence. **(d)** Let it be reiterated briefly that stems in *a* are more common than any other (Geiger, 1916/1956: 159; Warder, 1963/2001: 8). **(e)** The following affixes are used to form adjectives: *a, ana, ika, ka, kaṭa, ma, mantu* (*mā*; possessive), *maya, min* (*mī*; possessive), *ra, so, (s)sī* (possessive), *tana, ti, tya, va, vantū* (*vā*; possessive), *vī*.⁷⁸

Three Grades of Adjectives

(a) To express the comparative form of adjectives, the following affixes are appended to nominal bases: *tara, iya, iyya* and for the superlative: *tama, iṭṭha, issika, (i)ma* (Ānandamaitreya, 1993/2012: 93; Duroiselle, 1906/

⁷⁸ See chapters “*Kīta and Taddhīta Affixes*” and “*Uṇādi Affixes*.”

1997: 59; Perniola, 1997: 48–9; Yindee, 2018: 55–6).⁷⁹ **(b)** In most cases, affixes *tara* and *tama* may be used interchangeably as well as *iya* for *iṭṭha*, *issaka* and vice versa (Duroiselle: 59). **(c)** Affix *tara* may be superadded to some forms of the comparative and superlative without affecting the meaning as conveyed by the initial affix. **(d)** Some adjectives have more than one form or are constructed irregularly (e.g. *antika* – “near” → *nediya* – “nearer” or *nediṭṭha* – “nearest”; Duroiselle: 60; Perniola: 49). **(e)** The comparative adjectives are primarily employed with nouns in the instrumental or ablative cases singular and the superlatives with the genitive and locative cases plural (e.g. *tayā mahiddhikataro* – “more powerful than you”; *tesaṃ sattamo* – “the best of them”; *tesu sattamo* – “best among them”; Ānandamaitreya: 93) – the adjective may also stand after the ablative case. **(f)** The declensions of adjectives of stems in *mantu* (*mā*), *vantu* (*vā*), *vī* are elided together with the antecedent vowel (e.g. *guṇavā + iya* → *guṇiyo* – “more virtuous”). **(g)** Depending on which gender they ought to take, the comparative and superlative forms are to be declined like neuter and masculine stems in *a* or feminine stems in *ā* (Duroiselle: 59–60). **(h)** Certain past participles, by themselves or as the final member of compounds, are used comparatively with the appropriate affixes (e.g. *paṇīta* – “excellent” → *paṇītatara* – “more excellent”). **(i)** Within comparative compounds, the first member commonly is the object of the comparison (e.g. *paṇītasankhatatara* – “reckoned as more excellent”). **(j)** Some substantive nouns can also take the comparative affixes (e.g. *malatara* – “having a greater stain”) and certain pronouns, prepositions and adverbs are able to take both comparative and superlative affixes (e.g. *aññatama* – “one out of many”; *upari* – “above” → *uparīma* – “uppermost”; Perniola: 50–1).

⁷⁹ See Table 2 below for a summary.

Table 2. *Comparative and Superlative Degree of Adjectives*

(Positive) Natural Adjective (<i>pakatikaḡaṇāmaṃ</i>)	(Comparative) Distinctive Adjective (<i>visesaḡaṇāmaṃ</i>)	(Superlative) Beyond-Distinctive Adjective (<i>ativisesaḡaṇāmaṃ</i>)
<i>abhirūpa</i> ("beautiful")	<i>abhirūpatara</i> ("more beautiful")	<i>abhirūpatama</i> ("most beautiful")
<i>dhanavant</i> ("rich")	<i>dhavantatara</i> ("richer")	<i>dhanavantatama</i> ("richest")
<i>pāpa</i> ("evil")	<i>pāpīya/pāpīyya</i> ("eviler")	<i>pāpiṭṭha/pāpissika</i> ("most evil")

Note: Substantive nouns in *nt* take *a* before *tara* and *tama*, forming the alternative stem in *anta*. *Sources:* (a) Ānandamaitreya, B. (2012). *Pali made easy*. Buddhist Cultural Centre (original work published 1993). <https://archive.org/details/PaliMadeEasyOCRed>; (b) Perniola, V. (1997). *Pali grammar*. The Pali Text Society).

Participles

The participles have the nature of verbal adjectives and must, therefore, agree with the nouns they qualify in number, gender and case (Duroiselle, 1906/1997: 100; Oberlies: 571, f.n. 1; Perniola, 1997: 357).

Possessive Adjectives⁸⁰

Formation. (a) Commonly added are *vantu* (*vā*), *vī* (Perniola, 1997: 147). (b) The usual affixes that form possessives include: *a*, *āla*, *ālu*, *ava*, *ita*, *ika*, *imā*, *in* (*ī*) (strengthening as a rule takes place), *iya*, *ila*, *eyya*, *eyyaka*, *mantu* (*mā*), (*s*)*sī*, *vantu* (*vā*), *vī*. (c) The feminine of possessive adjectives formed with *mantu* (*mā*) and *vantu* (*vā*) is usually, but not invariably, constructed from the weakened base (Collins, 2006: 58).

Usage. (a) The possessive adjectives can be rendered into English as regular adjectives or in combination with such words and idioms as "having," "possessed of," "possessing" (e.g. *satimā* – "possessed of mindful-

⁸⁰ For the declensions of the adjectives and substantive nouns in *in* (*ī*), *mantu* (*mā*), *vantu* (*vā*), *vī*, see Table 3 in the "Tables" section and for further information on these as well as the remaining affixes, the chapter "Kita and Taddhita Affixes."

ness [i.e. ‘mindful’]; Kacc 369). **(b)** The possessive adjectives in *mantu* (*mā*), *vantu* (*vā*) and *in* (*ī*) are also used as substantive nouns when they don’t qualify any other noun⁸¹ (e.g. *dhanavanto* – “the wealthy one”; *gomī* – “cattle,” “a possessor of cattle”; Ānandamaitreya, 1993/2012: 53, 57; Duroiselle, 1906/1997: 150). **(c)** As is the case with other adjectives, possessive adjectives are capable of being rendered as relative clauses and participle clauses/constructions with present participles (e.g. [relative clause] *daṇḍī* – “the one who possesses [or ‘carries’] a staff”; [participle construction] *medhāvī* – “the one possessing wisdom”; Kacc 364, 532; cf. Hendriksen, 1944: 7, f.n. 2).

Adjectives from Pronominal Bases

(a) Duroiselle, 1906/1997: 77–8: Affixes *di* (*dī*), *disa*, *dikkha*, *disaka*, *risa* (“intimate,” “likeness,” “resemblance”) are, with lengthening of the base vowel, appended to pronominal bases to form adjectives (e.g. *ta + di* → *tādi* – “like him,” “like that,” “such”). **(b)** For that purpose, affixes *tara*, *tama* (see above) are also added to the bases of interrogative pronouns, but the meaning differs just a little from that of the respective bases (e.g. *katara* – “which [of two]?”; *katama* – “which [of many]”).

Pronouns or Pronominal Adjectives (*sabbanāmāni*)

Kinds of Pronouns

1. Personal pronoun (*puggalanāmaṃ*).
2. Demonstrative pronoun (*nidassananāmaṃ*).
3. Relative pronoun (*anvayīnāmaṃ*).
4. Interrogative pronoun (*pucchānāmaṃ*).
5. Indefinite pronoun (*anīyamanāmaṃ*).
6. Possessive pronoun (Collins, 2006: 61; Nwe Soe, 2016: 205; Periniola, 1997: 52).

⁸¹ Most, presumably all, of those formed with the other affixes too.

General Characteristics

(a) Substantive nouns and adjectives may qualify their referent words, but pronouns act as mere pointers to these (Collins, 2006: 62). (b) They are officially regarded as belonging to the category of nouns (*nāmāṇi*), as mentioned above, and do not constitute a separate class of words. (c) Pronouns can stand in all genders, as they can represent all things and persons of the different genders apiece (Thitzana, 2016: 287) but are not able to be in the vocative case. (d) We can find three persons for pronouns, singular and plural. (e) Almost all pronouns become adjectives when they are used before a noun of the same gender, number and case (e.g. *so puri-so* – “that man”). (f) They are pronouns when they stand alone in a sentence (Buddhadatta, 1937/1997: 49–50). (g) Pronouns can also act as noun substitutes (e.g. *sā bhunñjati* – “She eats”; Collins: 62; Warder, 1963/2001: 7) and are oftentimes merely implied (e.g. *bhunñjati* – “He eats”). (h) As a means of showing respect, especially (but not exclusively) to persons of higher rank, it is possible that the first and second person plurals of pronouns may replace the respective singular forms; this usage is known as the “honorific plural” (e.g. [possibly] *yo amhākaṃ rājaputto vā rājamahā-matto* – “the one who is our prince and prime minister [...],” Mil: 44). (i) The second person singular, on the other hand, is used for peers and subordinates, as with German “du” (Collins: 65).

General Formation⁸²

(a) For a description on the general features of the formation process of nouns (incl. pronouns), see the above section of the present chapter having the same name as this one (i.e. “General Formation”), with some additional specifics in the following. (b) The *i* and *a* vowels of pronouns may lengthen when in certain combinations with \sqrt{disa} , so too then vowel *i* of \sqrt{disa} (e.g. *ya + \sqrt{disa} + kvi* → *yādiso* – “any kind of person”; Kacc 642). It may be that the *d* of \sqrt{disa} → *r*, and its *s* → *sa*, *kkha* or *ī* in the process (e.g.

⁸² For a part of different pronouns and their declensions, see Table 4 in the “Tables” section as well as the following.

yādikkho; Kacc 642). **(c)** In the formation of the nominative case, all pronouns may take interfix consonant *k* (e.g. *sabbako* – “all”; Kacc 178).

The Traditional Inventory of 27 Pronouns (*sabbanāmāni*)

(1) *sabba* (“all”), (2) *katara* (“which [of two]?”), (3) *katama* (“which [of many]?”), (4) *ubbaya* (“both”), (5) *itara* (“other [of two]”), (6) *añña* (“other [of many]”), (7) *aññatara* (“other [of many]”), (8) *aññatama* (“a certain [of two]”), (9) *pubba* (“former”), (10) *para* (“another”), (11) *apara* (“another”), (12) *dakkhiṇa* (“right,” “south”), (13) *uttara* (“upper,” “north,” “more than”), (14) *adhara* (“lower”), (15) *ya* (“who,” “what”), (16) *ta* (“he,” “that”), (17) *eta* (“this”), (18) *ima* (“this”), (19) *amu* (“that”), (20) *kiṃ* (“what?,” “why?”), (21) *eka* (“one”), (22) *ubha* (“both”), (23) *dvi* (“two”), (24) *ti* (“three”), (25) *catu* (“four”), (26) *tumha* (“you”), (27) *amha* (“I,” “we”) (Sadd I: 150; Collins, 2006: 61).

Personal Pronouns

Usage. (a) Personal pronouns of the first and second persons do not possess gender and invariably operate as substantive noun substitutes (Collins, 2006: 62). **(b)** Enclitic genitive, dative, instrumental singular *me* (“by me,” “my,” “mine”) and genitive, dative, instrumental and ablative plural *no* (“our,” “for us,” “by us,” “from us”) are never used at the beginning of a sentence (Duroiselle, 1906/1997: 68), the same holds true for *te*. **(c)** For enhanced emphasis, the personal pronouns are found with relative pronoun *yo* (e.g. *lābhā vata me, suladdhaṃ vata me, yohaṃ evarūpehi sabrahmacārīhi saddhiṃ viharāmī* – “It is indeed a gain for me, a great gain for me, that I dwell together with such fellow companions in the holy life,” MN I: 135 [MN 31]; Duroiselle: 74).

Demonstrative Pronouns

Usage. (a) The pronouns of absence, formed from the stem *ta(d)*, are employed to refer to someone or something previously mentioned in a narrative or to absent persons or things.⁸³ **(b)** They might serve as a con-

⁸³ Pronoun *ena* is used in the same way (Oberlies, 2019: 277).

necting element between two sentences or to extend paragraphs or sections and be translated as “that” etc. (e.g. *etthantare yaṃ caritaṃ, sabbaṃ taṃ bodhipācanaṃ* – “What conduct there is in the interim, all that is a maturing of enlightenment,” Cp: 1; *yamaṃ jānāmi, taṃ tvaṃ jānāsi* – “What I know is that what you know!”, DN I: 41 [DN 3]). **(c)** They may also function as personal pronouns “he,” “she,” “it” and other forms of those. **(d)** The forms with *n* substitute (e.g. *enaṃ*)⁸⁴ usually refer to a noun which was already mentioned. **(e)** Besides these usages, forms of *ta(d)* can also be employed adverbially in all oblique cases (e.g. *taṃ* [acc.] – “thereto,” “therefore,” “that is why,” “now,” “then”; *tamenaṃ* – “at once”; *tassa* [gen.] – “therefore”; *yena [...] tena* [instr.] – “where [...], there,” “here and there”; *tasmā* [abl.] – “for this reason,” “therefore”; *tato* – “from there,” “thence”; *tahiṃ* [loc.] – “there,” “therefore”; *tahaṃ* – “there”; Oberlies, 2019: 260, 270, f.n. 1; PED, s.v. “ta”). **(f)** They are also used pleonastically, giving emphasis (e.g. *sohaṃ* – “I” [lit. “that I”]).⁸⁵

(a) Demonstrative pronouns formed from pronominal stem *eta(d)* are used to point to someone or something present in direct speech or to what immediately precedes or follows – they may be translated as “this” etc. (Collins, 2006: 63; Oberlies, 2019: 274; Warder, 1963/2001: 29); they may also operate as the personal pronouns “he,” “she,” “it” etc. **(b)** Demonstrative pronouns with stems in *ta(d)/eta(d)* are often used to give slight emphasis to the subject or as something approximating the English article “the.”

(a) Demonstrative pronouns formed from the pronominal stem in *ima* (such as *ayaṃ*) are used similarly but convey a special sense of proximity or immediacy, whereas those constructed from *eta(d)* are merely indefinite (Oberlies, 2019: 284; Warder, 1963/2001: 30). **(b)** They may be rendered into English with “this (here)” etc. **(c)** For enhanced emphasis, the pronouns *ayaṃ* and *so/eso* are applied pleonastically with relative *yo* (e.g. *tasmā yoyaṃ me attapaṭilābho* – “therefore, this is the acquisition of per-

⁸⁴ These are given in Table 4 in the “Tables” section.

⁸⁵ For the usage with a relative pronoun giving emphasis, see below.

sonality for me,” Sv-pt: 135; Duroiselle, 1906/1997: 74). **(d)** The pronouns formed from *amu* imply a sense of being far away and may be translated as “yonder” etc. (Collins, 2006: 63; Warder: 30).

Relative Pronouns

Formation. **(a)** Relative pronouns are mainly found building relative clauses (e.g. *yo dhammaṃ passati, so buddhaṃ passati* – “He who sees the *dhamma* is the one who sees the Buddha,” Mil: 35), but some are employed as indeclinables (Warder, 1963/2001: 70). **(b)** Neuter singular of *ya(d)* is used preceding vowels and in compounds (Duroiselle, 1906/1997: 74). **(c)** The relative pronouns take their gender and number from the antecedent (the modified element from the main clause) in relative clauses, but case is determined according to their function in the relative clause (Collins, 2006: 68). **(d)** The relative clause regularly precedes the main clause (Warder: 71), though it may be that the correlating pronoun (with its clause) precedes the relative one (e.g. *amataṃ tesaṃ bhikkhave sacchikataṃ, yesaṃ kāyagatāsati sacchikatā* – “Those, bhikkhus, that have realized the deathless are those who realized mindfulness directed to the body,” AN I: 29 [AN 1.627]; Dhammajoti, 2018: 103).

Usage. **(a)** Relative pronouns are commonly translated with “who” or “which,” in the three genders. **(b)** As a simple marker of a relative clause or a connector of a subordinate clause, it may function as an indeclinable and be translated as “that,” “since,” “if,” “whereas” etc. (e.g. *nesa dhamma, mahārāja, yaṃ tvaṃ gaccheyya ekako* – “It is not right, great king, that you might go alone,” Jā II: 188 [Jā 547]; Dhammajoti, 2018: 102). **(c)** For the sake of emphasis, the relative pronoun *yo* is used pleonastically with demonstrative pronouns *ayaṃ* and *so* as well as with personal pronouns (or *eso*; e.g. *yo so, āvuso, bhikkhu kāmesu avītarāgo hoti [...], tasssa cittaṃ na namati ātappāya [...]* – lit. “That bhikkhu, friend, who has not been without passion regarding sensuality, his mind does not bend toward ardor,” DN III: 105 [DN 33]; Duroiselle, 1906/1997: 74). **(d)** To express the sense of generalization, the pronoun *ya(d)* can be employed thus:

- Repetition of *ya(d)* and the correlative in a distributive sense (e.g. *yo yo [...] ādiyissati, tassa tassa dhanamanuppadassāmi* – “Whoever will take up, to him I will give,” DN III: 27 [DN 26]).
- In combination with its correlative (e.g. *yasmiṃ tasmīṃ* – “in whatever place/case”).
- In combination with the indefinite pronouns (e.g. *yaṃ kiñci* – “whatever”).

(a) The form *yadidaṃ* can be employed in a variety of ways (e.g. “that is to say,” “since,” “which is this,” “namely”; Collins, 2006: 69). **(b)** The instrumental form *yena* in combination with a verb of motion carries the import of “where,” “toward” and governs the nominative case (Warder, 1963/2001: 73); in that sense, constructions with *yena [...] tena* may be translated as “where [...], there” (e.g. *yena bhagavā tenupasaṅkami* – “Where the Blessed One was, there [he] went,” Vin I: 4 [Pār 1]). **(c)** The relative pronouns in all oblique cases are also used adverbially (e.g. *yena* [instr.] – “where” or “at which place”; *yena yena* [instr.] – “wherever”; *yahiṃ* [loc.] – “where” or “whither”; *yasmā* [abl.] – “because” [corresponding with *tasmā*]; Oberlies, 2019: 260, f.n. 1, 270; PED, s.v. “ya”).

Interrogative Pronouns

Formation and Usage. **(a)** Interrogative pronouns are used to formulate questions (Collins, 2006: 67). **(b)** There is no equivalent to a question mark in the Pāḷi language; however, if a sentence contains an interrogative pronoun, the whole sentence takes on an interrogative sense. **(c)** It is also possible that a sentence contains no such pronoun but that the context imposes an interrogative sense (Warder, 1963/2001: 73–4). **(d)** The particles *su/ssu*, *nu* and *no*⁸⁶ are used with interrogative pronouns for emphasis (PED, s.v. “ka”; Perniola, 1997: 56). **(e)** As mentioned in the section

⁸⁶ The last two-mentioned particles are used to signify doubt, by themselves or with an interrogative pronoun or adverb. They are oftentimes followed by *kho* (e.g. *ko nu kho, bho gotama, hetu ko paccayo [...]* – “Now what is the reason, dear Gotama, what the cause [...]?”; DN I: 68 [DN 5]; Oberlies, 2019: 282, f.n. 2).

on adjectives: “[...] affixes *tara*, *tama* [...] are also added to the bases of interrogative pronouns, but the meaning differs just a little from that of the respective bases (e.g. *katara* – ‘which [of two]?’; *katama* – ‘which [of many]’).” (f) *Kena* (instr.), *kasmā* (abl.) and *kissa* (gen.) are also employed adverbially, meaning “why?”, “wherefore?”; *kiṃ* (acc.) is oftentimes used with the instrumental to express the meaning of “what is the use of.” (g) Interrogative pronouns in all oblique cases may be used adverbially as well (Oberlies, 2019: 260, f.n. 1, 270; Palistudies, 2018f).

Indefinite Pronouns

Formation and Usage. (a) Indefinite pronouns don’t refer to any person, thing or amount specifically. They are inexplicit, “not definite.” (b) Sometimes, substantive nouns are constructed from indefinite pronouns (e.g. *kiñcanaṃ* – “defilement”; Oberlies, 2019: 283). (c) They are formed in the following ways (Ānandamaitreya, 1993/2012: 81; Duroiselle, 1906/1997: 75; Perniola, 1997: 56–7; Warder, 1963/2001: 85–6):

- Addition of *ci* (*cid* before a vowel), *cana* (*canaṃ* is also found), *api* or *pi* to the interrogative pronouns (e.g. *kiñci*, *kācana*, *kampī*).
- Twofold repetition of the demonstrative or relative pronoun (e.g. *so so* – “anyone”; *taṃ taṃ*, in the sense of “several,” “various”).
- Joining a relative with an indefinite (e.g. *yaṃ kiñci* – “whatever”).
- Joining a negative with an indefinite (e.g. *na kiñci* – “nothing”).

Possessive Pronouns

Formation and Usage. (a) Some possessive pronouns form from the base of the first and second personal pronouns by means of affixes *īya* and *aka*, with occasional lengthening of the base vowel (e.g. *mad* + *īya* → *madīya*; *mam* + *aka* → *māmaka* – “mine”; Duroiselle, 1906/1997: 77). (b) The word *attano* (dative/genitive) can be used as a possessive pronoun (in all three genders, singular as well as plural), meaning “himself,” “oneself,” “myself,” “yourself,” agreeing with the subject of the clause or sentence (e.g. *attāpi attānaṃ na upavadati* – “and he does not blame himself,” MN II: 53 [MN 65]). (c) As a possessive adjective, it stands for: “his own,” “her

own,” “my own” etc. **(d)** Other possessive pronouns and adjectives include: *sayam* and *sāmaṃ* (“oneself,” “self,” “myself” etc.; e.g. *sāmaṃ diṭṭham* – “seen by oneself”); *saka* and *sa* (“one’s own”; Perniola, 1997: 57; Warder, 1963/2001: 187). **(e)** The genitive of the personal pronouns for both persons also articulates a possessive sense (e.g. *mayham*, *tuyham*, *tassa*; Perniola: 57).

Pronominal Derivatives (Adjectives, Adverbs)

Adjectives (Duroiselle, 1906/1997: 77–8). **(a)** Certain affixes added to pronominal bases form a great number of adjectives: *di* (*dī*), *disa*, *dikkha*, *disaka*, *risa* intimate likeness and resemblance, with lengthening of the base vowel (e.g. *ta* + *di* → *tādi* – “like him,” “like that,” “such”). **(b)** As mentioned above: “[...] affixes *tara*, *tama* [...] are also added to the bases of interrogative pronouns, but the meaning differs just a little from that of the respective bases (e.g. *katara* – ‘which [of two]?’; *katama* – ‘which [of many]’).”

Adverbs (Duroiselle, 1906/1997: 78–9). **(a)** Certain suffixes added to pronominal stems form also a great number of adverbs: *dā*, *dāni*, *rahi* express time (e.g. *karahi* – “when?”; *etarahi* – “now”). **(b)** Adverbs of place are formed by means of suffixes *to*, *tra*, *tha*, *dha*, *ha*, *ham*, *hiṃ* (e.g. *kattha* – “where?”; *yatra* – “where?”) – preceding a short vowel, the *t* of *tha* is doubled. **(c)** Suffixes *thā*, *va*, *vaṃ*, *thaṃ*, *ti* are used to form adverbs of manner (e.g. *tathā* – “thus,” “like that”; *kathaṃ* – “how?”). **(d)** Another *va* suffix is used to intimate time and cause (stem final *a* is lengthened), appended to pronominal stems of *ta*, *ya*, *ki* – final *t* is dropped since no consonant is permitted to stand as word final. If it precedes a vowel, it is retained in the form of *d* (e.g. *yāvadeva* – “ever so much,” “as far as,” “but only”). **(e)** The ablative singular suffix *tā* is added to the mentioned forms too (e.g. *yāvatā* – “as far as,” “because”).⁸⁷ **(f)** Suffix *di* is found merely in *yadi* (“if”), *ti* in *kati* (“how many”) and *yati* (“as many”).

⁸⁷ More examples of case forms used adverbially are listed above in the section “Demonstrative Pronouns,” pt. (e).

Action Nouns

Formation and Usage. (a) The use of action nouns in Pāli is frequent – they are formed with affixes *a*, *i*, *ana*, *anā*, *aka*, *taṃ*, *tā*, *tī*, *tta*,⁸⁸ added either directly to the root or the base (Perniola, 1997: 381). **(b)** Action nouns express the generic verbal idea without reference to time or person (e.g. *dassana* – “seeing”) and, in the manner of any other noun, assume the case form according to the respective syntactical function they perform within the sentence (e.g. *te kāyassa bheda* [instr.] *paraṃ maraṇā sugatiṃ saggam lokaṃ upapannā* – “With the breaking up of the body, after death, they are reborn in a good destination, in the heavenly world,” DN I: 40 [DN 2]; Hendriksen, 1944: 87). **(c)** They usually govern the genitive case (e.g. *brāhmaṇo pokkharasāti bhagavato* [genitive] *adhivāsanam veditvā* [...] *kālam ārocesi* – “The Brahmin Pokkharasāti, having found out [about] the Blessed One’s consent [...], announced the time,” DN I: 51 [DN 3]), but *dassanāya* stands also with the accusative (e.g. *sammāsambuddham dassanāya upasaṅkamisāma* – “We would approach to see the Perfectly Enlightened One,” MN II: 118 [MN 81]; Perniola: 381). **(d)** Action nouns may take objects, are modified by adverbs and are oftentimes continued with verbs (Hendriksen: 87).

Agent Nouns

Formation. (a) The affixes forming agent nouns are: *a*, *ana*, *aka*, *āvi*, *dha*, *i*, *in*, *ina* [after √*ji*], *ka*, *ma*, *ratthu* (*tar*), *ta*, *tra*, *tuka* [after √*gamu*], *uka*, *ū*⁸⁹ – they are appended to roots or bases (Collins, 2006: 113; Perniola, 1997: 378). **(b)** Letter *a* [of roots] → *i* [occasionally] / __ *ratthu* (*tar*), but final *ā* and *e* of roots remain unchanged (Ānandamaitreya, 1993/2012: 66). **(c)** An *i* is also inserted under other circumstances (e.g. √*bhāsa* → *bhāsitar*; Warder, 1963/2001: 209). **(d)** The affix *aka* is used after action nouns in *ana* to form agent nouns (Perniola: 155). **(e)** The affixes of the past active participle may be superadded to these affixes (e.g. *sutavā* – “he who has

⁸⁸ See the chapter “*Kita* and *Taddhita* Affixes” for more details.

⁸⁹ See chapters “*Kita* and *Taddhita* Affixes” and “*Uṇādi* Affixes.”

heard”). **(f)** Agent nouns are oftentimes found as the final member of dependent-determinative compounds⁹⁰ (Perniola: 378).

Usage – as Adjectives and Substantive Nouns. **(a)** Agent nouns are frequently encountered in Pāḷi (more so in the earlier strata of the language) and may be translated as “one who does [this or that]” or rendered simply by means of the English suffixes -er or -or, denoting someone or something who/which does the action described by the verb; i.e. the agent (e.g. *tathāgato [...] dattḥāraṃ na maññati* – “The Tathagata [...] does not conceive the doer,” AN IV: 16 [AN 4.24]; Hendriksen, 1944: 81–2; Perniola, 1997: 378). **(b)** They may act as common nouns to take an object in the accusative, genitive or dative case (e.g. *bahujanamanāpā tathārūpiṃ vācaṃ* [acc.] *bhāsītā* – “the one who utters such speech which is pleasing to many people”; *bhinnānaṃ* [gen.] [...] *sandhātā* – “a conciliator [...] of those who are divided,” DN I: 2 [DN 1]; Ānandamaitreya, 1993/2012: 66; Oberlies, 2019: 251, f.n. 4; Warder, 1963/2001: 209; Wijesekera, 1936/1993: 186). **(c)** Agent nouns are also placed in apposition to a noun or pronoun (e.g. *ahasmaṃ brahmā [...] issaro kattā nimmātā* – “I am Brahma [...], the lord, maker and creator,” DN I: 9 [DN 1]; Hendriksen: 84; Perniola: 379). **(d)** They are also capable of functioning as adjectives (Ānandamaitreya: 66).

Usage – as Verbs and Predicates. **(a)** Agent nouns in Pāḷi may express the main action of a sentence (e.g. *samaṇo gotamo, ito sutvā na amutra akkhātā imesaṃ bhedāya* – “The ascetic Gotama is not one who relates there what he has heard here for the division of those,” DN I: 2 [DN 1]). **(b)** They are also capable of denoting the action of a subordinate clause (e.g. *ahaṃ tena samayena purohito brāhmaṇo ahoṣiṃ tassa yaññassa yājetā* – “At that time, I was the king’s high priest, who was the performer of [or ‘who performed’] the sacrifice,” DN I: 68 [DN 5]; Warder, 1963/2001: 211). **(c)** Oberlies (2019: 251, f.n. 4) notes that “[s]yntactically they take either the accusative [...] or the genitive” (e.g. [genitive] *bhavissanti dhammassa aññātāro* – “There will be those who understand the *dhamma*,” MN I: 114

⁹⁰ See chapter “Compounds (*samāsā*)” for details.

[MN 26]; Hendriksen, 1944: 82). **(d)** On account of the ambiguity of its temporal sense, the agent noun may be used to express the past, present and future tenses, thus denoting that which takes place at any time⁹¹ (e.g. [potentially future] *ayampi kho, mahānāma, puggalo agantā nirayaṃ* – “Now this person, Mahānāma, will not go to hell”; Hendriksen: 81, 83–4).

Grammatical Case (*vibhatti*)

Kinds of Cases

1. Nominative (*paṭhamā* or *paccattavacanaṃ*).
2. Accusative (*duṭṭiyā* or *upayogavacanaṃ*).
3. Instrumental → ablative of instrument (*tatiyā* or *karaṇavacanaṃ*).
4. Dative (*catutthī* or *sampadānavacanaṃ*).
5. Ablative of separation (*pañcamī*, *avadhi* or *apādānaṃ*).
6. Genitive or possessive (*chaṭṭhī* or *sāmivacanaṃ*).
7. Locative (*sattamī*, *bhumnavacanaṃ* or *ādhāro*).
8. Vocative (*ālapana* or *āmantaṇavacanaṃ*).

General Characteristics⁹²

(a) Noun case suffixes⁹³ are affixed to nominal stems to indicate grammatical case. **(b)** The traditional Pāli grammars acknowledge seven cases in total, excluding the vocative for the overall tally (cf. Yindee, 2018: 58); however, as mentioned earlier, “in modern grammars, we may find it included among the total count, therewith amounting to eight cases” (Collins, 2006: 18–9). **(c)** For the sake of completeness, the list of the most elementary morphological case suffixes – contained within the classical grammars – will be given in the following (Kacc 55; Rūp: 32; Thitzana, 2016: 186–9; Yindee, 2018: 58). This listing is not an exhaustive guide to all the possible forms as shown in Table 3 in the “Tables” section but would

⁹¹ There seem to be, however, no usages with an unequivocal future sense.

⁹² For an in-depth study about the various cases and their contextual applications see, for example, Wijesekera (1936/1993).

⁹³ See Table 3 in the “Tables” section for a comprehensive listing.

prove to be essential if one wishes to navigate the explanations contained within the indigenous grammar books – one would also better understand some derivations tendered in this grammar (singular endings are to the left, plural ones to the right):

— Nominative	<i>si</i> (→ <i>o</i>)	<i>yo</i> (→ <i>ā</i>)
— Vocative	<i>si</i> (→ \emptyset)	<i>yo</i> (→ <i>ā</i>)
— Accusative	<i>aṃ</i>	<i>yo</i> (→ <i>e</i>)
— Instrumental	<i>nā</i> (→ <i>ena</i>)	<i>hi</i> (→ <i>ebhi</i>)
— Dative/Gen.	<i>sa</i> (\emptyset → <i>s</i>)	<i>naṃ</i> (→ <i>ānaṃ</i>) ⁹⁴
— Ablative	<i>smā</i> (→ <i>mhā</i> , <i>ā</i>) ⁹⁵	<i>hi</i> (→ <i>ebhi</i>)
— Locative	<i>smiṃ</i> (→ <i>mhi</i> , <i>e</i>) ⁹⁶	<i>su</i> (final <i>a</i> [of stem] → <i>e</i> / __ <i>su</i>) ⁹⁷

To reiterate, the *Padarūpasiddhi* (Rūp: 29) and Duroiselle (1906/1997: 24) mention that whole syllables are at times elided for the sake of meter or to facilitate pronunciation (e.g. *abhiññāya sacchikatvā* → *abhiññā sacchikatvā*).

Usage of the Cases

1. Nominative

- Subject (*kattā* – lit. “agent”) of sentences or clauses, active or passive. This is the main use of this case (Wijesekera, 1936/1993: 39).
- Subject qualifiers: adjectives (*guṇanāmāni*), predicates (*kiriyaṇi*) or a term in apposition (e.g. [predicate] [...] *saṅgati phasso* – “The meeting [...] is contact,” MN I: 80 [MN 18]).
- Items in a *ti* clause.
- Viewpoint (in the sense of “as”; e.g. *pāmojjabahulo, dukkhassantaṃ karissati* – “one will, as one having much joy, put an end to suffering, Dhṃ: 26, v. 376).

⁹⁴ Vowel *a* [of stem] → (\bar{V}).

⁹⁵ Suffix may remain unchanged.

⁹⁶ Suffix may remain unchanged.

⁹⁷ Suffix may remain unchanged.

- Text titles (e.g. *dīghanikāyo*).
- Exclamations (of abstract nouns).
- Hanging nominative, introduces another phrase without grammatical connection (Kacc 281, 285; Collins, 2006: 19–20).
- The nominative can also be used instead of the locative (e.g. *evaṃ kilesamaladhova, vijjante amatantaḷe. na gavesati taṃ taḷākamaṃ, na doso amatantaḷe*⁹⁸ – “Just so there exists the pool of the deathless for the cleansing of the stains. If you don’t search out that pool, it is not the fault of the pool of the deathless,” Bv: 6; *bhikkhu nisinne mātugāmo upanisinno [...] hoti* – “While the bhikkhu is sitting, the woman has sat down closely,” Vin I: 157 [Ay 1]).

2. Accusative

- Direct object, incl. goal of motion (*kammaṃ*) – the main function of this case (Kacc 280; Wijesekera, 1936/1993: 58).
- Internal direct object (e.g. “He sang a song”).
- With abstract endings *taṃ* and *tā* as object of verbs of motion or acquisition for change of state.
- Double accusative (e.g. *taṃ ahaṃ brūmi brāhmaṇaṃ* – “Him I call a Brahmin,” MN II: 203 [MN 98]).
- Viewpoint (in the sense of “in terms of,” “as”; e.g. *yo ca abhāsitaṃ alapitaṃ tathāgatena abhāsitaṃ alapitaṃ tathāgatenāti dīpeti* – “he who explains that which has not been said and spoken by the Tathagata as what was not said and spoken by the Tathagata,” AN II: 7 [AN 2.24]).

⁹⁸ The respective commentary explicitly identifies *kilesamaladhova* as a nominative employed in the sense of a locative: ***kilesamaladhovanti kilesamalasdhane, bhummatthe paccattavacanaṃ*** (Bv-a: 47). I am indebted to Bryan Levman, who pointed out this passage to me. Both occurrences might be explained on different grounds, so much so that this usage has to be considered unattested (Oberlies, personal communication, October 3, 2020).

— Various adverbial uses:

- ❖ Time during which (e.g. *te tattha [...] ciraṃ dīghaṃ addhānaṃ titthanti* – “They stay there for a long stretch of time”; Kacc 298).
- ❖ Extent of space (e.g. *yojanaṃ* – “for a league”; Kacc 298).
- ❖ Manner (e.g. *sādhukaṃ manasikarohi* – “Apply your mind [i.e. ‘pay attention’] thoroughly!”, DN III: 75 [DN 31]).

— Object of various prepositions and postpositions: *pacchā, antarā, yathā, vinā, santike, anu, abhi, paṭi* (Collins, 2006: 20–3; Duroiselle, 1906/1997: 155–6).

— May be used in the sense of the genitive, ablative,⁹⁹ instrumental and locative (e.g. [locative] *so [...] pubbaṅhasamayaṃ nivāsetvā pat-tacīvaramādāya gāmaṃ vā nigamaṃ vā piṇḍāya pavisati* – “He [...], having dressed in the morning time and having taken his robe and bowl, enters a village or town for alms,” MN II: 63 [MN 67]; Kacc 275, 279, 297, 306–307).

3. Instrumental

— The instruments (means) or things with which an action is completed; the fundamental use of this case (Kacc 279; Wijesekera, 1936/1993: 108).

— Logical subject of passive verbs (e.g. *svākkhāto bhagavatā dhammo* – “Well taught is the *dhamma* by the Blessed One,” DN III: 100 [DN 33]).

— Cause or reason (Kacc 289).

— Accompaniment (*saddhiṃ* and *saha* are not absolutely necessary; e.g. [...] *atha kho bhagavā āyasmataṃ aṅgulimālena pacchāsamaṇena yena sāvatthi tena cārikaṃ pakkāmi* – “and then the Blessed One went to Sāvattthi with Ā. Aṅgulimāla as his attendant monk,” MN II: 150 [MN 86]; Kacc 286).

⁹⁹ With such words as *dūra* (“distant,” “far” etc.).

- Manner.
- Attendant circumstances (e.g. *abhibhū bhikkhu [...] dissamānenapi kāyena dhammaṃ desesi* – “The bhikkhu Abhibhū [...] taught the *dhamma* with his body being visible,” SN I: 97 [SN 6.14]).
- Motion to a definite place can be expressed with *yena-tena* [“where-there”] constructions (e.g. *aññatarā devatā [...] yena bhagavā tenupasaṅkami* – “A certain deva went up to where the Blessed One was,” Khp: 2).
- Place (e.g. *bhagavā dakkhiṇena passena sīhaseyyaṃ kappesi* – “The Blessed One lay down on the right side,” DN II: 57 [DN 16]).
- Time (e.g. *tena samayena [...]* – “at that time [...],” DN II: 38 [DN 16]).
- Comparison (e.g. *na tena seyyo sadiso ca vijjati* – “There exist none better or equal to him,” DN III: 65 [DN 30]; with *saha* at times in the sense of equality: “as”).
- Other adverbial uses.
- With *kiṃ* in the sense of “what is the use of [...]?”, “away with [...]!”, “no more of [...]!”; with *alam*: “enough of [...]!”, “there is no need of [...]!” (Kacc 279, 286, 288–289; Collins, 2006: 23–7; Duroiselle, 1906/1997: 156–7).
- Applied also in the sense of the ablative¹⁰⁰ and locative (Kacc 275, 290, 296).

4. Dative

- Purpose, benefit, result. It primarily “denotes the thing with reference to which an action proceeds” (Kacc 109, 276; Wijesekera, 1936/1993: 156).
- With *attha* also in the sense of “for the sake of.”
- Direction (e.g. *appo saggāya gacchati* – “Few go to heaven,” DhP: 12, v. 174).

¹⁰⁰ With such words as *dūra* (“distant,” “far” etc.).

- Time (e.g. *dukkhamupenti punappunaṃ cirāya* – “For a long time, again and again, they undergo suffering,” Dhp: 24, v. 342).
- Used also instead of the accusative and locative (Collins, 2006: 27–8; Duroiselle, 1906/1997: 154–5).
- The dative of nouns in *āya* is often used in the sense of the infinitive and may be applied in a future sense (e.g. *pākāya* – “in order to cook”; Kacc 653; Duroiselle: 109).
- The infinitive is at times fully interchangeable with the dative of purpose (cf. Warder, 1963/2001: 134; Wijesekera: 181).

5. Ablative

- The point from which, cause, origin, motive etc. – the primary significance of the ablative case and the very opposite of the dative (Wijesekera, 1936/1993: 192).
- **(a)** Measurement of distance and time (e.g. *ito so, bhikkhave, ekana-vutikappe yaṃ vipassī bhagavā arahaṃ sammāsambuddho loke udapādi* – “Bhikkhus, ninety-one aeons ago [lit. ‘from now’] Vipassī arose in the world, the Blessed One, Worthy One, Perfectly Enlightened One,” DN II: 1 [DN 14]). **(b)** Used also with such words as *dūra* (“distant,” “far” etc.), *antika* (“near”) and others of related meaning (e.g. *āsanne ito naḷakāragāmo* – “The village *Naḷakāra* is near from here,” MN II: 210 [MN 99]).
- Used with words indicative of purity, freedom, release, dissociation and “a little” as well as with the word *pubba* (“former,” “before”; e.g. *lobhaniyehi dhammehi suddho asaṃsaṭṭho* – “It is pure and dissociated from greed-causing phenomena”).
- Comparison and, closely related to that, viewpoint (in the sense of “in terms of,” “as” [with ablatives ending in *to*]; e.g. *sārañca sārato ñatvā [...], te sāraṃ adhigacchanti* – “Having known the essential as the essential [...], they attain the essential,” Dhp: 1, v. 12).
- Certain adverbial forms: *tasmā* or *tato* (“therefore,” “thence”), *ya-smā* or *yato* (“whence,” “because” etc.).

- Abstention from, with such words as *ārati* (“abstinence”).
- Used also in the sense of the instrumental, accusative, genitive and locative (Kacc 275; Collins, 2006: 28–31; Duroiselle, 1906/1997: 157–8; Wijesekera: 194, 218).

6. Genitive. (a) The genitive case is not merely used with verbs and substantive nouns but also with adjectives and adverbs, although normally it is found to qualify another noun. “It does so by assigning it to a particular class or description, or by distinguishing it as a part of a whole. So, the fundamental notion expressed by it is to mark the *belonging to* or *being part of*. This *possessive* or *partitive* application admits of the almost universal rendering of the gen. in Pāli as in the older languages by the English *of*” (Wijesekera, 1936/1993: 225). **(b)** So, the main sense is that of the first and second points below, with the remaining ones to follow also occurring in the language:

- Possessive (e.g. *tathāgatassa parinibbānaṃ* – “the final extinction of the Tathagata,” DN II: 45 [DN 16]).
- Partitive, in the sense of “from among,” “of these.”
- Subjective (e.g. [...] *pacchimakaṃ* [...] *tathāgatassa vesāliyā dassanaṃ bhavissati* – “This will be the Tathagata’s [...] last sight of Vesāli,” DN II: 52 [DN 16]).
- Objective (e.g. *māvamaññetha puññassa* – “You ought not disregard merit,” DhP: 9, v. 122).
- Time (e.g. *na cirasseva anupādāya āsavehi cittaṃ vimuccī* – “Just after no long time [or ‘before long’], the mind was liberated from the defilements by non-clinging,” DN II: 16 [DN 14]).
- Used also instead of the accusative, ablative, instrumental and locative (Kacc 277, 301, 304, 308–309; Collins, 2006: 31–4; Duroiselle, 1906/1997: 154).

7. Locative

The primary meanings expressed by the locative case are: “place at which” (proximity, domain), “in which” (permeation), “on which,” “into which” and “from which” (e.g. *jalesu khīraṃ tiṭṭhati* – “The milk is in the water”; Kacc 278; Wijesekera, 1936/1993: 265), but it may comprise also the following:

- Comparison.
- Partitive, in the sense of “from among,” “of these.”
- “With regard to,” “in respect of,” “in re” (e.g. *ariyasāvako rūpasmiṃ nibbindati* – “The noble disciple is disgusted with regard to corporeality,” MN I: 96 [MN 22]).
- Adverbial sense of space and time (e.g. *sacepi [...] taṃ bhagavantaṃ dasasu yojanesu [...]* – “even if [...] the Blessed One would be within ten leagues,” MN II: 137 [MN 84]).
- Adverbial (generally).
- Extensively used instead of the genitive, instrumental, dative and ablative (Kacc 278, 302, 304, 310–313; Collins, 2006: 34–7; Duroiselle, 1906/1997: 158–9).

Vocative

- Addressing listener (Collins, 2006: 37; Duroiselle, 1906/1997: 159).

Locative, Genitive, Accusative and Nominative Absolute

(a) A noun, pronoun or phrase together with a participle in agreement with it is called an absolute construction; it functions syntactically as an independent adverbial (i.e. qualifying) clause or phrase to denote time, manner or attendant circumstance (though not invariably) in relation to a main clause. **(b)** Its agent differs from the main clause or is impersonal (i.e. has no explicit agent; Collins, 2006: 37; Palistudies, 2018e; Wijesekera, 1936/1993: 302). **(c)** The presence of a participle separates this con-

struction – having a subject and a predicate of its own¹⁰¹ – from the main clause and is thus considered freed or detached (Lat.: *absolutus*) from the remainder of the sentence; however, a logical tie always remains. **(d)** Absolute constructions occur with the locative, genitive, accusative and nominative cases (order of frequency), either with a present or past passive participle but never with the future passive participle or others, such as the past active participle (Wijesekera: 302–3; however, see e.g. [past active participle] *therassa taṃ bhattaṃ thokaṃ bhuttavato kaṇṇasūlaṃ paṭṭipassambhi* – “When the elder had eaten that meal, the pain in the ear was allayed,” contained in the 1901 PTS edition of the *Vimānavatthu* commentary, Pd III [E^e]: 244).¹⁰²

(a) They discard their case-relevant meaning and may be translated as “when,” “while” (temporal), “since,” “because,” “as a result of” (causal), sometimes also as “although,” “even though” (concessive) and in the case of the locative and genitive absolutes – expressing a sense of contempt or disregard – oftentimes also as “in spite of,” “despite,” “notwithstanding”¹⁰³ (modal; Kacc 305, 313; Collins, 2006: 37–9; Duroiselle, 1906/1997: 160; Palistudies, 2018e; Wijesekera, 1936/1993: 305–6). **(b)** When the main clause is interrogative, the absolute construction can be rendered into English with hypothetical clauses beginning with “supposing” or “now if” (Wijesekera: 307).

Locative absolute (*bhāvena bhāvalakkhaṇabhummā*). **(a)** The locative absolute occurs frequently in Pāli and has many nuances, being occasionally syntactically complex (Wijesekera, 1936/1993: 303; e.g. *rudantasmiṃ*

¹⁰¹ Wijesekera (1936/1993: 302) observes that the “absolute construction differs from the simple temporal or modal use of a case only in the predicative character of the participle.”

¹⁰² This edition is, however, not without problems (Kieffer-Pülz, 2019: 489). An unproblematic example from B^e is the following: [...] *gahapatissa* [...] *manuññaṃ bhojanaṃ bhuttāvissa bhattasammado hoti* – “[...] when a householder has eaten delicious food, there occurs drowsiness after the meal,” DN II: 80 [DN 17]; cf. Hendriksen (1944: 10).

¹⁰³ In the case of the locative abs. especially when the main clause is negative.

dārake pabbaji – “He went forth in spite of his son weeping”; Kacc 305, 313). **(b)** Locative absolute phrase *atthe sati* can be rendered as “if, such being the case [...].”

Genitive absolute. **(a)** Wijesekera (1936/1993: 259) remarks that the genitive absolute is restricted “to a few standing phrases” and although “it is sometimes concurrent with the loc. absolute, it is still far from possessing the general character” of it (e.g. *so kho ahaṃ, bhikkhave [...] akāma-kānaṃ mātāpitūnaṃ assumukhānaṃ rudantānaṃ kesamassuṃ ohāretvā [...] agārasmā anagāriyaṃ pabbajim* – “In spite of the [my] parents being unwilling and crying, bhikkhus [...], I shaved off my hair and beard [...] and went forth from home into homelessness,” MN I: 111 [MN 26]). **(b)** The genitive absolute is only found with present participles or past participles as final members of a compound, and its agent is invariably a living being (cf. Hendriksen, 1944: 44; Oberlies, personal communication, October 10, 2020).

Accusative absolute. A few instances demonstrate that the accusative case of some substantive nouns is used with a participle in agreement, constituting an obvious absolute construction (Wijesekera, 1936/1993: 98; e.g. *santaṃyeva kho pana paraṃ lokaṃ ‘natthi paro loko’ti vācaṃ bhāsati* – “Although the other world exists, he says ‘there is no other world,’” MN II: 34 [MN 60]).

Nominative absolute. *Samvattaṃmāno loko yebhuyyena sattā ābhassara-samvattaṇikā honti* – “When the world is collapsing, beings, for the most part, become Ābhassara gods” (DN I [E^e]: 17 [DN 1]; cf. Wijesekera, 1936/1993: 54).¹⁰⁴ It is worth quoting Wijesekera (p. 53) regarding this kind of absolute:

The nom. absolute is not a regular construction in either Pāḷi or Skr. It is not entirely absent in the latter but as an idiom is very rare [...].

¹⁰⁴ The passage in Pāḷi is from the 1890 PTS edition (E^e). Interestingly, B^e has the same sentence in the locative absolute.

Nouns (*nāmāni*)

Duroiselle also in his Pāli Grammar (§603.ii) refers to a nom. absolute in Pāli but gives no examples. In the Nikāyas we come across a few uses of the nom. with the participle in agreement, that appear to be as much legitimate absolute constructions as are the loc. or gen. absolute [...]. These even exhibit the temporal sense.

Numerals (*saṅkhyā*)¹⁰⁵

Kinds of Numerals

1. Cardinal.
2. Ordinal.
3. Distributive.
4. Fractional.
5. Multiplicative.
6. Substantive.

Cardinal Numerals

Formation. (a) Numerals 11, 12, 21, 22 etc. are two-word copulative compounds (e.g. *ekārāsa* – “one and ten [i.e. ‘11’]”; *caturāsīti* – “four and eighty [i.e. ‘84’]”; *chappañca* – “five or six”). (b) The numerals which are to be added together can also be realized with the copulative particle *ca* (“and”); multiplication can be expressed by means of either juxtaposing or compounding the respective numerals (Oberlies, 2019: 297).¹⁰⁶ (c) Numerals 19, 29, 39 etc. are formed by *eka* (“one”) + the adjective *ūna(ka)* (“less”) + the immediately next higher cardinal numeral (e.g. *ekūnatiṃsati* – “29”). (d) *Sataṃ* (“100”) and *sahassaṃ* (“1,000”) stand in apposition with another noun (the counted thing) in the same case¹⁰⁷ or with genitive nouns and belong, as substantive nouns, themselves to the neuter gender (e.g. *sataṃ nikkhaṃ* – “100 cold coins”); *sahassaṃ*, in combination with other numerals, sometimes inflects like an adjective (e.g. *satasahassīyo gāvo* – “many hundreds of thousands of cows,” Sn: 24 [Sn 310]; Oberlies: 308; Warder, 1963/2001: 117). (e) The numerals above 100 form somewhat flexibly, so that compounds are also frequently encountered in which *sataṃ* stands as final member with the tens prefixed – the units come before the tens (e.g. *ekādasasataṃ* – “111”); higher numerals are usually copulative compounds (Ānandajoti, 2016: 8; Oberlies: 309; Perniola, 1997: 63). (f)

¹⁰⁵ See Table 5 in the “Tables” section below for a detailed list.

¹⁰⁶ See below.

¹⁰⁷ There is no agreement of gender but case and number (sing. and pl.).

It is also possible that the counted thing and the numeral form a compound (e.g. *vassasataṃ* – “100 years”; Oberlies: 308). **(g)** Numerals higher than 100 and 1,000 may take shape with the addition of *atireka* (“surplus,” “exceeding”) *adhika/samādhika* (“exceeding”), *paro* (“more than”) or *uttara/uttariṃ* (“higher,” “further,” “over”); some examples in the following:

- *Adhika: ekādhikaṃ sataṃ* (“101”); *aṭṭhārasādhikaṃ sataṃ* (“118”).
- *Atireka: atirekatiratte* (“exceeding three nights”).
- *Paro: parosahassaṅca* (“more than 1,000”).
- *Uttariṃ: tīṇi gāthāsātānettha, asīti tīṇi cuttariṃ* (“three hundred verses [and] eighty-three over in here [i.e. ‘383’],” Ap I: 298).

(a) Constructions with the word *matta* (“as far as the measure goes,” “consisting of” etc.) are frequent (e.g. *pañcamattāni brāhmaṇasatāni* – “500 Brahmins,” DN I: 52 [DN 4]; Oberlies, 2019: 309). **(b)** The higher numeral may also be placed as the initial + the smaller one, either with or without copulative particle *ca* (“and”; e.g. *sataṃ eko ca* – “101”; Oberlies: 309; Perniola, 1997: 63). **(c)** The numeral may also be expressed with two words in apposition; “200” etc. are usually written like that and 2,000 and 20,000 are constructed in the same way (e.g. *ekaṃ sataṃ* – “100”; *dve sataṃ* – “200”; Oberlies: 309). **(d)** Again, numerals 50, 150, 500, 1,500 etc. are made up with the word *aḍḍha* (“half”) + the word standing for the next higher order numeral (e.g. *aḍḍhateyyasataṃ* – “half of the third hundred [i.e. ‘250’]”), though 150 and 1,500 are *diyāḍḍhasataṃ* and *diyāḍḍhasahassaṃ* respectively (Perniola: 64).

(a) The numeral *eka* is declined in the masculine, feminine and neuter singular, following the same declensional paradigm as the demonstrative pronoun *ta* (nom.: *so, sā, taṃ*). **(b)** In the plural it means “some” (Pd I: 8; Perniola, 1997: 63–4). **(c)** Numerals *dvi* (“two”) and those from *pañca* (“five”) up to *aṭṭhārasa* (“18”) have no gender distinction; i.e. they have the same declension, irrespective of the gender of the word which they determine, or are, excepting *pañca*, used in an undeclined form (for the latter

point e.g. *dvattiṃsa mahāpurisalakkhaṇāni*; cf. Kacc 134; Collins, 2006: 71; Duroiselle, 1906/1997: 63–4; Oberlies, 2019: 296–7; Perniola: 64). **(d)** Numerals *ti* (“three”) and *catu* (“four”) have declensions in the masculine, feminine and neuter (Kacc 133; Duroiselle: 62). **(e)** From *dvi* up to *aṭṭhārasa*, the cardinals are declined only in the plural number, following the declensional paradigm of *pañca*. **(f)** The numeral *koṭi* is feminine (Budhadatta, 1937/1997: 66). **(g)** Numerals ending in (Perniola: 65):

- *ti* take the singular declensions like the feminine with the nominative in *i* (e.g. *jāti*);
- *ā* take the singular declensions like the feminine with the nominative in *ā* (e.g. *kaññā*);
- *aṃ* take the singular and plural like neuter nouns with the nominative in *aṃ* (e.g. *rūpaṃ*);
- *a* are usually uninflected.

Usage. **(a)** Cardinal numerals are used for counting objects, expressing numerical quantity (e.g. “one, two, three” etc.; Perniola, 1997: 59). **(b)** Numerals from one to 18 are adjectives (e.g. *eko puriso* – “one man”), “unless they inflect as neuters or feminines (sing.) in analogy with *vīsa-* and *vīsaṃ*” (Oberlies, 2019: 296), and those from 20 onwards are all substantive nouns (e.g. *bhikkhūnaṃ koṭisataṃ* – “millions of bhikkhus”; Oberlies: 296; Perniola: 64). **(c)** In the singular, *eka* can be translated with the indefinite article “a” or with “a certain”; standing as an adjective, it can – among other things – have the meaning of “alone” (Collins, 2006: 70). **(d)** In the plural, as mentioned above, *eka* has the meaning of “some” (e.g. *eke purisā* – “some men”). **(e)** Cardinal numbers are oftentimes used as ordinals, especially in compounds (Collins: 74; cf. Duroiselle, 1906/1997: 66) and ordinals above 1,000 are used in the same way as cardinals (Collins: 74).

Ordinal Numerals¹⁰⁸

Formation. (a) The first ordinal number is formed thus: stem *puṭha* + *ama* → *paṭhama*¹⁰⁹ (“first”). (b) Ordinals two and three take the affix *tiya* for their formation (e.g. *dutiya* – “second”). (c) *dvi* (“two”) is capable of changing into *bā* before *dasa* or *vīsati* (“twenty”; Kacc 380). (d) Four and six form their ordinals with the affix *tha* (e.g. *chaṭṭha* – “sixth”). (e) Sometimes, *cha* → *sa* in the formation of ordinal numerals (e.g. *saṭṭho* – “sixth”; Kacc 374) – it may also change into *so* when the word *dasa* (“ten”) follows (Kacc 376). (f) From five upwards, ordinals are fashioned from the stem of the cardinals by means of the affix *ama* (e.g. *pañcama* – “fifth”; Kacc 373; Oberlies, 2019: 310–1; Perniola, 1997: 67). (g) Duroiselle (1906/1997: 65) mentions two forms for the ordinals of five, six and seven (i.e. *pañcatha/pañcama*; *caṭṭha/chaṭṭhama*; *satta/sattama* respectively). (h) Those ordinals ending in *ti* form by means of the *ma* endings. (i) 60 and 80 as well as 100 and 1,000 take the affix *tama*, though for 100 and 1,000 *satima* and *sahassima* also exist. (j) The feminine of ordinal numerals one, two and three end in *ā* and all others in *ī* (Perniola: 67–8). (k) An affix *ī* can be added after cardinals from ten upwards to make ordinals (e.g. *dasī* – “the tenth”; cf. Kacc 375). (l) There are numerous other rules for potential changes; however, it is deemed most potent to learn them from the dictionaries and the listing of Table 5 in the “Tables” section.

Usage. (a) Ordinal numbers are used to express sequential ordering (first, second, third etc.; Perniola, 1997: 66). (b) They are adjectives used in the same way as others (Perniola: 67; Collins, 2006: 73), declined as such in all three genders. (c) To repeat verbatim what was said in the section on the usage of cardinal numerals: “Cardinal numbers are oftentimes used as ordinals, especially in compounds (Collins: 74; cf. Duroiselle,

¹⁰⁸ See Table 5 in the “Tables” section for a detailed list.

¹⁰⁹ Change is per Kacc 666. Perniola (1997: 67), however, breaks it up like this: prefix *pa* (“in front”) + *ṭhama* → *paṭhama*.

1906/1997: 66) and ordinals above 1,000 are used in the same way as cardinals (Collins: 74).”

Distributive Numerals

Formation and Usage. (a) Distributive numerals are expressed by repeating cardinal or ordinal numerals twice (e.g. *aṭṭha aṭṭha there amacce ca pesayi* – “He sent [for] eight elders and ministers each”). (b) Suffix *so*, when added to the cardinal numbers, articulates the selfsame idea (e.g. *ekekasō* – “one by one”; Perniola, 1997: 68).

Fractional Numerals

Formation and Usage. (a) Ordinal numbers take on a sense of partitioning with words as these: *bhāgo* (“a portion”), *kalā* (“a fraction”), *aṃso* (“a part”), *koṭṭhāso* (“a share”; e.g. *soḷasi kalā* – “a fraction of a sixteenth”). (b) To express “one half,” the words *aḍḍha/upaḍḍha* are appended to the next higher numeral (the word *pāda* means “one fourth”) – “one and a half” writes: *diyāḍḍha* (Oberlies, 2019: 316; Perniola, 1997: 68).

Multiplicative and Numeral Substantives

Formation and Usage. There are a few ways to express how many times something happens and to communicate the sense of “fold,” “ways,” “kinds” (Duroiselle, 1906/1997: 66–7; Perniola, 1997: 68–9).

- The accusative neuter of the ordinal numbers (e.g. *paṭhamam* – “for the first time,” “first”).
- *Sakiṃ* (“once”).
- Suffix *kkhattuṃ* appended to cardinal stems expresses the sense of “times” (e.g. *tikkhattuṃ* – “three times”) – it is the aforementioned *sakiṃ* transformed (Kacc 646).
- The word *vāra* (“turn,” “occasion”) in addition to cardinals and ordinals (e.g. *cattāro vārā* – “four turns”).
- Suffix *dhā* attached to cardinal stems expresses the sense of “fold,” “ways,” “kinds” (e.g. *sattadhā* – “sevenfold”; Kacc 397).

Numerals (*saṅkhyā*)

- The word *guṇa* is oftentimes used like the above *dhā*. In the sense of “times,” it usually takes the neuter in *aṃ* (e.g. *dasagunaṃ* – “ten times”).
- Affixes *ka* and *ya* form collective nouns and adjectives (e.g. *catukka* – “consisting of four”).

Verbs (*ākhyātāni*)

Kinds of Verbs

Primary Verbs

Present (*vattamānakālo*)

1. Indicative (*vattamānā*).
2. Imperative/benedictive (*pañcamī*).
3. Optative/potential (*sattamī*).
4. Present participle.

Past (*atītakālo*)

5. Aorist (*ajjatanī*).
 - i. Root aorist.
 - ii. *a*-aorist.
 - iii. *s*-aorist.
 - iv. *is*-aorist.
6. Imperfect (*hīyattanī*).
7. Perfect (*parokkhā*).
8. Past participle.

Future (*bhavissatikālo*)

9. Future indicative (*bhavissanti*).
10. Conditional (*kālātipatti*).
11. Future participle.

Secondary Verbs

1. Causative (*kārita*).
2. Desiderative (*tumicchatha*).
3. Intensive (aka frequentative).¹¹⁰

¹¹⁰ This kind is not classified by native grammarians to be a distinct class of conjugation; however, due to its distinct features, it was deemed worthy of separate note (Warder, 1963/2001: 331).

4. Denominative (*dhāturūpakasaddo*).¹¹¹

Indeclinable Forms

5. Absolutive (*tvādiyantapadaṃ*).
6. Infinitive (*tumantapadaṃ*).

General Characteristics

A verb is a word in a sentence that expresses the action of the subject (e.g. *so gacchati* – “He goes”), “that which describes fully”; i.e. a finite verb; Deokar, 2008: 245; cf. Yindee, 2018: 69). It has been further defined thus (*Kaccāyana-vaṇṇanā* as cited and translated by Deokar: 246):

There, that which expresses an action is an *ākhyāta*, or a *kiriyaṃpada* (a finite verb). It expresses time, syntactic relations between a noun and a verb, person, and action and it is characterized by an action ... As it is said thus: that which has three tenses, and three *kāraka* [agent] relations, that which is without three genders, and has two numbers, that is called and *ākhyāta*, finite verb.

General Formation

The formation of verbs in the Pāli language is brought about by conjoining or the application of two or more of the following elements or principles in the given sequence:

- Augment (*akārāgamo*).
- Prefix (*upasaggo* or *upasāraṃ*).
- Reduplication (*abbhāsaṃ*).
- Root (*dhātu*).
- Root affix (*dhātupaccayo* or *vikaraṇapaccayo*) to form stems expressing:
 - ❖ Active voice (*kattuvācako*).
 - ❖ Passive voice (*kammavācako*).

¹¹¹ Some include the passive (*kammakārako*) here (Nwe Soe, 2016: 208).

- ❖ Stative passive voice (*bhāvavācako*).
- Interfix (*āgamo*).
- *Kita* affix (*kitapaccayo*).
- Personal or conjugational ending or suffix (*paccayo* or *vibhatti*), expressing:
 - ❖ Person.
 - ❖ Number.
 - ❖ Tense.
 - ❖ Aspect.
 - ❖ Mood.
 - ❖ Further indications of voice (i.e. active and middle voice).

(a) For example, the verb *ajjhāvasati* consists of the following elements: *adhi* (*upasaggo*) + *ā* (*upasaggo*) + \sqrt{vas} + *a* (*dhātupaccayo*; first class active base root affix) form the stem to which *ti* (*vibhatti*; third person singular active voice present indicative suffix) is appended, finally → *ajjhāvasati* (“He inhabits,” “He settles down”).¹¹² (b) The augment *a* is often used in the formation of the aorist tense, imperfect tense and conditional mood (e.g. *a* [*akārāgamo*] + \sqrt{gamu} + *ā* [third person singular active voice aorist indicative suffix] → *agamā* – “He went”; Kacc 519); (c) the reduplication of the root may occur in the making of the active base/stem, perfect tense, desiderative, intensive and denominative (cf. Kacc, 434, 458).¹¹³ (d) The participles, absolutes and infinitives (the first mentioned decline but the last-mentioned two not, being “indeclinables”) are not formed by means of any conjugational endings but with the aid of some *kita* affixes appended directly to roots (e.g. \sqrt{su} + *ta* [*kitapaccayo*] → *sota* [past passive participle] + *nā* [*ena*; instrumental suffix] → *sotena* – “with the ear,” “with the stream”; Collins, 2006: 102; Thitzana, 2016: 747).¹¹⁴ (e) Pāḷi follows the convention that it – *generally* – forms the present indicative, the impera-

¹¹² The other elements are explained in the respective sections following.

¹¹³ See the respective sections below for details.

¹¹⁴ See chapter “*Kita* and *Taddhita* Affixes” and Table 6 in the “Tables” section.

tive and the optative from the active base/stem and everything else from the root (Collins: 79). **(f)** The rules of sandhi and morphology regularly hold, as the examples given adequately show.

(a) The “most fundamental” grammatical unit of analysis (expressing the core meaning) is the root (*dhātu*), from which words (verbs as well as nouns) are built, indicative of an action (*kiriya*) or a state (*bhāva*; e.g. $\sqrt{vā}$ – “going and spreading of odor,” as in *nibbāti*¹¹⁵ – “He gets cool,” “He attains *nibbāna*”; Kacc 457; Bodhirasa, 2021; Collins, 2006: 12, 15; Perniola, 1997: 135; Sīlānanda, 2001: xvi). **(b)** One traditional explanation of the word *dhātu* runs as follows, differentiating them from prefixes: “***Dhātu***: In what sense *dhātu*? ‘*Dhātu*’: It bears both its own meaning and – regarding a connection with the distinction of meaning – that of others; ‘*dhātu*’: It holds a difference in meaning, bound to the difference in meaning with whatever by necessity different in meaning prefix (*upasaggena*) of the twenty prefixes [...]” (Sadd I: 2; cf. Sīlānanda: vii–x).¹¹⁶ **(c)** A stem (*liṅgaṃ*), verbal or nominal, is a linguistic unit apart from (or leaving out) roots, affixes (incl. suffixes) and personal endings and thereby represents an uninflected verbal or nominal stem¹¹⁷ (Rūp: 4; cf. Deokar, 2008: 165; cf. Perniola: 70). **(d)** Roots and stems are not proper words and incapable of functioning independently in a sentence (Collins: 12). **(e)** To create an inflected verb, personal endings are then applied to verbal stems (Palistudies, 2018a) or directly to roots (e.g. Kacc 434; Deokar: 164).

¹¹⁵ The word breaks up as follows: *ni* (*upasaggo*) + $\sqrt{vā}$ + *a* (first class active base root affix) + *ti* (third person singular active voice present indicative suffix).

¹¹⁶ **[D]hātūti kenatthena dhātu? sakatthampi dhāretīti dhātu, atthātisayayogato paratthampi dhāretīti dhātu, vīsatiyā upasaggesu yena kenaci upasaggena atthavise-sakāraṇena paṭibaddhā atthavisesampi dhāretīti dhātu [...].**

¹¹⁷ *Dhātupaccayavibhattivajjitamatthavaṃ liṅgaṃ*. Stems are distinguished from bases insofar as that they only take inflectional suffixes providing finish to a word. Bases, on the other hand, are more global in scope and may include those inflectional suffixes but also comprise any other derivational affixes not finalizing a word (e.g. passive affixes, which require the addition of inflectional suffixes to form a word expressive of full meaning).

(a) As mentioned above, the rules of sandhi and morphology are regularly applied in the formation of verbal stems (Perniola, 1997: 7; Thitzana, 2016: 644). (b) If you feel inclined to do so, please utilize the material found above in the chapters “Sandhi” and “Morphology” to find out about the exact nature of potential changes that may occur during the formation processes of verbs (and the words of other classes). (c) There is great variance as to the elements used in the formation process and, as indicated above, not all of them must be employed simultaneously for each and every word, as can also be readily understood from the elaborations to follow.

Grammatical Voice

In Pāḷi, we find a traditional division into three voices (*vācakā*),¹¹⁸ being verbal stems formed with certain root affixes attached to roots:¹¹⁹

1. Active (*kattuvācako*; lit. “speech of the agent”).
2. Passive (*kammavācako*; lit. “speech of the object”).
3. Stative passive (*bhāvavācako*; lit. “speech of the state”; cf. Kacc 453–454, 456; cf. Bodhiprasiddhinand, 2016: 85; Collins, 2006: 77; cf. Thitzana, 2016: 612).¹²⁰

(a) Most importantly to note, it is the stem which indicates if a verb is active or passive (Oberlies, 2019: 555; Warder, 1963/2001: 51) and not the two sets of personal voice markers (discussed below). (b) Pāḷi also features the middle voice (*attanopadam* – “middle voice marker”; see just be-

¹¹⁸ The grammatical voice of a sentence verb indicates the subject’s function in relation to it (Deokar, 2008: 254; Yindee, 2018: 340, 390), telling, for example, if the subject acts (active voice), is acted upon (passive voice), acts and simultaneously is acted upon (middle voice) or if a state or condition is expressed (stative passive voice).

¹¹⁹ To which again the regular personal endings are appended to form the eventual finite verbs (see below the section “Personal Voice Markers” for details; for more about the voice-formative root affixes, see under “Active Base/Stem” and “Passive and Passive Stem”).

¹²⁰ The stative passive is only rarely employed (Thitzana, 2016: 612, 629).

low “Middle Voice Markers”), which is not expressed by any stem but by the so-called “latter six personal suffixes” (*parāni cha padāni*; e.g. *e, se, te*) of each class.¹²¹ The part of them termed “[personal voice] markers” cannot be distinguished from the personal suffixes in writing, being merely conceptual abstractions from them (see below; cf. Yindee, 2018: 76). **(c)** In what follows, a brief account of the most salient features of the voices and personal voice markers, before detailing the formation of the active and passive stems as well as the tenses and moods in general.

Active Voice

The subject¹²² (S) in an active sentence does a particular thing, expressed by a verb in the active voice, that impacts an object (O) or patient (P) other than itself (e.g. $\sqrt{paca} + a$ [first class active base root affix] + *ti* [third person singular active voice present indicative suffix] → *pacati* – “He cooks [something other than himself],” as in *puriso* [S] *odanaṃ* [O or P] *pacati* [V] – “The man [S] cooks [V] the rice [O]”; Thitzana, 2016: 613; cf. Yindee, 2018: 340–1).

Passive Voice

(a) The object in an active sentence becomes the subject in a passive one – i.e. the subject undergoes the action or has its state changed – and the agent¹²³ (A) is put in the instrumental case (e.g. $\sqrt{disi} + ya$ [passive voice affix] + *te* [third person singular middle voice present indicative suffix] → *desīyati*¹²⁴ – “He is taught [by himself or an outside agent],” as in *buddhena* [A] *dhammo* [S] *desīyati* [V] – “The *dhamma* is taught by the Buddha”; Kacc 440; cf. Thitzana, 2016: 614–5; cf. Yindee, 2018: 341). **(b)** The personal endings are mainly the *attanopadaṃ* or reversed *attanopadaṃ* suffixes; i.e.

¹²¹ A present middle participle also exists (see section “Present Participle” and Table 6 in the “Tables” section for more details).

¹²² A person or thing about which the statement of a sentence is concerned.

¹²³ The cause or initiator of an action.

¹²⁴ For the change into the active voice suffix (i.e. *te* → *ti*), see below. The sentence remains passive, despite of its presence.

attanopadaṃ suffixes in the “dress” of the *parassapadaṃ* forms – genuine *parassapadaṃ* forms are incapable of functioning passively (see below; Thitzana: 614).

Stative Passive Voice

(a) Passive voice affix *ya* is used to express the stative passive, with or without *i*-interfix (Kacc 440; Thitzana, 2016: 630). (b) The stative passive reveals experience, status or general condition (e.g. $\sqrt{thā} + ya$ [passive voice affix] + *te* [third person singular middle voice present indicative suffix] → *thīyate* – “act of standing”; Kacc 440, 453; Thitzana: 615; cf. Yindee, 2018: 343). (c) The subject may be either in the instrumental or in the genitive case (e.g. *devadattena bhūyate* – “Devadatta’s being”; cf. Kacc 556; Thitzana: 616). (d) Only the third person singular is applicable for this voice (Rūp: 129; Thitzana: 615–6).

Personal Voice Markers

(a) To express all the nuances of voice as approximating the usage in the English language, the personal endings have to be applied to the stems, the former are expressive of either of two so-called markers (sing. *padaṃ*; Yindee, 2018: 74): (i) active voice markers (sing. *parassapadaṃ*; lit. “marker for another”) and (ii) middle voice markers (sing. *attanopadaṃ*; lit. “marker for oneself”). (b) As mentioned above, these markers are merely conceptual abstractions from the personal endings, which cannot be distinguished from them in writing; the latter express three things in total (see also above under “General Formation”; Kacc 407; Deokar, 2008: 198):

- Person.
- Number.
- Voice (explained in this section).

(a) As a rule, it is stated that active voice suffixes are appended only to active stems (Kacc 456; cf. Thitzana, 2016: 642; cf. Yindee, 2018: 74, 267) and that middle voice suffixes are capable of being attached to all three

stems expressing voice: both active and passive stems as well as to stative passive stems (Kacc 453–454; Thitzana: 633; cf. Yindee: 74, 267). **(b)** As previously explained, apparent active voice suffixes, having been tacked to passive stems, are reversed *attanopadaṃ* forms and not genuine active voice suffixes.¹²⁵ **(c)** For instance, *karīyati* (“It is done”) is a verb form where a third person singular active voice suffix (i.e. *ti*) is used passively as a reversed *attanopadaṃ* suffix, breaking actually up as follows with the corresponding *attanopadaṃ* suffix *te*: $\sqrt{kara} + ya + te$ (cf. Kacc 442, 518; cf. Oberlies, 2019: 320; cf. Perniola, 1997: 341; Thitzana: 607, 633, 678). **(d)** To form the passive, the reversed *attanopadaṃ* suffixes are more common than the genuine ones (Collins, 2006: 93).

Active Voice Markers. (a) These endings are the ordinarily employed personal endings and said to be the “former six personal suffixes” (*pubbakāni cha padāni*) of every verbal tense¹²⁶ (e.g. $\sqrt{gamu} + a$ [first class active base root affix] + *mi* [first person singular active voice present indicative suffix] → *gacchāmi* – “I go”; Kacc 406; Deokar, 2008: 198–9; Warder, 1963/2001: 314). **(b)** The subject does a particular thing that impacts something – an object [O] or patient [P] – other than itself, the action or change of state thus passing “to another” (*parassa*; e.g. *buddho* [S] *dhammaṃ* [O or P] *desesi* [V] – “The Buddha [S] preached [V] the *dhamma* [P],” Bv: 44; Collins, 2006: 78). **(c)** In active sentences, the subject must be in the nominative with the object in the accusative and the verb should agree with the subject in person and number (Thitzana, 2016: 613).

Middle Voice Markers. (a) Traditionally, the middle voice endings are called the “latter six personal suffixes”¹²⁷ (*parāni cha padāni*; e.g. $\sqrt{mana} + ya$ [third class active base root affix] + *te* [third person singular middle voice present indicative suffix] → *maññate* – “I know [myself]”; Kacc 407,

¹²⁵ “It’s a form of historical simplification which is common in all inflected languages” (Levman, personal communication, August 28, 2020).

¹²⁶ In this grammar given in the left column of Table 6 in the “Tables” section.

¹²⁷ In this grammar given in the right column of Table 6 in the “Tables” section.

454; Deokar, 2008: 198). **(b)** Middle voice markers are quite rare in prose but more frequent in verse (Duroiselle, 1906/1997: 80; cf. Oberlies, 2019: 318; Warder, 1963/2001: 314–5). **(c)** The middle voice is, in principle, used for cases in which the subject is both the actor and patient of a sentence, with the action reverting to or being “for oneself” (*attano*; Collins, 2006: 78, Perniola, 1997: 339) but practically rarely differs in meaning from that which is expressed by the active voice (Oberlies: 318). **(d)** It is worthwhile to quote Duroiselle (p. 80) in this regard:

It must here be remarked that the Reflective Voice [or middle voice] has lost very much of its importance, and that the distinction between Active and Reflective has been almost if not altogether effaced, and that the choice between the Active or Reflective is mostly determined now by metrical exigencies.

(e) Thus, we must understand that the application of the middle voice, in its actual meaning, becomes blurred with the active voice and appears to be used only to confer an elevated or archaic meaning or to suit the meter. **(f)** However, it may still retain the reflective sense proper (Gair & Karunatillake, 1998: 154; Perniola: 339). **(g)** The passive form of the middle voice is extremely rare (Warder: 316).

Person, Number, Tense and Mood¹²⁸

(a) As for most nouns, it is explained that there are three persons (*purisā*) for verbs in the Pāḷi language: first (*paṭhamapuriso*), second (*majjhmapuriso*) and third (*uttamapuriso*; Kacc 408).¹²⁹ **(b)** When there are two

¹²⁸ The respective pers. endings are given in Table 6 in the “Tables” section.

¹²⁹ It is, in this connection, deemed pertinent to repeat what was said in the chapter “Nouns (*nāmāni*)” (f.n. 75): “This is the schema of the traditional Pāḷi grammarians – first and third persons given therein are the exact opposites in English (e.g. English first persons ‘I’ and ‘we’ are each classed as third person [*uttamapuriso*] in Pāḷi, and English third persons ‘he/she/it’ and ‘they’ each correspond to the first person [*paṭhamapuriso*] in Pāḷi); however, to forestall confusion, occurrences of grammatical numbers in Pāḷi – within the bounds of the present grammar – correspond [...] to English usage.”

subjects in a sentence, the last one determines the person for the corresponding verbs (Kacc 409). **(c)** There are two numbers in Pāli: singular (*ekavacanam*) and plural (*bahuvacanam*); three tenses: present, past and future; four moods: indicative, imperative, optative and conditional (informally also called a tense) and four systems of secondary verbs: causative, desiderative, intensive, denominative – these are neither moods nor tenses and can assume all moods, tenses and voices capable of being expressed by the primary verbs (Collins, 2006: 79; Nwe Soe, 2016; Oberlies, 2019: 321; Palistudies, 2018a). **(d)** Note that stems in *a* are more common than any other (Geiger, 1916/1956: 159; Warder, 1963/2001: 8).

Active Base/Stem

Formation. **(a)** According to Kaccāyana’s grammar and *Saddanīti* (Sadd I: 2), there are eight different classes (sing. *gaṇo*) of roots and thereby ways to form the active base/stem from roots,¹³⁰ although Buddhappiya’s *Padarūpasiddhi* considers the sixth class as part of the fifth (Sīlānanda, 2001: ix) – presented here is the eightfold scheme. **(b)** All roots in the Pāli language have typical affixes (sing. *paccayo* or *vikaraṇam*) placed between themselves and the personal endings or conjugations¹³¹ – they consist of between one and three (or even more) for each class,¹³² in which case the meaning of each stem from the same root differs, in most instances, from the original meaning of the root itself (Duroiselle, 1906/1997: 85; Thitzana, 2016: 636; Sīlānanda: viii–ix). **(c)** These classes are named according to an example root from that class (e.g. $\sqrt{bhū}$ is of the first class and is the first element of the name for that class: *bhūvādigaṇo* – “*bhū*-etc. class,” to give a literal translation). **(d)** Altogether there are more than 1,700 roots, each categorized under one of the eight classes and ways to form the active

¹³⁰ The sundry conjugations of the present indicative, imperative etc. are appended to this base or stem; see further below the detailed exposition on each class for exceptions.

¹³¹ Exceptions exist; see the different classes for details.

¹³² See below for the individual affixes.

base/stem, prepared for convenient access and identification by Ā. Bodhirasa (2021). **(e)** As stated above: “Pāḷi follows the convention that it – *generally* – forms the present indicative, the imperative and the optative from the active stem and everything else from the root” (Collins, 2006: 79). **(f)** In what follows, a listing and explanation of the eight classes (Duroiselle: 81–5).

1. Class (*bhūvādigaṇo*; Kacc 445):

- Roots ending in a consonant simply add *a* (e.g. √*labha* + *a* → *labha*; √*rakkha* + *a* → *rakkha*). To this division belong those roots which, ending in a consonant preceded by *i* or *u*, sometimes do and sometimes do not strengthen the vowel (e.g. √*gupa* + *a* → *gopa*).
- Affix *a* → ∅ or *e* [occasionally] (e.g. √*vasa* + *a* + *mi* → *vademi*; Kacc 510).
- The personal endings of the tenses are added directly to the root (e.g. √*hana* + *ti* → *hanti*).
- Roots of this division ending in *i*, *ī* or *u*, *ū*, which, before the conjugational sign *a*, are respectively changed to *ay* and *av* (e.g. √*nī* + *a* → *naya*).
- Reduplication of root (e.g. √*dhā* + *da* → *dadhā*).

2. Class (*rudhādigaṇo*; Kacc 446): It is formed by inserting the *niggahītaṃ* (*m*) before the last consonant of the root and then adding *a*, as in the first conjugation (e.g. √*muca* → *muñca*). The usual rules of sandhi apply in respect to the *niggahītaṃ*.

3. Class (*divādigaṇo*; Kacc 447): Generally added directly to the root is *ya* (e.g. √*yudha* + *ya* → *yujjha*; √*jhā* + *ya* → *jhāya*) – the rules for the assimilation of *ya* are regularly applied (cf. Kacc 444).

4. Class (*svādigaṇo*; Kacc 448): It is formed by appending *ṇu*, *ṇā*, *uṇā* to roots ending in a vowel and *uṇu* or *uṇā* to roots ending in a consonant (e.g. √*su* + *ṇā* + *ti* → *suṇāti* – “He listens”).

- The *u* of *ṇu* and *uṇu* may be strengthened to *o*.

Verbs (*ākhyātāni*)

- This *u* or *o*, before a personal ending beginning with a vowel, can be changed to *va*.
 - The long *ā* of *ṇā* and *uṇā* is retained before the personal endings of the present indicative and of the imperative, except the third person plural. Occasionally, however, it is found shortened.
 - In a few cases, the retroflex *ṇ* is delingualized and changed to the dental nasal *n*.
5. Class (*kiyādiḡaṇo*; Kacc 449): It is formed by the addition of *nā* to the root, which as a rule ends in a vowel.
- If the final vowel of the root is long, it is shortened before *nā*.
 - *nā* is sometimes lingualized and becomes retroflex *ṇā*.
 - The long *ā* of *nā* is retained in all the persons of the present indicative and imperative, except in the third person plural. The short form *na* is oftentimes also encountered.
 - Affix *nā* → \emptyset or *ya* [occasionally] / $\sqrt{nā}$ __ (Kacc 509).
6. Class (*gahādiḡaṇo*; Kacc 450): It is formed by the addition of *ppa* or *nhā* affixes to roots of this class (e.g. $\sqrt{gaha} + ppa + ti \rightarrow gheppati$).
7. Class (*tanādiḡaṇo*; Kacc 451): **(a)** It is formed by adding *o* or *yirā* to the root – the *o* generally is the strengthened form of *u*, which before an ending beginning with a vowel is changed to *va*. **(b)** There are just a remarkably few formations from this kind of roots, and \sqrt{kara} forms very irregular. **(c)** Affix *o* → *u* [occasionally] / \sqrt{kara} __ (e.g. $\sqrt{kara} + o + ti \rightarrow karoti$ – “He does”; Kacc 511).
8. Class (*curādiḡaṇo*; Kacc 452):¹³³ It is formed by adding to the root *e* or *aya*, which by contraction may be replaced by *e* – the forms in *e*

¹³³ Warder (1963/2001: 79) states: “Sometimes it is not easy to decide whether to class a verb as an independent seventh conjugation [our eighth class] root or as the causative form [*aya*] of some other verb of perhaps widely divergent meaning.”

are more commonly met than those in *aya* (e.g. $\sqrt{\text{bandha}} + e$ or *aya* → *bandhe* or *bandhaya*).

- When the radical vowel is *u*, it is changed to *o* in the process of increase (*vuddhi*), provided it is not followed by a conjunct consonant (e.g. $\sqrt{\text{cura}} + aya$ → *core* or *coraya*).
- Radical *a* (if followed by a single consonant) is generally lengthened, but in some cases, it remains short.

(a) The present indicative is obtained by adding the primary personal endings (both active and middle) to the mentioned active stem – they indicate tense, person, number, mood and, again, voice. **(b)** The imperative is obtained by adding the imperative personal endings to the active stem. **(c)** Before applying the imperative ending *hi*, the *a* of the active stem is lengthened and sometimes the ending is elided altogether (Kacc 479). **(d)** All verbs formed by means of the eighth class root affixes take endings in *hi* as well as some other forms (cf. Warder, 1963/2001: 34–5). **(e)** The optative is formed by inserting one of three affixes (i.e. *eyyā*, *i* or *ya*) between the active stem and either the primary or secondary personal endings. **(f)** However, due to sandhi procedures and the occurrence of several irregular forms, many grammars treat it separately, as a paradigm on its own.

Usage. To reiterate, for ease of reference, what is written in the section “Active Voice”: “The subject (S) in an active sentence does a particular thing, expressed by a verb in the active voice, that impacts an object (O) or patient (P) other than itself (e.g. $\sqrt{\text{paca}} + a$ [first class active base root affix] + *ti* [third person singular active voice present indicative suffix] → *pacati* – ‘He cooks [something other than himself],’ as in *puriso* [S] *odanaṃ* [O or P] *pacati* [V] – ‘The man [S] cooks [V] the rice [O]’; Thitzana, 2016: 613; cf. Yindee, 2018: 340–1).”

Passive and Passive Stem¹³⁴

Formation. (a) The passive base/stem is formed by affixing *ya* to the root in its strengthened or unstrengthened grade – consequently added are the personal endings of the present tense (indicative, imperative, optative, both in the active and middle voices),¹³⁵ with or without interfix vowel *i* and *ī* (e.g. for the optative: √*ji* + *ya* + *eyya* + *mi* → *jīyeyyāmi*; Kacc 442, 502; Warder, 1963/2001: 51). **(b)** It forms also from the active base/stem but only with the mentioned connecting vowels (Perniola, 1997: 98). **(c)** An aorist passive is sometimes formed, simply by adding the aorist suffixes to the passive stem (e.g. *haññiṃsu*). **(d)** A present passive participle is built – in a similar fashion – by adding the affix *māna* to the passive stem (e.g. *desīyamāna*; Warder: 52).

(a) The agent of the sentence verb is put in the instrumental case, and the object¹³⁶ of the verb stands in the nominative, agreeing with the verb or predicate in person and number (e.g. *buddhena dhammo desīyate* – “The *dhamma* is taught by the Buddha”; Thitzana, 2016: 614). **(b)** In the case of the present passive participle, the object agrees in gender, number and case (e.g. *desīyamānaṃ dhammaṃ* – “the expounded *dhamma*,” Sp II: 22). **(c)** When an active sentence is transformed into the passive, the object becomes the subject¹³⁷ (e.g. *vanītā odanaṃ pacati* – “The woman cooks the rice” → *vanītāya odano pacīyati* – “The rice is cooked by the woman”; Buddhadatta, 1937/1997: 83). **(d)** When affix *ya* is appended to the root, it is undergoing and causing different permutations, exhibiting and engendering the following behavior (Kacc 441–443, 502; Ānandamaitreya, 1993/2012: 131; Duroiselle, 1906/1997: 110; Perniola, 1997: 98–101):

¹³⁴ For the respective affixes, see Table 6 in the “Tables” section.

¹³⁵ As explained earlier, the endings of the active voice are actually reversed middle voice endings – they are not genuine active voice suffixes and thus retain a passive sense (see above the section “Grammatical Voice” for more details; cf. Kacc 518; Thitzana, 2016: 607).

¹³⁶ It is also the subject.

¹³⁷ It is also the *passive* object.

- Affix *ya* can be directly added to roots ending in a vowel.
 - ❖ Root *ā* → *ī* before *ya*, and *i*, *u* are lengthened to *ī*, *ū* (e.g. $\sqrt{dā} + ya \rightarrow dīya$).
 - ❖ Root *ī* and *ū* remain unaffected (e.g. $\sqrt{bhū} + ya \rightarrow bhūya$).
 - ❖ Few roots such as *ñā* and *khū* remain unaffected (e.g. $\sqrt{ñā} + ya \rightarrow ñāya$).
 - ❖ Sometimes, a long vowel before *ya* is shortened and the *y* doubled (e.g. $\sqrt{nī}$ [“to lead”] + *ya* → *nīya* or *niyya*).
 - ❖ Initial *va* [of a root] → *vu* (e.g. $\sqrt{vaca} + ya \rightarrow vucca$).
 - ❖ Final *a* and *e* → *ī* (e.g. $\sqrt{pā} + ya \rightarrow pīya$).
- When *ya* is joined to roots containing a double consonant, it is joined by means of the interfix letter *i* (subsequently lengthened to *ī*); however, it is also joined by means of *i* when a root ends in a consonant that does not generally reduplicate (*s*, *h* and *r*; e.g. $\sqrt{puccha} + ī + ya \rightarrow pucchīya$).
- **(a)** When *ya* is appended directly to roots ending in a consonant, the *y* of *ya* becomes assimilated to the last consonant of the root according to the respective rules of assimilation (e.g. $\sqrt{bhaṇa}$ [“to speak”] + *ya* → *bhañña*). **(b)** It is common to form the passive of roots ending in a consonant after *ā* by means of *ī* (e.g. $\sqrt{pāja} + ya \rightarrow pājīyati$). **(c)** Affix *ya* may be added directly to some roots ending in a consonant without assimilation and without connecting vowel *ī* (e.g. \sqrt{lupa} [“to cut,” “elide”] + *ya* + *ti* → *lupyati* – “It is elided”).
- Affix *ya* is also added to the active base/stem by means of the insertion of interfix vowel *i*, usually lengthened but sometimes staying short (e.g. $u + \sqrt{khipa} + a + i + ya + ti \rightarrow ukkhipiyati$ – “He was raised up”).

Usage. **(a)** To repeat verbatim, for easy reference, what is written in the section “Passive Voice” and explained in different words just above: “The object in an active sentence becomes the subject in a passive one – i.e. the subject undergoes the action or has its state changed – and the

agent (A) is put in the instrumental case (e.g. \sqrt{disi} + *ya* [passive voice affix] + *te* [third person singular middle voice present indicative suffix] → *desīyati* – ‘He is taught [by himself or an outside agent],’ as in *buddhena* [A] *dhammo* [S] *desīyati* [V] – ‘The *dhamma* is taught by the Buddha’” (Kacc 440; cf. Thitzana, 2016: 614–5; cf. Yindee, 2018: 341). [...] **(b)** The stative passive reveals experience, status or general condition (e.g. $\sqrt{thā}$ + *ya* [passive voice affix] + *te* → *thīyate* – ‘act of standing’; Kacc 440, 453; Thitzana: 615; cf. Yindee: 343). **(c)** The subject may be either in the instrumental or in the genitive case (e.g. *devadattena bhūyate* – ‘Devadatta’s being’; cf. Kacc 556; Thitzana: 616). **(d)** Only the third person singular form is applicable for the stative passive voice (Rūp: 129; Thitzana: 615–6).” **(e)** Both the participles and the infinitive can be used actively and passively (Buddhadatta, 1937/1997: 87; Duroiselle, 1906/1997: 105, 164).

Present Indicative

Formation. **(a)** The present indicative is formed from the active stem with the subsequent addition of the respective personal endings as furnished in Table 6 in the “Tables” section. **(b)** The vowel of the active stem before appending the present endings *hi*, *mi*, *ma* has to be lengthened (Kacc 478), as mentioned above. **(c)** The vowel of the active stem is dropped before personal endings beginning with or being a vowel (Duroiselle, 1906/1997: 86). **(d)** Verbs in the present indicative which have been constructed from past passive participles (the latter functioning therewith as a stem) are also encountered in the Pāḷi language (e.g. *laggati* ← *lagga*; Oberlies, 2019: 354–5).

Usage. **(a)** The indicative mood is used to make factual statements and proclamations, express opinions etc. (Collins, 2006: 168; Palistudies, 2018c). **(b)** At the beginning of a sentence, the present indicative may at times express interrogation (e.g. *socasi tvam upāsaka?* – “Do you grieve, devotee?”). **(c)** The present expresses further the following senses (Collins: 81–3; Duroiselle, 1906/1997: 162; Hendriksen, 1944: 13, f.n. 2; Periniola, 1997: 349–50):

- Contemporary time (e.g. *evaṃ passaṃ, bhikkhave, sutavā ariyasāvako rūpasmiṃ nibbindati* – “Seeing thus, bhikkhus, the learned disciple is disgusted with regard to corporality,” MN I: 96 [MN 22]; Kacc 414).
- Present progressive (e.g. *gacchāmi kāsinaṃ puraṃ* – “I am going to the city of Kāsi,” MN I: 115 [MN 26]).
- Recent past, being close to the present time.
- Future, constructed with particles *yāva, pure, purā* (e.g. *yāvadeva anattāya, ñattaṃ bālassa jayati* – “Only for the fool’s non-gain does learning arise,” Dhṃ: 5, v. 72).
- **(a)** Future, denoting what is uncertain, certain or inevitable (e.g. *nirayaṃ nanu gacchāmi natthi me ettha saṃsayo* – “Certainly, I will go to hell; I have no doubt [lit. ‘there is no doubt for me’]”). **(b)** It is also used for stating general truths (e.g. *sabbe maranti* – “All [beings] will die,” Jā-a III: 27 [commentary on Jā 317]).
- Future, constructed with *kadā, karahi* (“when?”, “at what time?”; e.g. *kadā bhante gacchati?* – “Venerable Sir, when does he go?”).
- Past, constructed with *nanu* (“certainly”), *na* (“not”) and *nu* (“indeed”) in reply to a question (e.g. *upāhanaṃ kaṭam pāladdhammika? – nanu karomi bhante!* – “Pāladdhammika, did you produce the shoe?” – ‘Certainly, I did, venerable Sir’).
- Past as “historic present” (very common), recounting past events as actually happening (e.g. *bhayaṃ tadā na bhavati* – “At that time there was [lit. ‘is’] no fear,” Bv: 11).
- Hypothetical (e.g. *yassa rañño cakkavattissa dibbaṃ cakkaratanaṃ osakkati ṭhānā cavati, na dāni tena raññā ciraṃ jīvitabbaṃ hoti* – “When for the wheel-turning monarch the divine wheel-treasure draws back, retreats from its place, the monarch now has not long to live,” DN III: 24 [DN 26]).

Imperative

Formation. (a) The imperative is formed from the present indicative with the subsequent addition of the respective imperative suffixes as shown in Table 6 in the “Tables” section below. (b) The vowel of the present stem is dropped before personal endings beginning with or being a vowel. (c) Before the personal ending *hi*, the *a* of the preceding present stem is lengthened (Duroiselle, 1906/1997: 86).

Usage. (a) In the second person, the sense is usually that of commanding, whereas the third person in addition to addressing by title or name expresses polite invitation. (b) Verbs in the imperative often stand as the sentence initial.¹³⁸ (c) The imperative of (*ṭ*)*ṭhā* is used in the sense of “Let it be!”, “Never mind!” (e.g. *tiṭṭhatha tumhe* – “Don’t bother!”; Warder, 1963/2001: 35). (d) The imperative and optative “are syntactically often exchangeable” (Oberlies, 2019: 399). (e) It is further used in these senses (Buddhadatta, 1937/1997: 31; Collins, 2006: 84; Duroiselle, 1906/1997: 164; Warder: 35):

- Command (e.g. *tena hi, gaccha* – “Now then, go!”; Kacc 415).
- Prohibition.
- Advice/instruction (e.g. *kusalaṃ karotu* – “May he do good!”).
- Invitation (e.g. *etu vessantaro rājā, siviraṭṭhe pasāsatu* – “Come, king Vessantara, reign the kingdom of Sivi!”, Jā II: 227 [Jā 547]).
- Wish.
- Curse (e.g. *akkhayaṃ hotu te bhayaṃ* – “May your fear remain [lit. ‘be’] incessantly!”, SN I: 140 [SN 11.10]).
- Benediction, blessing (e.g. *vassasataṃ jīva* – “May you live a hundred years,” Jā-a I: 182 [commentary on Jā 78]).

¹³⁸ Imperatives chiefly occur in main clauses (Oberlies, personal communication, October 30, 2020).

- Entreaty (e.g. *bhante, bhagavā diṭṭhadhammasukhavihāraṃ anu-yutto viharatu* – “Venerable Sir, let the Blessed One be given to a pleasant abiding in the here and now,” MN III: 95 [MN 128]).
- Reflection (e.g. *kinnu kho abhidhammaṃ suṇāmi udāhu vinayaṃ?* – “Should I listen to the *abhidhamma* or the *vinaya*?”).
- Hope (e.g. *imaṃ jivitā voropetuṃ samattho homi!* – “May I be able to deprive him of life!”).

Optative/Potential¹³⁹

Formation. (a) The affixes forming the optative are added to the active base, and the vowel of the optative stem is dropped before personal endings beginning with or being a vowel (Duroiselle, 1906/1997: 86). **(b)** Some verbs form an optative in *yā*, likewise from the active base (e.g. $\sqrt{vad} + yā \rightarrow vajjā$ – “He would say”). **(c)** Double optative formations occasionally occur: To a base in *yā* are appended *eyya* and the respective personal endings (e.g. *dajjā \rightarrow dajjeyyāti* – “He should give”; Collins, 2006: 85).

Usage. (a) The optative generally indicates hypothetical action (Gair & Karunatillake, 1998: 35). **(b)** When expressing condition, it is usually preceded by *ce, sace, yadi* (all meaning “if”). **(c)** This mood can best be translated into English using auxiliary verbs such as: “may,” “might,” “should” or “would” (Ānandamaitreya, 1993/2012: 14; Duroiselle, 1906/1997: 163). **(d)** As explained above, the imperative and optative “are syntactically often exchangeable (Oberlies, 2019: 399)”. **(e)** The range of the optative’s meaning further encompasses (Collins, 2006: 85; Duroiselle: 163):

- Permission (e.g. *tvaṃ gaccheyyāsi* – “You may go!”; Kacc 416).
- Supposition (e.g. *sacepi vāto girim vaheyya* – “Even if the wind should carry away the mountain”; *yathā* is occasionally also used in connection with this sense).
- Instruction.

¹³⁹ The optative affixes are furnished in Table 6 in the “Tables” section below.

Verbs (*ākhyātāni*)

- Wish (e.g. *ahaṃ imaṃ tumhākaṃ bhājetvā dadeyyaṃ* – “I would divide and give it to you”).
- Counterfactual assertions.¹⁴⁰
- Request.
- Invitation.
- Reflection.
- Hope.
- Exhortation.
- Authorization.
- Opportunity.
- Fitness.

Aorist¹⁴¹

Formation. (a) The aorist is supposed to be formed from the root, but as a matter of fact, it is formed indifferently either from the root or the active stem (Duroiselle, 1906/1997: 93; Geiger, 1916/1956: 159). **(b)** The conditional and also the past are formed with an augment in the form of a prefixed *a*; in the case of the aorist, it is frequently left out (Kacc 519; Geiger: 190). When the aorist is disyllabic (with exceptions) or would be monosyllabic without the augment, to give one example for when it is applied, it is appended (e.g. *adā* – “He gave”; Oberlies, 2019: 473). **(c)** If a regular prefix is added to the root, the augment is inserted between prefix (if one is applied) and root (cf. Perniola, 1997: 72–3; Warder, 1963/2001: 23). **(d)** Sometimes, a special aorist stem is formed from the root (Warder: 23). **(e)** There are altogether four types:

¹⁴⁰ This denotes an action or happening that might have occurred on the condition that the necessary things had been supplied (Oberlies, personal communication, October 30, 2020, for this usage).

¹⁴¹ For the respective conjugations, see Table 6 in the “Tables” section below.

1. Root aorist. Personal endings are added directly to the root and may take the augment *a* before the root (e.g. $a + \sqrt{gama} + \bar{a} \rightarrow agamā$).
2. *a*- or stem aorist. **(a)** Affix *a* is placed between root and personal ending; i.e. the personal endings are formed from the active stem. **(b)** This type is ubiquitous – both with and without the augment – but occurs more frequently in prose than in poetry; in the latter case its employment or nonuse is determined by metrical exigencies (Duroiselle, 1906/1997: 95).
3. *s*- or sigmatic aorist. **(a)** The sigmatic aorist is formed by inserting *s* between the radical vowel or the vowel of the stem and the personal endings; i.e. it is inserted to join the aorist suffixes to the root or to the stem. **(b)** This interfix is usually added to roots ending in vowels but to some roots ending in consonants too, in which case assimilation to the consonant takes place (the rules of assimilation strictly apply). **(c)** It is appended with or without the augment *a* having been appended to the root. **(d)** This type of aorist is principally formed (exceptions apply) with the causative verbs and the verbs formed by means of eighth class root affixes. **(e)** The personal endings may be added directly to stems in *aya* (Duroiselle, 1906/1997: 93–7).
4. *is*-aorist. This type is formed by adding *is* between the root (undergoing strengthening) or the active stem and the personal ending (Perniola, 1997: 96).

Usage. **(a)** The aorist is the principal past tense in Pāḷi and profusely applied (Duroiselle, 1906/1997: 162). **(b)** Aorist sentences oftentimes contain indicators of time and place (e.g. *tadā* – “then”; Hendriksen, 1944: 57–8). **(c)** It is used in the following ways:

- Simple past (*kena kāraṇena rodi?* – “Why did you cry?”; Kacc 419; Collins, 2006: 89; Duroiselle, 1906/1997: 162).
- Past actions in general (incl. the historical and narrative past; Warder, 1963/2001: 26).

- Present perfect (in particular; e.g. *kaṅkhaṃ vinodento dhammaṃ desesiṃ* – “I have taught the *dhamma*, removing doubt,” Dhp-a: 303; Warder: 26).
- Optative mood and future tense¹⁴² (e.g. *sace vaseyya agāraṃ, cak-kavattī bhaveyya so. aṭṭhānametaṃ yaṃ tādī, agāre ratimajjhagā* – “If he should live the home [life], he would become a wheel-turning monarch. There is no such ground [or ‘possibility’] that such a one would experience attachment regarding the home [life],” Ap I: 47; Clark, 2015: 228, n. 42; Norman, 1995: 141, n. 78).

(a) The indeclinable *mā* + the aorist intimates prohibition (Duroiselle, 1906/1997: 163) and may stand for all tenses (e.g. *mā gamī* – “Don’t go!”; Kacc 420). (b) The aorist has generally displaced the (OIA) imperfect and perfect aspects (Duroiselle: 162; cf. Oberlies, 2019: 437).

Imperfect¹⁴³

Formation. (a) In its formation process, augment *a* may be tacked to the root, and consequently the personal endings are furnished (cf. Kusalaṅṅāṇa, 2012: 165). (b) The imperfect is difficult to differentiate from the aorist. The only parameters aiding distinction are that the imperfect is said to form from the active stem and the aorist from the root; however, this is not an absolute measure and, in the end, these two can hardly be told apart (Duroiselle, 1906/1997: 94).

Usage. The imperfect denotes general past (Duroiselle, 1906/1997: 162), starting from yesterday (Kacc 418). The aorist has generally displaced the aspects of the imperfect and perfect (Duroiselle: 162; Geiger, 1916/1956: 158).

¹⁴² The latter is doubtful and perhaps only instanced by metrical exigencies.

¹⁴³ For the respective conjugations, see Table 6 in the “Tables” section.

Perfect

Formation. (a) The perfect is characterized by the reduplication of the root. **(b)** Roots ending in a consonant insert *an* before the personal endings beginning with a consonant. **(c)** Duroiselle (1906/1997: 97) supplies conjugations for all persons and numbers,¹⁴⁴ but Warder (1963/2001: 170) mentions that only the third person (singular and plural) of the verb *ah* exists. Perniola (1997: 98), yet again, states that alone second and third person singular forms exist for the mentioned verb.

Usage. (a) The perfect is but seldom used and has almost entirely vanished (Duroiselle, 1906/1997: 162; Geiger, 1916/1956: 158). **(b)** It is employed in the sense of the indefinite past (*apacchakkha*; Kusalagñāṇa, 2012: 166), general past (Kacc 417; Duroiselle: 162) and also often the present (Warder, 1963/2001: 170). **(c)** There seem to be only very few occurrences in early Pāḷi literature; in works like the *Bodhivaṃsa* (11th century CE) and others of such kind, it seems to be applied more frequently (Ānandamaitreya, 1993/2012: 91). **(d)** A number of perfect forms can be crafted by aid of several auxiliary verbs.¹⁴⁵ **(e)** The aorist has mostly superseded the aspects of the imperfect and perfect (Duroiselle: 162).

Future Indicative¹⁴⁶

Formation. (a) The future indicative is regularly constructed by appending the affix *ssa* to the active base or directly to the root (usually having been strengthened) – with the subsequent addition of the present indicative suffixes (e.g. $\sqrt{disa} + e + ssa + ti \rightarrow desessati$; $\sqrt{ṭhā} + ssa + ti \rightarrow ṭhassati$). **(b)** The interfix vowel *i* is often inserted between *ssa* and the root or active base, with the dropping of the root’s or stem’s final vowel. **(c)** When *ssa* is appended straight to a root with a final consonant, the same changes as occur in the aorist take also place within the future system, through the assimilation of the initial *s* of *ssa*. **(d)** Future passive verbs have the same

¹⁴⁴ See Table 6 in the “Tables” section below.

¹⁴⁵ See under “Auxiliary Verbs” for details.

¹⁴⁶ For the respective conjugations, see Table 6 in the “Tables” section.

affix and conjugations added to the passive base (Duroiselle, 1906/1997: 98; Warder, 1963/2001: 54–5).

Morphological Rules:

- The vowel *ū* of $\sqrt{hū}$ occasionally changes into *eha*, *oha*, *e* after the future ending has been affixed, which may be elided in the process (e.g. $\sqrt{hū} + ssa + ti \rightarrow hehiti$; Kacc 480).
- \sqrt{kara} may $\rightarrow kāha$ [occasionally] after the future ending has been affixed, which invariably is elided during the morphological process (e.g. $\sqrt{kara} + a + ssa + mi \rightarrow kahāmi$ – “I will do”; Kacc 481).

Usage. (a) The future in Pāḷi expresses the simple future as used and understood in English (e.g. *ahaṃ gacchissāmi* – “I shall go”; Kacc 421). **(b)** It can also be implemented to make generalizing statements (such as describing laws of nature), more emphatically than the present indicative, and to conclude inferences (e.g. *manussā marissanti* – “Humans will die”; *na vatimāni manussabhūtaṃ padāni bhavissanti* – “These cannot be the footprints of a human,” AN IV: 23 [AN 4.36]; Collins, 2006: 91; Warder, 1963/2001: 55). **(c)** The future may also express regret, disapproval, indignation, perplexity, surprise, wonder, certainty, determination, decision, habit and what is probable (Gair & Karunatilake, 1998: 127; Warder: 55). **(d)** Sometimes, it is applied in the imperfective (progressive) sense: “He will be learning Pāḷi” (Palistudies, 2018c). **(e)** Duroiselle (1906/1997: 163) and Oberlies (2019: 448, f.n. 3; 478, f.n. 2) further stipulate these operations of the future:

- Mild imperative, giving a “courteous command” (hortative optative).
- Condition (e.g. “if ..., then ...”), with particles *ce*, *sace* and *yadi*.
- Used also instead of the aorist, often in sentences with *kathaṃ hi nāma* and *yatra hi nāma*.
- *Bhavissati* (third person singular form, meaning “It is”) is oftentimes used to express “It must be that.”

- *Bhavissati* preceded by the negative particle *na* may be rendered as “It cannot be.”
- *Jānissāmi* (third person singular form, meaning “I know”) is oftentimes used to express the idiom “I’ll see” (e.g. *hotu, pacchā jānissāmi* – “Be it so, I’ll see [to it] afterward [or ‘later’]”).

Conditional¹⁴⁷

Formation. (a) The conditional takes the augment *a* “almost obligatory” before the root and is formed from the future stem (Oberlies, 2019: 474, 501); the endings may form one unit with it (Thitzana, 2016: 605). (b) They are generally linked to the root or the active base with the interfix vowel *i* (e.g. *a + √paca + i + ssaṃ → apacissaṃ*; Duroiselle, 1906/1997: 99; Warder, 1963/2001: 331). (c) It may be positioned in both protasis (the clause containing the condition) and apodosis (the clause containing the conclusion); it can also be in the protasis with the other conditional, optative or future tense verb in the apodosis or vice versa (Oberlies: 502).

Usage. (a) The conditional is but rarely used (Warder, 1963/2001: 331); the optative is usually applied to express the typical sense of the conditional (Oberlies, 2019: 502). (b) It expresses future time relative to something past and an action unable to be acted out on account of some obstacle (Duroiselle, 1906/1997: 80), in the case when there is no accomplishment of an action (Kacc 422; Collins, 2006: 91). (c) It also denotes an incidence that might have occurred on the condition that the necessary things had been supplied; i.e. it communicates counterfactual assertions (e.g. *no cedam, bhikkhave, paṇḍito sucintitacintī ca abhaviṣṣa subhāsita bhāsī ca sukatakkamakārī ca kena naṃ paṇḍitā jāneyyūṃ*: ‘*paṇḍito ayaṃ bhavaṃ sappuriso’ti?* – “If the wise man, bhikkhus, would not be one who thinks good thoughts, utters good speech and performs good actions, by what would wise men know him: “This venerable, righteous man is a wise man,” AN III: 2 [AN 3.3]; Ānandamaitreya, 1993/2012: 89; Collins: 92).

¹⁴⁷ For the respective endings, see Table 6 in the “Tables” section.

Causative¹⁴⁸

Formation. (a) To form the causative, the personal endings of the present indicative are added to its stem. (b) The causative stem is built from the root (often strengthening takes place) or the active base, which happens but rarely (Kacc 438; Ānandamaitreya, 1993/2012: 117; Collins, 2006: 95; Oberlies, 2019: 520). (c) Causative affixes not seldom coincide with the active base affixes of the eighth class (*e* and *aya*), which makes it sometimes hard to distinguish them from one another (Warder, 1963/2001: 79). (d) Causative verbs may take one object more than their corresponding non-causative forms: If the non-causative verb takes normally two objects, for example, the corresponding causative will take three (Warder: 79). (e) When built from intransitive roots or bases, they take one object, and when they are constructed from transitive ones, they take two (e.g. from transitive \sqrt{gamu} : *puriso purisaṃ gāmaṃ gāmayati* – “The man caused the man to go to the village”; Kacc 300; Hendriksen, 1944: 32; cf. Palistudies, 2018g; Warder: 79). (f) A double causative is applied for three objects and can occur with the affixes *e*, *āpe* or *āpāpe*¹⁴⁹ (e.g. *so purisaṃ dāsaṃ odanaṃ pācāpāpeti* – “He causes the man to cause the slave to cook the rice”; cf. Kacc 282; Duroiselle, 1906/1997: 112–3; cf. Perniola, 1997: 281; Warder: 79). (g) Causatives govern the accusative case; the instrumental case might be used (sometimes the genitive) in place of the factitive object¹⁵⁰ (e.g. *puriso purisena gāmaṃ gāmayati*; Kacc 300; Duroiselle: 156; Palistudies, 2018g). (h) The agent, as with ordinary verbs, stands in the nominative case (Warder: 79). (i) Duroiselle (p. 112) gives the following guidelines for the formation of the causative:

- Root vowels followed by one consonant are strengthened and remain unchanged when followed by two. Ānandamaitreya (p. 117) states, however, that strengthening takes place only optionally.

¹⁴⁸ For the respective causative affixes, see Table 6 in the “Tables” section.

¹⁴⁹ This last-mentioned affix is attached to the root.

¹⁵⁰ The object or patient which was caused to do something etc.

- Root *a* is occasionally not lengthened when followed by a single consonant.
- Roots in *i*, *ī* and *u*, *ū* form their causal form off the active base as well as other verbs.
- Some roots in *a* take *āpe*, *āpaya*, although Perniola (p. 103) says these endings are applied from the active base. Ānandamaitreya (p. 117) notes that roots as well as stems ending in *ā* and roots being classified under the seventh (our eighth) root affix class take the aforementioned endings.

Usage. (a) Causatives and double causatives can be used in all tenses and moods (incl. participles, absolutives, infinitives; Ānandamaitreya, 1993/2012: 117; Buddhadatta, 1937/1997: 120). (b) Causatives express the sense of end or cause (e.g. *attanā vippakataṃ attanā pariyoṣāpeti* – “He finishes himself what he himself left unfinished”; Sadd II: 175; Collins, 2006: 97). (c) They also carry the meaning of causing someone or something else to do an action designated by a root (i.e. to have something done; Kacc 282; Warder, 1963/2001: 78) and are often employed in the sense of directives or orders (Palistudies, 2018g). (d) Besides the straight causative sense, they may also have a special idiomatic meaning (Warder: 79), like a simple transitive sense (e.g. $\sqrt{cara} + e + ti \rightarrow cāreti$ – “He administers [an estate]”; Duroiselle, 1906/1997: 114; Oberlies, 2019: 520, f.n. 1). (e) The causative can act as an intransitive or transitive (usually) verb, with a single object or multiple ones (Collins: 96).

Desiderative

Formation. (a) Characteristic is the reduplication of the root in accordance with the regulations already given (Kacc 434; Duroiselle, 1906/1997: 115), with the weak form of the root’s reduplicated syllable. (b) To this, the affixes *kha*, *cha*, *sa* are added (e.g. $\sqrt{bhujā} + kha + ti \rightarrow bubhukkhati$ – “He wishes to eat”; Kacc 434; Warder, 1963/2001: 352).¹⁵¹

¹⁵¹ See also Table 6 in the “Tables” section below.

Usage. (a) The Desiderative is not extensively used in Pāli (mainly being restricted to verse) but often enough to warrant treatment (Duroiselle, 1906/1997: 115; Oberlies, 2019: 565; Warder, 1963/2001: 352). **(b)** As the name itself suggests, the desiderative is key in expressing the wish or desire to do or be that which is designated by the root (Duroiselle: 115; Oberlies: 565). **(c)** They are of the meaning of *tumicchaththa* (“wished [or ‘wanted’] for oneself”; e.g. $\sqrt{ghasa} + cha + ti \rightarrow jighacchati$ – “He wants to eat”; Kacc 434; Collins, 2006: 100).

Intensive¹⁵²

Formation and Usage. (a) The characteristic of the intensive conjugation is, here too, the reduplication of the root (Duroiselle, 1906/1997: 115). **(b)** It was stated that it is not possible or necessary to give an account of the rules for the formation of intensives; nevertheless, we find it specified that they do not form from polysyllabic roots, from roots with a vowel initial or from those pertaining to the eighth class of roots. **(c)** Intensive verbs express a frequent repetition or the intensification of the action intimated by the root (Duroiselle: 115; Collins, 2006: 101; Oberlies, 2019: 565). **(d)** Intensive adjectives are also found (e.g. $\sqrt{lupa} \rightarrow lolupa$ – “greedy”; Collins: 101).

Denominative

Formation. (a) The denominative verbs occur rarely, except for poetry and exaggerated speech, and are so called because they are constructed from nominal bases (incl. those of pronouns and adjectives) by means of certain affixes; however, they can also be formed from adverbs, onomatopoeias¹⁵³ etc. (Collins, 2006: 99; Perniola, 1997: 106; Warder, 1963/2001: 316). **(b)** In the formation process, the active base affixes of the first and eighth classes of roots are commonly utilized. **(c)** After the respective

¹⁵² For the respective intensive affixes, see Table 6 in the “Tables” section.

¹⁵³ Merriam Webster (“Onomatopoeia,” n.d.): “[T]he naming of a thing or action by a vocal imitation of the sound associated with it (such as buzz, hiss) [...] also: a word formed by onomatopoeia.”

denominative affixes¹⁵⁴ have been appended to form the denominative stem, the personal endings of the tenses are added, as with other verbs (e.g. *samudda + āya + ti* → *sammuddāyati* – “to be or act like the ocean”; Collins: 99; Warder: 316). **(c)** Absolutive, infinitive and participle affixes can also be appended (e.g. *mamāyita* – “cherished”; Oberlies, 2019: 517). **(d)** Duroiselle (1906/1997: 115) mentions an unusual approach to forming denominative verbs from nouns: The first, second or third syllable of the noun is reduplicated and the affix *īyisa* or *yisa* added to the word reduplicated in that manner. **(e)** The vowels *u* or *i* may or may not be inserted between the reduplication (e.g. *putta* → *pupputtīyisati* – “He wishes to be a son”).

Usage. (a) Denominatives can be transitive as well as intransitive, with the *e* affixes being usually transitive (e.g. *sukhāyati* – “He is pleased [intransitive]”; *sukheti* or *sukhāyati* – “He makes happy [transitive]”; Periniola, 1997: 108). **(b)** There are several ways of translating the denominative (Warder, 1963/2001: 316), usually having to express the following meanings (Duroiselle, 1906/1997: 114; Oberlies, 2019: 504):

- to act as, to be or treat like, to wish to be like that which is denoted by the noun;
- to wish for, to desire that which is signified by the noun;
- to change or make into that which is denoted by the noun;
- to use or make use of that which is expressed by the noun.

Absolutive¹⁵⁵

General Characteristics and Formation. (a) Absolutes are not declined since they are remnants of an old action noun in *tu*. As such, they have already been declined, so to speak (Collins, 2006: 114). **(b)** As is the case in Sanskrit, the absolutive in Pāḷi is employed to “knit together discourse” and may form complex sentences, with the agent performing a

¹⁵⁴ See Table 6 in the “Tables” section.

¹⁵⁵ See Table 6 in the “Tables” section for the respective suffixes.

series of actions (by rule successive in time); occasionally, the absolutive “may function as the main verb of a sentence” (Hendriksen, 1944: 112; Oberlies, 2019: 634, f.n. 4; Warder, 1963/2001: 48). **(c)** Like other verbs, they may take objects in the accusative (Warder: 48). **(d)** Words governed by the absolutive mostly precede, but that is not always the case (Collins: 117). **(e)** When the agent is the same for the main verb and the absolutive, it is found to be in the nominative with active and in the instrumental or genitive with passive verbs (Perniola, 1997: 375). **(f)** The absolutive is generally subordinate to a finite verb but occurs also with other forms, such as present participles, infinitives and action nouns (e.g. *tadā gātham vatvā pakkanto* [present participle] *paṇḍitavāṇijo pana ahameva ahosi* – “Now at that time, I was indeed the wise merchant who went away, having recited the stanza,” Jā-a I: 132 [commentary on Jā 43]; Hendriksen: 7, 108–11; Perniola: 375). **(g)** Verbs may exhibit multiple forms of the absolutive; however, this does not affect the meaning (e.g. absolutes of the verb *gaṇhāti* are: *gahetvā, gahetvāna, gaṇhitvā*; Hendriksen: 108; Oberlies: 638). **(h)** “A few nouns,” Oberlies (p. 654) states, “are abstracted from absolutes” (e.g. *upanidhā* [“comparison”] ← *upanidhāya* [“in comparison”]).

(a) Endings are appended to the root (occasionally being strengthened), active stem (at least in part) or causative stem (e.g. $\sqrt{yuja} + \text{āpe}$ [causative affix] + *tvā* → *yojāpetvā* – “having yoked,” DN II: 42 [DN 16]; Collins, 2006: 114; Geiger, 1916/1956: 159; Oberlies, 2019: 634). **(b)** Before *ya*, a *t* may be inserted (Collins: 114) between the absolutive suffixes and a root ending in a vowel (Duroiselle, 1906/1997: 107). **(c)** Some roots seem to take an absolutive suffix made up of *ya* and *tvā*, being joined to the root by means of *i*, but most can have several forms (Duroiselle: 108). **(d)** Further rules in the formation of the absolutive with suffixes *tvā, tvāna, tūna* are (Duroiselle: 107–8; Geiger, 1916/1994: 195; Perniola, 1997: 124):

- They are joined to the root by means of connecting vowel *i* (e.g. $\sqrt{khāda} + i + tvā \rightarrow khāditvā$).
- They are joined to the active base by mean of connecting vowel *i* ($\sqrt{sara} + a + i + tvā \rightarrow saritvā$).

- Initial *t* of the suffix is assimilated to the last root consonant (in a few cases).
- Root vowel is strengthened (e.g. $\sqrt{ni} + tvā \rightarrow netvā$).
- Last (C) [of root] $\rightarrow \emptyset$ [occasionally] / __ *tvā*, *tvāna* and *tūna* (e.g. $\sqrt{chida} + tvā \rightarrow chetvā$).
- Final (\tilde{V}) [of root] $\rightarrow (\check{V})$ / __ *tvā*, *tvāna* and *tūna* (e.g. $\sqrt{dā} + tvā \rightarrow datvā$).

Regarding suffix *ya*:

- It is mostly used with roots compounded with prefixes (e.g. *saṃ* + \sqrt{ikkha} [“to see”] + *i* + *ya* $\rightarrow samekkhiya$ – “having reflected”).
- It is used with simple roots at times and with interfix vowel *i* (e.g. $\sqrt{cinta} + i + ya \rightarrow cintiya$).
- Regularly *tya* $\rightarrow cca$ (e.g. *paṭi* + \sqrt{i} [“to go”] + *tya* $\rightarrow paṭicca$ – “because of,” “following upon,” “from”).
- It is added directly to roots ending in long *ā* (e.g. *vi* + $\sqrt{hā} + ya \rightarrow vihāya$).
- It may be added to the active stem.
- It is assimilated to the last root consonant (e.g. *ni* + $\sqrt{sada} + ya \rightarrow nisajja$).
- It is occasionally dropped during the formation process, with the root remaining (e.g. *abhiññāya* $\rightarrow abhiññā$).
- *m* $\rightarrow n$ / __ *tvā* (e.g. $\sqrt{gama} + tvā \rightarrow gantvā$;
Duroiselle 1906/1997: 18).

Usage. (a) Some facets of the way absolutes are employed can be more easily grasped when the remnant nature of the instrumental case is borne in mind, with which it has a quasi-nominal, adverbial nature (Collins, 2006: 114). **(b)** In the majority of instances, the absolute is used to express a previous action performed by the subject of the sentence. It is understood as a verb which stands in the same tense and mood, but merely *understood* since it is ultimately of an uninflected nature (Collins:

115). **(c)** The primary uses of the absolutive are as follows (Kacc 564; Collins: 115–6; Hendriksen, 1944: 113–6; Perniola, 1997: 375):

- Past, agent of absolutive and main verb being the same (e.g. *atha kho bhagavā soṇadaṇḍaṃ brāhmaṇaṃ dhammiyā kathāya [...] samādapetvā [...] pakkāmī* – “And then the Blessed One went away, having [...] roused [...] the Brahmin Soṇadaṇḍa with a talk on *dhamma*,” DN I: 59 [DN 4]).
- Same time, agent of absol. and main verb being the same (e.g. *so taṃ dhammaṃ sutvā tathāgate saddhaṃ paṭilabhati* – “Hearing that *dhamma*, he gains faith in the Tathagata,” DN I: 30 [DN 2]).
- Future time, agent of absol. and main verb being the same (e.g. *dvāraṃ āvaritvā pavisati* – “He enters and closes the door”).
- Agents of the absolutive and main verb are different (e.g. *paññāya cassa disvā āsavā parikkhīṇā* – “And for him, having seen with wisdom, the influxes are extinguished,” MN I: 109 [MN 25]).

(a) In the case of completed action, “having” + a past participle may be used when translating into English or a past tense followed by the copulative conjunction “and” (e.g. *so tatra gantvā idha āgacchati* – “Having gone there, he comes back here”), therewith also instancing what has been said earlier; i.e. that verbs in the absolutive may express consecutive action (Duroiselle, 1906/1997: 164; Hendriksen, 1944: 112; Perniola, 1997: 376).

(b) Absolutive verbal forms can be employed to form conditional clauses as well (e.g. *mañhi, bhante, aññatitthiyā sāvakaṃ labhitvā kevalakappaṃ nāḷandaṃ paṭākaṃ parihareyyuṃ* – “Indeed, venerable Sir, if adherents of other sects had gained me as a disciple, they would carry about a flag throughout the whole of Nālanda,” MN II: 23 [MN 56]; Perniola: 376–7).

(c) The sense of cause is occasionally expressed (e.g. *kasmā evaṃ vadasīti? – imesaṃ bahubhāvaṃ disvā*: “Why do you speak like that?” – ‘Because of having seen their abundance,’” Jā-a I: 153 [commentary on Jā 62]; Hendriksen: 113). **(d)** Before an absolutive, the negative prefix *a* signifies the meaning of “without” or “not having.” **(e)** The subsequent particle *api*, on

the other hand, suggests a translation by “although” or “even though,” forming concessive clauses (e.g. *akataññū puggalo cakkavattirajjaṃ datvā-pi tosetuṃ nasakkā* – “An ungrateful person cannot be pleased even though having been given the kingdom of a universal monarch”; Duroiselle: 165). **(f)** The *va* (*eva*) following the absolutive might be rendered as “as soon as” or “just as” (e.g. *so vāandro attano puttaṃ disvāva [...]* – “As soon as he saw his offspring, the monkey [...],” Jā-a I: 148 [commentary on Jā 58]; Duroiselle: 164). **(g)** The absolutive *hutvā* (“having been”) can mean “as,” “in the capacity of” (e.g. *tvaṃ puriso hutvā ulloketuṃ na sakkosi; ahaṃ kathaṃ sakkhissāmi* – “You, as a man, are not able to behold; how will I be able?”, Vibh-a: 175; Hendriksen: 114). **(h)** An absolutive may be translated with a present participle (Duroiselle: 165; Hendriksen: 114). **(i)** Some forms are also used as postpositions, such as (Duroiselle: 165; Perniola: 377):

- *Paṭṭhāya* (“since,” “from” etc.), which governs the ablative (e.g. *aruṇuggamanato paṭṭhāya* – “from dawnrise,” Sp I: 27).
- *Sandhāya, ārabba* (both “concerning” etc.); these and the following items govern the accusative (e.g. *sace kho te, jīvaka, idaṃ sandhāya bhāsitaṃ [...]* – “if it has been said by you, Jīvaka, concerning this [...],” MN II: 17 [MN 55]).
- *Paṭicca* (“because of” etc.; e.g. *macchariyaṃ paṭicca ārakkho* – “Because of stinginess guarding comes about,” DN II: 25 [DN 15]).
- *Nissāya, upanissāya* (both “near” etc.; e.g. *idhāvuso, bhikkhu sathāraṃ upanissāya viharati* – “whenever, friend, a bhikkhu lives near a teacher,” DN III: 130 [DN 34]).

Infinitive¹⁵⁶

General Characteristics and Formation. **(a)** The infinitive expresses the “idea of the verb without any indication of time” (Hendriksen, 1944: 92; Perniola, 1997: 371); it is the accusative or dative of an old action noun in *tu*, the absolutive being its instrumental, and is indeclinable in Pāḷi

¹⁵⁶ See Table 6 in the “Tables” section below for the respective suffixes.

(Collins, 2006: 117; Hendriksen: 94–5; Warder, 1963/2001: 134). **(b)** It normally precedes and is dependent upon the main verb or predicative (Ānandamaitreya, 1993/2012: 17; Gair & Karunatillake, 1998: 23). **(c)** The subject is virtually always the same as that of the main verb (Gair & Karunatillake: 23). **(d)** The infinitive usually precedes the principle verb but may also follow it (Hendriksen: 96). **(e)** Hendriksen (p. 93) points out that the agent even of the active infinitive may stand in the instrumental (e.g. [possibly] *na dāni sukaraṃ amhehi lābhasakkārasiloke pariccajituṃ* – “It is not easy for us, now, to abandon gain, honor and fame,” MN II: 96 [MN 76]). **(f)** The suffix *tuṃ* is applied most commonly, but other rare suffixes such as *tāye*, *tave*, *tuye* are also found, although (seemingly) being confined to verse compositions (Geiger, 1916/1994: 190–1; Oberlies, 2019: 627). **(g)** Infinitives are formed from transitive and intransitive stems as well as from causatives, double causatives, desideratives and denominatives (e.g. *gopayituṃ*) – they are used in any tense or mood (Kacc 561; Collins: 117–8; Geiger: 192). **(h)** The prefix *a* may be added to make them negative (Warder: 135). **(i)** The infinitive can be formed with the elision of final *ṃ* of *tuṃ*, mostly happening when *ye* (e.g. *kātuṃ* + *ye* → *kātuye*) or the word *kāma* is appended (“desiring to”; e.g. *atha kho milindo rājā yenāyasmā nāgaseno tenupasaṅkami [...] ñāṇālokaṃ uppādetukāmo [...]* – “And then king Milinda went to where Ā. Nāgasena was [...] being eager to cause the light of knowledge to arise [...],” Mil: 145; Collins: 119; Oberlies: 627). **(j)** Sometimes, two forms of an infinitive exist (e.g. *chettuṃ*, *chindituṃ*; Oberlies: 630).

(a) Suffixes *tave*, *tuye*, *tāye*, *tase* are added to the strengthened root (ending in vowels or consonants) or to the active stem with the interfix vowel *i* (e.g. $\sqrt{ni} + tave \rightarrow netave$; Kacc 561; Geiger, 1916/1994: 190; Perniola, 1997: 128). **(b)** The suffix *tuṃ* is appended according to the following schema (Kacc 561; Duroiselle, 1906/1997: 109; Gair & Karunatillake, 1998: 22; Perniola: 126–7; Warder, 1963/2001: 134):

- directly to roots with final *ā* or vowels in general
(e.g. $\sqrt{dā} + tuṃ \rightarrow dātuṃ$);

- directly to strengthened roots (e.g. $\sqrt{ni} + tuṃ \rightarrow netuṃ$);
- to roots by means of interfix vowel *i*
(e.g. $\sqrt{jīva} + i + tuṃ \rightarrow jīvituṃ$);
- to active stems in *a* by means of interfix vowel *i*
(e.g. $bhava + i + tuṃ \rightarrow bhavituṃ$);
- directly to active stems in *e* and *o* (e.g. $dese + tuṃ \rightarrow desetūṃ$);
- initial *t* of *tuṃ* is assimilated to the last consonant of the root or vice versa (e.g. $\sqrt{bhujā} + tuṃ \rightarrow bhottuṃ$) or vice versa.

Usage. (a) Depending on a main verb (incl. predicated adjectives), the infinitive conveys the idea of “purpose of,” “in order to” and is also used with verbs denoting intention, worthiness, ability, possibility and appropriateness (e.g. *ninditumarahati* – “he who deserves to blame [that person]”; *alameva dānāni dātuṃ* – “It is just appropriate to give alms”; Kacc 561–563, 637; Gair & Karunatilake, 1998: 23; Hendriksen, 1944: 95). **(b)** It implies a wish or desire to do something and can be rendered into English with the so-called full infinitive or to-infinitive (e.g. *bhāsituṃ* – “in order to speak”; Palistudies, 2018d). **(c)** The Infinitive is used passively and actively (Hendriksen: 93; Warder, 1963/2001: 135). **(d)** The dative of nouns in *āya* is often used in an infinitive sense (Duroiselle, 1906/1997: 109; Geiger, 1916/1994: 191); the infinitive is interchangeable with the dative of purpose (Warder: 134). **(e)** As already stated above, it takes on a negative sense with the prefix *a/an* (Oberlies, 2019: 628; Warder: 135).

Participles

*Kinds of Participles*¹⁵⁷

1. Present active participle.
2. Present middle participle.
3. Present passive participle.
4. Past active participle.
5. Past passive participle.

¹⁵⁷ See Table 6 in the “Tables” section below for the respective affixes.

6. Future active participle.
7. Future middle participle.
8. Future passive participle (aka gerundive, participle of necessity).
9. Absolutive (aka *gerund*).¹⁵⁸

Present Participle

Formation. (a) Both the active and middle forms are built from the active base of verbs (but the latter may also be constructed from roots) and have the selfsame meaning (Dhammajoti, 2018: 96; Gair & Karunatillake, 1998: 36; Hendriksen, 1944: 8; Warder, 1963/2001: 46). (b) Verbal bases which end in *e* may change to *aya* before affixes *māna* and *āna* are applied. (c) Active bases ending in *e* or *o* merely take the *anta* suffix (Perniola, 1997: 109). (d) Present active participles formed with the affix *anta* etc. are declined in a similar way as possessive adjectives with the stem in *vantu* and the form of the present middle participles in *māna* etc. like *a*-ending stems (cf. Oberlies, 2019: 257). (e) Feminine stems in *antī* are declined like feminine stems in *ī*¹⁵⁹ (Ānandamaitreya, 1993/2012: 60; Dhammajoti: 95–6).

Usage – as Adjectives. (a) Participles have the nature of verbal adjectives and must, therefore, agree with the nouns they qualify in number, gender and case (Duroiselle, 1906/1997: 100; Oberlies, 2019: 571, f.n. 1; Perniola, 1997: 357). (b) Present participles are oftentimes used as adjectives with no relation to time (Collins, 2006: 106) and may share the same agent as the main verb (Palistudies, 2018e). (c) As adjectives, they may precede or follow the noun which they modify (e.g. *addasāma kho mayaṃ, bho, taṃ bhavantaṃ gotamaṃ gacchantaṃ* – “Sir, we have seen the Venerable Gotama walking,” MN II: 168 [MN 91]; Gair & Karunatillake, 1998: 37).

Usage – as Verbs. (a) The present participle can also function as a verb, with the same syntactical function as a finite verb (Oberlies, 2019: 571, f.n.

¹⁵⁸ See above.

¹⁵⁹ See Table 3 in the “Tables” section for details.

1). **(b)** It is commonly translated into English by “while” or “when” + a present participle and signifies an unfinished action occurring simultaneously with the action as designated by the main verb in the past, present or future tense (e.g. *saramāno rodī* – “Remembering, she wept”; *saramāno rodati* – “Remembering, she weeps”; *saramāno rodissati* – “Remembering, she will weep”; Ānandamaitreya, 1993/2012: 61; Collins, 2006: 106; Hendriksen, 1944: 7; Oberlies: 571, f.n. 1; Warder, 1963/2001: 46). **(c)** This participle generally expresses the continuous, progressive and imperfect aspects (e.g. *bhikkhu gacchanto vā ‘gacchāmi’ti pajānāti* – “Or while walking, a bhikkhu knows: ‘I am walking,’” MN I: 35 [MN 10]; Kacc 565; Collins: 106). **(d)** It can sometimes also be translated by a conditional clause (“when,” “if”; e.g. *evaṃ karonto asātamante lacchasi, akaronto na lacchasi* – “If you do so, you’ll obtain the dolor text; if you don’t do it, you won’t obtain it,” Jā-a I: 150 [commentary on Jā 61]; Oberlies: 579). **(e)** The present participle also appears to be capable of being correctly rendered with the simple present tense (e.g. *santaṃyeva kho pana paraṃ lokaṃ ‘natthi paro loko’ti vācaṃ bhāsati* – “Although the other world exists, he says ‘there is no other world,’” MN II: 34 [MN 60]; Hendriksen: 7). **(f)** Oberlies (p. 571, f.n. 1) mentions that present participles may also express the ideas of cause or purpose but gives no examples. **(g)** When standing in relation to a present participle, the particle *pi* (= *api*) may be rendered as “although,” introducing a concessionary clause (e.g. *evampi kho ahaṃ karonto* – “although I act thus,” MN I: 210 [MN 50]; Duroiselle, 1906/1997: 165; Palistudies, 2018e; Perniola, 1997: 359). **(h)** The present participle is able to be used actively as well as passively (Buddhadatta, 1937/1997: 87).

Usage – as Substantive Nouns. **(a)** Present participles may also act as substantive nouns (Ānandamaitreya, 1993/2012: 61) and are sometimes used substantively as an action noun (e.g. *kubbāna* – “doing”; cf. Warder, 1963/2001: 47). **(b)** In this case, they may be translated by means of a relative clause (beginning with the personal pronoun “he” or the indefinite pronoun “one”; cf. Bodhi, 2020: 28) or a participle construction containing a present participle; in the case of the former relative clause, the present

tense, besides its use together with the present participle, was suggested to be permissible too (e.g. [relative clause] *idaṃ pana paralokaṃ gacchan-tassa pātheyyaṃ bhavissatī* – “This will be a provision for the one who goes to the next world [after death],” Pd IV: 3; [participle construction] *jānato passato āsavānaṃ khayo hoti* – “For the one knowing, the one seeing, the destruction of the taints occurs,” SN V: 211 [SN 56.25]; Ānandamaitreya: 62; cf. Bodhi: 27; cf. Duroiselle, 1906/1997: 165; Gair & Karunatillake, 1998: 37).

Past Passive Participle¹⁶⁰

Formation. (a) Past passive participles occur frequently and are to be constructed from the root: directly if it ends in a vowel (with a potential insertion of an *i* between the root and the subsequently added respective affixes) or with certain morphological rules effected if it ends in a consonant (Duroiselle, 1906/1997: 102). (b) The *ta* affix is applied after \sqrt{chada} , \sqrt{citi} , \sqrt{su} , $\sqrt{nī}$, \sqrt{vida} , \sqrt{pada} , \sqrt{tanu} , \sqrt{yata} , \sqrt{ada} , \sqrt{mada} , \sqrt{yuja} , \sqrt{vatu} , $\sqrt{mi-da}$, $\sqrt{mā}$, \sqrt{pu} , \sqrt{kala} , \sqrt{vara} , \sqrt{ve} , \sqrt{pu} , \sqrt{gupa} , $\sqrt{dā}$ etc. (Kacc 656). (c) Past passive participles are also formed from the active base, and some may also form irregularly (Collins, 2006: 107; Dhammajoti, 2018: 65; cf. Geiger, 1916/1956: 159). (d) They decline like *a/ā*-stem substantive nouns (cf. Bodhi, 2020: 29; Duroiselle: 105).

Usage – as Adjectives. (a) The past passive participles, like all participles, are of the nature of verbal adjectives and must agree with their nouns in number, gender and case (Duroiselle, 1906/1997: 100; Oberlies, 2019: 571, f.n. 1; Perniola, 1997: 357). (b) Past passive participles as adjectives may either precede or succeed the substantive noun they qualify (e.g. *subhāvitaṃ cittaṃ* – “the well-developed mind,” DhP: 2, v. 14; Gair & Karunatillake, 1998: 72). (c) When modifying a noun or pronoun, their meaning does not necessarily have to be past (e.g. *bhinnena sīsena* – “with broken head,” MN I: 89 [MN 21]; Dhammajoti, 2018: 66; Duroiselle: 100;

¹⁶⁰ See Table 6 in the “Tables” section for the respective suffixes.

Perniola: 362). **(d)** In equational sentences,¹⁶¹ a past passive participle can function as an adjectival predicate (i.e. an adjective that succeeds a linking verb, such as “am,” “is,” “are,” “has been”), modifying the sentence subject (e.g. *ahaṃ kho pana susikkhito* – “I am indeed well trained,” Vin I: 25 [Pār 2]; Gair & Karunatilake, 1998: 72). **(e)** There might be a case where a translation by means of a relative clause appears warranted (e.g. *bhagavantam pabbajitam anupabbajanti* – “They go forth alongside the Blessed One, who [already] went forth,” Mp I: 74).

Usage – as Verbs. (a) The past passive participles can oftentimes also function as verbs, with the same syntactical function as a finite verb (cf. Hendriksen, 1944: 9, 50; cf. Oberlies, 2019: 571, f.n. 1), with auxiliary verbs being explicit or implicit (e.g. [explicit] *tena kho samayena āyasmato upasenassa kāye āsiviso patito hoti* – “At that time, a snake had fallen on the body of Ā. Upasena,” SN IV: 20 [SN 35.69]; Collins, 2006: 108). **(b)** They generally express completed action and, as the name suggests, are usually employed in a passive sense (e.g. *bhāsitaṃ* – “is said [by such and such a person]”; Kacc 556; Dhammajoti, 2018: 65), although an active sense is also assumed when they are formed from roots indicating motion, those meaning “to drink,” “to eat,” “to give birth to” (inter alia), transitive roots used intransitively and intransitive roots in general (Dhammajoti: 66; Du-roiselle, 1906/1997: 165; cf. Hendriksen: 9; Oberlies: 618; Warder, 1963/2001: 40). **(c)** In the latter case (active sense), they take an accusative object, agreeing with the agent in number, gender and case (e.g. *samaṇo khalu bho gotamo amukaṃ nāma gāmaṃ [...] osaṭo* – “The dear ascetic Gotama has indeed come to such and such a village,” MN I: 119 [MN 27]). **(d)** In the former case (passive sense), the agent is found to be in the instrumental case, with the past passive participle agreeing with the patient, again in number, gender and case (e.g. *svākkhāto bhagavatā dhammo* – “The *dhamma* has been well proclaimed by the Blessed One,” DN II: 88

¹⁶¹ These are sentences without a finite verb but, inter alia, with adjectival predicates.

[DN 18]; Ānandamaitreya, 1993/2012: 33; Dhammajoti: 67; Duroiselle: 166; cf. Warder: 40).

(a) The past passive participle can be translated by means of the simple past,¹⁶² which is used for narrations, or present perfect tense – in fact, it has been said that they denote the past in general (*atīto*; e.g. *ayaṃ kho no, bhante, antarākathā vippakatā; atha bhagavā anuppattoti* – “Now this was, venerable Sir, the chance talk that was not finished, then the Blessed One arrived,” DN III: 16 [DN 25]; Kacc 555; Hendriksen, 1944: 9, 51, 53, 60–8).

(b) Not seldom, it may also be rendered as a present participle, an absolute or is applied in a present sense (e.g. [absolute] *nisinno purise āṇāpesi* – “He commanded [his] men, having sat down,” Jā-a I: 71 [commentary on Jā 4]; Kacc 650; Ānandamaitreya, 1993/2012: 178; Duroiselle, 1906/1997: 165–6; Hendriksen: 13–5). **(c)** Sometimes, the past passive participle functions almost like an infinitive (e.g. *aññatra asitapītakhāyitasāyitā* – “except to eat, drink and consume food,” MN I: 59 [MN 12]; Oberlies, 2019: 626, f.n. 1). **(d)** In the neuter gender, it can also be employed impersonally (e.g. *evaṃ me sutam* – lit. “Thus it was heard by me,” DN I: 1 [DN 1]; Dhammajoti, 2018: 68).

(a) The past passive participle is often combined with auxiliary verbs (Oberlies, 2019: 591, 592, f.n. 4). **(b)** With first and second person auxiliary verbs¹⁶³ formed from \sqrt{as} , an emphasized present perfect is to be understood (e.g. *ahamasmi sammā paṭipanno* – “I have practiced rightly,” DN I: 5 [DN 1]; cf. Dhammajoti, 2018: 67; Warder, 1963/2001: 233). **(c)** Past participles + auxiliary verbs formed from $\sqrt{hū}$ (*hoti* etc.) carry the same sense (e.g. *so ārāmaṃ gato hoti* – “He has gone to the monastery”) or are – with *tena-samayena* constructions – expressive of the past continuous aspect (“I was going” etc.; Warder: 235). **(d)** With *bhavissati* (not necessarily of fu-

¹⁶² The past passive participle is never used together with auxiliary verbs to denote the simple past (Hendriksen, 1944: 78).

¹⁶³ For an exposition on the different meanings of the past passive participle with auxiliary verbs, refer to the section “Auxiliary Verbs” below.

ture import), they bear the meaning of “might have,” “would have,” “will have” (Gair & Karunatilake, 1998: 171).

Usage – as Substantive Nouns. (a) Past passive participles may act as substantive nouns too, incl. action and agent nouns (with the first-mentioned type being in the neuter gender; e.g. *dinnaṃ* – “giving”; *na hi pabbajito parūpaghātī [...]* – “One who has gone forth [i.e. ‘a monk’] is certainly not one who harms others [...],” Dhp: 13, v. 184; Kacc 556–557; Ānanda-maitreya, 1993/2012: 178; Collins, 2006: 109; Hendriksen, 1944: 15; Oberlies, 2019: 626; Thitzana, 2016: 714). (b) They can be translated by a relative clause “who/which is,” as can be gathered from the previous example. (c) Past passive participles are sometimes used as neuter verbal nouns to designate either the action of the verb or the resultant effect of it (e.g. *dinnaṃ* – “giving,” “the given [thing]”; *natthi buddhānamiñjitaṃ* – “There is no wavering for the Buddhas,” Dhp: 18. v. 255; Hendriksen: 16; Perniola, 1997: 363; cf. Thitzana: 712).

Past Active Participle¹⁶⁴

Formation. (a) All participles have the nature of verbal adjectives and must, therefore, agree with the nouns they modify in number, gender and case (Duroiselle, 1906/1997: 100; Oberlies, 2019: 571, f.n. 1; Perniola, 1997: 357). (b) The past active participles occur but rarely. (c) The respective endings are tacked to the past passive participle and declined like the possessive adjectives in *vantu* (*vā*) and *in* (*ī*) respectively (*bhuttavī* – “he who has eaten”; Bodhi, 2020: 30; Duroiselle: 105; Geiger, 1916/1956: 220), but some irregular forms exist (e.g. *vidvā*, *viddasu*; Perniola: 119). (d) Functioning as verbs, they may take objects in the accusative case, with the agents standing in the nominative (Warder, 1963/2001: 274).

Usage.¹⁶⁵ (a) The absolutive has mostly supplanted the past active participle in Pāḷi. (b) The past active participles, like the other participles,

¹⁶⁴ See Table 6 in the “Tables” section for the respective endings.

¹⁶⁵ See also the section “Locative, Genitive, Accusative and Nominative Absolute” for a possible absolute construction and viable translation.

can be used as substantive nouns, adjectives and verbs (e.g. [adjective] *katāvī* – “expert”; Kacc 555; Geiger, 1916/1956: 221; Hendriksen, 1944: 10; cf. Warder, 1963/2001: 274). **(c)** They generally denote the past (*atīto*), with a suggested translation by means of the present/past perfect aspect (e.g. *so sīhamādinnavā* – “He has/had captured a lion,”¹⁶⁶ Mhv: 35; Hendriksen: 1; Warder: 275). **(d)** A translation by means of a past passive participle clause (i.e. “having” + a past participle) has been offered as well (e.g. “he, having captured the lion [...]” [Pāli text is basically the same as in the previous example]; cf. Kacc 555; Duroiselle, 1906/1997: 165; Hendriksen: 10–1). **(e)** Similarly to the past passive participle, a relative clause containing a past passive participle or regular adjective might be used for translation (e.g. [past passive participle] *vusitavā* – “one who has lived [the spiritual life perfectly],” DN III: 34 [DN 27]; [adjective] *viññitāvī* – “the one who has been victorious,” Th: 2, v. 5; Geiger: 220–1; cf. Bodhi, 2020: 30–1; Hendriksen: 10). **(f)** Hendriksen (p. 10), explaining the functions of the affix *vantu* (*vā*), translated with a relative clause containing a present tense (e.g. *taṃ avidvā* – “he who does not know it,” MN I: 197 [MN 46]). **(g)** These participles are also capable of being nominalized (e.g. *hutāvī* – “the given”; Thitzana, 2016: 712).

Future Passive Participle¹⁶⁷

Formation. **(a)** Future passive participles are either formed from the root – usually having been strengthened – or the active base (generally the case with roots ending in *u* and *ū*; Collins, 2006: 110; Duroiselle, 1906/1997: 105; cf. Geiger, 1916/1956: 159; Perniola, 1997: 368). **(b)** At times, interfix vowel *i* is inserted (Dhammajoti, 2018: 131). **(c)** The affixes *tabba* and *anīya* are the ones most commonly encountered (Hendriksen, 1944: 12).

General Characteristics and Usage as Verbs. **(a)** The future passive participle can also function as a verb, with the same syntactical function as a

¹⁶⁶ It would be “slain” or “split” when reading *ādiñṇavā* (Andersen, 1901: 112).

¹⁶⁷ See Table 6 in the “Tables” section for the respective suffixes.

finite verb (Oberlies, 2019: 571, f.n. 1); in fact, as “a rule it is employed as a sentence verb,” perhaps there being “a tendency to use *-tabba-* with the gerundive [i.e. future passive participle] functioning as sentence verb and *-anīya-* in other cases” (Hendriksen, 1944: 11–2). **(b)** The future passive participle denotes that what is expressed by the root or base – it signifies that which is to be, ought to be, is fit to be, can be or that must be done or undergone (e.g. *majjhatteneva bhavittabbaṃ* – “One ought to be just impartial,” Jā-a I: 157 [commentary on Jā 64]; Ānandamaitreya, 1993/2012: 179; Hendriksen: 11). **(c)** One may, generally, translate as “ought to be,” “should be,” “is [or ‘has’] to be” and occasionally as “might be,” “can be,” “may be” + the past passive participle (e.g. *evaṃ tathāgatassa sarīre paṭipajjitabbaṃ* – “In such a way the body of the Tathagata should be handled,” DN II: 59 [DN 16]; *tassa ‘sādhū’ti bhāsitaṃ abhinanditabbaṃ anumoditabbaṃ* – “Therefore, by saying ‘very well,’ it should be approved of, should be appreciated,” DN III: 53 [DN 29]; Ānandamaitreya: 179; Duroiselle, 1906/1997: 166; Warder, 1963/2001: 104).

(a) Despite the fact that it is called “future,” it is more frequently employed in sentences with past or present verbs; it can also bear a non-temporal meaning, therewith communicating general truths, duties etc. (Collins, 2006: 110). **(b)** The agent, when expressed, is either found to be in the instrumental, genitive or dative case, whereas the subject, with future passive participles constructed from transitive roots/bases, usually stands in the nominative (e.g. *cātumahāpathe tathāgatassa thūpo kātabbo* – “One should build a stupa for the Tathagata at a crossroad,” DN II: 60 [DN 16]; cf. Ānandamaitreya, 1993/2012: 179; cf. Duroiselle: 166). **(c)** It may further express the following ideas (Kacc 635–636; Collins: 112; Duroiselle: 166):

- | | |
|-----------------------------|----------------------|
| — Authorization. | — Obligation. |
| — Command. | — Opportunity. |
| — Debt owed. | — Permission. |
| — Due time to do something. | — Polite imperative. |
| | — Probability. |

Verbs (*ākhyātāni*)

- Exhortation.
- Inevitability.
- Likelihood.
- Necessity.
- Suitability or fitness.
- Sure action or event.

(a) Future passive participles are also capable of functioning as the sentence predicate, as can be seen from the examples already given. **(b)** In the accusative singular neuter, the future passive participle can be used impersonally, usually (but not invariably) when formed from intransitive roots/bases (Collins, 2006: 111; Perniola, 1997: 370). It is acceptable in Pāli to have the impersonal passive construction both with an agentive oblique (i.e. a by-phrase) and without (e.g. [without] *asantiyā āpattiyā tuṅhī bhavitabbaṃ* – “When there is no offence, there should be silence,” Vin III: 73; [with] *yassa rañño cakkavattissa dibbaṃ cakkaratanaṃ osakkati ṭhānā cavati, na dāni tena raññā ciraṃ jīvitabbaṃ hoti* – “When for the wheel-turning monarch the divine wheel-treasure draws back, retreats from its place, the monarch now has not long to live [lit. ‘it has not to be lived long by the monarch’],” DN III: 24 [DN 26]). **(c)** It is commonplace to find an action thus expressed in a passive voice construction using an accusative singular neuter future passive participle; however, “in English the action is normally expressed in the active” (e.g. *avassaṃ mayā maritabbameva* – “Inevitably I have to die [lit. ‘Inevitably dying has to be undergone by me’],” Dh-p-a: 271; Dhammajoti, 2018: 132). **(d)** With the dative or infinitive, the future passive participle *bhabba* (“able”) is utilized to mean “able to,” “capable of,” “permitted to” (e.g. *abhabbo kho yaso kulaputto hīnāyāvattivā kāme paribhuñjitum* – “Yasa, the son of family, is indeed incapable of returning to the low [life; i.e. that of a householder] in order to enjoy sensual pleasures,” Vin III: 12; Collins: 111). **(e)** We can garner from all the given examples and explanations that the future passive participle is employed in an active, passive as well as a stative passive sense (Kacc 625; Collins: 111).

Usage – as Adjectives. (a) The participles have the nature of verbal adjectives and must, therefore, agree with the nouns they modify in number, gender and case (Duroiselle, 1906/1997: 100; Oberlies, 2019: 571, f.n. 1; Perniola, 1997: 357). (b) Numerous future passive participles ending in *anīya* have an independent idiomatic meaning as ordinary adjectives (and substantive nouns), being somewhat disconnected from the denotations encountered above (e.g. *nāhaṃ, bhikkhave, aññaṃ ekarūpampi samanupassāmi [...] evaṃ madanīyaṃ [...] yathayidaṃ, bhikkhave, itthirūpaṃ* – “I do not, bhikkhus, see even one form [...] that is so enticing [...] as the form of a woman,” AN V: 33 [AN 5.55]; Collins, 2006: 110; cf. Perniola: 368; cf. Warder, 1963/2001: 107).

Usage – as Nouns. (a) Besides all that, future passive participles are also capable of operating as abstract neuter nouns (e.g. *kiccaṃ* – “[something] that should be done”; *kataṃ karaṇīyaṃ* – “done what has to be done,” MN I: 14 [MN 4]; cf. Kacc 540–542 etc.; Ānandamaitreya, 1993/2012: 179; Duroiselle, 1906/1997: 166; Warder, 1963/2001: 107). (b) As mentioned and elaborated upon in the previous section on adjectival usages contained within this chapter, substantive nouns formed with affix *anīya* carry an idiomatic significance somewhat dissociated from their usual meaning.

Auxiliary Verbs

Formation and Usage. (a) Auxiliary or helping verbs are a characteristic feature of the Pāḷi language (Geiger, 1916/1956: 158). (b) The principle ones of these are built from \sqrt{as} , $\sqrt{hū}$, \sqrt{car} , $\sqrt{thā}$, *vatt*, *vihar*.¹⁶⁸ (c) They supply nuances of meaning not possible to be expressed by an isolated verb standing by itself (Warder, 1963/2001: 233). (d) Sometimes, any forms of $\sqrt{hū}$ or $\sqrt{bhū}$ (such as *hoti, ahoṣi, hessati, hotu*) are following the declinable participle in relation to the sense it expresses (Ānandamaitre-

¹⁶⁸ For derivatives of \sqrt{as} and others, see Table 7 in the “Tables” section.

ya, 1993/2012: 178). **(e)** With the aid of these auxiliary verbs, it is possible to convey the following senses:

- Present perfect.
- Past perfect (aka pluperfect).
- Future perfect.
- General statements and eternal truths.
- Inception.

Present Perfect. (a) With first and second person forms of auxiliary verbs constructed from \sqrt{as} ¹⁶⁹ following a past passive participle, as mentioned above, an emphasized present perfect is to be understood (e.g. *katapuññosi tvaṃ, ānanda, padhānamanuyuñja, khippaṃ hohisi anāsavo* – “You have done merit, Ānanda, practice diligently; it shall come to pass quickly that you will be without influxes,” DN II: 60–1 [DN 16]; Warder, 1963/2001: 233–4). **(b)** These auxiliary verbs may be dropped when the respective pronouns are used as noun substitutes and possibly also as adjectives modifying a noun (e.g. *amhā āgatā* – “We have come”; *iti mama ca manopaṇidhi, ime ca sattā itthattaṃ āgatā* – “and because of my mental resolve, these beings here have come to this world,” DN I: 9 [DN 1];¹⁷⁰ Warder: 234). **(c)** The past participle + *hoti* (from $\sqrt{hū}$) expresses the same sense (e.g. *so ārāmaṃ gato hoti* – “He has gone to the monastery”; Gair & Karunatilake, 1998: 171). **(d)** Present participle *samāna* (from \sqrt{as}) also communicates an emphasized present perfect (e.g. *so [...] pabbajito samāno* – “he [...] having gone forth”; Warder: 234). **(e)** The perfective sense of past and future time may be expressed by derivatives of $\sqrt{hū}$ (as in a narrative) and present time by derivatives of \sqrt{as} (as in direct speech and dialogue); *hoti* usually relates the historical present (Warder: 235).

¹⁶⁹ Note that the third person of the present tense of \sqrt{as} is not used in this way, except for *atthi* and *santi* as emphatic and indefinite sentence initials (Hendriksen, 1944: 79; cf. Geiger, 1916/1956: 203; Warder, 1963/2001: 233–4).

¹⁷⁰ Considering the larger context of this passage, a translation with the past perfect would also seem warranted (i.e. “[...] these beings here had come [...]).”

Past Perfect (aka Pluperfect). (a) Constructions with *tena samayena* (“at that time”) or *tasmiṃ khaṇe* (“at that moment”) + past passive participle + auxiliary verb formed from $\sqrt{hū}$ (i.e. *hoti* etc.) express the past perfect (e.g. *tena kho pana samayena kūṭadanto [...] divāseyyaṃ upagato hoti* – “At that time, Kūṭadanto [...] had approached his day bed,” DN I: 59 [DN 5]) or past continuous aspect (past of “to be”; i.e. “was” + present passive participle; e.g. “I was watching”; Hendriksen, 1944: 69–71; Warder, 1963/2001: 233).¹⁷¹ (b) Without *tena-samayena* constructions (not invariably present), *ahosi* plays the same role as *hoti* with it (Gair & Karunatillake, 1998: 171; Hendriksen: 74; Warder: 235–6). (c) A past passive participle + the present participle *samāna*, introduced already further above, also appears to be capable of expressing the past perfect or past perfect continuous aspect (e.g. *anattamanavacanāhaṃ tena bhikkhunā vutto samāno anattamano aho-siṃ* – “When [or ‘while’] I had been spoken to with irritated utterances by that bhikkhu, I became irritated,” AN II: 5 [AN 2.15]).

Future Perfect. (a) A future perfect sense is to be understood if *bhavis-sati* (the future form of $\sqrt{hū}$) is preceded by a past passive participle, expressing the sense of “might have,” “would have,” “will have” (e.g. *gato bhavissati* – “He will have gone”; Bubenik, 1998: 105; Gair & Karunatillake, 1998: 171), but the meaning does not necessarily have to be future, as in English “he will have gone by now” (Gair & Karunatillake: 171). (b) A future passive participle + *bhavissati* may also express such significance but also implies that the action should or must be done (e.g. *maggo kho me gantabbo bhavissati* – “The path will have to be trodden by me,” DN III: 112 [DN 33]; Warder, 1963/2001: 236; Gair & Karunatillake: 172).

General Statements and Eternal Truths. Auxiliary verbs formed from $\sqrt{hū}$ (e.g. *hoti*, *samāna*), usually in sentences beginning with *idha* (“here”), can also express general statements and eternal truths; these constructions frequently carry a hypothetical sense and may also indicate that one

¹⁷¹ Such phrases of time may also be absent, with the past perfect aspect still being expressed (Hendriksen, 1944: 72).

thing simply precedes another in time (e.g. [with future passive participle + *hoti*] *idhāvuso, bhikkhunā kammaṃ kātappaṃ hoti* – “Here [also ‘supposing,’ ‘whenever’] some work has to be done by a bhikkhu,” DN III: 112 [DN 33]; Hendriksen, 1944: 75; Warder, 1963/2001: 237–8).

Inception. (a) The notion of inception might be expressed by the combination of a participial form with the past of the verb *tiṭṭhati*¹⁷² (“to stand”; e.g. *atho kho āyasmā ānando [...] rodamāno aṭṭhāsi* – “Then Ā. Ānanda started weeping [or ‘burst into tears’],” DN II: 60 [DN 16]; Bubenik, 1998: 106). **(b)** Warder (1963/2001: 238), Geiger (1916/1956: 204) and Oberlies (personal communication, February 2, 2021) seem to differ on this point, taking it to be expressive of the continuous aspect; Geiger notes, however, that the literal meaning of *tiṭṭhati* “can still be distinctly felt,” at least for the example he quotes.

¹⁷² This form is derived from $\sqrt{thā}$.

Particles (*nipātā*)

(a) A particle (*nipāto*) is not in need of grammatical transformation, and although its contribution for the syntax might appear insignificant at times, they feature prominently as it relates to the sentence's sounding and rhythm (Collins, 2006: 121, 123). (b) Circa 200 particles exist (Duroiselle, 1906/1997: 128). (c) Kacc 221 gives the following examples: *yathā* (“as,” “like”), *tathā* (“thus,” “so”), *evaṃ* (“thus”), *khalu* (“indeed”), *kho, ta-ttra* (“there”), *atho* (“also,” “likewise”), *atha* (“and further,” “then”), *hi* (“indeed,” “because”), *tu* (“however”), *ca* (“and”), *vā* (“or”), *vo* (“to you”), *haṃ* (“hey!”), *abhaṃ, alaṃ* (“enough”), *eva* (“just,” “even,” “only”; emphatic particle), *ho* (“hello!”), *aho* (exclamation of surprise), *he* (“hey!”), *ahē* (exclamation of surprise), *re* (exclamation of contempt), *are* (“hey!”). (d) With slight modifications, the following was gleaned mainly from Collins (pp. 121–3), Duroiselle (p. 129) and Perniola (1997: 133), if not otherwise indicated.

Kinds of Particles and Usage

1. Conjunction:

- i. Copulative (*samuccayo*): *ca* (“and”), *pi* (“also”), *atha* (“then”).
- ii. Disjunction (*vikappanaṃ*): *vā, udāhu* (both “or”; e.g. *bhikkhū vā bhikkhunī vā* – “bhikkhus or bhikkhunis”).
- iii. Adversative or filler (*pūraṇaṃ*): *atha, atho, assu, ā, enaṃ, kahaṃ, kīva, khalu, kho, carahi, tato, naṃ, pana, yagghe, yathā* (all “as”), *vata, vatha* etc., many of which can be translated as “then,” “indeed,” “certainly” etc.
- iv. Subordinate: *sace, yadi* (both “if”), *yatra hi nāma* (“inasmuch as,” “inasmuch that”).¹⁷³

(a) Never used as sentence initials are *ca, vā, yadi, sace, ce* (last three-mentioned mean “if”), *atha, atho* (Duroiselle, 1906/1997: 129), although

¹⁷³ The future is often used in the sense of the aorist in sentences with *yatra hi nāma* and *kathaṃ hi nāma* (Oberlies, 2019: 448, f.n. 3; see the section “Future Indicative”).

phrases and sentences may be joined by copulative, disjunctive etc. particles – next to other uses than that (Warder, 1963/2001: 117–8). **(b)** *Ca* or *vā* may follow both words or the last in a series (DOP II, s.v. “ca”).

2. Negation, prohibition (*paṭisedho*): *na*, *no*, *mā*, *a*, *alaṃ*, *halaṃ* (e.g. *nāhaṃ tatra gacchāmi* – “I don’t go there”).
3. Adverbs (*bhāvanapuṃsakaṃ* or *kriyāvisesaṇaṃ*).

Adverbs can be formed with suffixes added to pronominal or nominal stems and from numerals; they may also be constructed with certain grammatical cases (Kacc 247–250, Collins, 2006: 124; Duroiselle, 1906/1997: 78–9):

- Time: *dā*, *dāni*, *rahi* (e.g. *karahi*, *kadā* – “when”; *idāni* – “now”).
- Locality (ablative and locative sense): *to*, *tra*, *tha*, *dha*, *dhi*, *ha*, *haṃ*, *hiṃ*, *ja*, *ju* (e.g. *tatra* – “there”; *atra* and *idha* – “here”; *aññatra* – “elsewhere”; *ito* – “from this place,” “hence”; *kuhiṃ* – “where?”; *tahiṃ* and *tahaṃ* – “in that place”; *ajja* – “today”; Kacc 571).
- Manner: *thā*, *vā*, *vaṃ*, *thaṃ*, *ti* (e.g. *tathā* – “thus”; *evaṃ* and *iti* – “thus,” “in this manner”).
- Ablative suffix: *to* (e.g. *abhito* – “near”; *sabbato* – “everywhere”).
- Ablative suffix *so* (e.g. *yoniso* – “from its origin,” “profoundly,” “properly”).
- Instrumental suffix (of *as*-stems): *sā* (e.g. *balasā* – “forcibly”).

From numerals (Duroiselle, 1906/1997: 66–7):

- Ways, times, fold: *dhā* (e.g. *ekadhā* – “once”).
- Times: *khattuṃ* (e.g. *sattakkhattuṃ* – “seven times”).
- Times, fold: non-suffix *guṇa* (like *dhā*; e.g. *dasaguṇaṃ* – “ten times”). It usually takes the neuter in *aṃ*, but in the sense of “fold,” it would be an adjective and declined accordingly.
- Collective nouns and adjectives: *ka* and *ya* (e.g. *catukka* – “four-fold,” “consisting of four”; *dvaya* – “consisting of two,” “a pair”).

— Distributive: *so* (e.g. *ekaso* – “one by one”).

Grammatical Cases (Collins, 2006: 124; Duroiselle, 1906/1997: 127–8):

— Accusative (e.g. *dukkhaṃ* – “with difficulty”).

— Instrumental (e.g. *dhammena* – “rightly,” “according to *dhamma*”).

— Dative (e.g. *ajjatanāya* – “today”).

— Ablative (e.g. *pacchā* – “behind”).

— Genitive (e.g. *cirassa* – “after a long time,” “at last”).

— Locative (e.g. *bāhire* – “outside”).

All oblique cases can be used adverbially (Collins, 2006: 124), though the accusative is most commonly employed to form adverbs (Perniola, 1997: 131).

4. Interjections (Perniola, 1997: 134). They may express emotions such as joy, sadness, anger or stand for words which call for attention (e.g. *aho* – for surprise or consternation; *je* – used to address low standing women; *iṅgha* – “Come on!”, “Look here!”; *nūna* – “Is it then?”).

Prepositions and Prefixes (*upasaggā* or *upasārā*)

Kinds of Prepositions

(a) There are twenty prepositions or prefixes – generally prefixed to roots and *kita* nouns,¹⁷⁴ although quite a number can be used independently too (Thitzana, 2016: 323; others limit their number to exactly five; see below). (b) The following list was grafted mainly from Kacc 221, with explanations from Thitzana (pp. 324–40) and Ānandamaitreya (1993/2012: 97), if not indicated otherwise:

- *a/ā*: till, up to, upward, back, intensifier, signifies opposite meaning of root to which it is affixed (e.g. *āgacchati* – “He comes”; *akkosati* – “He insults”).
- *abhi*: being special, specially, distinctive, beyond, very much, predominantly, toward, wrongly, recklessly, to, unto, facing, opposite, up, above (e.g. *abhigacchati* – “He goes toward”).
- *adhi*: being lord over, up, over, superior, supreme, to attain, deeply, excessively, with regard to (e.g. *adhigacchati* – “He goes over,” “He attains”).
- *anu*: following, again and again, alongside, in compliance with, suitable, small, after, repeatedly, behind, inferior, favorable, in detail (e.g. *anugacchati* – “He follows”).
- *apa*: away from, off, negatively, wrongly (e.g. *apagacchati* – “He goes away from”).
- *api*: above, cover up, close on (e.g. *apidhānaṃ* – “a cover,” “a lid”).
- *ati*: over, much, excessively, beyond, across (e.g. *atikkamati* – “He passes over”).
- *ava*:¹⁷⁵ down, inside, contemptuously, mean, away, off, around¹⁷⁶ (e.g. *okkamati* – “He descends”).

¹⁷⁴ See chapter “*Kita* and *Taddhita* Affixes.”

¹⁷⁵ It may change to *o* before consonants; see also the section “Consonantal Sandhi (*byañjanasandhi*),” pt. 10.

¹⁷⁶ The three last mentioned were taken from Nārada (n.d.: 120).

- *du*: ill, inauspicious, bad, without, lack of, unwholesome, poor in nature, being difficult (e.g. *dujjana* – “a bad man”).
- *ni*: down, out, away, into, opposite of, without, lack of (e.g. *nisīdati* – “He sits down”).
- *nī*: out, off, to remove (e.g. *niggacchati* – “He goes out”).
- *pa*: forth, specifically, up, away, the source, successively, chief, noble, clear, clean, inside, intensifier (e.g. *pabbajati* – “He goes forth”).
- *parā*: opposite, again and again, continuously, wrongly (e.g. *parābhavati* – “He is ruined”).
- *pari*: round, insulting, dominant, overall, completely, altogether¹⁷⁷ (e.g. *paribhavati* – “He scolds”).
- *pati/paṭi*: again, in response to, in return, instead of, in exchange for, against, on behalf of, similar to, being suitable, minor parts or limbs of the body, opposite, back, representing, similar to, afterward,¹⁷⁸ intensifier (e.g. *paṭipucchati* – “He questions in return”).
- *saṃ*: together, well, oneself, in union, unitedly, self, again and again, intense, intensifier (e.g. *saṅgacchati* – “He meets”).
- *su*: good, well, auspicious, being easy, abundance, intensely, firmly, intensifier (e.g. *sugati* – “good [or ‘happy’] destination [after death]”).
- *u*: up, upward, above, wrong, opposite of, intensifier (e.g. *uggacchati* – “He goes up,” “He rises”).
- *upa*: to, close by, toward, near, subordinate, firmly, allegation, over, to exceed, intensifier (e.g. *upagacchati* – “He goes to,” “He goes near”).

¹⁷⁷ Last two-mentioned meanings have been taken from PED (s.v. “pari”).

¹⁷⁸ Pd I (p. 5) attests that *paṭi* can mean “afterward”: *paṭīti vā ayaṃ saddo pacchāti etassa atthaṃ bodheti* – “or this word ‘paṭi’ reveals the meaning of ‘afterward.’”

- *vi*: away, off, variously, in different ways, transformed, without, out, specially, being off, separated, apart (e.g. *vigacchati* – “He goes away”).

Usage. (a) An *upasaggaṃ* (“addition”) adds to verbs, participles, absolutes, infinitives, nouns or adjectives semantically or otherwise, specifying, emphasizing or altering their meaning – it may be added to those (Ānandamaitreya, 1993/2012: 97), but Collins (2006: 125) mentions that five are also common as independent words and prepositions: *anu* (+ accusative), *apa* (+ ablative), *abhi* (+ accusative), *ā* (+ ablative), *paṭi* (+ accusative). **(b)** They usually modify or specify the meaning of the root, intensifying it (classification name: *dhātvatthavisesako* – “that which modifies [or ‘enhances’] the meaning of the root”) and sometimes even reversing its significance altogether (classification name: *dhātvatthabādhako* – “that which debars the meaning of the root”). **(c)** At other occasions, they add no meaning whatsoever – or just little – to the original sense of the root (type name: *dhātvatthānuvattako* – “that which keeps on alongside the meaning of the root,” Collins: 125; Thitzana, 2016: 323; Tun, 2019: 3). **(d)** Adverbs (e.g. *antarā* – “in between,” “meanwhile”), as well as absolutes (e.g. *nissāya* – “near”), adjectives (e.g. *samīpa* – “near,” “close”) and nouns (in oblique cases) may operate as prepositions proper. **(e)** Even verbal forms may carry the sense of a preposition (e.g. *sahita* – “with”; Perniola, 1997: 133; Collins: 126).

Compounds (*samāsā*)

(a) Compound words of related meaning are “combinations of two or more words that function as a single unit of meaning” (cf. Kacc 316; Yin-dee, 2018: 92) – the literal meaning of the word *samāso* is “putting together” (Rūp: 90; Deokar, 2008: 286). (b) A characteristic of compounds is that the separated meanings of their members unite to become one (Deokar: 287); however, the following contrasting statement has to be taken into consideration:

The Indian compounds are not so much felt as a unit as for instance the compounds in the western European languages; the first member of the compound has often in some degree preserved its syntactic independence. This appears plainly from the cases, by no means rare, in which a word outside the compound is syntactically connected with the first member only [as will become apparent to some degree in the course of this chapter] (Hendriksen, 1944: 145).

(a) Declinable stems are very often worked into compounds, and indeclinables and prefixes may also unite with them – some compounds are even entirely made up of indeclinables. (b) The words as initial members stand usually in their uninflected stem form, the case endings having been elided,¹⁷⁹ and may be either singular or plural (Kacc 317; Collins, 2006: 130; Duroiselle, 1906/1997: 129; Warder, 1963/2001: 77). (c) To determine their numbers, the context has to be taken into consideration; oftentimes, commentarial explanations are of great help too, even for the beginner or intermediate student, since they tend to be succinct and straightforward. (d) Some specifics on formation (Perniola, 1997: 158):

- Some stems in $a \rightarrow i / _ _ \sqrt{bhū}$ and \sqrt{kara} and their derivatives.
- \bar{u} [masculine stems] $\rightarrow (\check{V})$ (e.g. $vññūjātika \rightarrow viññujātika$).
- \bar{a} , \bar{i} , \bar{u} [feminine stems] $\rightarrow (\check{V})$ in a few instances (e.g. $mettācitto \rightarrow mettacitto$).
- as [neuter stems] $\rightarrow o$ [except $rājas$] (cf. Kacc 183).

¹⁷⁹ An exception would be: *parassapadaṃ* (“active voice marker”).

Compounds (*samāsā*)

- *go* [stem] → *gav*/ __ vowel (*gavassaṃ* – “cattle and horses”).
- *go* [stem] / __ consonant (e.g. *goghātako*).
- Stems formed with the *kita* affix *ratthu* (*r*-stem) commonly stand with the *u* (e.g. *piturakkhita* – “protected by the father”).
- *Ratti* → *ratta* [occasionally].¹⁸⁰
- The adjective *mahanta* takes the form *mahā* or *maha* in the case when an antecedent consonant is reduplicated (Kacc 330).

(a) As the first member may stand: substantive nouns, adjectives, pronouns, numerals, adverbs and verbal forms (participles and nouns derived from verbs¹⁸¹ can form compounds but finite verbs cannot; Warder, 1963/2001: 77). (b) They are considered as one word and as being of one individual inflection (Kacc 317; Collins, 2006: 129). (c) Compound words may carry an idiomatic significance, and the usual sandhi rules apply (Perniola, 1997: 160; Warder: 77). (d) Possessive adjectives can also be formed from compound words with the addition of affixes *ika*, *iya*; they are similar in function to the English suffix -ed, as in “kindhearted,” being implemented to change substantival compounds into adjectives (cf. Duroi-selle, 1906/1997: 137; Collins: 135).

Kinds of Compounds

1. Copulative (*dvandaṃ*).
2. Dependent determinative (*tappuriso*).
 - i. Accusative-dependent determinative (*dutiyā tappuriso*).
 - ii. Instrumental-dependent determinative (*tatiyā tappuriso*).
 - iii. Dative-dependent determinative (*catutthī tappuriso*).
 - iv. Ablative-dependent determinative (*pañcamī tappuriso*).
 - v. Genitive-dependent determinative (*chaṭṭhī tappuriso*).
 - vi. Locative-dependent determinative (*sattamī tappuriso*).

¹⁸⁰ Exceptions are *pitā* and *mātā* in copulative compounds.

¹⁸¹ The present participle and the agent noun are just rarely employed for compounds in the Pāli language (Hendriksen, 1944: 146).

- vii. Descriptive determinative (*kammadhārayo*).¹⁸²
- a. Attribute-word-first descriptive determinative.
 - b. Attribute-word-second descriptive determinative.
 - c. Both-attribute-word descriptive determinative.
 - d. Resemblance-attribute-word descriptive determinative.
 - e. Effectual-first-word descriptive determinative.
 - f. Emphasis-first-word descriptive determinative.
 - g. Ku-particle-first-word descriptive determinative.
 - h. Na-particle-first-word descriptive determinative.
 - i. Prefix-first-word descriptive determinative.
 - j. Numerical descriptive determinative
(*digukammadhārayo*).
- viii. Attributive or possessive (*bahubbīhi*).
3. Adverbial (*abyayībhāvo* or *avyayībhāvo*).

Copulative (*dvandam*)

Formation. (a) The members of this compound class (lit. “twin” or “pair”) are simple collocations, being connected with the copulative particle *ca* (“and”) or disjunctive *vā* (“or”; Kacc 329; Collins, 2006: 131; Deokar, 2008: 304; Warder, 1963/2001: 97). (b) The individual members are to be understood as standing in the same case (Deokar: 304). (c) The meaning of both terms within a copulative compound are of equal value, with neither of them being predominant (Deokar: 305).

Usage. (a) Copulative compounds may operate as substantive nouns, adjectives (in which case they become attributive compounds) and as adverbs. (b) They may stand as a collective substantive and be found in the neuter singular (Kacc 321–323) or may designate two or more items, being then inflected in the plural of the actual gender of the compound’s last member (Thitzana, 2016: 454). (c) Collins (2006: 131) informs us that the

¹⁸² See below for the Pāḷi terms of the respective compound types.

last member of these compounds can also be declined as singular in the gender of the last member (apart from the neuter form) – he cites *dharmavinayo*. **(d)** Warder (1963/2001: 97) states that “the more important or leading object, if any, sometimes occupies the second position, which is normally the dominant position in Pali”; the Waxing Syllable Principle¹⁸³ may influence the sequencing as well (*dharmavinayo* as a viable example with a syllable count of 2 + 3; Anālayo, 2009: 741). **(e)** When translating into English, one may reverse the positioning as found in the Pāli compound (e.g. *mātāpitaro* – “father and mother”; Warder: 97). **(f)** Words can also be found repeated in this class (e.g. *punappunaṃ* – “again and again”; Collins: 132).

Dependent Determinative (*tappuriso*)

Formation. **(a)** The first member of this type is a noun in any oblique case (i.e. all but the nominative and vocative) and qualifies the last member, which may be a predominant ordinary noun, action noun or agent noun (e.g. *araññagato* [accusative relation] – “gone to the forest”; Kacc 327; Deokar, 2008: 294; Perniola, 1997: 167; Thitzana, 2016: 457–8). **(b)** When case endings are not elided, the compound is called “non-elision dependent determinative” (*aluttatappuriso*; Duroiselle, 1906/1997: 131). **(c)** At times, the usual first member is placed last (e.g. *rājahaṃso* – “the king of swans,” not “the swan of kings”; Duroiselle: 132). **(d)** The last member determines gender and number (Buddhadatta, 1937/1997: 48). **(e)** In its un-compounded state, the members of a dependent-determinative compound would be in different cases (Collins, 2006: 133). **(f)** They are also named according to the implicit case ending of the first member (e.g. *saṃsare* + *dukkha* → *saṃsāradukkha*; it is a type called a locative-dependent determinative [*sattamītappuriso*] because *saṃsāra* is to be understood as standing in the locative case;¹⁸⁴ Thitzana: 458–9). **(g)** These are

¹⁸³ See chapter “Sentence Structure and Syntax” for details.

¹⁸⁴ See chapter “Grammatical Case (*vibhatti*).”

the different classes of the dependent-determinative compound type (Kacc 327; Duroiselle: 131–2; Thitzana: 457–9; Yindee, 2018: 95–6):

- Accusative-dependent determinative (*dutiyaṭappuriso*; e.g. *apāyagato* [*apāyaṃ gato*] – “the one who has gone to the realms of [non-eternal] perdition”).
- Instrumental-dependent determinative (*tatiyaṭappuriso*; e.g. *issarakataṃ* [*issarena kataṃ*] – “done by a ruler [or ‘deity’]”).
- Dative-dependent determinative (*catutthiṭappuriso*; e.g. *kathinadussaṃ* [*kathinassa dussaṃ*] – “a *kathina* robe,” “a robe for *kathina*”).
- Ablative-dependent determinative (*pañcamīṭappuriso*; e.g. *methunāpeto* [*methunā apeto*] – “abstinence from sexual intercourse”).
- Genitive-dependent determinative (*chaṭṭhiṭappuriso*; e.g. *rājaputto* [*rañño putto*] – “the king’s son”).
- Locative-dependent determinative (*sattamīṭappuriso*; e.g. *saṃsāradukkaṃ* [*saṃsāre dukkaṃ*] – “the suffering of transmigration [as it relates to rebirths]”).

Usage. (a) A dependent-determinative compound may function as an adjective (in which case it becomes an attributive compound), a noun or an adverb (Perniola, 1997: 166). **(b)** The most common occurrences of this type of compound are of the genitive relation (e.g. *bhikkhusaṅgho* – “the order of bhikkhus”; Duroiselle, 1906/1997: 131–2). **(c)** An example of a verbal form is: *manasikaraṇīya dhammā* – “things to be kept in mind” (Perniola: 169).

Descriptive Determinative (*kammadhārayo*)

Formation. (a) Descriptive-determinative compounds are themselves classified ultimately as dependent-determinative compounds. **(b)** In their uncompounded state, the parts of this compound class would stand in the same case relation, unless the first member is an adverb, becoming thus indeclinable (Kacc 324; Collins, 2006: 132; Deokar, 2008: 295). **(c)** The last feminine member sometimes takes on the masculine gender, and if both

are feminine, the first becomes masculine (Kacc 332; Buddhadatta, 1937/1997: 41; Duroiselle, 1906/1997: 134). **(d)** The adjective *mahanta* takes the form *mahā* or *maha* if the antecedent consonant is reduplicated (Kacc 330). **(e)** The different classes of this type of compound are as follows (Deokar: 298; Duroiselle: 132–4; Yindee, 2018: 92–4):

- Attribute-word-first descriptive determinative (*visesanapubbapadakkammadhārayo*): The first member determines the second (e.g. *mahāpuriso* – “a great man”).
- Attribute-word-second descriptive determinative (*visesanuttarapadakkammadhārayo*): The second member determines the first (e.g. *buddhaghosācariyo* – “the teacher Buddhaghosa”).
- Both-attribute-word descriptive determinative (*visesanobhayapadakkammadhārayo*): Both members are determinative (e.g. *andhabadhiro* – “[He is] blind and deaf”).
- Resemblance-attribute-word descriptive determinative (*visesanopamapadakkammadhārayo*): Both members are in the same case (e.g. *dibbacakkhu* [*dibbam iva cakkhu*] – “the divine eye”).
- Effectual-first-word descriptive determinative (*sambhāvanapubbapadakkammadhārayo*): The initial member indicates the origin of the second, with the words *iti* (“thus,” “namely”), *sañkhāto* (“reckoned,” “called”), *hutvā* (“having been”) being tacitly understood to convey the compound’s entire gamut of meaning (e.g. *khattiyamāno* [*khattiyo iti māno*] – “the conceit of a warrior,” “the conceit ‘I am a warrior’”).
- Emphasis-first-word descriptive determinative (*avadhāraṇapubbapadakkammadhārayo*): **(a)** The first word modifies a general term. **(b)** Traditionally, the word *eva* (“just,” “even”) is inserted but, again, has to be understood just implicitly. **(c)** When translating into English, this type of compound ought to be translated in the genitive relation (e.g. *sīladhanaṃ* [*sīlaṃ eva dhanaṃ*] – “the wealth of morality”).

- Ku-particle-first-word descriptive determinative (*kunipātapub-bapadakammadhārayo*): As the name suggests, the first member is particle *ku* (e.g. *kuputto* – “a bad son”; *ku* may → *ka* before a consonant).
- Na-particle-first-word descriptive determinative (*nanipātapub-bapadakammadhārayo*): First member is *a* or *na* before consonants and *an* before vowels (e.g. *anariyo* – “ignoble”).
- Prefix-first-word descriptive determinative (*pādīpubbapadakkammadhārayo*): First members are *pa*, *pā* or any other prefix (e.g. *pamukkho* – “facing,” “chief”; *abhidhammo* – “the higher teaching”).

(a) The members may be substantive noun + substantive noun, adjective + substantive noun, adverb + substantive noun, adverb + adjective (Perniola, 1997: 163). (b) If a comparative meaning is intended, the descriptive word comes last (Buddhadatta, 1937/1997: 40). (c) Nouns in apposition are considered descriptive-determinative compounds too (e.g. *vinayaṭṭakam* – “the *vinaya* basket”; Duroisselle, 1906/1997: 134; Perniola: 164). (d) A numeral as first-member adjective, qualifying a noun, is considered a subclass of the descriptive-determinative compounds called “numerical descriptive determinative” (*digukammadhārayo*; Kacc 325; Collins, 2006: 132; Warder, 1963/2001: 274; Perniola: 165).

Usage. Compounds of this tier may be used as substantive nouns, adjectives (in which case they become attributive compounds) or adverbs (Perniola, 1997: 164).

Numerical descriptive determinative (*digu*)

Formation. (a) As mentioned just above: “A numeral as first-member adjective, qualifying a noun, is considered a subclass of the descriptive-determinative compounds called ‘numerical descriptive determinative’ (*digukammadhārayo*; Kacc 325; Collins, 2006: 132; Deokar, 2008: 299–300; Warder, 1963/2001: 274; Perniola, 1997: 165).” (b) The numerical compounds are themselves ultimately classified as dependent-determinative

compounds, as is the case for descriptive-determinative compounds as well (Kacc 326; Deokar: 299). **(c)** There are two classes of this type (Duroiselle, 1906/1997: 134):

- Collective numerical (*samāhāradigu*): takes the neuter singular form (e.g. *dvirattaṃ* – “two nights”; Kacc 321–322).
- Non-collective numerical (*asamāhāra*): stands in the plural (e.g. *tibhavā* – “three states of existence”).

Usage. The usage is seemingly the same as above. When used as adjectives, they become attributive compounds (Duroiselle, 1906/1997: 135).

Attributive or Possessive (*bahubbīhi*)

Formation. **(a)** The attributive compound is a compound turned adjective (cf. Perniola, 1997: 169); all of the compounds discussed above (*dvan-daṃ*, *tappuriso*, *kammadhārayo*, *ḍigu*, *abyayībhāvo*) become attributive compounds when used as adjectives. **(b)** Being used as adjectives, they must agree with the noun they qualify in gender, number and case (e.g. *jitindriyo* [nominative]¹⁸⁵ *samaṇo* – “The ascetic by whom the [sense] faculties have been subdued” (Kacc 328; Duroiselle, 1906/1997: 135; Thitzana, 2016: 459–62). **(c)** So, a feminine noun, for example, at the end of the compound becomes masculine if it qualifies a masculine form (Kacc 331; Collins, 2006: 135). **(d)** Without changing the meaning, the determining word within the compound may be situated first or last (Duroiselle: 137) – with the initial vowel sometimes undergoing strengthening in that (Collins: 135). **(e)** Oftentimes, the word which is determined by the attributive compound is only implicitly understood and not expressed (e.g. *jitindriyo* – “[he] who has subdued [sense] faculties”; Duroiselle: 136). **(f)** Attributive compounds are capable of standing in any case relation (except the voca-

¹⁸⁵ It may get a little confusing, but an attributive compound agrees in grammatical case with the word it modifies yet may be classified differently according to the function it has; thus, *jitindriyo* is in the nominative but classified as an instrumental attributive compound (*tatīyābahubbīhi*), according to its function as an instrumental case (see the classification system within this section).

tive) to a word which they modify, and it is according to this flexibility that the different kinds – seven in total – are formed (Kacc 328; Duroiselle: 136; Thitzana: 460–1; Yindee, 2018: 97–8):

- Nominative attributive compound (*paṭhamābahubbīhi*).
- Accusative attributive compound (*duṭṭiyābahubbīhi*).
- Instrumental attributive compound (*tatīyābahubbīhi*;
e.g. *jitindriyo samaṇo* [i.e. *jitāni indriyāni anena samaṇena*] –
“The ascetic by whom the [sense] faculties have been subdued”).
- Dative attributive compound (*catutthībahubbīhi*).
- Ablative attributive compound (*pañcamībahubbīhi*; e.g.
niggatajano gāmo [i.e. *asmā gāmasmā janā niggatā*] –
“the village from which people have departed”).
- Genitive attributive compound (*chaṭṭhībahubbīhi*).
- Locative attributive compound (*sattamībahubbīhi*; e.g. *sampannasasso janapado* [i.e. *sassāni sampannāni yasmim janapade*] –
“the country in which rice is abundant”).

(a) The attributive compounds do not constitute a distinct class but are part of the dependent-determinative compounds. **(b)** They virtually always follow the *a*-stem declensions¹⁸⁶ (Collins, 2006: 135; Yindee, 2018: 97). **(c)** The feminine case endings of initial members are dropped (Kacc 332; Duroiselle, 1906/1997: 137).

Usage. **(a)** As indicated above, predominance in determining the collective meaning of attributive compounds lies in a word external to it (*aññapadattho* – “the meaning of the other word”); i.e. an external word determines the ultimate meaning of an attributive compound (e.g. *jitin-driyo* [attributive compound] *samaṇo* [*aññapadattho*] – “The ascetic by whom the [sense] faculties have been subdued”; Kacc 328; Deokar, 2008: 301–2; Thitzana, 2016: 459–61; Yindee, 2018: 97). **(b)** This type of compound is mostly (but not invariably) to be rendered by means of a relative clause –

¹⁸⁶ See Table 3 in the “Tables” section.

one would then need to translate with such relative pronouns as “who,” “that,” “which,” as illustrated above (cf. Duroiselle, 1906/1997: 135; cf. Warder, 1963/2001: 137).

Adverbial (*abyayībhāvo* or *avyayībhāvo*)

Formation. (a) The first member of this compound type is an indeclinable (*upasaggo* or *nipāto*) in the leading or predominant role (e.g. *upana-garaṃ* [with *upasaggo*] – “near town”; *yathāvuḍḍhaṃ* [with *nipāto*] – “according to [or ‘by’] age”; Kacc 319; Collins, 2006: 134; Deokar, 2008: 291–2). (b) A declinable word form is made indeclinable by means of these adverbial compounds (Deokar: 291). (c) The last member’s *ā* is replaced by neuter *aṃ*, and other long vowels are shortened (Kacc 342; Thitzana, 2016: 492). (d) At times, ablative and locative case endings are kept, although at the same time the form in *aṃ* is also mostly encountered (Duroiselle, 1906/1997: 135). (e) Compounds which do not contain any indeclinable but function adverbially are also termed “adverbial compound” (*avyayībhāvasamāso*). (f) This class is usually fashioned by taking the accusative singular neuter ending in *aṃ*, being then indeclinable (Kacc 320, 341; Thitzana: 491–2).

Usage. An adverbial compound functions as an adverb and if used as an adjective, becomes an attributive compound (e.g. *itthannāmo* [...] *khattiyo* – “such and such [...] a warrior,” AN III: 2 [AN 3.13]; Buddhadatta, 1937/1997: 58; Deokar, 2008: 291; Duroiselle, 1906/1997: 135).

Complex Compounds

(a) The above-explained compounds are themselves capable of standing as initial or last members of another compound. (b) It is also possible that two compounds are brought together to coalesce into a new one, which itself, again, may become a member of yet another compound – this process may be carried on thus almost ad infinitum. (c) These complex compounds are in the main used as attributive compounds; i.e. relatively. (d) Later Pāḷi texts feature these longer compounds frequently (Du-

roiselle, 1906/1997: 138). (e) To give an example for a one-word complex dependent-determinative compound in the instrumental singular feminine: *aparimitakālasañcitapuññabalanibbattāya* (*aparimite kāle sañcitassa puññassa balena nibbattāya* – “arisen by the power of [spiritual] merit accumulated during an immense period of time”). Duroiselle (p. 138) resolves the compound thus:

- *aparimitakālasañcitapuññabala*: dependent-determinative compound determining *nibbattāya* (“arisen by”).
- *aparimitakālasañcitapuñña*: descriptive-determinative compound determining *bala* (“power”).
- *aparimitakālasañcita*: descriptive-determinative compound determining *puñña* (“merit”).
- *aparimitakāla*: descriptive-determinative compound determining *sañcita* (“accumulated”).
- *aparimita* (*a* + *parimita* – “measureless”): descriptive-determinative compound determining *kāla* (“time”).

Kita and Taddhita Affixes

(a) Some of the details on word formation as it happens in the Pāḷi language have already been given in the chapters “Nouns (*nāmāṇi*)” and “Verbs (*ākhyātāṇi*),” and the rules which show what changes may occur when words and their constituent elements unite were laid out in the chapters “Sandhi” and “Morphology.” (b) In this chapter, however, synopses and a detailed listing of the *kita* and *taddhita* affixes are provided, in addition to explanations and copious examples thereto.

General Characteristics

(a) Perniola (1997: 136) notes pertinently: “The distinction between primary and secondary suffixes is not of great importance since the same suffixes may be used both as primary [i.e. *kita*] and as secondary [i.e. *taddhita*] [...]” (b) “The rules of sandhi and assimilation are regularly applied” (Duroiselle, 1906/1997: 141). (c) The affixes with *ṇ* in front denote that the root undergoes changes of vowel gradation – they are called *kārita* affixes by Kaccāyana (Kacc 621). (d) The suffix *inī* is employed after *pati*, *bhikkhu*, *rāja* and other *i*-ending nouns to construct the feminine (Kacc 240; cf. Duroiselle: 58).

***Kita* Affixes Synopsis**

(a) Prefixes, roots themselves or special affixes are appended to roots, which forms participles, absolutives, infinitives, adjectives, action nouns, agent nouns and possessive nouns, in some cases constituting nominal stems which have to undergo further declension to accomplish the full gamut of meaning. (b) These special affixes are called *kitapaccayā* (“primary affixes”) – **bold** in the listing below. (c) In the case of adjectives and substantive nouns, a potential subsequent appending of nominal suffixes may happen (e.g. $\sqrt{cara} + a$ [*kita* affix] $\rightarrow cāra$ [nominal stem] + *nā* [*ena*] [instrumental suffix] $\rightarrow cārena$ – “with the spy”). (d) Proviso: Kaccāyana includes the affixes of participles, absolutives and infinitives under *kita* affixes but classifies them, obviously, not as nouns (Kacc 601; Thitzana, 2016: 747). (e) Note that all the following *kita* affixes, despite all the nu-

ances they are able to express, carry the sense of agent (Kacc 624; Deokar, 2008: 215).

Taddhita Affixes Synopsis

(a) Another set of special affixes, which are, in turn, appended to the just mentioned *kita* derivatives to form nominal stems,¹⁸⁷ are the so-called *taddhitapaccayā* (“secondary affixes” – plain in the listing below); nominal suffixes, again, can be applied to these (Thitzana, 2016: 747). (b) They are mainly responsible for the formation of adjectives and substantive nouns (Duroiselle, 1906/1997: 146).

Kita and Taddhita Affixes: Listing

-a/-ṇa: (a) This affix forms an extremely large number of derivatives, some of which undergo increase (*vuddhi*)¹⁸⁸ and some of which do not. (b) With a near-by object, it may form nouns carrying a future sense (e.g. *nagara + √kara + ṇa + si [o] → nagarakāro* – “the [would-be] city planner”; Kacc 654). (c) It forms nouns (substantive nouns and adjectives), indicating or standing for:

- Personal names (e.g. *ari + √damu + a + si [o] → arindamo* – “the one who subdues the enemy”; Kacc 525 – no increase).
- Action (e.g. *√paca + a + si [o] → pāko* – “the act of cooking”; Kacc 525 – no increase, 529 – increase).
- Doer or agent (e.g. *√cara + a + si [o] → cāro* and *caro* – “a spy”; Kacc 524 – increase).
- Abstract nouns of action (e.g. *√kara + a + si [o] → karo* – “action,” “making”).
- It forms adjectives (e.g. *√kara + a → kāra* – “doing,” “making”; also *kara* – “causing,” “making”).

¹⁸⁷ This includes pronominal stems.

¹⁸⁸ See chapter “Vowel Gradation” for details.

-a: forms substantive nouns and adjectives, conveying the following:

- Possessiveness (e.g. *paññā + a + si [o] → pañño* – “one having wisdom”; Kacc 370).
- Belonging to (Kacc 352).
- Collection of (Kacc 352).
- Study, knowledge of, knowing (Kacc 352).
- Periods of time (Kacc 352).
- Action.
- Doer or agent.
- Patronymics (Kacc 344).
- Abstract nouns of action (cf. Kacc 361).
- That which is dyed with (Kacc 352).
- The flesh of.
- The locality in which something or someone is or exists (Kacc 352).
- Domain (Kacc 352).
- Devotion (Kacc 352).

-abha: forms the names of some animals; the derivation is obscure.

-aka/-ṇvu: **(a)** As per Kacc 622, affix *ṇvu* → *aka*. **(b)** The *ṇvu* affix + a causative affix → *ānanaka* (Kacc 641; Thitzana, 2016: 781). **(c)** This affix denotes the doer of an action and forms numerous action nouns (Kacc 527). **(d)** It is capable of expressing a future sense (e.g. *√kara + aka + si [o] → kārako*, as in *kārako vajati* – “The [would-be] doer goes”; Kacc 652).

-ala: **(a)** is forming a few nouns of doubtful derivation (e.g. *√kusa + ala + si [o] → kusalo* – “that which is capable of cutting sin,” “meritorious act”). **(b)** These nouns belong to the neuter gender.

-ana: **(a)** This affix forms a large number of derivative substantive nouns and adjectives. **(b)** It may be applied in the sense of the present as well as the past (Kacc 650). **(c)** As per Kacc 622, affix *yu* → *ana*. **(d)**

After roots ending in *r* and *h*, *ana* → *aṇa* (Kacc 549). **(e)** The *yu* affix + a causative affix → *ānana* (Kacc 641; Thitzana, 2016: 781). **(f)** Affix *yu* may, seemingly, also stand untransformed (e.g. $\sqrt{vā} + yu + si$ [$\rightarrow \emptyset$] → *vāyu* – “wind [blowing in past and present]”; Kacc 650). **(g)** It expresses the following:

- Habit, habitual pattern of doing things well, consistent character, ingrained nature (Kacc 533).
- Agent (e.g. *rajoharanaṃ* – “the dust remover”; Kacc 548).
- Instrument (e.g. *karanaṃ* – “a supporting cause”; Kacc 548).
- A locative sense (e.g. *ṭhānaṃ* – “a place”; Kacc 548).
- Appended after \sqrt{nanda} , it carries an abstract sense and is also taken as a direct object (e.g. $\sqrt{paca} + ana + si$ [*aṃ*] → *pacanaṃ* – “the cooking”; Kacc 533, 546).

-anīya: It is called a *kicca* affix but is included in the *kita* chapter of *Kaccāyana* (Kacc 545) – an affix of the future passive participle (Kacc 540).

-as: A not very large but important class of words is constructed by means of this affix (e.g. $\sqrt{vaca} + as + si$ [*o*] → *vacaso* – “speech,” “having speech”).

-ava: patronymics (Kacc 348).

-aya: for this, see *ya*.

-ālu: This affix denotes tendency and being of a particular nature (e.g. *dayā* [“sympathy,” “compassion”] + *ālu* + *si* [$\rightarrow \emptyset$] → *dayālu* – “compassionate,” “the one who is compassionate”; Kacc 359).

-āna: patronymics (e.g. *kacca* [a proper name] + *āna* + *si* [*o*] → *kaccāno* – “the son [or ‘offspring’] of *Kacca*”; Kacc 345).

-āṇa: very few derivatives (e.g. \sqrt{kalla} [by assimilation from *kalya*] + *āṇa* + *si* [*o*] → *kallāṇo* – “happy,” “blessed with health,” “good”).

- āvi:** (a) This affix is applied after all roots and is used to denote habit, habitual pattern of doing things well, consistent character, ingrained nature (e.g. *bhaya* + \sqrt{disa} + *āvi* → *bhayadassāvī* – “the one who sees danger,” “the one who is used to seeing danger”; Kacc 527, 532). (b) The suffix *inī* is employed after it to construct the feminine (Kacc 240; cf. Duroiselle, 1906/1997: 58).
- āyana:** patronymics (e.g. *kacca* + *āyana* + *si* [o] → *kaccāyano* – “the son of Kacca”; Kacc 345).
- āyitatta:** expresses a simile or metaphoric resemblance (e.g. *dhūma* + *āyitatta* + *si* [aṃ] → *dhūmāyitattaṃ* – “obscuration,” “becoming smokelike,” as in *dhūmāyitattaṃ vanaṃ* – “the smoky forest”; Kacc 357).
- bhū:** This is $\sqrt{bhū}$ (“to be”). It has generally the meaning denoted by the verb itself (e.g. *abhi* + *bhū* → *abhibhū* – “mastering,” “conqueror”).
- bya:** is said to denote “the state of” (e.g. *dāsa* + *bya* + *si* [aṃ] → *dāsabyaṃ* – “the state of being a slave,” “slavery”).
- dā:** This is $\sqrt{dā}$ (“to give,” “bestow”; e.g. *amata* + \sqrt{da} + *si* [o] → *amatado* – “the bestower of immortality”).
- dhā:** is applied to cardinal stems and means “fold,” “ways,” “kinds” (Kacc 397).
- era:** constructs patronymics; the final vowel of the word is elided (e.g. *samaṇa* + *era* + *si* [o] → *sāmaṇero* – “the son [i.e. ‘the disciple’] of the ascetic,” “a novice”; Kacc 349).
- eyya:** denotes:
- The state or nature of (e.g. *alasa* + *eyya* + *si* [aṃ] → *ālaseyyaṃ* – “idleness”).
 - Patronymics (e.g. *vinata* + *eyya* + *si* [o] → *venateyyo* – “the son of Vinata”; Kacc 346).

— Denotes the nature of, origin and place where a thing is made or a person or animal is reared in (e.g. *pabbata + eyya + si [o] → pabbateyyo* – “the one whose place [or ‘abode’] is in the mountains”).

— Fitness, worthiness.

-ga: \sqrt{gama} (“to go”; e.g. *pāra + ga + si [o] → pārago* – “gone to the further shore [i.e. ‘nibbāna’]”; *kula + upa + ga + si [o] → kulupago* – “one who goes near a family,” “a family adviser”).

-gha: \sqrt{ghana} → *han* (“to strike,” “kill”; e.g. *paṭi + gha + si [o] → paṭigho* – “hatred”).

-gū: is a collateral form of \sqrt{gama} (e.g. *addhā + gū + si [→ ∅] → addhagū* – “going to a distance,” “a traveler”).

-i: **(a)** large class of derivatives – agent and action nouns, patronymics (e.g. *duna + i → doni* – “the son of Duna”; cf. Kacc 551). **(b)** From $\sqrt{dhā}$ (“to bear,” “hold”), a derivative *dhi* is formed. **(c)** It forms many compounds, mostly masculine (e.g. *saṃ + $\sqrt{dhā}$ + i + si [→ ∅] → sandhi* – “connection,” “union”). **(d)** Similarly, from $\sqrt{dā}$ (“to give”) with prefix *ā*, we obtain: *ādi* (*ā + $\sqrt{dā}$ + i [→ ∅] → ādi* – “and so forth,” “and so on,” “etcetera” etc., lit. “beginning”). **(e)** The word *ādi* is much used at the end of compounds and forms a few patronymics from nouns in *a*.

-i: After the word *pura* (“town,” “city”), it indicates that which belongs to or is proper for a city (e.g. *pura + i + si [→ ∅] → pori*).

-ika: This affix is appended to \sqrt{gamu} and expresses future possibility and prospect (e.g. *\sqrt{gamu} + ika + si [o] → gamiko* – “the [would-be] traveler”; Kacc 570). It also denotes any traveler (Thitzana, 2016: 721).

-ika: is of very wide application and denotes:

— Patronymics (e.g. *nādaputta + ika + si [o] → nādaputtiko* – “the son of Nādaputta”).

- Living by means of (e.g. *nāvā + ika + si [o] → nāviko* – “one who goes [or ‘lives by means of’] a boat”; i.e. “a sailor”; Kacc 351).
- Going by means of (e.g. *pada + ika + si [o] → pādiko* – “one who goes with his feet,” “a pedestrian”; Kacc 350).
- Relating to (e.g. *samudda + ika + si [o] → sāmuddiko* – “relating to the sea,” “marine”).
- Playing upon (e.g. *vīṇā + ika + si [o] → veṇiko* – “playing upon a lute,” “a lute player”).
- Mixed with (e.g. *tela + ika → telika* – “oily” or + *si [aṃ] → telikaṃ* – “that which is mixed with oil”).
- Making, the maker (e.g. *tela + ika + si [o] → teliko* – “an oil manufacturer”).
- Connected with (e.g. *dvāra + ika + si [o] → dvāriko* – “one who is connected with a door,” “a doorkeeper”).
- Carrying upon (e.g. *khandā* [“the shoulder”] + *ika + si [o] → khandiko* – “one who carries on the shoulder”).
- Born in, belonging to or living in a place (e.g. *sāvatti + ika + si [o] → sāvattiko* – “the one of [or ‘born in,’ ‘living in’] Sāvatti”; Kacc 350, 351).
- Studying, learning (e.g. *vinaya + ika + si [o] → venayiko* – “one who studies the *vinaya*”; Kacc 351).
- That which is performed by (e.g. *mānasa + ika + si [o] → mānasiko* – “mental”; Kacc 351).
- That which is bartered for (e.g. *suvaṇṇa + ika + si [aṃ] → sovaṇṇikaṃ* – “that which is bartered for gold”; Kacc 351).
- Possession (e.g. *daṇḍa + ika + si [o] → daṇḍiko* – “one who has a staff,” “a mendicant”; Kacc 367).
- Collection, herd, group (e.g. *kedāra + ika + si [aṃ] → kedārikaṃ*; Kacc 351).

- Measure (e.g. *kumbha + ika + si [aṃ] → kumbhikaṃ* – “that which is contained in a pot”; Kacc 351).
- Being mixed with something (e.g. *golikaṃ* – “food mixed with *guḷa* [i.e. ‘molasses’]”; Kacc 350).
- ima*: **(a)** Denotes position or direction in space or time and also shows relation (e.g. *pacchā + ima + si [o] → pacchimo* – “hindermost,” “western”; Kacc 353). **(b)** It forms a limited number of possessive adjectives too (e.g. *putta + ima + si [o] → puttimo* – “the one who has a son”).
- in* (-ī nom.): **(a)** This forms a very great number of derivatives. **(b)** A large class of possessive adjectives is also constructed with this affix (e.g. *manta + ī + si [→ ∅] → mantī* – “one replete with [or ‘having’] plans,” “a minister,” “adviser”; Kacc 366).
- ina*: **(a)** This affix constructs a few possessive adj. (e.g. *√mala + ina → malina* – “dirty,” “tainted”). **(b)** After *√ji*, it is used to form agent nouns (*jino* – “the one who subjugates”; Kacc 558), and after *√supa* it makes abstract nouns (e.g. *supinaṃ* – “sleep”; Kacc 559).
- isika*: This is the sign of the superlative (Kacc 363).
- itta*: is said to express multitude (e.g. *√vada + itta + si [aṃ] → vādittaṃ* – “the multitude of those who play music,” “an orchestra”). This affix and its derivatives are incomprehensible.
- iṭṭha*: An affix used for the comparison of adjectives (Kacc 363).
- iya*: **(a)** An affix used for the comparison of adjectives (Kacc 363). **(b)** It forms a few abstract nouns (e.g. *issara* [“chief,” “lord”] + *iya + si [aṃ] → issariyaṃ* – “dominion”) and denotes position or direction in space or time (Kacc 353). **(c)** This affix intimates also sources of passion, fear, joy etc. (Kacc 356).
- ī*: is used after the cardinals from ten upwards to form ordinals expressing the day of the month but sometimes also regular ordinals (e.g. *ekādasā + ī + si [→ ∅] → ekādasī* – “the 11th day” or simply “the 11th”).

- ī/-ṇī:** **(a)** Denotes habit, habitual pattern of doing things well, consistent character, ingrained nature (e.g. *brahma* + $\sqrt{\text{cara}}$ + \bar{i} + si [$\rightarrow \emptyset$] \rightarrow *brahmacārī* – “the one who [is used to] practicing the holy life”; Kacc 532). **(b)** It is also expressive of sure action or event and a debt owed (Kacc 636) as well as the sense of the future – the future sense is expressed when attached to $\sqrt{\text{gamu}}$, $\sqrt{\text{bhaja}}$, $\sqrt{\text{su}}$, $\sqrt{\text{thā}}$ etc. (Kacc 651).
- ja:** $\sqrt{\text{jā}}$, $\sqrt{\text{jana}}$ (“to be born,” “produced”; e.g. *pañka* + ja + si [$aṃ$] \rightarrow *pañkajaṃ* – “that which is produced in the mud,” “a lotus”).
- ji:** $\sqrt{\text{ji}}$ (“to conquer”; e.g. *māra* + ji + si [$\rightarrow \emptyset$] \rightarrow *māraji* – “conqueror of *māra*”).
- ka:** **(a)** Kacc 571 states that this affix is applied after $\sqrt{\text{vada}}$ and $\sqrt{\text{hana}}$. **(b)** It is used to form agent nouns and adjectives (e.g. $\sqrt{\text{vada}}$ + ka + si [o] \rightarrow *vādako* – “one who speaks,” “a musician”).
- ka:** **(a)** This affix is much employed to form adjectives and also a certain number of substantive nouns which are, however, adjectives used as substantive nouns (e.g. *rakkhā* + ka + si [o] \rightarrow *rakkhako* – “protecting,” “a guard”). **(b)** It also forms or denotes:
- Collection, group (e.g. *mahiṃsa* + ka + si [o] \rightarrow *māhiṃsako* – “a group [or ‘band’] of buffaloes”; Kacc 354).
 - Diminutives; sometimes, a certain amount of contempt is implied (e.g. *pāda* + ka + si [o] \rightarrow *pādako* – “a small foot”).
 - It is much used in compounds, above all attributives, to form possessives – often, it is redundant.
 - The use of *ka* after numerals also occurs.
 - Abstract nouns (Kacc 362).
 - Not seldom, *ka* adds nothing whatsoever to the primary meaning of the word.
- kaṭa:** **(a)** is considered an affix by some grammarians. **(b)** It forms adjectives differing very little or even not at all from the meaning of the affix to which it is added. **(c)** It is probably a form of *kata*, from $\sqrt{\text{kara}}$

(“to do,” “make”). **(d)** It is used with these prefixes: *ni + kaṭa* → *nikaṭa* (“near”); *vi + kaṭa* → *vikaṭa* (“changed”); *pa + kaṭa* → *pākaṭa* (“evident,” “public,” “clear”); *saṃ + kaṭa* → *saṅkaṭa* (“narrow”).

-kha: √*khā* is a collateral form of √*khana*.

-kiya: This affix forms adjectives denoting relation/connection and is made up of *ka + iya* (e.g. *andha + kiya* → *andhakiya* – “relating [or ‘belonging’] to the Andha country”).

-kvi: **(a)** Duroiselle (1906/1997: 151) has the following to say about this affix: “‘*kvi*’ is an imaginary suffix denoting that the root itself is to be considered as the suffix. [...] As these form primarily adjectives, they assume, in certain cases, but not always, the endings of the three genders.” **(b)** These roots can themselves be appended to all roots (Kacc 530) but are in practice elided (e.g. *sayam + √bhū + kvi + si* [→ ∅] → *sayambhū*; Kacc 639).

-la: **(a)** forms a few adjectives and substantive nouns and is often preceded by the vowels *i* and *u* (e.g. *bahu + la* → *bahula* – “abundant”). **(b)** Affix *la* is another form of *ra*; *ra* and *la* are oftentimes interchangeable. **(c)** It expresses that on which something “depends” or to which it is “related” (Kacc 358).

-ma: **(a)** This affix forms some abstract nouns, agent nouns and some adjectives (e.g. √*bhī* [“to fear,” “to be afraid of”] + *ma* → *bhīma* – “terrible,” “fearful”; Kacc 369). **(b)** It also forms ordinal numbers (Kacc 373).

-mantu (*-mā* nom.): expresses possession of the quality or state indicated by the noun to which it is affixed (e.g. *sati + mantu + si* [*ā*] → *satimā* – “possessed of mindfulness [i.e. ‘mindful’]”; Kacc 369; morphological changes as per Kacc 124).

-maya: with this affix are formed adjectives denoting “made of,” “consisting of” (e.g. *suvaṇṇa + maya* → *suvaṇṇamaya* – “made of gold,” “golden”; Kacc 372).

- min** (-*mī* nom.): This forms a few possessive adjectives (e.g. *gomī* – “possessing oxen,” “cattle,” “a possessor of cattle”; *sāmī* – “owner,” “master,” “lord”).
- nī**: By means of this affix, we obtain but a few substantive nouns (e.g. $\sqrt{hā} + nī + si$ [$\rightarrow \emptyset$] $\rightarrow hānī$ – “abandonment,” “loss,” “decay”).
- nu**: forms a few words, some abstract and some concrete (e.g. $\sqrt{bhā} + nu + si$ [$\rightarrow \emptyset$] $\rightarrow bhānu$ – “beam,” “light,” “the sun”).
- pa**: $\sqrt{pā}$ (“to drink”; e.g. *pada* + *pa* + *si* [*o*] $\rightarrow pādapo$ – “drinking by the foot [i.e. ‘the root’],” “a tree”).
- ra**: It is said that *upasaggo saṃ* + \sqrt{hana} and others take affix *ra* – with $\sqrt{hana} \rightarrow gh$ (e.g. *saṃ* + \sqrt{hana} + *ra* + *si* [*o*] $\rightarrow saṅgho$; Kacc 538).
- ra**: **(a)** A few abstracts are formed with the help of this affix. **(b)** It is often preceded by the vowels *a* and *i* (e.g. *madhu* [“honey”] + *ra* $\rightarrow madhura$ – “sweet” or + *si* [*o*] $\rightarrow madhuro$ – “something having a sweet taste”; Kacc 367).
- ramma** (**-an stem**): **(a)** forms action nouns (e.g. $\sqrt{dhara} + ramma + si$ [*o* or *aṃ*] $\rightarrow dhammo$ or *dhammaṃ* – “nature,” “characteristic” etc.; Kacc 531). **(b)** When any *r*-morpheme is appended to a root, the first component vowel of that root and its last consonant as well as the vowel and the *r* of the *r*-morpheme are usually elided (see *rū* below for an example; Kacc 539).
- ratthu** (**-ā nom.**): **(a)** This affix forms agent nouns (e.g. *sāsa* + *ratthu* + *si* [$\rightarrow \emptyset$] $\rightarrow satthā$; Kacc 566; morphological changes of *u* [of *ratthu*] $\rightarrow ā$ as per Kacc 199). **(b)** In Table 3 in the “Tables” section below, the declensions belonging to this affix are given as having the stem in *r*, following in that other Western Pāli guides (modelled after Sanskrit grammar). Actually, this affix forms stems in *u* with the nominative in *ā*.
- ri**: Just a very few formations transpire with this affix (e.g. $\sqrt{bhū} + ri + si$ [$\rightarrow \emptyset$] $\rightarrow bhūri$ – “abundant,” “much”).

- ricca: (a)** This affix of the future passive participle is called a *kipca* affix but is included in the *kita* chapter of Kaccāyana (e.g. $\sqrt{kara} + icca + si [aṃ] \rightarrow kiccam$ – “that which ought to be done”; Kacc 540, 542, 545). **(b)** When any *r*-morpheme is appended to a root, the first component vowel of that root and its last consonant as well as the vowel and the *r* of the *r*-morpheme are usually elided (see affix *rū* below for an example; Kacc 539).
- ririya:** Occasionally applied after \sqrt{kara} (e.g. $\sqrt{kara} + ririya + si [aṃ] \rightarrow kiriyam$), it is another affix of the future passive participle (Kacc 554).
- ritu, -rātu (-ā nom.):** These affixes form agent nouns (e.g. $\sqrt{pā} + ritu + si [\rightarrow \emptyset] \rightarrow pitā$ – “father”; Kacc 567–568).¹⁸⁹ The same holds true here for what was explained just above for the *ratthu* affix: “In Table 3 in the ‘Tables’ section below, the declensions belonging to this affix are given as having the stem in *r*, following in that other Western Pāḷi guides (modelled after Sanskrit grammar). Actually, this affix forms stems in *u* with the nominative in *ā*.”
- ru:** is used to form some substantive nouns and adjectives and stands to express habit, habitual pattern of doing things well, consistent character, ingrained nature (e.g. $\sqrt{bhī}$ [“to fear,” “to be afraid”] + *ru* + *si* [$\rightarrow \emptyset$] $\rightarrow bhīru$ – “timid”).
- rū (-u stem): (a)** stands to mean: habit, habitual pattern of doing things well, consistent character, ingrained nature (e.g. $\sqrt{bhikkha} + rū + si [\rightarrow \emptyset] \rightarrow bhikkhu$; Kacc 534–535). **(b)** When any *r*-morpheme is appended to a root, the first component vowel of that root as well the vowel and the *r* of the *r*-morpheme and its last consonant are usually elided (e.g. $\sqrt{pāra} + \sqrt{gamu} + rū \rightarrow pāragū$; Kacc 539).
- so:** From this are made a few adjectives, and it is applied after some nouns expressing possessiveness (e.g. *medhāso* – “the one having wisdom”; Kacc 364).

¹⁸⁹ Morphological changes of *u* [of *ritu*] $\rightarrow \bar{a}$ as per Kacc 199.

- (s)*sī*: This affix is used to form adjectives of possession from stems *tapa*, *teja* etc. (Kacc 365).
- ta**: **(a)** This is the affix of the past passive participle and a few concrete nouns (e.g. $\sqrt{su} + ta + si [am]$ → *sotaṃ* – “the ear,” “a stream”). **(b)** The *ta* affix is applied after \sqrt{chada} , \sqrt{citi} , \sqrt{su} , \sqrt{ni} , \sqrt{vida} , \sqrt{pada} , \sqrt{tanu} , \sqrt{yata} , \sqrt{ada} , \sqrt{mada} , \sqrt{yuja} , \sqrt{vatu} , \sqrt{mida} , $\sqrt{mā}$, \sqrt{pu} , \sqrt{kala} , \sqrt{vara} , \sqrt{ve} , \sqrt{pu} , \sqrt{gupa} , $\sqrt{dā}$ etc. (Kacc 656). **(c)** *Kita* affix *ta* → *cca* or *ṭṭa/√naṭa* __ (e.g. $\sqrt{naṭa} + ta + si [am]$ → *naccaṃ* – “dancing”; Kacc 571).
- tabba**: It is called a *kicca* affix but included in the *kita* chapter of Kaccāyana (Kacc 545) – an affix of the future passive participle (Kacc 540).
- tama**: This is the affix used in forming the superlative (Kacc 363).
- tana**: forms a few adjectives from adverbs (e.g. *svā [sve, suve] + tana + si [o]* → *svātano* – “belonging to tomorrow”).
- tara**: is the affix used to form the comparative (Kacc 363).
- tavantu (-tavā nom.)**: This affix forms the past active participle (Kacc 555; Thitzana, 2016: 712).
- tave**: This is a suffix of the infinitive.
- tā**: **(a)** This affix forms feminine abstract nouns from adjectives and denotes several things: the state, nature or quality of being of that which is denoted by the adjectives or substantive nouns (e.g. *lahu + tā + si [→ ∅]* → *lahutā* – “lightness”; Kacc 360). **(b)** It also denotes “multitude” or “collection” (e.g. *jana + tā + si [→ ∅]* → *janatā* – “a multitude of persons,” “folk,” “people”; Kacc 355).
- tāvī**: This is another affix of the past active participle (Kacc 555; Thitzana, 2016: 712).
- teyya**: This one is designated a *kicca* affix but is included in the *kita* chapter of Kaccāyana (Kacc 545) – an affix of the future passive participle (Kacc 540).

-tha: The derivatives constructed with this affix are not very numerous (e.g. $\sqrt{gā} + tha + si [ā] \rightarrow gāthā$ – “a song,” “stanza,” “verse”).

-tha: used in forming ordinals: fourth, fifth etc.

-thā: applied after pronouns to express “manner” (e.g. *yathā* – “by which manner” etc.; Kacc 398).

-thaṃ: makes adverbs from pronominal stems and denotes “manner” (Kacc 399).

-ti: fashions an extensive class of derivatives and stands for the following:

— Fem. action nouns (e.g. \sqrt{bhaja} [“to divide”] + *ti + si* [$\rightarrow \emptyset$] \rightarrow *bhatti* – “division”; cf. Kacc 553).

— A circumscribed number of adjectives.

— Proper nouns expressive of “wishing well” (e.g. *dhanabhūti* [a name] – “May he be prosperous [or ‘wealthy’]!”; Kacc 552).

-ti: used to form words expressing decades.

-tra, ta: form a large number of derivatives, chiefly agent and concrete nouns (e.g. $\sqrt{chad} + tra$ or $ta + si [aṃ] \rightarrow chatraṃ, chattaṃ$ – “an umbrella”).

-tta: abstract form of that which is denoted by the adjective or substantive noun (e.g. *puthujjana + tta + si [aṃ] \rightarrow puthujjanattaṃ* – “the state of being a common man”; Kacc 360).

-ttana: used in the same sense as *tta*.

-tu (-tā nom.): (a) forms agent nouns and signifies habit, habitual pattern of doing things well, consistent character, ingrained nature (e.g. *bhijanadātā* – “the one who gives food,” “the food giver”; Kacc 527, 532). (b) It can be expressive of a future sense (e.g. *bhottā* – “[would-be] eater”; Kacc 652).

-tuka: This affix is applied after \sqrt{gamu} , forming agent nouns (e.g. $\bar{a} + \sqrt{gamu} + tuka + si [o] \rightarrow \bar{a}gantuko$ – “the one who comes”; Kacc 569).

-tuṃ: This is a suffix of the infinitive.

- tuna**: This is a suffix of the absolutive.
- tvā**: This is a suffix of the absolutive.
- tvāna**: This is another suffix of the absolutive.
- tya**: forms a few adjectives from indeclinables (e.g. *niti* + *tya* → *nicca* – “inward,” “inmate,” “own,” “eternal”; cf. Kacc 638).
- uka/-ṇuka**: forms a few substantive nouns and adjectives denoting the agent and also denotes: habit, habitual pattern of doing things well, consistent character, ingrained nature (e.g. √*pada* [“to step”] + *uka* + *si* [o] → *pāduko* – “a shoe”; Kacc 536).
- una**: forms a few derivatives (e.g. √*pisa* + *una* → *pisuna* – “malicious” or + *si* [o] → *pisuno* – “backbiting,” “a talebearer”).
- ū**: forms some adjectives and substantive nouns (e.g. √*vida* + *kvi* + *ū* + *si* [→ ∅] → *vidū* – “knowing”; the *kvi* affix is elided as per Kacc 639).
- va**: forms a small number of adjectives (e.g. *aṇṇa* [“wave”] + *va* → *aṇṇava* – “billyow”).
- vantu** (-*vā* nom.): **(a)** This affix makes a very large class of possessive adjectives. **(b)** It is similar in character to *mantu* (*mā*) and expresses possession of the quality or state indicated by the noun to which it is affixed: *māna* + *vantu* + *si* [*ā*] → *mānavā* – “having pride [i.e. ‘proud’]”; Kacc 368; morphological changes as per Kacc 124).
- vī**: **(a)** This affix is used to form adjectives of possession (e.g. *medhā* + *vī* + *si* [→ ∅] → *medhāvī* – “the one possessing wisdom,” “the wise one”; Kacc 364). **(b)** The suffix *inī* is employed to construct the feminine (e.g. *medhāvinī*; Kacc 240; cf. Duroiselle, 1906/1997: 58).
- ya/-ṇya**: This is called a *kicca* affix but is included in the *kita* chapter of Kaccāyana (Kacc 545) – an affix of the future passive participle (Kacc 540).

-*ya*: **(a)** forms a very large class of nouns, mostly neuter abstract; **(b)** strengthening takes place in most cases and assimilation is regular (e.g. *alasa* + *ya* + *si* [*aṃ*] → *ālasyaṃ*, *ālassaṃ* – “laziness”; Kacc 360).

Uṇādi Affixes

(a) Kaccāyana's *uṇādi* chapter comprises special rules and further miscellaneous affixes for words which cannot be derived from the antecedent ones tendered so far (Subhūti, 2018: 11). (b) To avoid repetition, this chapter deals only with the latter affixes because the divers morphological rules have already been given above, in the chapter "Morphology." (c) The words formed with the addition of *uṇādi* affixes are presumably capable of expressing any sense, such as agent, object, instrument and abode, as demanded by exigency (Abhyankar, 1961). (d) The just tendered supposition constitutes a fact when presented against the backdrop of the Sanskrit language but is not explicitly spelled out in Kaccāyana, although the examples therein support it. (e) These are the respective affixes.

-*ala*: is added after √*paṭa*, √*kala*, √*kusa*, √*kada*, √*bhaganda*, √*mekha*, √*vakka*, √*takka*, √*palla*, √*sadda*, √*mūla*, √*bila*, √*vida*, √*caḍi*, stem *pañca*, √*vā*, √*vasa*, √*paci*, √*maca*, √*musa*, √*gotthu*, √*puthu*, √*bahu*, √*maṅga*, √*baha*, √*kamba*, √*samba*, √*agga* and after some stems (Kacc 665).

-*athu*: This affix is applied after √*vepu*, √*si*, √*dava*, √*vamu*, √*ku*, √*dā*, √*bhū*, √*hū* etc. and expresses the sense of "caused by" or "originated from" (e.g. √*vepu* + *athu* + *si* [→ ∅] → *vepathu* – "ailment [which occurs by the shaking of the body]"; Kacc 644).

-*āni*: This affix is applied after all roots in the context of the applied negative particle *na* and signifies a sense of "reviling" or "cursing" (e.g. *na* + √*kara* + *āni* + *si* [→ ∅] → *akarāṇi*; Kacc 645).

-*da*: This affix is employed after √*uda*, √*idi*, √*cadi*, √*madi*, √*khuda*, √*chidi*, √*rudi* etc. (e.g. √*idi* + *da* + *si* + [o] → *indo* – the celestial king of that name; Kacc 661; Thitzana, 2016: 807).

-*dha*: is used after √*ranja* etc., seemingly forming concrete, abstract, proper and agent nouns (e.g. √*ranja* + *dha* + *si* [aṃ] → *randhaṃ* – "hole"; Kacc 661; Thitzana, 2016: 807).

-*du*: This affix is utilized after √*sasu*, √*dada*, √*ada*, √*mada* etc. (e.g. √*dada* + *du* + *si* [→ ∅] → *daddu* – a kind of cutaneous eruption; Kacc 667).

- ḍha*: is appended to √*usu*, √*ranja*, √*daṃsa* (√*daṃsa* → *daḍḍha*; e.g. √*usu* + *ḍha* + *si* [o] → *uḍḍho* – “heat”; Kacc 659).
- ghin̄*: This one could be a redundant affix which is pretty much alike *kita* affix *ī/ṇī* (cf. Kacc 651; Thitzana, 2016: 796).
- i*: is appended to √*muna*, √*yata*, √*agga*, √*pata*, √*kava*, √*suca*, √*ruca*, stem *mahāla* and stem *bhaddāla*, √*mana* etc. as well as after some other stems (e.g. √*muna* + *i* + *si* [→ ∅] → *muni* – “a sage”; Kacc 669).
- idda*: is used after √*dala* etc. (e.g. √*dala* + *idda* + *si* [o] → *daliddo* – “a beggar”; Kacc 661; Thitzana, 2016: 807).
- ima/-ṇima*: is applied after √*vepu*, √*sī*, √*dava*, √*vamu*, √*ku*, √*dā*, √*bhū*, √*hū* etc. and expresses the sense of “caused by” or “originated from” (e.g. *ava* + √*hu* + *ṇima* + *si* [*aṃ*] → *ohāvimaṃ* – “things meant for sacrifice”; Kacc 644).
- ira*: This affix is used after √*vaja* etc. (e.g. √*vaja* + *ira* + *si* [*aṃ*] → *vajiraṃ* – “diamond,” “thunderbolt”; Kacc 661; Thitzana, 2016: 807).
- isa*: This one is affixed to √*manu*, √*pūra*, √*suṇa*, √*ku*, √*su*, √*ila*, √*ala*, √*maha*, √*si*, √*ki* etc. and some stems (e.g. √*ala* + *isa* + *si* [o] → *alaso* – “a lazy man”; Kacc 673).
- itta/-ṇitta*: is attached to √*vada*, √*cara*, √*vara* etc., expressing “collection” or “grouping” (e.g. √*cara* + *ṇitta* + *si* [*aṃ*] → *cārittaṃ* – “group of ethical precepts [or ‘rules]’”; Kacc 657).
- ivara*: Affix is put to use after √*ci*, √*pā*, √*dhā* etc. (e.g. √*pā* + *ivara* + *si* [o] → *pīvaro* – “a fat person”; Kacc 668).
- ka*: This affix is found to be attached after √*susa*, √*suca*, √*vaca* etc. (e.g. √*suca* + *ka* + *si* [o] → *soko* – “sadness”; Kacc 661; Thitzana, 2016: 807) and is also applicable after √*kaḍi*, √*ghaḍi*, √*vaḍi*, √*karaḍi*, √*maḍi*, √*saḍi*, √*kuṭhi*, √*bhaḍi*, √*paḍi*, √*daḍi*, √*raḍi*, √*taḍi*, √*visiḍi*, √*caḍi*, √*gaḍi*, √*ḍaḍi*, √*laḍi*, √*meḍi*, √*eraḍi*, √*khaḍi* etc. (e.g. √*kaḍi* + *ka* + *si* [o] → *kaṇdo* – “chapter”; Kacc 663).

- kta*: This affix can be regarded as the *kita* affix *ta* (Kacc 626; Thitzana, 2016: 765).
- la*: is applied after √*ala*, √*kala*, √*sala* and forms substantive nouns and adjectives (e.g. √*sala* + *la* + *si* [aṃ] → *sallaṃ* – “arrow [lit. ‘that which pierces’]”; Kacc 632).
- lāna*: is appended to √*kala* and √*sala* (e.g. *pati* + √*sala* + *lāna* + *si* [aṃ] → *paṭisallānaṃ* – “seclusion”; Kacc 633).
- ma*: As with affix *tha*, this affix is applied after √*samu*, √*damu*, √*dara*, √*raha*, √*du*, √*hi*, √*si*, √*bhī*, √*dā*, √*yā*, √*sā*, √*ṭhā*, √*bhasa* etc. (e.g. √*du* + *ma* + *si* [o] → *dumo* – “a tree”; Kacc 628).
- man*: After √*khi*, √*bhī*, √*su*, √*ru*, √*hu*, √*vā*, √*dhū*, √*hi*, √*lū*, √*pī*, √*ada* etc., this affix is applied (Kacc 627).
- nu*: This affix is appended to √*hana*, √*jana*, √*bhā*, √*ri*, √*khanu*, √*ama*, √*ve*, √*dhe*, √*dhā*, √*si*, √*ki*, √*hi* etc. (Kacc 671).
- tha*: This affix is applied after √*samu*, √*damu*, √*dara*, √*raha*, √*du*, √*hi*, √*si*, √*bhī*, √*dā*, √*yā*, √*sā*, √*ṭhā*, √*bhasa* etc. (Kacc 628).
- ṭha*: This affix, as *ḍha* above, is appended to √*usu*, √*ranja*, √*daṃsa* (√*daṃṣa* → *daḍḍha*; e.g. √*ranja* + *ṭha* + *si* [aṃ] → *raṭṭhaṃ* – “kingdom”; Kacc 659) and also to √*kuṭa*, √*kusa*, √*kaṭa* etc. and some stems (e.g. √*kaṭa* + *ṭha* + *si* [aṃ] → *kaṭṭhaṃ* – “piece of wood”; Kacc 672).
- ti*: Same explanation as for *tī* applies; possibly the same affix as *kita* *tī*.
- tī*: is appended to √*mīda*, √*pada*, √*ranja*, √*tanu*, √*dhā* etc., forming common and abstract nouns (e.g. √*mīda* + *tī* + *si* [→ ∅] → *mettī* – “love”; Kacc 658).
- tīma*: This affix is applied after √*vepu*, √*sī*, √*dava*, √*vamu*, √*ku*, √*dā*, √*bhū*, √*hū* etc. and expresses the sense of “caused by” or “originated from” (e.g. √*kara* + *tīma* + *si* [aṃ] → *kuttīmaṃ* – “something created artificially”; Kacc 644).

- tran*: The affix is applied after √*chada*, √*citi*, √*su*, √*nī*, √*vida*, √*pada*, √*tanu*, √*yata*, √*ada*, √*mada*, √*yuja*, √*vatu*, √*mida*, √*mā*, √*pu*, √*kala*, √*vara*, √*ve*, √*pu*, √*gupa*, √*dā* (e.g. √*yuja* + *tran* + *si* [aṃ] → *yotraṃ* – “rope”; Kacc 656).
- tu*: is utilized after √*sasu*, √*dada*, √*ada*, √*mada* etc. (e.g. √*sasu* + *tu* + *si* [→ ∅] → *sattu* – “enemy”; Kacc 667) and also after √*hana*, √*jana*, √*bhā*, √*ri*, √*khanu*, √*ama*, √*ve*, √*dhe*, √*dhā*, √*si*, √*ki*, √*hi* etc. (e.g. √*dhā* + *tu* → *dhātu* – “root”; Kacc 671).
- u/-ṇu*: (**a**) is applied in the senses of the present and past (e.g. √*kara* + *u* + *si* [→ ∅] → *kāru* – “artisan” or “carpenter [who did or is doing his craft]”; Kacc 650). (**b**) It is used after √*hana*, √*jana*, √*bhā*, √*ri*, √*khanu*, √*ama*, √*ve*, √*dhe*, √*dhā*, √*si*, √*ki*, √*hi* etc. (Kacc 671).
- ūra*: This affix finds itself employed after √*vida*, √*valla*, √*masa*, √*sida*, √*du*, √*ku*, √*kapu*, √*maya*, √*udi*, √*khajja*, √*kura* etc. and after some stems (e.g. √*du* + *ūra* + *si* [o] → *dūro* – “a distant place,” “remote”; Kacc 670).
- usa*: Affix is appended to √*manu*, √*pūra*, √*suṇa*, √*ku*, √*su*, √*ila*, √*ala*, √*ma-ha*, √*si*, √*ki* etc. and some stems (e.g. √*manu* [or √*mana*] + *usa* + *si* [o] → *manusso* – “a human being”; Kacc 673).
- ya*: is applied after √*ala*, √*kala*, √*sala* (Kacc 632).
- yāna*: This type of affix is tacked to √*kala* and √*sala* (e.g. √*kala* + *yāna* + *si* [aṃ] → *kalyānaṃ* – “good”; Kacc 633).

Repetition

(a) Repetition of words at times happens to express the senses of plurality, totality, distribution, variety, multiplicity etc. (e.g. *yaṃ yaṃ gāmaṃ* – “whatever village”; Duroiselle, 1906/1997: 162). (b) Oftentimes, a strong dissimilarity is expressed by repeating the interrogative pronoun before each clause in a sentence (e.g. *ke ca chhave sigāle ke pana sīhanāde* – “What is [the yapping of] a vile jackal but what a lion’s roar,” DN III: 10 [DN 24]; Perniola, 1997: 393).

Prohibition

(a) As mentioned under the aorist section above: “The indeclinable *mā* + the aorist intimates prohibition (Duroiselle, 1906/1997: 163) and may stand for all tenses (e.g. *mā gamī* – ‘Don’t go!’; Kacc 420).” (b) In some cases, the present indicative, imperative and optative moods following *mā* can also be employed to express the selfsame import (e.g. *mā pamādamanuyuñjetha, mā kāmaratisanthavaṃ* – “Don’t engage in heedlessness and intimacy with sensual delight,” Dhṃ: 2, v. 27; Dhammajoti, 2018: 234; Oberlies, 2019: 474). (c) An optative with *na* (Duroiselle: 167) and indeclinables *alam/halam* (“enough!”, “stop!”) may also be utilized to voice prohibition (Collins, 2006: 121).

Comparison

(a) As mentioned above in the chapter “Sentence Structure and Syntax”: “*seyyathāpi* (‘just as’) contrasted with *evameva* (‘just so’) and *yathā* (‘just as’) contrasted with *tathā* (‘so’)” are expressive of comparative clauses (Perniola, 1997: 393). (b) To repeat another relevant portion from just above: “Oftentimes, a strong dissimilarity is expressed by repeating the interrogative pronoun before each clause in a sentence (e.g. *ke ca chhave sigāle ke pana sīhanāde* – ‘What is [the yapping of] a vile jackal but what a lion’s roar’).” (c) It also needs to be reiterated here for convenience that “certain past participles, by themselves or as the final member of compounds, are used comparatively with the appropriate affixes (e.g. *paṇīta* – ‘excellent’ → *paṇītatara* – ‘more excellent’).” (d) In addition to that, it

must be mentioned that the second term of an attributive compound is expressive of a comparison when it ends with *upamā* (“simile,” “parable,” “comparison”; e.g. *nagarūpamaṃ* – “like a citadel”), and superiority is expressed when the word *seyyo* is found in the first clause or phrase (Perniola: 394).

Interrogation

(a) The main verbs of interrogative clauses may be the present, aorist or future of the indicative or stand in the optative mood (e.g. *taṃ kiṃ maññasi* – “What do you think of this?”, DN I: 28 [DN 2]; *iccheyyātha no tumhe mārisā nimi rājānaṃ daṭṭhum* – “Would you like, friends, to see king Nimi?”, MN II: 132 [MN 83]). **(b)** Interrogation may also be realized with participles or agent nouns – with or without an auxiliary verb. **(c)** Pronouns, pronominal adjectives, adverbs and interrogative particles (e.g. *api*, *api nu*, *api nu kho*, *kiṃ*, *katara*, *kati*, *kīva*, *ko*, *kā*, *kadā*, *kathā*, *kamaṃ*, *kuhiṃ* etc.) may be employed to construct interrogative clauses (Perniola, 1997: 388–9) – *api* and *api nu* stand as sentence initials, but *kiṃ* may also be encountered in the final position (Ānandamaitreya, 1993/2012: 17). **(d)** Phrases like *saccaṃ kira* (“Is it really true?”) and *atthi nāma* (“Is it thus?”) can also be utilized to frame interrogative clauses (e.g. *saccaṃ kira tvaṃ, nanda, sambahulānaṃ bhikkhūnaṃ evaṃ ārocesi* – “Is it really true, Nanda, that you spoke thus to many bhikkhus?”, Ud: 14 [Ud 3.2]). **(e)** The same sense of interrogation is occasionally achieved when placing the main verb or the verb *atthi*¹⁹⁰ at the beginning of a sentence (Perniola: 389–90; Dhammajoti, 2018: 116). **(f)** Negative particle *na* before *nu* intimates an emphatic interrogation – *kiṃ* and *api* followed by *nu* also possess emphatic force. **(g)** At times, the mere tone of voice suffices to form a question (e.g. *supaṃ labhi* – “Did you get sleep?”; Duroiselle, 1906/1997: 168; Dhammajoti: 116).

¹⁹⁰ In certain instances, it is effectively indeclinable, so the context has to be evaluated to understand the respective case, if it is interrogative or not.

Negation

(a) Negative sentences are constructed with the negative particles *na* and *no* (e.g. *na dānāhaṃ bhagavantaṃ uddissa viharāmi* – “Now I am not living with reference to the Blessed One [as a teacher],” DN III: 1 [DN 24]; Duroiselle, 1906/1997: 167). (b) Some particles following *na* put emphasis on it (e.g. *na + pi* → *nāpi*; *na + eva* → *neva*; *na + kho* → *na kho* etc.; Perniola, 1997: 384), and in the case of *no* following *na*, the emphasis becomes a strong one. (c) As explained above, an optative may also stand with *na* to give the same meaning (Duroiselle: 167). (d) Two negative particles *na* have an affirmative sense, making the sentence positive (Duroiselle: 167). (e) On some occasions, particles *a/an* and *na* are added to substantive nouns, adjectives, verbs (finite and infinite forms) or predicates to invest them with a negative or privative meaning (DOP I, s.v. “a-”; Collins, 2006, 121; Perniola: 384) – *a* and *na* before consonants and *an* before vowels. (f) As mentioned earlier in the chapter “Compounds (*samāsā*),” these particles can also stand as the first member of a dependent-determinative compound (e.g. *na + āgamaṇaṃ* → *nāgamaṇaṃ* – “non-arrival”; Kacc 333–334).

Etcetera (etc.)

(a) The word *ādi* (“beginning,” “starting point,” “beginning with”), functioning either as an adjective or adverb, is sometimes added to a noun or a list to convey the sense of “etcetera,” “and so forth” but can also stand by itself (e.g. *ko ādi* – “What is the beginning?”). (b) It can also appear as a neuter – when the phrase ends in a neuter noun – or masculine plural construction (e.g. *muttakarīsādīni* – “excrement, urine etc.”; *pasukādayo* – “quadrupeds etc.”; cf. Gair & Karunatilake, 1998: 141; Levman, personal communication, July 17, 2020).

Direct and Indirect Speech

Direct Speech

(a) Direct speech is a common feature of the Pāli language. (b) The particle *iti* (“so,” “thus,” “in this way”) marks a clause as direct speech (or thought etc.) when following it. (c) It is always abbreviated to *ti* unless undergoing a change to *cca* due to sandhi procedures (e.g. ‘*pāpaṃ me katan’ti tappati* – “He is tormented [thinking]: ‘Evil has been done by me,’” Dhp: 2, v. 17). The two forms may also appear together for emphasis. (d) *Iti* is an adverb of manner usually suffixed (rarely prefixed) to words, phrases or clauses – with or without verbs such as “saying,” “thinking” etc. – and typically has the meaning of “quote” (Collins, 2006: 141; Deokar, 2013: 125; Duroiselle, 1906/1997: 167; Perniola, 1997: 395; Warder, 1963/2001: 35–6). (e) It is at times difficult to ascertain when the quotation begins since in most cases an opening quotation marker is not set. (f) The respective rules of morphology and sandhi are applied for *iti* and its preceding and succeeding letters (e.g. *iti + evaṃ → iccevaṃ*; *kvāci + iti → kvācīti*) – a vowel preceding *iti* is usually lengthened and *ṃ → n* (e.g. ‘*sammukhībhūto no satthā ahoṣi, na mayaṃ sakkhimhā bhagavantam sammukhā paṭipucchitun’ti* – “The teacher had been present with us, [yet] we were not able to ask the Blessed One in his presence,” DN II: 64 [DN 16]; Collins: 141–2; Duroiselle: 167; Warder: 36).

(a) To quote a pertinent statement of Duroiselle (1906/1997: 167): “Verbs of ‘saying, telling, asking, naming, knowing, thinking,’ are generally used with *iti*.” Such verbs may stand either after or before the elements quoted or be omitted altogether (e.g. ‘*sādhū’ti vatvā* – “having said ‘very well’”). (b) Clauses with *iti* express the words as well as the thoughts of persons or anything quoted (such as titles of books) and also signify the senses of cause, motive, intention, purpose, bringing to completion, variation in the meaning of near synonyms, manner, affirmation and illustration (e.g. ‘*jīvitum asakkontā’ti* – “because we are unable to make a living”; Ānandamaitreya, 2012: 180; Collins, 2006: 142; Duroiselle: 167). (c) *Iti* appears also to be used in the prepositional sense of English “as” (e.g.

yo ca neyyatthaṃ suttantaṃ neyyattho suttantoti dīpeti – “he who explains a discourse whose meaning has to be inferred as a discourse whose meaning has to be inferred,” AN II: 7 [AN 2.25].

Indirect Speech

(a) Indirect speech is just rarely employed in the Pāli language (Warder, 1963/2001: 36). (b) When it occurs, it is in constructions where a substantive noun or pronoun stands with a participle agreeing with it, both constituting then the object of the clause’s main verb (e.g. *tathāgate arahante sammāsambuddhe āsādetabbaṃ maññasi* – “You think that the Tathagata, the worthy one, the Perfectly Enlightened One, ought to be assailed,” DN III: 10 [DN 24]; Perniola, 1997: 395; cf. Wijesekera, 1936/1993: 106). (c) Attributive and dependent-determinative compounds are also seen to express indirect speech (e.g. *āhu sabbappahāyinaṃ* – “They say [that] he is one who has given up everything,” It: 26 [It 66]; Perniola: 395–6). (d) In certain contexts, it is not impossible to translate an *iti*-clause – as introduced above in the section “Direct Speech” – into English by means of employing indirect speech.

Metrical License

(a) Metrical License is rare in Pāli when compared to the usage in Buddhist Hybrid Sanskrit, but the readers of Pāli texts not infrequently encounter irregular forms in verse compositions (Warder, 1967: 74). (b) This license is most prominent in the increased flexibility it imparts on the order of words in verse compilations but comprises also the following.

- Employment of archaic word forms instead of regular ones (e.g. *ādiseyya* → *ādise* – “should announce,” “should dedicate”; *sāvaka* → *sāvakāse* – “disciples,” DN II: 111 [DN 8]; Warder, 1963/2001: 356).
- Flexible sandhi (Warder, 1967: 71).
- Phonological variance (e.g. *hessati/bhavissati*, Bv: 9; Warder: 71).
- Alternative case numbers expressive of the same meaning (Warder: 74).
- Employment of lexicographical variants (e.g. *nimeso* → *nimiso* – “winking”; *upayānaṃ* → *upāyanaṃ* – “approach,” Cp: 3; Warder: 73).
- Lengthening of short vowels and shortening of long vowels: as word initials, word finals, between compound words, betwixt prefixes and roots as well as roots and affixes (incl. suffixes) and occasionally also as root vowels (e.g. *upanissaya* → *ūpanissaya* – “supporting condition”; *nadati* → *nadatī* – “roar”; *ca* → *cā* – “and”; *satimā* → *satīmā* – “possessed of mindfulness”; *chetvā* → *chetva* – “having cut [or ‘severed’],” Sn: 3 [Sn 3]; Ānandajoti, 2000/2004: 18; Warder 1963/2001: 355; Warder, 1967: 75–7, 82).
- Doubling or simplification of consonants (Ānandajoti: 18–9).
- Elision, insertion or change of the *niggahītaṃ* (e.g. *ṃ* → *m* at the end of a word; Ānandajoti: 18–20).
- Elision of whole syllables (e.g. *chamāya* → *chamā* – “on the ground”; *accupatati* → *accupatī* – “He flew nearby,” Jā I: 166 [Jā 481]; Warder: 78, 82).

Metrical License

- Insertion of redundant particles providing emphasis or with otherwise opaque meaning.
- Interchangeability, for the most part, of final vowels *i* and *e*, *a* and *o* (Warder: 78).

(a) It is the fluidity of the language that accounts for most of the above-mentioned variation (Warder, 1967: 83). **(b)** It must be remarked that *(i)* end syllables are most likely to be affected by the changes, *(ii)* that syllables in medial position are only altered within a junction (either between compound words or stems and affixes) and that *(iii)* initial syllables but infrequently change (Ānandajoti, 2000/2004: 19). **(c)** The denominative, intensive, desiderative and root aorist are more often met with in verse than in prose formats (Warder 1963/2001: 356); the root aorist is found in poetry without the augment *a* (Perniola, 1997: 273). **(d)** Most of the occurrences of the middle voice are also encountered in verse (Perniola: 339).

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Tables

Declensions – Substantive Nouns and Adjectives

Table 3. *Substantive Noun and Adjectival Declensions (stem vowels mostly included)*

Stem	-a	-a	-ā	-i	-i	-in	-in
Gender, sing.	Masc.	Neut.	Fem.	Masc.	Neut.	Masc.	Fem.
Nominative	<i>e, o</i>	<i>aṃ, e</i>	<i>ā</i>	<i>i, ī</i>	<i>asū, i(ṃ)</i>	<i>i, ī</i>	<i>i, inī, ī</i>
Vocative	<i>a, aṃ, ā, e, o</i>	<i>a, ṃ</i>	<i>a, ā, e</i>	<i>i, e</i>	<i>i</i>	<i>ini, ī</i>	<i>i, ī</i>
Accusative	<i>aṃ</i>	<i>aṃ</i>	<i>aṃ</i>	<i>iṃ, inaṃ</i>	<i>asū, i(ṃ)</i>	<i>iṃ, inaṃ</i>	<i>iṃ</i>
Instrumental	<i>asā, aso, ā, ena</i>	<i>asā, aso, ā, ena</i>	<i>āya, ā</i>	<i>inā</i>	<i>inā</i>	<i>inā</i>	<i>iyā, yā</i>
Ablative	<i>amhā, aṃ, asmā, aso, ato, ā, āh, i</i>	<i>amhā, aṃ, asmā, aso, ato, ā, āh, i</i>	<i>ato, āto, āya</i>	<i>imhā, inā, ismā, ito</i>	<i>imhā, inā, ismā, ito</i>	<i>imhā, inā, ismā, ito</i>	<i>ito, iyā, yā</i>
Genitive/Dative	<i>assa, ā/ayā</i>	<i>assa, ā/ayā</i>	<i>āya</i>	<i>ino, issa</i>	<i>ino, issa</i>	<i>ino, issa</i>	<i>iyā, yā</i>
Locative	<i>amhi, asi, asmi(ṃ), e</i>	<i>amhi, asi, asmi(ṃ), e</i>	<i>āya(ṃ), āye</i>	<i>e, imhi, ini, ismiṃ, o</i>	<i>e, imhi, ini, ismiṃ, o</i>	<i>imhi, ine, ini, ismiṃ</i>	<i>(ā)yaṃ, iyaṃ, o, u, yaṃ</i>
Gender, pl.	Masc.	Neut.	Fem.	Masc.	Neut.	Masc.	Fem.
Nominative	<i>ā, āse, āso, o</i>	<i>ā, āni</i>	<i>ā, āyo</i>	<i>ayo, ino, iyo, ī</i>	<i>ī, īni</i>	<i>ayo, inā, ino, iyo, ī</i>	<i>iyo, ī, yā, yo</i>
Vocative	<i>ā, āse, āso</i>	<i>ā, āni</i>	<i>ā, āyo</i>	<i>ayo, iyo, ī</i>	<i>ī, īni</i>	<i>ino, ī</i>	<i>iyo, ī, yo</i>

Māgadhabhāsā (Pāli)

Table 3. *Substantive Noun and Adjectival Declensions (stem vowels mostly included)*

Accusative	<i>āni, e</i>	<i>āni, e</i>	<i>ā, āyo</i>	<i>ayo, e, iyo, ī</i>	<i>ī, īni</i>	<i>aye, ine, ino, iye, ī</i>	<i>iyo, ī, yo</i>
Instrumental	<i>e, ebhi, ehi</i>	<i>e, ebhi, ehi</i>	<i>ābhi, āhi</i>	<i>ibhi, ihi, ībhi, īhi</i>	<i>ibhi, ihi, ībhi, īhi</i>	<i>ibhi, ihi, ībhi, īhi</i>	<i>ībhi, īhi</i>
Ablative	<i>ato, ebhi, ehi</i>	<i>ato, ebhi, ehi</i>	<i>ābhi, āhi</i>	<i>ibhi, ihi, ībhi, īhi</i>	<i>ibhi, ihi, ībhi, īhi</i>	<i>ibhi, ihi, ībhi, īhi</i>	<i>ībhi, īhi</i>
Genitive/Dative	<i>āna(ṃ), uno</i>	<i>āna(ṃ), uno</i>	<i>ānaṃ</i>	<i>inaṃ, īnaṃ</i>	<i>inaṃ, īnaṃ</i>	<i>inaṃ, īnaṃ</i>	<i>īnaṃ</i>
Locative	<i>ehi, esu</i>	<i>ehi, esu</i>	<i>āsu</i>	<i>isu, īsu</i>	<i>isu, īsu</i>	<i>inesu, isu, īsu</i>	<i>isu, īsu</i>
Stem	-ī	-u	-u	-ū	-u	-ū	-u/-r
Gender, sing.	Fem.	Masc.	Neut.	Masc.	Fem.	Fem.	Masc.
Nominative	<i>i, ī</i>	<i>u, o</i>	<i>u, uṃ</i>	<i>u(ṃ), ū (neut.)</i>	<i>u</i>	<i>u, ū</i>	<i>a, ā, o</i>
Vocative	<i>i, ī</i>	<i>u, o</i>	<i>u, uṃ</i>	<i>u, ū</i>	<i>u</i>	<i>u, ū</i>	<i>a, ā, e</i>
Accusative	<i>iṃ, iyaṃ</i>	<i>uṃ, unaṃ</i>	<i>u, uṃ</i>	<i>uṃ</i>	<i>uṃ</i>	<i>uṃ</i>	<i>aṃ, araṃ, āraṃ, uṃ</i>
Instrumental	<i>ā, iyā, īyā, yā</i>	<i>unā</i>	<i>unā</i>	<i>unā</i>	<i>uyā</i>	<i>uyā, ūyā</i>	<i>arā, ārā, unā</i>
Ablative	<i>ā, ito, iyā, īto, yā</i>	<i>u, umhā, unā, usmā, uto</i>	<i>u, umhā, unā, usmā, uto</i>	<i>umhā, usmā, ūto</i>	<i>uto, uyā</i>	<i>uyā</i>	<i>arā, ārā, ito, u</i>

Tables

Table 3. *Substantive Noun and Adjectival Declensions (stem vowels mostly included)*

Genitive/Dative	<i>ā, iyā, yā</i>	<i>u, uno, ussa</i>	<i>u, uno, ussa</i>	<i>uno, ussa</i>	<i>uyā</i>	<i>uyā</i>	<i>u, uno, ussa</i>
Locative	<i>aṃ, iyaṃ, iyā, yaṃ, yā</i>	<i>u, umhi, usmiṃ</i>	<i>u, umhi, uni, usmiṃ</i>	<i>umhi, usmiṃ</i>	<i>uyaṃ, uyā</i>	<i>uyaṃ, uyā</i>	<i>ari</i>
Gender pl.	Fem.	Masc.	Neut.	Masc.	Fem.	Fem.	Masc.
Nominative	<i>āyo, iyo, īyo, yo</i>	<i>avo, uno, uyo, ū</i>	<i>ū, ūni</i>	<i>uno, uvo, ū, ūni, ūno</i>	<i>uvo, uyo, ū</i>	<i>uyo, ū, ūyo</i>	<i>aro, āro</i>
Vocative	<i>āyo, iyo, īyo, yo</i>	<i>ave, avo, uno, ū</i>	<i>ū, ūni</i>	<i>uno, uvo, ū, ūno</i>	<i>uvo, uyo, ū</i>	<i>uyo, ū, ūyo</i>	<i>āro</i>
Accusative	<i>āyo, iyo, īyo, yo</i>	<i>avo, uno, uyo, ū</i>	<i>ū, ūni</i>	<i>uno, uvo, ū, ūno</i>	<i>uvo, uyo, ū</i>	<i>uyo, ū, ūyo</i>	<i>are, aro, āre, āro, e, uno, ū</i>
Instrumental	<i>ībhi, īhi</i>	<i>ubhi, uhi, ūbhi, ūhi</i>	<i>ubhi, uhi, ūbhi, ūhi</i>	<i>ūbhi, ūhi</i>	<i>ūbhi, ūhi</i>	<i>ūbhi, ūhi</i>	<i>arebhi, arehi, ārebhi, ārehi, ūbhi, ūhi</i>
Ablative	<i>ībhi, īhi</i>	<i>ubhi, uhi, ūbhi, ūhi</i>	<i>ubhi, uhi, ūbhi, ūhi</i>	<i>ūbhi, ūhi</i>	<i>ūbhi, ūhi</i>	<i>ūbhi, ūhi</i>	<i>arebhi, arehi, ārebhi, ārehi, ubhi, uhi, ūbhi, ūhi</i>
Genitive/Dative	<i>inaṃ, iyanaṃ, īnaṃ, iyanamaṃ</i>	<i>unaṃ, un- naṃ, ūnaṃ</i>	<i>unaṃ, un- naṃ, ūnaṃ</i>	<i>ūnaṃ</i>	<i>ūnaṃ</i>	<i>ūnaṃ</i>	<i>arānaṃ, ānaṃ, ārānaṃ, unnaṃ, ūnaṃ</i>
Locative	<i>isu, īsu</i>	<i>usu, ūsu</i>	<i>usu, ūsu</i>	<i>ūsu</i>	<i>ūsu</i>	<i>ūsu</i>	<i>aresu, āresu, usu, ūsu</i>

Māgadhabhāsā (Pāli)

Table 3. *Substantive Noun and Adjectival Declensions (stem vowels mostly included)*

Stem	-u/-r	-a/-an	-a/-an	-m/vantu	-m/vantu	-as	-us
Gender, sing.	Fem.	Masc.	Neut.	Masc.	Neut.	Neut.	Neut.
Nominative	<i>ā</i>	<i>ā, no</i>	<i>a, aṃ</i>	<i>aṃ, anto, ato, ā, o</i>	<i>aṃ, antaṃ</i>	<i>aṃ, o</i>	<i>u, uṃ</i>
Vocative	<i>a, ā, e</i>	<i>a, ā, e</i>	<i>a</i>	<i>a, aṃ, anta, ā</i>	<i>aṃ, antaṃ</i>	<i>a, aṃ, ā, o</i>	<i>u, uṃ</i>
Accusative	<i>araṃ, uṃ</i>	<i>aṃ, ānaṃ</i>	<i>a, aṃ</i>	<i>aṃ, antaṃ, ataṃ</i>	<i>aṃ, antaṃ</i>	<i>aṃ, o</i>	<i>u, uṃ</i>
Instrumental	<i>arā, uyā, yā</i>	<i>ena, inā</i>	<i>anā, ā, ena, unā</i>	<i>antena, atā</i>	<i>antena, atā</i>	<i>asā, ena</i>	<i>unā, usā</i>
Ablative	<i>arā, ito, uyā, yā</i>	<i>ano, amhā, asmā, ato, nā</i>	<i>anā, ā</i>	<i>antamhā, antasmā, antato, antā, atā</i>	<i>antamhā, antasmā, antato, antā, atā</i>	<i>amhā, asā, asmā, ato, ā</i>	<i>unā, usā</i>
Genitive/Dative	<i>āya, u, uyā, yā</i>	<i>ano, assa, ino, nassa</i>	<i>assa, uno</i>	<i>antassa, ato</i>	<i>antassa, ato</i>	<i>aso, assa</i>	<i>uno, ussa</i>
Locative	<i>ari, uyaṃ, uyā, yā</i>	<i>imhi, ismiṃ, ne, ni</i>	<i>ani, āni, e</i>	<i>amhi, ante, asmiṃ, ati</i>	<i>amhi, ante, asmiṃ, ati</i>	<i>amhi, asi, asmiṃ, e</i>	<i>uni, usi</i>
Gender pl.	Fem.	Masc.	Neut.	Masc.	Neut.	Neut.	Neut.
Nominative	<i>aro, ā</i>	<i>ā, āno</i>	<i>ani</i>	<i>antā, anto</i>	<i>antāni, anti</i>	<i>ā, āni</i>	<i>ū, ūni</i>

Tables

Table 3. *Substantive Noun and Adjectival Declensions (stem vowels mostly included)*

Vocative	<i>aro</i>	<i>ā, āno</i>		<i>antā, anto</i>	<i>antāni, anti</i>	<i>ā, āni</i>	<i>ū, ūni</i>
Accusative	<i>are, aro</i>	<i>ano, āno</i>	<i>ani</i>	<i>ante, anto</i>	<i>antāni, anti</i>	<i>āni, e</i>	<i>ū, ūni</i>
Instrumental	<i>arebhi, arehi, ūbhi, ūhi</i>	<i>uhi, ūbhi, ūhi, ebhi, (n)ehi</i>	<i>ehi</i>	<i>antebhi, antehi</i>	<i>antebhi, antehi</i>	<i>ebhi, ehi</i>	<i>ubhi, uhi</i>
Ablative	<i>arebhi, arehi, ārebhi, ārehi, ubhi, uhi, ūbhi, ūhi</i>	<i>ebhi, uhi, ūbhi, ūhi, (n)ehi</i>	<i>ani</i>	<i>antebhi, antehi</i>	<i>antebhi, antehi</i>	<i>ebhi, ehi</i>	<i>ubhi, uhi</i>
Genitive/Dative	<i>arānaṃ, ānaṃ, ārānaṃ, unaṃ, ūnaṃ</i>	<i>ānaṃ, ūnaṃ, naṃ</i>	<i>ānaṃ</i>	<i>antaṃ, antānaṃ, ataṃ</i>	<i>antaṃ, antānaṃ, ataṃ</i>	<i>ānaṃ</i>	<i>usaṃ, ūnaṃ</i>
Locative	<i>aresu, āresu, usu, ūsu</i>	<i>esu, usu, ūsu</i>	<i>asu, esu</i>	<i>antesu</i>	<i>antesu</i>	<i>esu</i>	<i>usu</i>

Note: Briefly note that stems in *a* are more common than any other. Abbreviations: masc.: masculine; neut.: neuter; fem.: feminine; sing.: singular; pl.: plural. *Sources:* **(a)** *Kaccāyana Pāli vyākaraṇaṃ* (Thitzana, Trans.) (Vol. 2; 2016). Pariyatti Press (Kacc 55–138, 160, 181–209, 211, 223–226, 237–246, 248, 566–568). **(b)** Ñāṇatusita (2005): *Pāli noun declension table*. **(c)** Warder, A. K. (2001). *Introduction to Pali*. The Pali Text Society (original work published 1963). **(d)** Wijesekera, O. H. (1993). *Syntax of the cases in the Pali nikayas* [Doctoral Dissertation, University of London]. The Postgraduate Institute of Pali and Buddhist Studies, University of Kelaniya (original work published 1936). <https://www.ancient-buddhist-texts.net/Textual-Studies/Syntax-of-the-Cases/index.htm>

Declensions – Pronouns

Table 4. *Pronominal Declensions*

PERSONAL PRONOUNS: 1. Person – Stem <i>ma(d)</i>, <i>mam</i>; 2. Person – Stem <i>ta(d)</i>		
1. Person	Singular	Plural
Nominative	<i>ahaṃ (amhi, asmi, mhi)</i>	<i>amhā, amhe, mayaṃ, mayhaṃ, no, vayaṃ</i>
Accusative	<i>maṃ, mamaṃ, mayhaṃ, mām-, me</i>	<i>amhākaṃ, amhe, asmākaṃ, asme, no</i>
Instrumental	<i>mayā, me</i>	<i>amhebbhi, amhehi, asmāhi, asmābhi, no</i>
Ablative	<i>mamato, mayā, me</i>	<i>amhebbhi, amhehi, asmāhi, asmābhi, no</i>
Gen./Dat.	<i>amhaṃ, mama(ṃ), mamā, maṃ, mayha(ṃ), me</i>	<i>amhaṃ, amhāka(ṃ), asmākaṃ, no (ne)</i>
Locative	<i>mayi, me</i>	<i>amhesu, asmāsu, asmesu</i>
2. Person	Singular	Plural
Nominative	<i>taṃ, tuvaṃ, tvaṃ</i>	<i>tumhe, vo</i>
Accusative	<i>taṃ, tavaṃ, tuvaṃ, tvaṃ, tyaṃ, te</i>	<i>tumhākaṃ, tumhe, vaṃ, ve, vo</i>
Instrumental	<i>tayā, te, tvāya</i>	<i>tumhebbhi, tumhehi, vaṃ, ve, vo</i>
Ablative	<i>tayā, te, tvāya</i>	<i>tumhebbhi, tumhehi</i>
Gen./Dat.	<i>tava(ṃ), tayā, te, tumhaṃ, tuyha(ṃ)</i>	<i>tumhaṃ, tumhāka(ṃ), tuyhaṃ (possibly), vaṃ, ve, vo</i>
Locative	<i>tayi, tvayi</i>	<i>tumhesu</i>

Tables

Table 4. *Pronominal Declensions*

DEMONSTRATIVE PERSONAL PRONOUNS – Stem <i>ta(d)</i>. Substitues in <i>n</i> are in Parentheses			
3. Person	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>sa, se, so, sū</i>	<i>tad-, tadaṃ, taṃ (naṃ), se</i>	<i>sā</i>
Accusative	<i>taṃ (naṃ), te</i>	<i>tad-, taṃ (naṃ), se</i>	<i>taṃ</i>
Instrumental	<i>tena (nena)</i>	<i>tena (nena)</i>	<i>tāya (nāya)</i>
Ablative	<i>tamhā, tasmā (nasmā), tato, tāto</i>	<i>tamhā, tasmā (nasmā), tato, tāto</i>	<i>tāya (nāya)</i>
Gen./Dat.	<i>asmā, assa, tassa (nassa), tāya (dat.)</i>	<i>asmā, assa, tassa (nassa), tāya (dat.)</i>	<i>assā, tassā (nassā), tassāya (nassāya), tāya, tissā, tissāya</i>
Locative	<i>asmim̄, tamhi, tamhī, tasmim̄ (nasmim̄)</i>	<i>asmim̄, tamhi, tamhī, tasmim̄ (nasmim̄)</i>	<i>assaṃ, tassaṃ, tāsam̄ (nassaṃ), tāya(ṃ) (nāyaṃ), tissaṃ</i>
3. Person	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>te (ne)</i>	<i>tāni</i>	<i>tā, tāyo</i>
Accusative	<i>te (ne)</i>	<i>tāni</i>	<i>tā (nā), tāyo</i>
Instrumental	<i>tebhi, tehi (nehi)</i>	<i>tebhi, tehi (nehi)</i>	<i>tābhi, tāhi (nāhi)</i>
Ablative	<i>tebhi, tehi (nehi)</i>	<i>tebhi, tehi (nehi)</i>	<i>tābhi, tāhi (nāhi)</i>
Gen./Dat.	<i>tesam̄ (nesam̄), tesānam̄</i>	<i>tesam̄ (nesam̄), tesānam̄</i>	<i>tāsam̄ (nāsam̄), tāsānam̄, sānam̄</i>
Locative	<i>tesu (nesu)</i>	<i>tesu (nesu)</i>	<i>tāsu (nāsu)</i>

Table 4. *Pronominal Declensions*

DEMONSTRATIVE PERSONAL PRONOUNS – Stem <i>eta(d)</i>			
3. Person	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>esa, eso, yo</i>	<i>etad-, etaṃ</i>	<i>esā</i>
Accusative	<i>etaṃ</i>	<i>etad-, etaṃ</i>	<i>etaṃ</i>
Instrumental	<i>etena</i>	<i>etena</i>	<i>etāya</i>
Ablative	<i>etamhā, etasmā</i>	<i>etamhā, etasmā</i>	
Gen./Dat.	<i>etassa</i>	<i>etassa</i>	<i>etissa, etissā</i>
Locative	<i>etamhi, etasmiṃ</i>	<i>etamhi, etasmiṃ</i>	
3. Person	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>ete</i>	<i>etāni</i>	<i>etā, etāyo</i>
Accusative	<i>ete</i>	<i>etāni</i>	<i>etā, etāyo</i>
Instrumental	<i>etehi</i>	<i>etehi</i>	<i>etāhi</i>
Ablative	<i>etehi</i>	<i>etehi</i>	<i>etāhi</i>
Gen./Dat.	<i>etesaṃ, etesānaṃ</i>	<i>etesaṃ, etesānaṃ</i>	<i>etāsaṃ</i>
Locative	<i>etesu</i>	<i>etesu</i>	<i>etāsu</i>

Tables

Table 4. *Pronominal Declensions*

DEMONSTRATIVE PRONOUNS – Stem <i>ima</i>			
	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>ayaṃ</i>	<i>idaṃ, imaṃ</i>	<i>ayaṃ</i>
Accusative	<i>imaṃ</i>	<i>idaṃ, imaṃ</i>	<i>imaṃ</i>
Instrumental	<i>aminā, anena, imena, iminā</i>	<i>aminā, anena, imena, iminā</i>	<i>asmā, imāya</i>
Ablative	<i>amhā, asmā, imamhā, imasma</i>	<i>amhā, asmā, imamhā, imasma</i>	<i>asmā, assā, assāya, imāya, imissā, imissāya</i>
Gen./Dat.	<i>assa, imassa, imissa</i>	<i>assa, imassa</i>	<i>imāya</i>
Locative	<i>amhi, asmim, imamhi, imasmi(ṃ)</i>	<i>asmim, imamhi, imasmiṃ</i>	<i>assaṃ, imāsaṃ, imāyaṃ, imissaṃ, imissā</i>
	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>ime</i>	<i>imāni</i>	<i>imā, imāyo</i>
Accusative	<i>ime</i>	<i>imāni</i>	<i>imā, imāyo</i>
Instrumental	<i>ebhi, ehi, imebhi, imehi</i>	<i>ebhi, ehi, imebhi, imehi</i>	<i>imābhi, imāhi</i>
Ablative	<i>ebhi, ehi, imebhi, imehi</i>	<i>ebhi, ehi, imebhi, imehi</i>	<i>imābhi, imāhi</i>
Gen./Dat.	<i>āsaṃ, esaṃ, esānaṃ, imesaṃ, imesānaṃ</i>	<i>āsaṃ, esaṃ, esānaṃ, imesaṃ, imesānaṃ</i>	<i>āsaṃ, imāsaṃ, imāsānaṃ</i>
Locative	<i>āsaṃ, esu, imesu</i>	<i>āsaṃ, esu, imesu</i>	<i>āsaṃ, imāsaṃ, imāsu</i>

Table 4. *Pronominal Declensions*

DEMONSTRATIVE PRONOUNS – Stem <i>amu</i>			
	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>amu, asu, asū</i>	<i>adum̐</i>	<i>asu</i>
Accusative	<i>amuṃ</i>	<i>adum̐, amuṃ</i>	<i>amuṃ</i>
Instrumental	<i>amunā</i>	<i>amunā</i>	<i>amuyā</i>
Ablative	<i>amumhā, amusmā</i>	<i>amumhā, amusmā</i>	<i>amuyā</i>
Gen./Dat.	<i>adussa, amussa</i>	<i>adussa, amussa</i>	<i>amussā, amuyā</i>
Locative	<i>amumhi, amusmiṃ</i>	<i>amumhi, amusmiṃ</i>	<i>amussaṃ, amuyam̐</i>
	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>amuyo, amū</i>	<i>amū, amūni</i>	<i>amuyo, amū</i>
Accusative	<i>amuyo, amū</i>	<i>amuyo, amū</i>	<i>amuyo, amū</i>
Instrumental	<i>amūbhi, amūhi</i>	<i>amūbhi, amūhi</i>	<i>amūbhi, amūhi</i>
Ablative	<i>amūbhi, amūhi</i>	<i>amūbhi, amūhi</i>	<i>amūbhi, amūhi</i>
Gen./Dat.	<i>amūsaṃ, amūsānaṃ</i>	<i>amūsaṃ, amūsānaṃ</i>	<i>amūsaṃ, amūsānaṃ</i>
Locative	<i>amūsu</i>	<i>amūsu</i>	<i>amūsu</i>

Tables

Table 4. *Pronominal Declensions*

RELATIVE PRONOUNS – stem <i>ya(d)</i>			
	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>yo</i>	<i>yad-, yaṃ</i>	<i>yā</i>
Accusative	<i>yaṃ</i>	<i>yad-, yaṃ</i>	<i>yaṃ</i>
Instrumental	<i>yena</i>	<i>yena</i>	<i>yāya</i>
Ablative	<i>yamhā, yasmā</i>	<i>yamhā, yasmā</i>	<i>yāya</i>
Gen./Dat.	<i>yassa</i>	<i>yassa</i>	<i>yassā, yāya</i>
Locative	<i>yamhi, yasmīṃ</i>	<i>yamhi, yasmīṃ</i>	<i>yassaṃ, yāya, yāyaṃ</i>
	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>ye</i>	<i>yāni</i>	<i>yā</i>
Accusative	<i>ye</i>	<i>yāni</i>	<i>yā</i>
Instrumental	<i>yebhi, yehi</i>	<i>yebhi, yehi</i>	<i>yāhi</i>
Ablative	<i>yebhi, yehi</i>	<i>yebhi, yehi</i>	<i>yāhi</i>
Gen./Dat.	<i>yesaṃ, yesānaṃ</i>	<i>yesaṃ, yesānaṃ</i>	<i>yāsaṃ, yāsānaṃ</i>
Locative	<i>yesu</i>	<i>yesu</i>	<i>yāsu</i>

Table 4. *Pronominal Declensions*

INTERROGATIVE PRONOUNS – stem <i>ka</i>			
	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>ko, ke</i>	<i>kiṃ</i>	<i>kā</i>
Accusative	<i>kaṃ, kiṃ</i>	<i>kiṃ</i>	<i>kaṃ</i>
Instrumental	<i>kena</i>	<i>kena</i>	<i>kāya</i>
Ablative	<i>kasmā, kismā</i>	<i>kasmā, kismā</i>	<i>kāya</i>
Gen./Dat.	<i>kassa, kissa</i>	<i>kassa, kissa</i>	<i>kassā, kāya, kissā</i>
Locative	<i>kamhi, kasmīṃ, kismīṃ</i>	<i>kamhi, kasmīṃ, kismīṃ</i>	<i>kayaṃ, kāya, kissaṃ</i>
	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>ke</i>	<i>kāni</i>	<i>kā, kāyo</i>
Accusative	<i>ke</i>	<i>kāni</i>	<i>kā, kāyo</i>
Instrumental	<i>kebhi, kehi</i>	<i>kebhi, kehi</i>	<i>kāhi</i>
Ablative	<i>kebhi, kehi</i>	<i>kebhi, kehi</i>	<i>kāhi</i>
Gen./Dat.	<i>kesaṃ, kesānaṃ</i>	<i>kesaṃ, kesānaṃ</i>	<i>kāsaṃ, kāsānaṃ</i>
Locative	<i>kesu</i>	<i>kesu</i>	<i>kāsu</i>

Tables

Table 4. *Pronominal Declensions*

INDEFINITE PRONOUNS – <i>ka</i> + suffix <i>-ci</i>			
	Masculine Singular	Neuter Singular	Feminine Singular
Nominative	<i>koci</i>	<i>kiñci</i>	<i>kāci</i>
Accusative	<i>kañci, kiñci</i>	<i>kiñci</i>	<i>kañci</i>
Instrumental	<i>kenaci</i>	<i>kenaci</i>	<i>kāyaci</i>
Ablative	<i>kasmāci</i>	<i>kasmāci</i>	<i>kāyaci</i>
Gen./Dat.	<i>kassaci</i>	<i>kassaci</i>	<i>kassāci, kāyaci</i>
Locative	<i>kamhici, kamiñci, kimhici, kismiñci</i>	<i>kamhici, kamiñci, kimhici, kismiñci</i>	<i>kassañci, kāyaci, kāyañci</i>
	Masculine Plural	Neuter Plural	Feminine Plural
Nominative	<i>keci</i>	<i>kānici</i>	<i>kāci, kāyoci</i>
Accusative	<i>keci</i>	<i>kānici</i>	<i>kāci, kāyoci</i>
Instrumental	<i>kehici</i>	<i>kehici</i>	<i>kāhici</i>
Ablative	<i>kehici</i>	<i>kehici</i>	<i>kāhici</i>
Gen./Dat.	<i>kesañci</i>	<i>kesañci</i>	<i>kāsañci</i>
Locative	<i>kesuci</i>	<i>kesuci</i>	<i>kāsuci</i>

Table 4. *Pronominal Declensions*

DEFECTIVE PRONOUNS – stem <i>na</i>			
	Masculine Singular	Neuter Singular	Feminine Singular
Accusative	<i>naṃ, ena(ṃ)</i>	<i>naṃ, ena(ṃ)</i>	<i>naṃ, enaṃ</i>
Gen./Dat.	<i>nassa</i>	<i>nassa</i>	
	Masculine Plural	Neuter Plural	Feminine Plural
Accusative	<i>ne</i>		
Gen./Dat.	<i>nesaṃ</i>		

Sources: **(a)** Andersen, D. & Smith, H. (1924). Amhi. In *A critical Pāli dictionary*. The Royal Danish Academy. https://cpd.uni-koeln.de/search?article_id=8903. **(b)** *Kaccāyana Pāli vyākaraṇaṃ* (Thitzana, Trans.) (Vol. 2; 2016). Pariyatti Press (Kacc 139–151). **(c)** Ñāṇatusita (2005): *Pali verb conjugation pronouns*. **(d)** Oberlies, T. (2019). *Pāli grammar. The language of the canonical texts of Theravāda Buddhism – Phonology and morphology* (Vol. I). The Pali Text Society.

Tables

Cardinals and Ordinals

Table 5. *Cardinal and Ordinal Numerals*

Cardinals	Ordinals
1: <i>eka</i>	1 st : <i>paṭhama</i>
2: <i>dvi, di, du, dve</i>	2 nd : <i>dutiya</i>
3: <i>ti</i> or <i>tri</i>	3 rd : <i>tatiya</i>
4: <i>catu</i> or <i>catur</i> (before a vowel)	4 th : <i>catuttha, turīya</i>
5: <i>pañca</i>	5 th : <i>pañcatha, pañcama</i>
6: <i>cha</i>	6 th : <i>chaṭṭha, chatthama</i>
7: <i>satta</i>	7 th : <i>sattha, sattama</i>
8: <i>aṭṭha</i>	8 th : <i>aṭṭhama</i>
9: <i>nava</i>	9 th : <i>navama</i>
10: <i>dasa, rasa, lasa, ḷasa</i>	10 th : <i>dasama, dasī</i>
11: <i>ekārasa, ekādasa</i>	11 th : <i>ekārasa, ekarasama, ekādasa, ekādasama, ekadasī</i>
12: <i>bārasa, dvārasa</i>	12 th : <i>dvādasa, bārasa, bārasama, barasama, dvādasama</i>
13: <i>tedasa, terasa, telasa</i>	13 th : <i>tedasama, telasa, telasama, terasama</i>
14: <i>catuddasa, cuddasa, coddasa</i>	14 th : <i>catuddasa, catuddasama, cuddasama</i>
15: <i>pañcadasa, pañnarasa, pannarasa</i>	15 th : <i>pañcadasa, pañcadasama, pannarasama</i>

Māgadhabhāsā (Pāli)

Table 5. Cardinal and Ordinal Numerals

16: <i>soḷasa, sorasa</i>	16 th : <i>soḷasa, soḷasama</i>
17: <i>sattadasa, sattarasa</i>	17 th : <i>sattadasa, sattadasama, sattarasama</i>
18: <i>aṭṭhādasā, aṭṭhārasa</i>	18 th : <i>aṭṭhādasā, aṭṭhādasama, aṭṭhārasama</i>
19: <i>ekūnavīsati, ekūnavīsaṃ</i>	19 th : <i>ekūnavīsatima</i>
20: <i>vīsati, vīsaṃ, vīsa, vīsā</i>	20 th : <i>vīsatima</i>
21: <i>ekavīsati, ekavīsaṃ</i>	21 st : <i>ekavīsatima</i>
22: <i>dvāvīsati, dvāvīsa, bāvīsa</i>	22 nd : <i>dvāvīsatima</i>
23: <i>tevīsati, tevīsa</i>	23 rd : <i>tevīsatima</i>
24: <i>catuvīsati, catuvīsa, catubbīsa</i>	24 th : <i>catuvīsatima, cattālīsatima</i>
25: <i>pañcavīsati, pañcavīsa, paṇṇavīsati</i>	25 th : <i>pañcavīsatima</i>
26: <i>chabbīsati</i>	26 th : <i>chabbīsatima</i>
27: <i>sattabīsati, sattavīsati</i>	27 th : <i>sattabīsatima</i>
28: <i>aṭṭhavīsaṃ</i>	28 th : <i>aṭṭhavīsatima</i>
29: <i>ekūnatiṃsati, ekūnatiṃsaṃ</i>	29 th : <i>ekūnatiṃsatima</i>
30: <i>tiṃsati, tiṃsaṃ, tiṃsā, tiṃsa, tidasa</i>	30 th : <i>tiṃsatima</i>
31: <i>ekatīṃsati</i>	31 st : <i>ekatīṃsatima</i>
32: <i>dvattiṃsati, dvattiṃsa</i>	32 nd : <i>dvattiṃsatima</i>

Tables

Table 5. *Cardinal and Ordinal Numerals*

40: <i>cattālīsaṃ, cattārīsaṃ</i>	40 th : <i>cattālīsatiṃ</i>
50: <i>paññāsā, paññāsa, paññāsaṃ</i>	50 th : <i>paññāsama</i>
60: <i>saṭṭhi</i>	60 th : <i>saṭṭhima</i>
70: <i>sattati, sattari</i>	70 th : <i>sattatiṃ</i>
80: <i>asīti</i>	80 th : <i>asītiṃ</i>
90: <i>navuti</i>	90 th : <i>navutiṃ</i>
100: <i>sataṃ</i>	100 th : <i>satama</i>
200: <i>bāsataṃ, dvāsataṃ</i>	200 th : <i>bāsataṃ</i>
1000: <i>sahassaṃ</i>	1000 th : <i>sahassama</i>
10,000: <i>dasasahassaṃ</i>	10,000 th : <i>dasasahassama</i>
100,000: <i>satasahassaṃ, lakkhaṃ</i>	100,000 th : <i>satasahassatama, lakkhatama</i>
1,000,000: <i>dasalakkha</i>	1,000,000 th : <i>dasalakkhatama</i>
10,000,000: <i>koṭi</i>	10,000,000 th : <i>koṭiṃ</i>
100 x <i>koṭi</i> : <i>pakoṭi</i>	
1 + 28 zeros: <i>nahuta</i>	
1 + 35 zeros: <i>ninnahuta</i>	
1 + 42 zeros: <i>akkhohiṇi</i>	

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Table 5. *Cardinal and Ordinal Numerals*

1 + 49 zeros: *bindhu*

1 + 56 zeros: *ambutam*

1 + 63 zeros: *nirabbutam*

1 + 70 zeros: *atataṃ*

1 + 77 zeros: *apapam*

1 + 84 zeros: *aṭaṭam*

1 + 91 zeros: *sokandhikam*

1 + 98 zeros: *uppalam*

1 + 105 zeros: *kumudam*

1 + 112 zeros: *padumam*

1 + 119 zeros: *puṇḍarikam*

1 + 126 zeros: *kathānam*

1 + 133 zeros: *mahākathānam*

1 + 140 zeros: *asaṅkheyyam*

uncountable: *asaṅkheyyam*

Sources: **(a)** *Kaccāyana Pāli vyākaraṇam* (Thitzana, Trans.) (Vol. 2; 2016). Pariyatti Press (Kacc 571 for the changes of (i) *eka* → *ekā* and *dasa* → *rasa*; (ii) *dvi* → *bā* and *dasa* → *vīsaṃ*; (iii) *cha* → *so* [also Kacc 376] and *dasa* → *ḷasa*). **(b)** Ānandajoti (2016): *Pāli numbers (saṅkhyā)*.

Tables

Conjugations – Verbs

Table 6. *Verb Forms (stem vowels at times included)*

PRIMARY VERBS			
PRESENT (<i>vattamānakālo</i>)			
INDICATIVE (<i>vattamānā</i>)			
Active Voice		Middle Voice	
Sing.	Plural	Sing.	Plural
1. <i>haṃ, mi, ṃ</i>	<i>āmasi, omasi, ma</i>	<i>e</i>	<i>āmase, omase, mahe, mha, mhase, mhe</i>
2. <i>asī, si</i>	<i>(a)tha</i>	<i>ase</i>	<i>avho, vhe</i>
3. <i>atī, ti</i>	<i>antī, nti</i>	<i>ate</i>	<i>ante, are</i>
IMPERATIVE/BENEDICTIVE (<i>pañcamī</i>)			
1. <i>mi</i>	<i>ma, mu</i>	<i>e</i>	<i>mase, mhase</i>
2. <i>a (stem), (a)hi, ā, āsi, e, ssu</i>	<i>(a)tha</i>	<i>as(s)u</i>	<i>avho</i>
3. <i>(a)tu, atū</i>	<i>ntu</i>	<i>taṃ</i>	<i>antaṃ, aruṃ, are</i>
OPTATIVE/POTENTIAL (<i>sattamī</i>)			
1. <i>e, ehaṃ, eyyahaṃ, eyyaṃ, eyyāhaṃ, eyyāmi</i>	<i>ema, emasi, emu/omu, eyyāma</i>	<i>etha, eyyaṃ, eyyāhe</i>	<i>emase, emhase, eyyāmhe, (iy)āmase</i>
2. <i>e, esi, eyya, eyyāsi</i>	<i>etha, eyyātha</i>	<i>etha, etho, eyyātha, eyyātho</i>	<i>eyyavho</i>
3. <i>e, eyya, eyyāti</i>	<i>eyyu(ṃ)</i>	<i>etha, eyyātha</i>	<i>eraṃ, etha</i>

Māgadhabhāsā (Pāli)

Table 6. *Verb Forms (stem vowels at times included)*

PAST (atītakālo)			
AORIST (ajjatanī)			
Root Aorist			
Active Voice		Middle Voice	
Sing.	Plural	Sing.	Plural
1. ṃ	<i>mha, mhā</i>		<i>mhase</i>
2. ā, o	<i>ttha</i>		
3. ā	<i>u, uṃ, ū</i>	<i>tha, ttha</i>	
a-Aorist			
1. <i>a(ṃ), ā</i>	<i>amha, amhā, āma</i>	<i>aṃ</i>	<i>mase, mhasa, mhase, mhe</i>
2. <i>a, asi, ā, o</i>	<i>atha, attha</i>	<i>ā, se</i>	<i>vhaṃ</i>
3. <i>ā</i>	<i>u, uṃ, ū, ṃsu</i>	<i>tha, ttha</i>	<i>e, ū, re, ruṃ, tthuṃ</i>
s-Aorist			
1. <i>siṃ</i>	<i>mha, siṃha, siṃh, ā</i>	<i>thaṃ</i>	<i>mhase</i>
2. <i>si</i>	<i>sittha, ttha</i>	<i>tha</i>	
3. <i>si</i>	<i>ṃsu, siṃsu, sisuṃ, suṃ</i>	<i>tha</i>	
is-Aorist			
1. <i>iṃ, issa, is(s)aṃ</i>	<i>imha, imhā</i>	<i>itthaṃ, issaṃ</i>	<i>(ā)mase, imhase, imhāse, imhe</i>

Tables

Table 6. *Verb Forms (stem vowels at times included)*

2.	i, ī	ittha, ittho	ittha, ittho, ssu	ivho
3.	i, ī	iṃsu, isu(ṃ), uṃ	ittha, ittho, taṃ	(a)ntaṃ, ittha, ruṃ
IMPERFECT (hiyattani)				
Active Voice		Middle Voice		
	Sing.	Plural	Sing.	Plural
1.	a, aṃ	mha, mhā	iṃ, ṃ	mhase
2.	o	ttha	se	vhaṃ
3.	a, ā, ttha	u	ttha	tthuṃ
PERFECT (parokkhā)				
1.	a	mha	i	mhe
2.	e	ttha	ttho	vho
3.	a	u	ttha	re
FUTURE (bhavissatikālo)				
FUTURE INDICATIVE (bhavissanti)				
1.	hāmi, (i)ssāmi	hāma, (i)ssāma	(i)ssaṃ	(i)ssamhe, (i)ssāmase, (i)ssāmhe
2.	hasi, (h)isi, (i)ssasi	hatha, (i)ssatha	(i)ssase	(i)ssavhe
3.	hati, (i)hiti, (i)ssati	hanti, hinti, (i)ssanti	(i)ssate	(i)ssante, (i)ssare

Māgadhabhāsā (Pāḷi)

Table 6. *Verb Forms (stem vowels at times included)*

CONDITIONAL (<i>kālātipatti</i>)			
Active Voice		Middle Voice	
Sing.	Plural	Sing.	Plural
1. <i>a(ṇ)</i>	<i>amhā, āma</i>	<i>aṇ</i>	<i>amhase, āmhase</i>
2. <i>a, asi, e</i>	<i>atha</i>	<i>ase</i>	<i>avhe</i>
3. <i>a, atī, ā</i>	<i>aṃsu</i>	<i>atha</i>	<i>iṃsu</i>
SECONDARY VERBS			
PASSIVE (<i>kammakārako</i>)		CAUSATIVE (<i>kārita</i>)	
<i>īya, īyya, īra, īya, ūra, ya</i>		<i>āya, āpaya, āpāpaya, āpāpe, āpe, e, paya, pāpaya, pāpe, pe</i>	
DESIDARATIVE (<i>tumicchatta</i>)		INTENSIVE (AKA “FREQUENTATIVE”)	
<i>cha, kha, sa</i>		<i>a, ya</i>	
DENOMINATIVE (<i>dhāturūpakasaddo</i>)			
<i>a, āya, āla, āpe, āra, āya, e, īya, īya</i>			
INDECLINABLE FORMS			
ABSOLUTIVE (<i>tvādiyantapadaṃ</i>)		INFINITIVE (<i>tumantapadaṃ</i>)	
<i>aṃ, akaṃ, eyya, (i)cca, iṃ, (i)tuye, (i)tūna, (i)tvā, (i)tvāna, (i)ya, (i)yāna, tā, ttā, (t)tu(ṃ), (t)ya</i>		<i>(an)āya, (i)tāye, (i)tum, (i)tuye, tase, tave, taye</i>	

Tables

Table 6. *Verb Forms (stem vowels at times included)*

PARTICIPLES	
PRESENT ACTIVE PARTICIPLE	FUTURE ACTIVE PARTICIPLE
<i>(a)ṃ, anta, at, aya(n)t</i>	<i>a(ṃ), esin, nt (aṃ, nt to future stem [i]ssa)</i>
PRESENT MIDDLE PARTICIPLE	FUTURE MIDDLE PARTICIPLE
<i>ana, ayamāna, ayāna, āna, māna</i>	<i>āna, māna</i>
PRESENT PASSIVE PARTICIPLE	FUTURE PASSIVE PARTICIPLE¹⁹¹
<i>ya [passive base] + māna</i>	<i>aneyya, aniya, aniyya, aniya, eyya, (i)cca, (i)tabba, (i)tāya, (i)ya, tayya, teyya, (r)iriya</i>
PAST ACTIVE PARTICIPLE	PAST PASSIVE PARTICIPLE
<i>vā or vī (tavantu, tāvī) to past passive participles</i>	<i>na, ta, tta, ṭha</i>

Note: All imperfect suffixes as well as the intensive affix *ya* can be appended with or without augment *a* (Duroiselle, 1906/1997: 87). *Sources:* **(a)** *Kaccāyana Pāli vyākaraṇaṃ* (Thitzana, Trans.) (Vol. 2; 2016). Pariyatti Press (Kacc 423 [present], 424 [imperative], 425 [optative], 426 [perfect], 427 [imperfect], 428 [aorist], 429 [future], 430 [conditional], 435–437 [denominative], 438 [causative], 555 [past participle], 561 [infinitive], 564 [absolute], 565 [present participle], 571 [for substitution of imperative *hi* with *ssu*]). **(b)** Duroiselle, C. (1997): *Practical grammar of the Pali language*. Buddha Dharma Education Association (original work published 1906). **(c)** Oberlies, T. (2019). *Pāli grammar. The language of the canonical texts of Theravāda Buddhism – Phonology and morphology* (Vol. I). The Pali Text Society. **(d)** Palistudies (2018g). ‘Secondary’ derivations - *Verb conjugation*. <https://palistudies.blogspot.com/2018/06/pali-verb-conjugation-part-4-secondary.html#Cause>.

¹⁹¹ Aka “gerundive” or “participle of necessity.”

Derivatives of Root *as* etc.

Table 7. *Some Derivatives of Roots as, bhū and kara*

√as	
PRESENT (vattamānakālo)	
INDICATIVE (vattamānā)	
Sing.	Plural
1. <i>amhi, asmi, mhi</i>	<i>amha, amhase, amhasi, amhā, amhāse, amhāsi, asma, asmase, asmā</i>
2. <i>asi, si, sī</i>	<i>attha</i>
3. <i>atthi</i>	<i>santi, sante</i>
IMPERATIVE/BENEDICTIVE (pañcamī)	
1. <i>amhi, asmi, mhi</i>	<i>amha, amhase, amhasi, amhā, amhāse, amhāsi, asma, asmase, asmā</i>
2. <i>(a)hi</i>	<i>attha</i>
3. <i>atthu, siyā</i>	<i>santu</i>
OPTATIVE/POTENTIAL (sattamī)	
1. <i>assa(ṃ), siyaṃ, siyā</i>	<i>assāma</i>
2. <i>assa(sī), assu, siyā</i>	<i>assatha</i>
3. <i>assa, assu, siyā</i>	<i>assu(ṃ), siyaṃsu, siyuṃ</i>

Tables

Table 7. *Some Derivatives of Roots as, bhū and kara*

PAST (<i>atītakālo</i>)			
AORIST (<i>ajjatanī</i>)			
	Sing.	Plural	
1.	<i>āsiṃ</i>	<i>āsimha</i>	
2.	<i>āsi</i>	<i>āsittha</i>	
3.	<i>āsa</i> (perfect), <i>āsi</i>	<i>āsiṃsu</i> , <i>āsisu(ṃ)</i> , <i>āsu</i> , <i>āsuṃ</i>	
PRESENT ACTIVE PARTICIPLE			
Gender, sing.	Masc.	Neut.	Fem.
Nominative	<i>santi</i>	<i>santaṃ</i>	<i>sati</i>
Vocative	<i>santa</i>	<i>santa</i>	<i>sati</i>
Accusative	<i>santaṃ</i>	<i>santaṃ</i>	<i>satiṃ</i> , <i>satiyaṃ</i>
Instrumental	<i>santena</i> , <i>satā</i>	<i>antena</i> , <i>satā</i>	<i>satiyā</i>
Ablative	<i>santamhā</i> , <i>santasmā</i> , <i>santā</i> , <i>satā</i>	<i>santamhā</i> , <i>santasmā</i> , <i>santā</i> , <i>satā</i>	<i>satiyā</i>
Genitive/Dative	<i>santassa</i> , <i>sato</i>	<i>santassa</i> , <i>sato</i>	<i>satiyā</i>
Locative	<i>sati</i>	<i>sati</i>	<i>satiyaṃ</i> , <i>satiyā</i>
Gender, pl.	Masc.	Neut.	Fem.
Nominative	<i>santo</i>	<i>santāni</i>	<i>satiyo</i> , <i>sati</i>

Māgadhabhāsā (Pāḷi)

Table 7. Some Derivatives of Roots *as*, *bhū* and *kara*

Vocative	<i>santo</i>	<i>santāni</i>	<i>satiyo, satī</i>
Accusative	<i>sante</i>	<i>santāni</i>	<i>satiyo, satī</i>
Instrumental	<i>sabbhi, santehi</i>	<i>sabbhi, santehi</i>	<i>satībhi, satīhi</i>
Ablative	<i>sabbhi, santehi</i>	<i>sabbhi, santehi</i>	<i>satībhi, satīhi</i>
Genitive/Dative	<i>sataṃ</i>	<i>sataṃ</i>	<i>satīnaṃ</i>
Locative	<i>santesu</i>	<i>santesu</i>	<i>satīsu</i>
<hr/>			
√bhū			
<hr/>			
PRESENT (vattamānakālo)			
<hr/>			
INDICATIVE (vattamānā)			
<hr/>			
	Sing.	Plural	
1.	<i>bhavāmi, homi</i>	<i>bhavāma, bhavāmase, homa</i>	
2.	<i>bhavasi, hosi</i>	<i>bhavatha, hotha</i>	
3.	<i>bhavati, hoti</i>	<i>bhavanti, honti</i>	
<hr/>			
IMPERATIVE/BENEDICTIVE (pañcamī)			
<hr/>			
1.	<i>homi</i>	<i>bhavāma, homa, bhavāmase</i>	
2.	<i>bhava, bhavassu, bhavāhi, hohi</i>	<i>bhavatha, bhavātha, hotha</i>	
3.	<i>bhavatu, hotu</i>	<i>bhavantu, hontu</i>	

Tables

Table 7. *Some Derivatives of Roots as, bhū and kara*

OPTATIVE/POTENTIAL (<i>sattamī</i>)	
Sing.	Plural
1. <i>bhaveyyaṃ, heyyāmi</i>	<i>bhaveyyāma, heyyāma</i>
2. <i>bhaveyyāsi, heyyāsi</i>	<i>bhavetha, heyyātha</i>
3. <i>bhave, bhaveyya, heyya</i>	<i>bhaveyyuṃ, heyyuṃ</i>
PAST (<i>atītakālo</i>)	
AORIST	
1. <i>ahosiṃ, ahuṃ</i>	<i>ahosiṃhā, ahumhā</i>
2. <i>ahosi</i>	<i>ahosittha</i>
3. <i>ahosi, ahu</i>	<i>ahesuṃ, ahuṃ</i>
FUTURE (<i>bhavissatikālo</i>)	
1. <i>hehāmi, hehissāmi, hemi, hessāmi, hohāmi, hohissāmi</i>	<i>hehāma, hehissāma, hema, hessāma, hohāma, hohissāma</i>
2. <i>hehisi, hehissasi, hesi, hessasi, hohisi, hohissasi</i>	<i>hehissatha, hehitha, hessatha, hetha, hohissatha, hohitha</i>
3. <i>hehissati, hehiti, hessati, heti, hohissati, hohiti</i>	<i>hehinti, hehissanti, henti, hessanti, hohinti, hohissanti</i>

Māgadhabhāsā (Pāli)

Table 7. Some Derivatives of Roots *as*, *bhū* and *kara*

√kara	
PRESENT (vattamānakālo)	
INDICATIVE (vattamānā)	
Sing.	Plural
1. <i>karomi, kummi</i>	<i>karoma, karom(h)ase</i>
2. <i>karosi, kubbasi, kuruse</i>	<i>karotha</i>
3. <i>kariyyati, karīyati, karoti, kayirati, kayyati, kīrati, kubbati, kurute</i>	<i>karonti, kubbanti</i>
IMPERATIVE/BENEDICTIVE (pañcamī)	
1. <i>karomi</i>	<i>karoma, karomase</i>
2. <i>kara, karassu, karohi, kuru</i>	<i>karotha</i>
3. <i>karotha, karotu, kurutaṃ, kurutu</i>	<i>karontu</i>
OPTATIVE/POTENTIAL (sattamī)	
1. <i>kare, kareyyaṃ, kareyyāmi</i>	<i>kareyyāma</i>
2. <i>kare, kareyyāsi, kariyā, kariyāhi, kayirāsi</i>	<i>kareyyātha, kayirātha</i>
3. <i>kubbetha, kare, kareyya, kariyā(tha), kayira, kayirā(tha), kuriyā, kuyirā</i>	<i>kare, kareyyuṃ, kayiruṃ</i>

Tables

Table 7. *Some Derivatives of Roots as, bhū and kara*

PAST (<i>atītakālo</i>)	
Sing.	Plural
1. <i>akaṃ, akaraṃ, (a)karīṃ, akāsiṃ, kāhāsiṃ</i>	<i>akamha, akaramha, akaramhase, akarāma, akarimha, akāsimha, karimhā</i>
2. <i>akara, akarā, (a)karī, akā, akāsi</i>	<i>(a)karittha, akattha</i>
3. <i>akaraṃ, akarā, akarittha, (a)karī, akā, akāsi</i>	<i>akaṃsu, (a)karūm</i>
FUTURE (<i>bhavissatikālo</i>)	
1. <i>karissaṃ, karissāmi, kassaṃ, kassāmi, kāhāmi, kāsaṃ</i>	<i>karissāma, kassāma, kāhāma</i>
2. <i>karissasi, kāhasi</i>	<i>kāhatha</i>
3. <i>karissati, kariyissati, kāhati, kāhiti, kāsati</i>	<i>karissanti, karissare, kāhanti, kāhinti</i>
CONDITIONAL (<i>kālātipatti</i>)	
3. <i>(a)karissa, akarissā</i>	
INDECLINABLE FORMS	
ABSOLUTIVE (<i>tvādiyantapadaṃ</i>)	INFINITIVE (<i>tumantapadaṃ</i>)
<i>kacca, karitvā, karitvāna, kariya, kattā, katvā, kavāna, kāraṃ, kāraṃ, kātūna</i>	<i>kattuṃ, kātave, kātuṃ</i>

Māgadhabhāsā (Pāli)

Table 7. *Some Derivatives of Roots as, bhū and kara*

Note: Abbreviations: masc.: masculine; neut.: neuter; fem.: feminine; sing.: singular; pl.: plural; pass.: passive. *Sources:* **(a)** Andersen, D. & Smith, H. (1924). Atthi. In *A critical Pāli dictionary*. The Royal Danish Academy. **(b)** Atthi (n.d.). In *Wiktionary – The free dictionary*. <https://en.wiktionary.org/wiki/atthi#Pali>. **(c)** Cone, M. (2001). Karoti. In *A dictionary of Pāli* (Vol. I). The Pali Text Society. **(d)** Oberlies, T. (2019). *Pāli grammar. The language of the canonical texts of Theravāda Buddhism – Phonology and morphology* (Vol. I). The Pali Text Society. **(e)** Santa (n.d.). In *Wiktionary – The free dictionary*. <https://en.wiktionary.org/wiki/santa#Pali>

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