

Bilingualism in the *Brahmajālasutta*, Indo-Aryan & Indigenous

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Abstract

The first part of the *Brahmajālasutta*—the *Cūḷa-*, *Majjhima-* and *Mahāsīla* sections—contain almost 200 words of non-Indo Aryan (non-IA) derivation in the root transmission (*mūla*) and commentary. Many of these are lists of indigenous items, like vegetation and various cultural practices in their Aryanized form; others are glosses of a Dravidian or indigenous term in Middle Indic, or vice-versa. All these terms occur in the context of practices which monks are to avoid, suggesting that many of them were specific to the Dravidian culture. It is also possible that the plethora of *desi* (autochthonous) terminology indicates a translation of these sections from an underlying Dravidian work. At the very least it indicates the presence of extensive bilingualism at the time these sections were transmitted, and supports an old hypothesis of a prominent Dravidian substrate underlying Middle-Indo Aryan languages and Pāli, manifested in both structural features and lexical borrowing.

Keywords

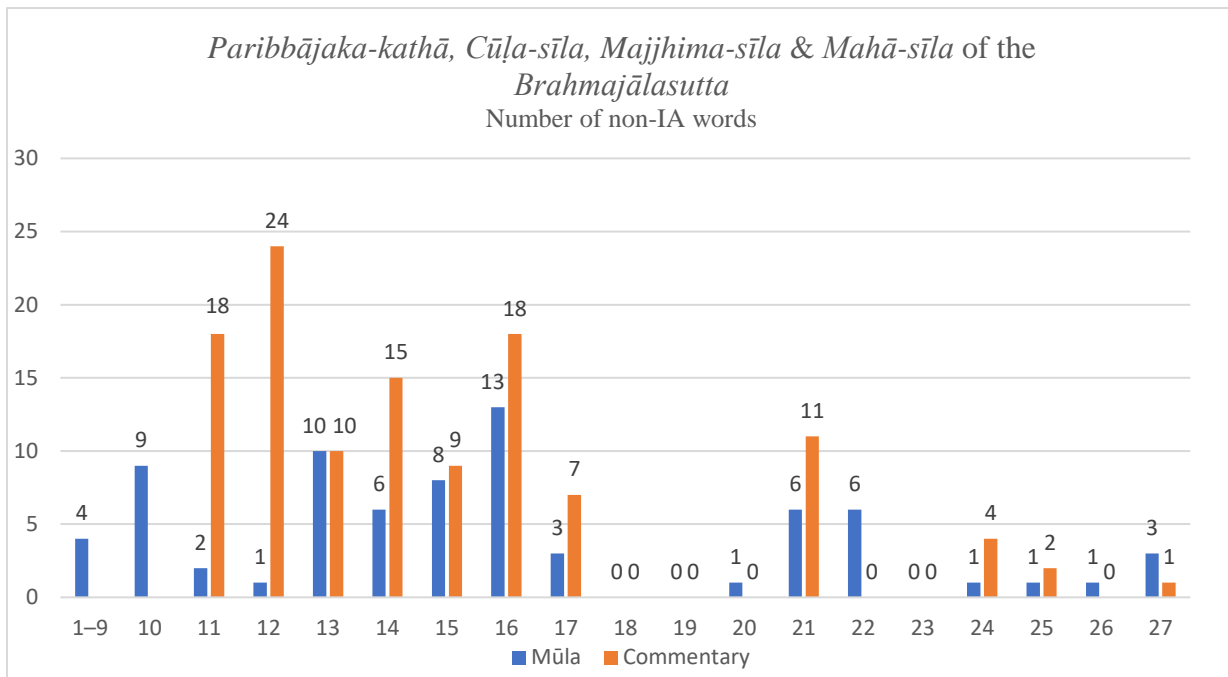
Brahmajālasutta, Pāli, Middle Indic, Middle Indo-Aryan, Dravidian languages, bilingualism, Indian linguistic area, Sprachbund, substrate.

Introduction

Most Buddhist *suttas* are composed in a language which is almost 100% pure Middle Indic (MI), except for proper names like toponyms which often preserve their indigenous heritage; so when there is a sudden change in word etymology, as occurs at the beginning of the *Brahmajālasutta*, one must try to understand the significance of that spike. Here the number of non-IA words goes from only four in the first nine sections of the work to nine in Section ten, and, especially in the commentary, goes as high as twenty-four in section twelve and fifteen in Section fourteen, before

gradually declining back to its normal, near zero non-IA content at the start of Section twenty-eight (*Pubbantakappikā*). Graphically this charts as follows:¹

Figure One



Altogether there are approx. 180 words of non-IA etymology that are found here. Although the *Cūḷa-sīla* section does not begin until section ten, it is pre-figured in section nine by a long list of

¹ Section markers are on the horizontal axis and follow the PTS and Burmese numbering. For a list of words used, see Appendix A. The ones listed with a question mark (?) are considered “unsure” or “contested” to use Mayrhofer’s terminology. Some I have included as non-IA based on my own criteria which are summarized in Levman 2021a: Chapter two, which also contains numerous examples of the methodology used to determine the etymology of a word. The commentary for sections one-nine has been omitted from consideration here as it contains fifty pages of material not directly related to the *Brahmajālasutta*, like the meaning of Tathāgata which occupies ten pages alone in the PTS edition, pp. 59-69).

prohibitions which introduce a significant number (nine) of words of non-IA derivation, which are then repeated and commented on in the following *Cūḷa-Majjhima-* and *Mahā-sīla* sections.

The Indian Linguistic Area

The many shared features between Dravidian and Indo-Aryan were named the “Indian Linguistic Area” by Emeneau in 1956 and since that time his discoveries have been validated over and over again (1956, reprinted 1980: 105-125; Sjoberg 1992; Krishnamurti 2003: 38-42; Levman 2013: 147-152; Levman 2021a: Chapter four). Emeneau defined the phrase “linguistic area” as an area in which “languages belonging to more than one family show traits in common which do not belong to the other members of (at least) one of the families” (1980: 1). In Emeneau’s definition of the term with respect to South Asia, the common traits belong to the Indo Aryan languages (OI, MI, NIA) and Dravidian and Munda (and perhaps Tibeto-Burman), but are not shared by Indo Aryan’s closest cousin, Iranian. These include, *inter alia*, the use of retroflex consonants, the extensive use of non-finite verbs in strings as a compositional principle, the use of the quotative marker in reporting direct speech, syntactic parallels between the proto-Dravidian *-um* suffix and IA *api*, and the use of what he called “echo words” or “expressives.” Although IA languages show a lot of structural borrowing from Dravidian, the amount of lexical borrowing is not great; there is much more borrowing the other way around, from Indo-Aryan into the Dravidian languages, which is certainly what one would expect considering the political, economic and military dominance of the immigrating IA peoples. Yet there is also a significant amount of borrowing the other way around, as this article will demonstrate.

Emeneau postulated that the structural borrowing was facilitated through extensive bilingualism. Because of their economic interdependence and growing IA political and cultural influence, the native population was forced to learn the IA languages. In doing so, they imposed their own grammatical structures on the foreign language and in some cases, their own terminology. Or, the terminology was simply adopted by the IA immigrants, especially for unfamiliar items for which they lacked referents. Krishnamurti suggests that Middle Indo-Aryan was “built on a Dravidian substratum”:

The fact that the invading Aryans could never have outnumbered the natives, even though they politically controlled the latter, is a valid inference. We may formulate the situation as follows: If the speakers of L1 (mother tongue) are constrained to accept L2 (2nd language) as their ‘*lingua franca*’, then an L3 will develop with the lexicon of L2 and with the dominant structural features of L1 and L2; L1 = Dravidian languages, L2 = Varieties of Sanskrit, L3 = Middle Indic. This is also true of modern Indian varieties of English, which have an English (L2) lexicon but a large number of structural features of Indian languages (L1) (Krishnamurti 2003: 41).

This article is not about structural influence—which is well covered elsewhere—but lexical borrowing. We can see this lexical substrate surfacing in the opening sections of the

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Brahmajālasutta, the catalyst being certain religious and cultural practices forbidden to the Buddhist monks. Many of these words are of autochthonous origin, suggesting that the practices originated with the local population. We often find the word communicated in two forms, Indo-Aryan and Dravidian/Munda, both in the root text and the commentary, side-by-side and as a gloss, suggesting that bilingualism had an important role to play in the *sutta* and commentary reaching its present form.

Brahmajālasutta

The *Brahmajālasutta* is an important composition in the *Tipiṭaka*, being the first *sutta* in the *Dīgha Nikāya* collection and one of only two *suttas* explicitly mentioned at the First Council (Vin 2, 287¹⁶, the second *sutta* mentioned is the *Sāmaññaphalasutta*, DN 2). It lists sixty-two wrong views espoused by non-Buddhists, prefaced by a list of abstentions which the Buddha defined as part of his *sīla* (“morality”). This begins with the five precepts in sections seven through nine, and continues with a long list of prohibitions in section ten where the *desi* words appear in significant numbers. After the *sīla* sections are complete, the list of sixty-two views are presented which are almost wholly Middle Indic in vocabulary with very few native words, just like a “normal” *sutta*.

G. Ch. Pande considered the *sutta* to be a “late composition compiled out of ancient materials” (1974: 82) because of the presence of “formular expressions...long fossilized”; however, I question the validity of this criterion for age stratification. As has been argued elsewhere (Levman 2020: 22), instruction by standardized rote recitation and memorization was an integral part of the teaching and transformation process in the Buddha’s time. Per Ñāṇamoli and Bodhi (1995: 52), “these formulas were almost certainly part of the Buddha’s repertory of instructions, employed by him in the countless discourses he gave during his forty-five years’ ministry in order to preserve the unity and consistency of his teaching.” Von Hinüber talks of a “a highly formalized dialogue...a true orality...the result of their [the Buddhists] having to create a formalized text that can be remembered and handed down by the tradition” (1996: §55); though it sounds artificial to modern ears, the formular expressions are mnemonic devices, concocted for transmissional accuracy and not necessarily indicative of a late composition. Certainly the materials in the *Brahmajāla* are ancient and must go right back to the time of the Buddha’s encounter with the competing *samaṇa* groups he encountered. It is also a mistake to consider the commentary as late, because it was compiled by Buddhaghosa in the fifth century CE. One must remember that he had access to very early materials including the *aṭṭhakathā* as it existed in the mid-third century BCE as brought by Mahinda to Sri Lanka. As Norman and Endo have shown (Norman 1997/2006: 206; Endo 2013: 5), some parts of the commentary may go right back to the time of the Buddha, when his explanations on certain difficult points were incorporated right into the *suttas* or remembered by his disciples in the commentary (which, according to legend was recited at the First Council; DN-a/Sv 1¹⁵⁻⁶), as a parallel oral explanation of his teachings.

The Title

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The title of the *Brahmajālasutta* itself epitomizes the mixed nature of this introductory *sīla* section: it is etymologically half IA and half indigenous. The word *Brahma/brāhmaṇa* is generally derived from the Vedic root *br̥mh*, “to grow great, to grow strong, increase,” but the Buddha re-defined it as coming from a homonym *br̥mh*, “to destroy, tear, pluck, root out” as “one who has destroyed evil.” (Norman 1991: 275). There is indeed considerable evidence that the word is IA in origin (Mayrhofer 1956-76, vol. 2: 452-56, hereinafter M1), not the least of which is the God’s position as the Supreme Being of Brahmanism. Charles Autran, however, has suggested an “underlying Dravidian influence” (une influence sous-jacente du dravidien; 1946: 241, note 1) in the form of the Dravidian root *pār*, “to see, to know, to search, to worship, to charm away by incantation, to look at with compassion” (DED #4091; Tamil Lexicon). The participial noun form of this verb is *pārppāṇ*, meaning, “one who sees, knows...,” which indeed is the Old Tamil word for brahman, occurring in their oldest work the *Tolkāpiyam* (circa 5th century BCE; section 1137, 1437, 1438 hereinafter Tolk). The word is also very similar to the word for brahman in the Asoka edicts, the oldest written record we possess: Kālsī *bābhanā* (13G), any of Dhauli edicts, all but one of which omitted the *-m-*, or the Delhi-Topra edict: *bābhanesu* (7th Pillar Edict Z), *bābhana* (7th PE HH); the nasal *-m-* or *-m-* was clearly not essential.² In proto-Dravidian (PD) voicing of stops, and aspirates was not phonemic. Moreover, the meaning in Dravidian seems much more relevant and descriptive than either of the two IA roots. The word *Brahma/brāhmaṇa* however is much older than Tolk, so it is likely that it is borrowed from IA into Dravidian with a unique calque on the underlying meaning. We may therefore concede the word as IA in derivation with some potential Dravidian influence. The word *jāla*, however, seems to be almost certainly of native origin. Kuiper finds it cognate with Pāli *jaṭa* (“matted hair”),³ deriving it from the proto-Munda root **da-da* “matted, entangled.” Mayrhofer calls *jāla* “not satisfactorily explained,” or “unclear” (1992-96: vol. 1: 588, hereinafter M2). Kuiper’s suggestion that the word has a Munda origin is well supported by the comparative lexicon: cp the Munda languages Turi, *jal*; Santali *jalām*; Juang, *jalō*; Korwa *ja:l*; Korku *ja:li*, *jhali*, *jali*; Birhor *jhāli*, all with the meaning “net.” Both the Dravidian and Munda words may be from a common source.

So here we have in the very title of the *sutta* two words, one IA with possible native influence and a second Dravidian and/or Munda in heritage. This mixed scenario will continue to manifest throughout the first part of the composition. For translation of these sections of the *sutta* see Bodhi 1978/2007: 53-62.

The *Majjhima-sīla*

The *Majjhima-sīla* begins with an explication of what is meant in the *Cūḷa-sīla* of section 10 by “the Samaṇa Gotama refrains from damaging seed and plant life” (*bīja-gāma-bhūta-gāma-samārambhā paṭivirato Samaṇo Gotamo*, DN 5⁴⁻⁵). The word *gāma* (Pāli, “collection of houses,

² The capital letters refer to the section in Hultsch 1969, where the edicts are transliterated and translated.

³ M1 vol. 1: 413, sv *jaṭa*: “The Indo-Germanic interpretations are all of them unsatisfactory...Non-Aryan origin immediately suggests itself but is not certain.” See Burrow 1947: 135, cp Tamil *caṭai*, “matted locks of hair”; Malayalam, *jaṭa*, *caṭa*, *ceṭa*, *ciṭa*, *idem*. In proto-Dravidian *j-* is an allophone of *c-*.

hamlet” cp OI *grāma*, idem and “collection”) is of IA extraction per Mayrhofer (M1 vol. 1: 353), but it is not clear where the word comes from; in M2 vol. 1: 508 he relates it to an IE root **gr-em*, “gather, collect.” Burrow (1943: 139, note 1) derives it from Dravidian, cp Kannada *gummu*, “mass, crowd,” but both of these derivations are questionable. *Bīja* is on more solid ground and appears to be a native word. M1 vol. 2: 433–34 calls the Dravidian connection “very noteworthy”; M2 vol. 2: 227 suggests a possible Indo Iranian (Iir) connection, while Burrow (1946:10) derives it from the Dravidian, cp Tamil *viccu*, “to sow” Kannada *bittu*, “to sow” and “seed”; Gondi *vījā*, “seed.” Southworth reconstructs a proto-Dravidian (PD) root **vit* (2005: 285; hereinafter Southworth). Kuiper (1955: 157 derives it from Mundari *ibil*, “to sow”; cp Juang, *bir* “sow”; Kharia *biḍa*, “sow”; Korku *baṛa*, “seed”; Sora *biṛ*, “sow.” Witzel (2009: 93) traces the word to the Bactria-Margiana Archaeological Complex of ~ 2400–1900 BCE, a bronze age civilization of central Asia. It is definitely a non-IA word, although not necessarily Dravidian.

In the commentary the seeds are subdivided into five categories: *mūla-bījaṃ* (“plants propagated by roots”),⁴ *khandha-bījaṃ* (“propagated by shoots”), *phaḷu-bhījaṃ* (“propagated by joints”), *agga-bhījaṃ* (“a plant propagated by cuttings”), and *bīja-bīja* (the seven *pubbaṇṇa* or grains; and *aparaṇṇa*, beans, other leguminous plants and gourds).⁵ Of the nineteen plants listed, only a small number are IA (four), the rest (eleven) being Dravidian or non-IA with a few (four) ambiguous or indeterminable.

1. Vegetation List

Pāli name	Old Indic name	Derivation	Source	Comment
<i>haliddi</i> , “tumeric” (<i>Nikāyas</i> , Vin).	<i>hardirā</i> , idem (RV, Br).	IA.	M1 vol. 3: 580. Probably from the root <i>hari</i> , “yellow.”	
<i>siṅgiveraṃ</i> , “ginger root” (Jā).	<i>śṛṅgavera</i> , “ginger” (Suśr).	Dravidian/AA (Austro- Asiatic).	M1 vol.3: 370, “foreign word, the echo to <i>śṛṅgam</i> is only	Burrow 1943: 130; Burrow 1946: 26; <i>vēr</i> = Tamil for “root”; <i>iñci</i> =

⁴ The word *mūla* itself is of native origin. cp Tamil *mūtu*, “root, cause, origin”; Malayalam *mūtu*, “bottom, root, origin”; Kannada *mūdu*, “to arise, originate, be born”; *mūdi*, “rising of the sun”; Tuḷu *mūdu*, “support, the east”; Telugu *mūdu*, “to happen”; Gondi *mūr*, “beginning.” Kuiper (1955: 158) also suggests a connection with Santali *mula* and Mundari and Ho *murai*, “radish”; one also finds *mūla* as “radish” in Bondo and Gta’; in Juang *muḷɔ*; and Korku *mu.ṛa*, all meaning “radish,” a root vegetable; the English word radish of course is itself derived from Latin *radix*, “root, foundation, basis, source.”

⁵ These are listed in the PTS as: *pubbaṇṇa* (the seven *dhañṇāni* or grains, *sāli*, *vīhi*, *yava*, *godhūma*, *kangu*, *varaka*, *kudrūsa*); and *aparaṇṇa* (i e. beans and other leguminous plants, and gourds such as *mugga*, *māsa*, *tila*, *kulattha*, *alābu*, *kumbhaṇḍa*). Due to space limitations they will not be discussed further except for those that come up later in the commentary. Most of these names are indigenous in origin; see Witzel 1999b and Southworth 2009 for further information.

			a folk etymology.”	“ginger” < * <i>singi</i> < AA ultimate source.
<i>vacā</i> , “orris root” (Vin).	idem, <i>Acorus calamus</i> (classic lit.).	Dravidian.	M1 vol. 3: 126.	See DED #5213, Tamil <i>vacam</i> ; Kannada <i>baje</i> , <i>vace</i> , <i>vaje</i> , etc; <i>Acorus calamus</i> .
<i>vacattam</i> , “a kind of root” (Vin).	?	Dravidian.		presumably another form of <i>vacā</i> , inflected form (oblique case ending in <i>-ttu</i>)
<i>ativisā</i> , “plant name” (Vin).	<i>ativisā</i> , <i>Aconitum Ferox</i> .	IA.	“exceedingly poisonous.”	
<i>kaṭuka-rohiṇī</i> , “black hellebore” (Vin).	idem, <i>kaṭuka</i> < * <i>kṛt-u</i> “cutting” per M1; <i>rohiṇī</i> < <i>rohita</i> , “red.”	IA.	M1 vol. 1: 143; M1 vol. 3: 81.	
<i>usīraṃ</i> , “the fragrant root <i>Andropogon muricatus</i> ” (Nikāyas, Vin).	<i>uśīra</i> , idem (Suśr).	probably Dravidian.	M1 vol. 1: 113, “unexplained”; Burrow 1947: 139.	cp Tamil <i>ucil</i> “Sirissa” (shrub; Tolka); meanings are inconsistent.
<i>(bhadda)-muttakam</i> , “fragrant grass, <i>Cyperus rotundus</i> ” (comm).	<i>(bhadra)-musta</i> , “a kind of <i>Cyperus</i> ” (Kālidāsa).	Dravidian/IA?	M1 vol. 2: 659-660.	cp Tamil <i>mucalai</i> <i>Cyperus rotundus</i> ; Telugu <i>muste</i> , idem. ⁶
<i>assattha</i> , “ <i>Ficus religiosa</i> ” (Nikāyas, Vin).	<i>aśvattha</i> , idem (AV, ŚBr).	non-IA, prob. Dravidian.	M1 vol. 1: 61, 155 ⁷ ; Burrow 1945: 92.	PD root * <i>att-i</i> (Southworth 274).

⁶ The word *mucalai* is found under *musalī*, “alligator < Dravidian “crocodile (Kannada *mosale*, *masale*, etc). Apparently this had a near-homonym in Tamil *muyalai* ~ *mucalai*, “*Cyperus rotundus*.” Mayrhofer suggests that the word was loaned from IA into Dravidian, but the timing is late for both words, so hard to tell priority.

⁷ The *-ttha* suffix is Dravidian (see discussion in M1 vol. 1: 237-38 s.v. *kulatttha*, “wohl dravidisch,” probably Dravidian). M2 vol. 1: 140-41, “nicht sicher gedeutet” (not interpreted with certainty).

<i>nigrodha</i> , “banyan tree” (<i>Nikāyas</i>).	<i>nyag-rodha</i> , idem (AV), lit: “growing downward.”	IA?	Southworth 209. PTS: Non-Aryan? unusual - <i>gr</i> - conjunct in Pāli.	The Dravidian word for the <i>Ficus Indica</i> is <i>kōḷi</i> in Tamil and Malayalam and <i>gōḷi</i> in Kannada, which may be the kernel of the word.
<i>pilakkha</i> , “ <i>Ficus infectoria</i> , wave-leaf fig tree” (Vin, <i>Nikāyas</i> , Jā).	<i>plakṣa</i> , idem (AV).	non-IA.	M1 vol 2: 383, “unclear tree name, that, despite its early attestation (AV) could also be pre-Aryan”; M2, vol. 2: 194, “not clear, foreign word?”	
<i>udumbara</i> , “ <i>Ficus glomerata</i> ” (Sn, <i>Nikāyas</i>).	<i>uḍumbara</i> , idem (AV, ŚBr).	non-IA, Dravidian or Munda.	M1 vol. 1: 104, “perhaps AA”; M2 vol. 1: 217 (“the source of <i>udumbara</i> is not clarified”;) Kuiper 23-5 <AA <i>tumba</i> (Bondo), “gourd.”	cp Bondo <i>dumri</i> , “fig”; Southworth (74) derives it from PD * <i>uttumara</i> , “date-tree.”
<i>kacchaka</i> , “a kind of fig tree, <i>Cedrela toona</i> ” (Vin).	< <i>kaccha</i> ? “bank, shore marsh” < <i>kakṣa</i> ? “wood” (RV) ?	?		cp Dravidian <i>kaccha</i> , “loincloth”; Tamil <i>kaccai</i> , <i>kaccu</i> , “girdle, belt.”
<i>kapitthana</i> / <i>kapitṭana</i> , “a kind of fruiting tree” (Jā).	<i>kapittha</i> , “ <i>Feronia elephantum</i> ” (MBh).	Dravidian.	M1 vol. 1: 155, “apparently Dravidian.”	
<i>ucchu</i> , “sugar-cane” (Vin, <i>Nikāyas</i>)	<i>ikṣu</i> , idem (AV).	Dravidian.	M1 vol 1: 84, “derivation unclear”; M2 vol. 1: 185,	Witzel (2009: 90) derives it from Dravidian * <i>it-cu</i> “sweet

			“probably a foreign word.	juice”, after Southworth (218).
<i>naḷa</i> , “reed, stalk, tube” (<i>Nikāyas</i> , Vin).	<i>naḷa/naḍa</i> , idem (RV).	Dravidian.	Burrow 1946: 23; Kuiper 82 < PM * <i>ḍa-ḍa</i> , “bare, stalk, shaft of an arrow,” with common change of <i>ḍ- > n-</i> (<i>ḍa-ḍa > na-ḍa</i>). Witzel 16.	cp Kannada <i>naḷḷu</i> , <i>nānal</i> (“reed”).
<i>veḷu</i> , “bamboo” (<i>Nikāyas</i>).	<i>veṇu</i> , idem (RV).	Dravidian.	M1 vol. 3: 253–54, “non-Aryan source possible”; M2 vol. 2 : 578 “not clear.”	Southworth (220) reconstructs a proto-Dravidian root * <i>vet-Vr-</i> , which he suggests > OI <i>veta</i> , “cane, reed” and <i>veḍu/veṇu</i> “bamboo.” ⁸
<i>ajjakam</i> , “name of a plant, <i>Ocimum gratissimum</i> ” (Vin), clove basil.	<i>arjaka</i> , idem.	?		cp Tamil <i>accakam</i> , “species of <i>Hygrophila</i> ”
<i>phaṇijjakam</i> , “sweet marjoram” (Vin, Jā). = <i>samīraṇa</i> (“marjoram”) per Childers.	<i>phaṇijjha(ka)</i> , idem (Suśr).	non-IA perhaps Munda.	M1, vol. 2: 391, “all very unclear”; perhaps < AA <i>phaṇa</i> , “cream” as marjoram cream & oil have medicinal usages?	M2, vol. 2: 200, derivation “unclear”; per Kuiper 163 < AA (<i>phaṇa</i>).
<i>hirivera</i> , “a kind of <i>Andropogon</i> ” (Jā).	<i>hrīvera</i> , idem.	non-IA.	M1 vol. 3: 616-17, “unclarified foreign word.”	

⁸ The common Munda word for “bamboo” is *mad*, *mat*, *maḍ*, *maḍ*, *maḍ*, *maḍ* in the North Munda languages, which is related to Dravidian because of the common *m- >< v-* interchange which happens in Dravidian (Zvelebil 1990: §1.7.8), and in OI/MI (Bloomfield and Edgerton 1932: §223–240; Pischel §251). Proto-Munda had no *v*, so it would be heard as an allophone of *m*.

It is hardly surprising that the IA immigrants would have adopted the indigenous names for these plants, especially if they were unfamiliar with them or their uses. In some cases, the Indo-Aryans develop their own names for the plants (usually descriptive metaphors like *aṅga-loḍya*, for ginger, “a piece to be stirred”), but the above *desi* names are probably all earlier. In brackets after each name is its earliest appearance in both Pāli and OI, so the reader can get a sense of timelines; for example, a word like *usīraṃ* which appears in the Pāli *Nikāyas* but does not appear in Sanskrit until *Suśruta* (a medical text of several layers parts of which may date back to the early centuries BCE) was probably borrowed by Sanskrit from Pāli which itself borrowed it from Dravidian.

Hoarding

In the next section on hoarding (*sannidhi-kāra-paribhogam*), the terminology is not as straightforward. The first section on hoarding food does not mention any special kinds of food, just states that the monk can not keep it until the following day. The section on drinks mentions eight drinks starting with *amba-pāna-ādīni* (a mango beverage), but they are not listed here; *amba* is a non-IA word which has been discussed extensively elsewhere (Levman 2021a: Chapter two). Section three on hoarding clothes simply states that one should be happy with the three robes (*ti-cīvara*); *cīvara* is also of Dravidian extraction, based on the verb *cī/cīvu* (Tamil), “to pare off, shave or scrape off,” referring to the bark of a tree (*cīrai*), originally used as clothing (Burrow 1945: 101–02; for discussion, Levman 2021a: Chapter three).

The next section is about hoarding vehicles and lists six types, three IA and three non-IA: they are all very close in meaning and it is clear that the composer is glossing one language in terms of the other:

2) Vehicle List

Pāli	Old Indic	Derivation	Source	Comment
<i>vayhaṃ</i> , “vehicle, bed, litter” (Vin, Jā).	<i>vahyam</i> , “portable bed, litter, palanquin	IA < gerundive of <i>vah</i> , “to carry, transport, convey.”	M1 vol. 3: 177-78.	
<i>ratha</i> , “chariot, car, wagon, cart, vehicle” (Sn, <i>Nikāyas</i> , Th).	idem, (RV).	IA < <i>*rotā</i> , “wheel”; or from the root <i>r</i> “to advance towards an enemy, to attack.”	M1 vol. 3: 38	
<i>sakaṭaṃ</i> , “cart, wagon” (<i>Nikāyas</i> , Vin, Jā).	idem, “cart, wagon, car, carriage” (Nir).	Munda.	Kuiper 1955: 161, < Munda, cp Santali, Mundari, Juang <i>sagaṭ</i> , “cart	

			with two-spoked wheels”; Kharia <i>cakaṛa</i> “cart.” Birhor <i>sāgri</i> ; Bondo <i>sogor</i> .	
<i>sandamānikā</i> , “chariot” (Vin).	<i>syandana</i> , “chariot” < <i>syand</i> , “to move or flow on rapidly, run, drive” in present participle form (RV).	probably IA.	M1 vol. 3: 550-51, “not convincingly explained.”	cp Dravidian Tuḷu <i>caṭṭa</i> , “litter, palanquin, bier” (DED #2304).
<i>sivikā</i> , “palanquin, litter” (Vin, Jā).	<i>śibikā</i> , “palanquin, litter, bier” (MBh).	Dravidian/IA?	M1 vol. 3: “unclear”; < <i>śiva</i> , “friendly”?; cp Tamil <i>civikai</i> , “palanquin, covered litter” (<i>Tirukkura!</i>).	sometimes described as a <i>mañca-sivikā</i> , “bed- palanquin”; <i>mañca</i> is also a Dravidian word.
<i>pāṭāṅkī</i> , “sedan chair”? “Cone ? “carrying a sling on a pole”; var. <i>pāṭāṅgin</i> , <i>pāṭāṅgan</i> <i>pāṭākan</i> (Vin).	No corresponding word.	Dravidian < Tamil <i>pāṭu</i> , “to lie prostrate; <i>pāṭu-kāṭṭu</i> , “to lie leaning one’s side.” ⁹	DED #3852.	

Here we have three words for “palanquin, litter” all listed together, *vayhaṃ* (IA), *pāṭāṅkī* (Dravidian) and *sivikā* which may or may not be IA, as direction of borrowing is impossible to tell. There are two words for chariot, the normal IA word *ratha* and *sandamānikā* which is a metaphor from the present participle of the verb *syand* (Pāli *sandati*, “to flow”), but itself etymologically “not convincingly explained” (for which see Kuiper 1937: 144-45); it is quite possible that *sandamānikā* (and the corresponding Skt form *syandana*) are calques on an

⁹ The word *pāṭāṅkī* appears to come from the very old root *paṭu* in Dravidian, common to all branches of the language (DED #3852), whose basic meaning is to “perish, die, lie down horizontally.” The form *pāṭu-* has the specific meaning of “lying prostrate” and this is where the form *pāṭāṅkī* appears to come from. Tamil also has the word *pāṭakam*, meaning “shade” and this is another possible line of derivation.

(unknown) Dravidian or Munda word for “moving swiftly,”¹⁰ or the word is related to another term for “palanquin” the Dravidian word *caṭṭa* (above). The word *sakaṭa*, which is a generic term for cart or wagon, comes from the Munda language, a substrate underlying Dravidian (cp Tamil *cakaṭam*). In these six words there are two or three of IA ancestry, two of Dravidian, and one of Munda derivation. The author of the commentary is him/herself bilingual and appears to be speaking to a bilingual audience.

This trend of mixing IA and non-IA words, often in glossing couplets, continues throughout the commentary. In the next section the word *mañca* (“couch, bed, platform,” coupled with *sivikā* in other parts of the *Tipiṭaka*) glosses *sayana*, the normal IA word for “bed” from the root *śī*, *śaya-* “to lie down.” *Mañca* itself derives from Burušaski *man*, “an earth platform” < older **manč* or **manṅ* < a precursor of Burušaski which is a language isolate (M1 vol. 2: 551); it is related to the word *-maṇḍa* (*bodhi-maṇḍa*), the Buddha’s enlightenment seat. The word appears in Dravidian as *mañci* (DED #4638), “cargo boat with a raised platform.” In Pāli, the word occurs in the *Sutta Nipāta* (v. 401), a work which goes back to the time of the Buddha and is earlier than its first appearance in OI (MBh).

Hoarding of Scents

The next section on the hoarding of scents (*gandha-sannidhi*) contains two non-IA words, *kaṇḍu* and *kacchu*, both technical terms representing a cutaneous infection. The word *gandha* itself is probably of native origin; even though it has an Avestan correlate, it has no IA derivation.¹¹ The word *kaṇḍu* (~ OI *kaṇḍū*, “itch”), however, is a native *desi* term. Burrow (1948: 369) derives the word from a proto-Dravidian source, cognate with Tamil *karaṇṭu*, “scrape” and *curaṇṭu*, “scrape, scratch” and similar words in Malayalam, Tuḷu and Kannada. Kuiper 1950: 168 explains these words and OI *kacchu*, “scab” and OI *kharju*, “scratching, itching” as being derived from the same AA source: cp Santali *gar*, *gḍur*, “scrape, scratch”; *gḍuḍ*, “to scratch, claw”; *gasar gasar*, *ghasar ghasar*, “to scratch oneself; *kasra* “scabies”; *kuṭ kuṭ*, “itching, irritating, to itch”; and from the Munda Etymological Dictionary (MED) compare also Korwa *goda:r*, “to scrape”; Bodo-Gadaba *gor*, “write, scrape”; Korku *kosod*, “scrape”; Juang *kuri*, “to scrape”; Korwa *k^horḍa:o*, “scrape food with the fingers.”¹²

In the Vinaya, *kaṇḍu* occurs in the compound *kaṇḍu-paṭicchādi* (“itch-cloth covering”) as a treatment for monks suffering from an (inter alia) *thulla-kacchu* (“large scab”). *kacchu* derives

¹⁰ A monk’s only proper conveyance is his sandals (*upāhanā* < *upa-nahyati*, “to fasten on”), which itself may well be a calque or literal loan-translation from the old Dravidian word for “sandal, slipper, shoe”, *ceruppu* (DED #1963) < verbal root *ceruku*, “to insert, slide in.”

¹¹ The word *gandha* (“smell, scent”) per M1 vol. 1: 322, may have an Avestan pedigree but its IA derivation is “questionable”; M2 vol 1: 461 connects it with late Avestan *gaiṇti*, “offensive smell” but “[anything] further is uncertain.” Munda has several words that are related, but it is not clear whether as a donor or receiver, although the former is indicated from the widespread use of phonetically similar words in Santali *gandha-gandhi*, “strong smell, stinking, horrible smell,” with the related word *gandhak*, “sulphur, brimstone”; in Sadri, *gḥmk*, “smell; Juang, *gonda*, *gono*, “to smell”; Kharia, *ghāri*, *ghaṇi*, “smell” (noun and verb); and Sora *ga:da:*, “a strong smell.”

¹² M1, vol. 1: 147, “with high likelihood an AA loan-word.” M2 vol. 1: 292, “not clear.”

from the Dravidian (Burrow 1943: 133), cp Kannada *kacce, koru*, “to bite, sting, smart” and several other examples; while *thulla* (alt. *thūla*) < OI “big, thick, dense” < *sthā*, “stand firmly, remain.” In this section we have a glimpse of Dravidian medicinal terms adapted to IA usage; all the other words in the passage are normal Pāli. What is left over of the fragrance is to be given to other ill persons or placed on the door in the form of a *pañc-aṅguli-ghara-dhūpana* (lit: “five-finger-house-fumigation”) a curious expression of IA words but yet apparently pointing to an autochthonous purification practice (Morris 1884: 84-5). This was some kind of ornament in the shape of a hand dipped in *gandha*, that was hung on the door for magical protection. The expression occurs several times in the *Jātakas* in connection with tree-worship, which was a native practice (Levman 2013: 166-68).

Food hoarding

The next section is about food hoarding, and curiously, most of the items are indigenous products, or at least have indigenous names:

3) Food List

Pāli	Old Indic	Derivation	Source	Comment
<i>tila/tela</i> , “sesame seed/sesame seed oil” (Sn, <i>Nikāyas</i>).	<i>tila/tila</i> , idem (AV, ŚBr).	Munda/Dravidian.	M1 vol. 1: 504-5, “not sufficiently explained; perhaps a non-IA word”; M2 vol 1: 648, “not clear; foreign word?”	Kuiper 1955: 157, Witzel (2009b: 90) both < AA; Burrow 1948: 380 suggests a Dravidian source. ¹³
<i>taṇḍula</i> , “rice-grain” (Sn, Vin).	idem (AV, ŚBr).	Munda/Dravidian.	M1 vol. 1: 471, “not clear”; Kuiper 48-9 < PM root * <i>ga-da</i> , “in pieces”; Bloch 1930: 737 < Dravidian.	Chatterji and Bagchi 1929: xxiv give several AA cognates from Bengali, Mon, Khmer, etc.
<i>mugga</i> , “kidney bean” (<i>Nikāyas</i>).	<i>mudga</i> , idem (VS).	Munda/Dravidian.	M1, vol. 2: 653, “without convincing explanation”; M2 vol. 2: 361, “not clear.”	Kuiper 146 < Munda; Witzel 2009b: 90; Burrow 1948: 391 <

¹³ Cp Santali *til* or *tilmin*, “sesame oil plant”; Mundari *tilming*; Korku, *telamij*; Kharia, *telmiṅ, tilmiṅ*. For Dravidian, cp Tamil, Kannada and Malayalam *eḷ* with original *c-* > \emptyset , but *c-* > *t-* in OI and MI. Southworth (p. 204) says “origin unknown.” Munda has the wider distribution.

				Dravidian, cp Tamil <i>mutirai</i> .
<i>māsa</i> , “bean” (Vin).	<i>māṣa</i> , “bean” (RV).	Munda/Dravidian.	M1 vol. 2: 630, “without convincing explanation”; M2 vol. 2: 352, “problematic.”	Kuiper 144 < Munda; Witzel 2009b: 90; Burrow 1948: 390 < Dravidian,
<i>nālikera</i> , “coconut tree” (Jā).	<i>nārikera</i> , idem (Suśr).	Dravidian.	M1 vol. 2: 155, “probably a native word”; Bloch 1930: 740 < Dravidian	cp Tamil <i>nāri</i> , Kannada <i>nār</i> , etc., “fibre, sinew” and Tamil <i>kēli</i> , “coco-palm.”
<i>loṇa</i> - “salt” (Vin, <i>Nikāyas</i>).	<i>lavaṇa</i> , idem, also “beautiful”; (“derivation doubtful” per MW; ŚBr).	probably Munda	M1 vol. 3: 92-3; M2 vol. 2: 476 < <i>lav</i> , “to cut”; Wackernagel 1896/2005 vol 1: 223 (“foreign origin”). Southworth (268) reconstructs PD form <i>*cup-</i> “salt” (e.g. Tamil <i>uppu</i>) apparently unrelated (DED #2674a).	cp proto-Kherwarian <i>*bu’luṇ</i> , “salt” which is very widespread in Munda languages (prefix <i>bu-</i> > Ø?).
<i>maccha</i> , “fish” (<i>Nikāyas</i> , Sn, Jā). Mil 331 ¹³ .	<i>matsya</i> , idem (RV).	IA? cp Iir Avestan <i>masya</i> .	M1 vol. 2: 566-67 connects the word with the root <i>mad</i> , “to rejoice” and M2 vol. 2: 298 with the s-stem <i>*mad(a)s</i> , “food,” both of which are singularly unconvincing.	Southworth (258) reconstructs a PD generic root <i>*mīn</i> for “fish”
<i>maṃsa</i> , “meat” (<i>Nikāyas</i> , Jā).	<i>māṃsa</i> , idem (RV)	IA.	M1 vol. 2: 615.	

<i>vallūra</i> , “dried meat” (<i>Nikāyas</i> , Jā).	idem (Manu).	Dravidian.	M1 vol. 3: 167; cp Tamil <i>vallūram</i> , “dried meat”; but directionality uncertain.	Burrow 1948: 393. DED #4352.
<i>sappi</i> , “ghee” (Sn, <i>Nikāyas</i>).	<i>sarpis</i> , idem (RV).	IA.	M1 vol. 3: 446.	
<i>guḷa</i> (<i>piṇḍa</i>), “ball” (<i>Nikāyas</i>).	<i>guḍa</i> , idem, also “dry sugar lump” (MBh).	Dravidian.	Burrow 1948: 377; Kuiper 1939: 1001.	cp Telugu, <i>guḍḍu</i> , “eyeball, egg”; <i>goḍḍa</i> , “cylindrical stone”; etc. (DED #1680)
<i>yāgu</i> , “rice-gruel” (<i>Nikāyas</i>).	<i>yavāgū</i> , idem (Br).	prob. IA.	M1 vol. 3: 10 “difficult to assess.”	
<i>dadhi</i> , “sour milk, curds” (<i>Nikāyas</i>).	idem, (Pāṇ).	IA.	M1 vol. 2: 15 < reduplicated root <i>dhū</i> .	
<i>piṇḍa-pāta</i> , “alms giving” (Sn, <i>Nikāyas</i> , Vin).	idem (<i>piṇḍa</i> , RV).	Dravidian.	M1 vol. 2: p. 275 < MI sources. M2 vol. 2: 128 “not clarified.” ¹⁴	cp Kannada <i>peṭṭa</i> , <i>peṭṭe</i> , <i>peṇṭe</i> , “lump” ~ Tamil, Kannada <i>piṇḍu</i> , “press together.”

Of the fifteen items not to be hoarded, only three to four of them are IA (omitting *maccha* which is ambiguous). How to account for the wholesale importation of non-IA terms into the IA vocabulary? All the terms are from agriculture; the only IA terms, with the exception of *yāgu*

¹⁴ Kuiper associates the word *piṇḍa* with a Munda word meaning “fleshy swelling, round and thick” (p. 143); cp Gta’ *bāntu*, “ball”; Juang *penḍu*, “ball”; see Witzel §1.6, p. 15 and 1999b: footnote 26 where he suggests it may come from an unknown W. Central Asian substrate language. The word has a wide distribution in Dravidian in the meaning “squeeze, press into (a cake),” which appears to be the root. See DED #4183, examples: Tamil *piṇṭi*, “oilcake made of the residue of oil seeds”; Malayalam *piṇṭi*, “what is squeezed, residue, sediment”; Kannada *piṇḍu*, “squeeze out, wring”; Koḍagu *punḍ-* “squeeze”; Tuḷu *piṇḍi*, *punḍi*, “oilcake”; Kolami *pinḍ*, *pīnḍ*, “squeeze”; Naiki *pīnḍ*, “milk”; Malto *piqe*, “wring or squeeze out”; Brahui *piḷhing*, *princing*, “squeeze, squeeze out.” The OI word appears in the RV 1.162.19, where it refers to lumps of flesh; it first refers to balls of food offered to deceased ancestors in Manu and MBh (after fourth century BCE). The wide distribution in all sub-languages of Dravidian suggests a very old ancestry, predating its OI occurrence by many centuries. The word *pāta*, is popularly taken from the root *pat*, “to fall” (food falling into the monk’s bowl) but might also be from the Dravidian *patam*, “cooked rice” making *piṇḍapata* a hendiadys or an epexegesis.

(whose derivation is unclear), are those designating animal products (meat, ghee and sour milk), which makes sense for a pastoralist group. Witzel explains this in greater detail:

The reason [for the adoption of non-IA terms] clearly appears in the RV: the Vedic tribes preferred to have local people (*kināśa*, cf Kīkaṭa RV 3.53.14) do the back-breaking agricultural work (*sā/sī*, *lāṅgula*) and preferred to do the more ‘noble’ work of tending their cattle, Maasai style: by young armed men roaming about the cow pastures (*gavyūti* in the ominous *araṇya* ‘wilderness’ (RV 10.146), and returning to their temporary settlements (*grāma*) and cow enclosures (*gotra*) in the evening—a picture still epitomized many centuries later by the Yādava tribe’s cow herd Krishna, playing his flute in the wilderness (2009: 94).

Two other *desi* words are of interest in the commentary. Monks who hoard are criticized as living the life of a *muṇḍa-kuṭumbika* (“bald householder”). The first word is a *desi* word, used by brahmins as a term of insult for the Buddha and his followers; arguably it refers not only to their shaven heads, but also to their ethno-linguistic group, the Munda language speaking clan (Levman 2021a: Chapter five). The word *kuṭumba* (Pāli, OI *idem*, “household, family”; Jā, ChUp) derives from the Dravidian word for “hut”: *kuṭi* (Burrow 1938: 717 and 1946: 8; cp Tamil *kuṭi*, “hut”; Kannada, Telugu *guḍi*, *idem*). This section provides a unique glimpse into the socio-cultural divide of these two groups, the immigrants and the locals, as reflected in the language mix. Here we have wholesale borrowing of one language group to the other (section twelve has the most non-IA words of any section in the commentary), which presupposes extensive bilingualism in both parties.

Entertainment

Section thirteen is about *visūka-dassanaṃ* or entertainment. Here again we have many indigenously derived words (twenty in the *mūla* transmission and commentary), both in mixed lists and in binary pairs where one IA word glosses a *desi* word. The word *visūka* itself is of Dravidian extraction, from the Dravidian root, Telugu *cūcu*, “to see, observe, behold, look at, view” (Burrow 1948: 395; DED #2735), and has widespread provenance among Central and South Dravidian language groups suggesting an age of about 1500 BCE (Southworth 51; 2009: 110); Mayrhofer (M1 vol. 3: 491) tries to derive the word from a denominative of *sūci* (“needle”), but that is not very plausible; in any case the word in OI (*sūcayati*, “to point out, indicate, show; indicate by gesture”) is quite late, not appearing until the MBh. *Visūka* (“show”) and *dassana* (OI *darśana*, “seeing, observing, exhibiting”) are themselves a binary pair, one in Dravidian and one in Pāli, each complementing the other.¹⁵ Presumably *pekkha* (OI *prekṣa*, “show”), the fourth item in the *mūla*, is also a synonym for *visūka* and *dassana*.

¹⁵ Although the PTS gives the primary meaning of *visūka* as “restless motion, wriggling, twisting, twitching” which they say is better than “show,” it occurs dozens of times in the canon and commentary in the compound *nacca-gīta-vādita-visūka-dassana*, which clearly means “show” (“dancing-song-music-show-show”).

4) Entertainment List¹⁶

Pāli	OI	Derivation	Source	Comment
<i>nacca/naṭa</i> , “dancing, dancer” (<i>Nikāyas</i>)	* <i>nṛtyaka</i> , idem < <i>nṛt</i> , “to dance” (RV); <i>naṭaka</i> , “actor”	Dravidian.	M1 vol. 1: 127; M2, vol. 2: 22; Kuiper 1955: 104-06. ¹⁷	cp Kannada, <i>naḍaka</i> , Tamil <i>naṭalai</i> , “trembling.”
<i>pāṇi-ssara</i> , “hand music (clapping)” (<i>Nikāyas</i>)	<i>pāṇisvarika</i> (BHSD) “recitation or singing to the accompaniment of the clapping of hands.”	IA.		
<i>kaṃsa-(tāḷa)</i> , “bronze, gong, metal vessel” (<i>Jā</i>).	idem, “vessel made of metal” (AV).	prob. non-IA, gloss for <i>pāṇi-ssara</i> .	M2, vol. 1: 285- 86 “not clear.”	cp Malayalam <i>kiṇṇam</i> , “gong”; Bondo, <i>kakṇ</i> “kind of metal bangle.”
(<i>pāṇi</i>)- <i>tāḷa</i> , “clapping of hands”) < <i>tāḍayati</i> (“to beat”).	<i>tāḍa/tala</i> , “slapping the hands together” < <i>tad</i> , “to beat, strike; to strike a musical instrument” (MBh).	Dravidian, gloss for <i>pāṇi-ssara</i> .	M1 vol. 1: 492 “etymologically not clear”; Burrow 1948: 380; Kuiper 1937: 139, note 1.	cp Tamil, Kannada <i>taṭṭu</i> , “beat”; connected with <i>tāṇḍava</i> , “wild, frantic dance.”
<i>vetāḷa</i> , “musical art”; cp <i>vetāḷika</i> , “court musician” (<i>Nikāyas</i>).	<i>vetāḷa</i> , “demon, goblin, vampire” (medieval); <i>vaitāḷika</i> , “one	non-IA	Levman 2013: 156; Warder 1967: 88, note 1. M1 vol. 3: 255,	> <i>vetāḷiya</i> metre. ¹⁸ cp <i>Mahāvastu</i> (Senart 1897) <i>vaitāḷika</i> (113 ²),

¹⁶ There are twenty words of non-IA extraction in this section alone. To save space I am not including all of them (some have already been dealt with above), nor am I including the IA words, except where they form binary pairs with the indigenous terms.

¹⁷ The derivation is unclear. It looks like an original Dravidian root *naṭ* was adopted first by the Prakrits (*naṭati*) and later Sanskritized, but the word *nṛtyati* is old, going back to the RV. M1 vol. 1: 127 takes it (*naṭati*) as non-IA, “with greater likelihood the originally differentiated *naṭ-* (“stagger, shiver”), Bengālī *naṛā*, “to shake” (*Gopālakelicandrikā*), may probably come from a non-IA source.” See DED #3585. Kuiper (1955: 105) also identifies the root *naṭ* with the Skt. word *laṭva* “dancing boy” even though initial *n-* does not usually change to initial *l-*; there is also a word *laṣva*, “dancer” in the *Uṇādi sūtra*. This suggests that the word *lāsikā*, “dancer” is also another version of the word *naṭaka*, with phonological changes. How exactly the root *nṛt* is related is not clear, if not a back-Sanskritization. But the Prakrit *naṭ* is clearly not a development from OI *nṛt*, but a separate pathway from the Dravidian.

¹⁸ Warder (1967: 88, note 1) suggests, “It is possible that this *deśī* music was that of the pre-Aryan population of the Ganges region,” and on page 103, “The new metre may have had its origin in *deśī* (Māgadhī) folk song: its rhythms may even be non-Indo-Aryan in origin, coming perhaps from some Munda tradition in Eastern India.”

	possessed by a <i>vetāla</i> .” (med).		“not certainly explained.”	“bard, musician, conjurer.”
<i>ghana</i> -(<i>tāla</i>), “cymbal”;	idem < <i>han</i> , “to strike.”	IA, gloss for <i>vetāla</i> .		
(<i>kumbha</i> , “jar, pitcher”)- <i>thūṇa</i> , “drum” (<i>Nikāyas</i>).	idem (<i>kumbha</i>)- <i>sthūṇa/sthāṇu</i> “pillar” (Mn MBh) < <i>sthā</i> ?	<i>kumbha</i> is IA; <i>thūṇa</i> is prob. Munda.	M1 vol. 3: 528; Kuiper 1954: 248-50 as AA in origin.	< * <i>thāṇu</i> , Munda synonym with initial vowel change (normal); cp Pāli <i>khāṇu</i> (“stump, leafless tree”) < Munda root * <i>ḍaḍ/gaḍ/baḍ</i> “tree trunk”
(<i>caturass</i> ’)- <i>ambalaka</i> -(<i>tāla</i>) < <i>ambaṇa</i> , “measure of capacity” (Vin)	<i>caturaśra</i> - <i>armaṇa</i> (Suśr).	gloss for <i>kumbha-thūṇa</i> ; Dravidian	Rhys Davids (1889: 8, note 4); the Sinhalese comm. has “striking a drum big enough to hold sixteen gallons.” ¹⁹	cp Tamil <i>ampaṇam</i> ; Malayalam <i>avanam</i> , “measure”; DED #263.
<i>caṇḍāla</i> , “outcaste” (<i>Nikāyas</i>).	idem (ChUp).	non-IA, probably Dravidian.	M1 vol. 1: 370; M2 vol. 2: 539, “prob. a pre-Aryan tribe name.”	cp Dravidian, Tamil <i>caṇṭai</i> , “conflict, quarrel, fight, war”; Malayalam <i>caṇṭa</i> , “quarrel.”
(<i>ayo</i>)- <i>guḷaka</i> , “little ball” < <i>guḷa</i> , “ball” (<i>Nikāyas</i>).	<i>guḍa</i> , <i>gola</i> , idem (MBh).	Dravidian.	M1 vol. 1: 349, “probably Dravidian”; Burrow 1948: 377; Kuiper 1939: 1001.	
<i>vaṃsa</i> , “bamboo” (Sn).	<i>vaṃśa</i> , idem (RV).	Dravidian.	M1 vol. 3: 120 finds connections with some Indo-Iranian border languages, “all further	cp Tamil <i>vañci</i> , Malayalam <i>vañci</i> , <i>vañṇi</i> , “rattan, bamboo, reed” < proto-Dravidian * <i>vank</i> , “to bend” Southworth 73.

¹⁹ The *-thūṇa* (-*sthāṇu*) appears to be a support for the drum, mirrored in the word *-ambalaka*, as per the Sinhalese commentary.

			correlations remain uncertain”; M2 vol. 2: 485 idem.	
<i>veḷu</i> , “bamboo” (<i>Nikāyas</i>).	<i>veṇu</i> , idem (RV).	Dravidian.	M1 vol 3: 253-54; Southworth (220) reconstructs PD root * <i>vet-Vr-</i> , which he suggests > OI <i>veta</i> , “cane, reed” and <i>veḍu/veṇu</i> “bamboo.”	
<i>meṇḍa</i> -(<i>yuddha</i>), “ram” (<i>Nikāyas</i> , Jā).	<i>meṇḍa</i> , idem (Lex).	Munda.	M1, vol. 2: 682, “prob. non-IA, perhaps AA”; Kuiper 109.	cp Juang <i>meṇḍa</i> , “ram”; Bondo <i>meṇḍa</i> “sheep”; Mundari <i>miṇ'di</i> ; Ho <i>mi'di</i> ; Birhor <i>miṇḍi</i> , etc., all “sheep”
<i>kukkuṭa</i> -, “cock” (<i>Nikāyas</i>).	idem (MBh).	prob. Munda.	M1 vol. 1: 218, “onomatopoeic”; Kuiper 1991: 59, 68 < AA.	cp Kota <i>kukur</i> , “cock’s comb”; Kharia, <i>kokoro</i> , <i>kōkrō</i> .
<i>daṇḍa</i> -, “stick, staff, pole” (<i>Nikāyas</i> , Vin).	idem (RV).	Dravidian or Munda.	M1 vol. 2: 11-12, A contested, undecided etymological problem”; Burrow 1946: 19 < Dravidian; Kuiper 75 < Munda; Witzel 16 < Munda; Southworth 72 < Dravidian.	cp Tamil <i>taṇṭu</i> , <i>taṭi</i> , “staff”; cp Santali <i>ḍaṇṭa</i> , “club”; Mundari <i>ḍāṇḍā</i> , “club, stick”; Sora <i>daṇ</i> , idem; Kharia, <i>ḍāṇḍa?</i> , <i>ḍāṇṭa</i> , <i>ḍaṇḍa?</i> , <i>ḍaṇḍa?</i> , idem.
<i>muṭṭhi</i> -, “fist” (<i>Nikāyas</i> , Jā).	<i>muṣṭi</i> , clenched hand (RV)	Dravidian.	M1 vol. 2: 658 connects with the word for “mouse” (<i>mūḥ</i> = “clenched hand”	DED #4932, cp Tamil <i>muṭṭu</i> , “assault, attack fight”; Kannada, <i>moṭṭu</i> , “rap the

			= thief); not very plausible; M2 vol. 2: 363 idem.	head with the knuckles of the fist”; etc.
<i>nibbuddha</i> -, “wrestling” (<i>Nikāyas</i>).	<i>niyuddha</i> , idem, (MBh).	IA, a gloss of <i>muṭṭhi-yuddha</i> .		
<i>malla</i> -, “wrestler, name of a people” (<i>Nikāyas</i>).	idem, (Mn, MBh).	Dravidian, a gloss of <i>nibbuddha-yuddha</i> .	Burrow 1946: 18.	cp <i>malla</i> -, “wrestler, boxer, strongman.”

In the above there are several binary pairs or “double translations” where one term is glossed in the language of the other, indicating extensive bilingualism. The words for “hand-clapping” or “time-keeping” are particularly informative as here we have several different musical technical terms from the two languages combined. The basic term *pāṇi-ssara* (IA, “hand-clapping”) occurs in the *mūla* where it is immediately followed by *vetāla*, “musical art,” a *desi* word, glossed by *ghana-tāḷa* (keeping time with a cymbal; *ghana* is IA and *tāḷa* is Dravidian) in the commentary. The compound *pāṇi-ssara* itself has two glosses, *kaṃsa-tāḷa* (non-IA), which is keeping time with some sort of gong and *pāṇi-tāḷa* which is keeping time by clapping. Granted these may be all slightly different ways of keeping time with the music, but the mixed nature of the glosses and the compounds themselves (where one word *pāṇi*- or *ghana*- is IA and the second, *-tāḷa* Dravidian, or where two *desi* words, *kaṃsa-tāḷa* gloss two IA words) tell us that this composition was composed by and directed at a bilingual audience, or at least an audience that was becoming bilingual.

This practice continues in a few other places where the word *-thūṇa*, apparently a Munda word originally meaning “tree-trunk,” is explained in terms of the Dravidian word *ambalaka/ambaṇa*, a “certain measure of capacity” and apparently a stand to the *kumbha* or drum (also perhaps a drum-resonator). The interplay between the two languages continues in the *mūla* text where *muṭṭhi-yuddha* and *nibbuddhaṃ* are placed side by side, one explaining the other: *muṭṭhi* (a Dravidian word) is a form of fist-fight and *nibbuddha* (< OI *ni* + *yudh*, “to fight” > *nivvudh*- > Pāli *nibbudh*- von Hinüber 2001: §216) the same (also “wrestling”); the latter is glossed with *malla-yuddha* in the commentary which is the Dravidian word for “wrestling” and also the name of a sub-Himalayan tribe, who were well-known athletes.

The Indo-Aryans were a pastoralist, nomadic culture and they apparently were not as musically sophisticated and established as the urban Dravidians (Levman 2021c: 22); most of the musical terms here are non-IA and adopted from the local population. The IA musical orientation appears to be more religiously manifested in the sacred, sung hymns of the Vedas, rather than the popular music portrayed here, where the audience is involved with the performers, audibly keeping the beat.

Actors and dancers are also very important in the Dravidian culture; when the dancers died, they were not cremated, but when their body decayed, the bones were collected, washed and anointed and placed in a sacred place where mourning took place and food and alcohol were consumed (Sv 1, 84²⁷-85³).

The language here is highly unusual, with twenty indigenous words (ten in the *mūla* out of twenty-six total designations, and ten in the commentary), all important cultural and technical terms appearing in this short space. They indicate not only bilingualism, but an interdependency of the two cultures, which has perhaps not been heretofore appreciated.

Games

This cultural amalgam is also shown in the next section fourteen, which contains twenty-two important terms from the language of the native culture (six in the *mūla* and sixteen in the commentary). This portion is about the various games which the monks are not to engage in. Presumably, based on the word etymology, they are largely Dravidian practices which the Indo-Aryans were prone to adopting; of course their appearance here does not mean they were sanctioned in the Dravidian culture either.

5) Games List

Here there are nineteen different games described in the *mūla* of which six are of non-IA etymology; the commentary has another fifteen technical terms. The word for “game” is *kīlā* in Pāli (OI *krīḍā*) from the verb *krīḍ/krīḷ* (RV), “to play, amuse oneself.” Although this seems like a bona fide IA derivation, counter-views have been expressed by Master (1948: 363-64) who takes it from a PD root *kiḷ/keḷ* (cp Tamil *kēḷ*, “friend, companion”), and Kuiper who derives it from Munda **k(h)id*, “to play” (1954: 242).

Pāli	Old Indic	Derivation	Source	Comment
<i>sakkharā</i> , “gravel, grit, grain, (sugar) granules.” ²⁰	<i>śarkarā</i> idem (ŚBr).	probably Munda.	M1 vol. 3: 308-09; M2, vol. 2: 618-9, “difficult”; Kuiper 122.	cp Khari <i>gargar</i> , “gravel” < PM root <i>*gaḍ</i> .
<i>khalikā</i> , “dice-board” (Vin); < <i>khala</i> “contest, battle.”	<i>phalaka</i> , “gaming board.”	Dravidian.	prob. from <i>khala</i> . M1 vol. 1: 305, “not certainly explained”; M2 vol. 1: 449,	cp Tamil, <i>kaḷam</i> , “threshing floor, open space”; Tuḷu <i>kala</i> , “square.”

²⁰ The word occurs in the game called *santikaṃ* which involves stacking up *sakkarāyo* (“granules”) and *sāriyo* (OI *śāri*, “die or small cube”) and trying to remove them with one’s nail. M1 vol. 3: 327 treats the latter as an IA word, although Burrow 1945: 117 takes it from the Dravidian, cp. Kannada *cāra*, “line, streak”; it has not been included as an IA word here as the meaning does not correspond.

			idem; Burrow 1946: 9.	
<i>pāsaka</i> , “die” (Jā).	<i>pāśaka</i> , “die” < <i>pāsa</i> , “die”(MBh) < <i>pra-as</i> “to throw.”	IA, glossing <i>khalika</i> in comm.		
<i>ghaṭikā</i> , “game of sticks” (Th) < <i>ghaṭa</i> , “multitude, heap” (Jā).	<i>ghaṭā</i> , “number, collection, group” (BhP).	Dravidian ?	M 1 vol. 1: 355 s.v. <i>ghaṭa</i> , “waterjar” “unclear, perhaps a native word”; Kuiper 55; Burrow 1948: 377	Note change of meaning
<i>daṇḍaka</i> , see above sv <i>daṇḍa</i> .		Dravidian.		
<i>salāka</i> , “small stick” (<i>Nikāyas</i>).	<i>śalākā</i> , idem (ŚBr).	non-IA?	M1 vol. 2: 314 < <i>śara</i> , “arrow”? Gonda 1932: 332-34; Kuiper 1955: 167 < Munda.	Turner (sv <i>śalyaka</i> , “porcupine”): “possibly connected with a word or words of non-Aryan origin.”
<i>mañjiṭṭhika</i> , “crimson” (<i>Nikāyas</i>).	<i>mañju</i> , “charming” in superlative <i>mañjiṣṭha</i> , “bright red, crimson (MBh).	Dravidian.	M1 vol. 2: 533; “not convincingly explained”; M2 vol. 2: 292, “a foreign word remains possible”; Burrow 1948: 389.	cp Tamil <i>mañcu</i> “beauty” < <i>maintu</i> , “strength, beauty, desire, love.”
<i>guḷa-kīlā</i> , “playing with balls or marbles.”	see above sv <i>guḷaka/guḍa</i> .	Dravidian, glossing <i>akkha</i> , “dice” (IA, <i>akṣa</i>)		

<i>paṅga-cīra</i> , “leaf-pipe” ²¹	?	Dravidian?		
<i>paṅṅa-nāḷika</i> , “leaf-tube.”	(<i>parṅa</i>)- <i>nāḷika</i> .	Dravidian/Munda (<i>nāḷika</i>) glossing <i>paṅga-cīra</i> and (<i>patta</i>)- <i>āḷhaka</i> .	M1 vol. 2: 127–29 sv <i>naḍa</i> ; Burrow 1946: 23; Kuiper 81-2.	Witzel, 16 suggests Munda connection.
<i>naṅgala</i> , “plough (Sn, <i>Nikāyas</i>).	<i>lāṅgala</i> , idem (RV)	Munda or Dravidian, glossing <i>vaṅkaka</i> , “a sort of toy; toy-plough.”	M1 vol. 3: 97 < AA; Kuiper 127; Burrow 1946: 25 < Dravidian; Przyluski 1929: 8; Witzel, 25 < Para-Munda <i>*laṅgal</i> .	cp Tamil <i>nāñcil</i> ; Khmer <i>aṅkāl</i> ; Malay <i>taṅgāla</i> ; Southworth 80, PD <i>*ñāñ-kVI</i>
<i>ciṅgulika</i> , “a wheel made of palm-leaves blown about by the wind.”	~? <i>hiṅgulaka</i> , ? “vermillion, cinnabar; a plant.”	? unknown; glossed by <i>tāla- paṅṅa</i> which are two Dravidian words. For <i>paṅṅa</i> (“leaf”) see above; for <i>tāla</i> (“palm-tree”) see Southworth 82, PD <i>*tāz</i> .	Southworth 2009: 119 early PD root for date palm <i>*cīnt(t)-</i> .	cp Tamil <i>cikku</i> , “to become entangled” (DED #2498) as a possible source, or Kannada <i>teṅgu</i> , “coconut palm,” with change of <i>t-</i> > <i>c-</i> .
<i>tāla-paṅṅa</i> , “palm-leaf.”	<i>tāla-parṅa</i> , idem.	both Dravidian, glossing <i>ciṅgulika</i> .		
(<i>patta</i>)- <i>āḷhaka</i> , (bowl) “a certain measure” (<i>Nikāyas</i>).	- <i>āḷhaka</i> , “a measure of grain” (Pāṇ).	? glossed by <i>tāla- paṅṅa</i> .	M1 vol. 1: 71, “unclear.”	Comm: “leaf-tube; they play, measuring sand, etc., with it.”
<i>vālukā</i> , “sand” (<i>Nikāyas</i>).	idem or <i>bālukā</i> (MBh).	Munda, glossing (<i>patta</i>)- <i>āḷhaka</i> .	M1 vol. 3: 196, “not convincingly clarified.”	cp Bondo, Juang <i>bali</i> , “sand”; Gta’ <i>bali=lo</i> ?; Korwa <i>ba:la:</i> ; Santali <i>bḷi</i> .

²¹ According to the commentary a *paṅga-cīra* is some kind of leaf-pipe, glossed as *paṅṅa-nāḷikaṃ taṃ damantā*, “blowing through a leaf-tube”; both these words (*nāḷikaṃ*, < *naḷa*, “reed” OI *nāḍa*) and *paṅṅa* (Levman 2021c: 28 note 34) are of Dravidian extraction. So is the second word in the compound -*cīra*, (“bark”); see above. The Dravidian word *paṅga* commonly refers to the forked branch of a tree, so *paṅga-cīra* as a compound would have something to do with stripping bark off a tree branch, which of course is not consistent with the commentarial gloss given here.

<i>kāṇa-</i> , “blind, usually of one eye” (Vin, Jā, Th).	idem (MBh).	Dravidian.	M1 vol. 1: 196 favours IA; M2 vol. 1: 336 idem; Kuiper 1955: 176 < Munda; Burrow 1946: 22 < Drav.	cp Tamil <i>kāṇ</i> , “to see” with neg. ending <i>-ā</i> > <i>kāṇā</i> , neg. root “to not see.” ²² Modern Tamil <i>kāṇaṇ</i> , “one-eyed man.”
<i>kuṇi-</i> , “deformed, paralyzed” (Jā).	idem (MBh).	Dravidian.	M1 vol. 1: 225, “apparently Dravidian”; Kuiper 54; Kittel 1894: XXVIII; Burrow 1946: 22.	DED #1688, Malayalam <i>kuṇṭan</i> , “cripple,” etc., < Dravidian root <i>kūṇ</i> “bend, curve, humpback”; modern Tamil <i>kuṇi</i> , “that which is lame; person with a withered hand.”
<i>khujja</i> , “humpbacked, crooked” (Jā). var. <i>khañja</i> , <i>khajja</i> .	<i>kubja</i> , idem (MBh).	Munda/Dravidian.	M1 vol. 1: 230, “prob. proto-Munda”; Kuiper 42f; Burrow 1948: 374.	cp Santali <i>kubja</i> , <i>kobjo</i> , “bandy, crooked.” Dravidian cp Kannada <i>gubāru</i> , “swelling”; <i>gubbi</i> , “knob, protuberance”; DED #1743. Modern Tamil <i>kuñcitam</i> , “bent, crooked” < verb <i>kuñci</i> , “to bend.”

Of all these non-IA words, the most revealing are the last three, which are part of the gloss for the game *yathā-vajjam* (“according to their fault”). This is some form of mimicry of a person’s defects: *kāṇa-kuṇi-khujj-ādīnaṃ yaṃ yaṃ vajjam, taṃ taṃ payojetvā dassana-kīlā* (“imitating this or that fault of a blind, deformed or humpbacked person, etc., the game of showing it” Sv 1, 86²⁰⁻¹). The words are all Dravidian in origin (*khujja* perhaps from a Munda substrate), and are a direct lift from that language. In modern Tamil it would read *kāṇa-kuṇi-kuñcitam*, almost identical to the

²² Mayrhofer objected to this explanation as did Kuiper, the latter on the grounds that it must have been very rare. But there is also a neg. verbal root (Wilden 2018: 148) *kāṇā*, that is root + *-ā*, with implied pronominal suffix *-a* (3rd plural), “those eyes don’t see,” which is the logical source of MI/OI *kāṇa*, the *-ā* > *-ā* to denote the masc. sing. nom., that is, a form of aryianization.

Pāli, and presumably old Tamil would not be far from this. This shows a high degree of language integration and bilingualism, whereby the words in one language have been borrowed and are understandable in another. Note that the words are not expressed in IA which has its own words for these phenomena (*andha-virūpa-vakra-prṣṭha*); presumably this is another example of using pejorative language from Dravidian (as in *muṇḍa-kuṭumbika*, “bald householder” discussed above) to imply a subaltern position for those native speakers.

Two of these words (*ciṅgulika*, *paṅgacīra*) only occur here in the canon (and in the section as repeated in the *Sāmaññaphalasutta* DN 2), which is a means of dating them, assuming we can date the *suttas* in which they appear. A third appearance is later, in the Vinaya commentary (Sp 3, 179-180) criticizing the followers of Assaji-Punabbasu, some wayward Buddhist monks; here, virtually all the forbidden practices in this *sutta* and more are repeated.

Again there are some binary pairs in this section where one phrase is glossed by another in the opposite language like *phalaka* (“dice-board”) or *pāsaka* (“dice”) glossing *khalikā* (“dice-board”), and *naṅgala* glossing *vaṅkaka* (“plough”); and there are also indigenous phrases like *paṅga-cīra* and *ciṅgulika* which are glossed only by other words of Dravidian etymology (*paṅṅa-nāḷika*, and *tāla-paṅṅa* respectively); all these common words for leaf (*paṅṅa*), reed (*naḷa* > *nāḷika*) and date palm (*tāla*) have been in the IA language for a long time, the first two since the RV, so no particular conclusion should be drawn from this fact, except that the languages have been interacting since at least the time of the middle RV period (~1500 BCE, Witzel, 14). More important are words like the last three name-calls, which appear quite late in IA (MBh) and are therefore likely recent borrowings. Intuitively this makes sense, as common agricultural terms would be the first to be borrowed, and later, as the two languages became acculturated to each other, the profane language of each culture would be exchanged.

Highbeds

Monks were forbidden to sleep in raised beds or use fancy bed-covers, and section fifteen is devoted to those which are prohibited. Here there are approx. twenty different types of bed and bed coverings listed of which eight are non-IA in etymology; in the commentary there are nine words of indigenous origin. Again, only these are listed, with IA words as appropriate for illustration.

6) Bed and Bed-covers List

Pāli	Old Indic	Derivation	Source	Comment
<i>pallaṅka</i> , “sofa, couch, cross-legged sitting, palanquin” (<i>Nikāyas</i>).	<i>palyaṅka</i> , idem (Pāṇ).	Dravidian.	M1 vol. 2: 226, sv <i>paryaṅka</i> , “from an Indian source, allegedly Drav.”	American Heritage dictionary < Javanese <i>pelangki</i> (AA).

<i>vāla</i> , “snake, beast of prey” (Jā).	<i>vyāḍa/vyāla</i> , idem (AV).	prob. non-IA, unknown source.	M1 vol. 3: 276, “unclear”	glosses <i>pallaṅka</i> , “with the legs made of beasts of prey.”
<i>goṇaka</i> , “a woollen cover with long fleece” (<i>Nikāyas</i>).	<i>goṇikā</i> , “kind of woolen cloth” (<i>Lotus Sūtra</i>).	Dravidian.	M1 vol. 1 345-46 < Dravidian, cp Kannada, <i>gōṇi</i> , “sack” Telugu <i>gōne</i> , idem; Burrow 1945: 90.	
<i>kojava</i> “a rug or cover with long hair, a fleecy counterpane” (Vin).	<i>kocava</i> (BHS) < <i>kavaca</i> , “armour, jacket” (ŚBr).	Dravidian, glosses <i>goṇaka</i> .	M1 vol. 1: 186, “apparently Dravidian”; Kittel 1894: XXXI I; Burrow 1945: 90.	cp Kannada <i>gavasaniḡe</i> , <i>gavasani</i> , “cover, wrapper, cloth, case”; <i>kavudi/kavadi</i> , “quilted cover.”
<i>paṭikā</i> , “white, woolen cloth” (<i>Nikāyas</i>).	idem, “woven cloth” < <i>paṭa</i> , “cloth” (MBh).	Dravidian/Munda.	M1 vol. 2: 190, “perhaps from AA”; Master 1944: 302,	cp Dravidian reflexes <i>paṭṭa</i> , <i>paṭa</i> , <i>paḍa</i> , <i>paṭṭe</i> , <i>paṭi</i> , etc., “cloth”; cp Tamil <i>paṭṭu</i> , “silk cloth”;
<i>paṭalikā</i> , “a woolen coverlet embroidered with <i>āmalaka</i> (gooseberry) flowers.”	?	Dravidian.	M1 vol. 2: 189, sv <i>paṭalam</i> , not to be separated from <i>paṭa</i> (see row above).	
<i>pupphaka</i> , “flower” (<i>Nikāyas</i> , for <i>puppha</i>).	<i>puṣpa</i> , “flower” (AV).	Dravidian.	M1 vol. 2: 318; M2 vol. 2: 153; Burrow 1946:10.	From the Dravidian root <i>pū</i> , “to blossom, to flower” and noun <i>pū</i> , “flower, blossom.” ²³

²³ *puppha*, “flower”: (Levman 2021a: Chapter three, Appendix two): The word *puppha* (“flower”; OI *puṣpa*) is usually interpreted as derived from the root *puṣ*, “to thrive, flourish, prosper,” but the derivation is questionable as the meaning does not correspond (so Turner notes in CDIAL #8303). Dravidian has at least a direct correspondence in Tamil *pū*, “flower,” (noun and verb, non-past stem is *pūpp-*; absolutive is *pūppu*, “flowering, having flowered”; Telugu *pū*, *pūvu*,

<i>-paṭṭa</i> , “cloth, strip of cloth” (<i>Nikāyas</i> , Vin, Jā).	idem, “cloth, bandage, strip, bturban” (MBh).	Dravidian.	M1 vol. 1: 192-3, “non-IA source?”	cp Dravidian, Tamil <i>paṭṭai</i> , “rind, strip” (DED #3876).
<i>tūlika</i> , “mattress, full of three cotton layers” (<i>Nikāyas</i>) < <i>tūla</i> , “tuft of grass, cotton” (Sn).	<i>tūla</i> , idem (AV), (<i>tūlika</i> = “cotton trader”).	Dravidian.	M1, vol. 1: 520 “not convincingly explained”; Burrow 1944: 348; 1946: 18, 28	cp Tamil <i>tūval</i> , “feather, down”; Malayalam <i>tūval</i> , “feather.”
<i>dasā</i> , “fringe” (<i>Nikāyas</i>).	<i>daśā</i> , idem (Mn).	Munda.	M1 vol. 2: 27, “without certainty”; M2, vol. 1: 710.	cp Santali <i>dāsi</i> , “fringe”; Kharia <i>dosiyara</i> , “border”; Mundari <i>dāsi</i> , “fringe”; Korwa <i>d^hari</i> ., “edge, border of a garment.”
<i>kaṭṭissa</i> , “silk covering embroidered with jewels” (Vin, <i>Nikāyas</i>)	?	Dravidian.		Tamil <i>kaṭṭil</i> “cot, bedstead, couch, sofa; throne”; Malayalam <i>kaṭṭil</i> , “bedstead, cot.”
<i>nāṭaka/nacca</i> , “dancer/dance” see above List #4.		Dravidian.		
<i>mañca</i> , “bed” see above List #2.		Dravidian.		

puvvu; Kui *puju*, “flower”; *pūpa*, “to blossom, bloom,” etc. (Burrow 1946: 10; DED #4345), although Mayrhofer considers this “little justified”; M1 vol. 2: 318; later in M2 vol. 2: 153 he calls Burrow’s proposal “a worthless sound-similarity interpretation from the Dravidian.” Yet the Dravidian word has a very wide distribution in all branches of the language, including PND (e.g. Malto *pūpu*, flower; *pūthe*, “to blossom”), which would date the proto-form to approx. 2500–2000 BCE (Southworth p. 195), well before the first OI appearance of the word in the *Śatapatha Brāhmaṇa* (with the meaning “flower,” approx. seventh century BCE).

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<i>kadalī</i> , “a kind of deer” (<i>Nikāyas</i> , Jā).	<i>kadalin</i> , “a kind of antelope” (Lex).	Munda/Dravidian.	M1 vol. 1: 150, “probably an AA word”; Przulski 1929: 5.	Tamil <i>katuppu</i> “herd of cattle”; Kannada <i>kadupu</i> “herd, flock” <i>kadale</i> , <i>kadaḷi</i> “a mass, multitude” (DED #1198).
<i>paveṇi</i> , “a mat, cover” (<i>Nikāyas</i>).	<i>praveṇī</i> , “a piece of coloured woolen cloth” (MBh).	Dravidian.	M1 vol. 3: 254 sv Veṇṇā; also vol 2: 224 sv Paṇṇā; Witzel 1999b: 384-5.	< originally a Drav. river name <i>veṇa</i> or <i>veṇī</i> .

Both in the *mūla* and the commentary the pattern of gloss translation is evident. The first IA word *āsandi* (“long easy chair, small couch”) is explained by the immediately following word *pallaṅka* (“sofa, couch”), its equivalent in Dravidian. *Goṇaka* in the *mūla* (“woolen cover with long fleece”) is glossed with *kojava* (“cover with long fleece”) in the commentary; here both words are of Dravidian origin and the precise difference between the two is not clear. *Cittakā*, a “many-coloured woolen covering” is followed by two Dravidian near-synonyms, *paṭikā*, a “white cover made of wool” and *paṭalikā*, a “woolen cover embroidered with flowers” which is followed by another IA-derived bed-cover *vikatikā*, a “woolen cover embroidered with figures of lions and tigers.” The word *kuttaka* (“woolen carpet”), which appears to be IA in origin (< *kattā*, “maker” < *karoti* “to make” with an original meaning “to weave” per PED), is glossed as a “woolen carpet big enough for sixteen female dancers (*nātak’itthīnaṃ*) to stand on,” dancing being primarily an activity of Dravidian urban culture. The generic IA word for “covering, carpet, cover” *attharaṇa* (~OI *āstarāṇa*, “spreading out” < *ā* + *str*, “to cover, spread”) is used throughout, counterpointed against the various covers whether IA or indigenous; by the time of this commentary one must assume that there was a fairly high level of bilingualism at work, judging from the juxtaposition and mixing of the various words we find here, IA and indigenous, synonyms and near-synonyms. The commentary also provides a lot of relevant information about various cultural practices: bed-covers made of black antelope skins (*ajina-ppaveṇi*) sewn together; a bed-cover made of *kadalī* skins, which is considered the best (*uttama-paccattharaṇaṃ*); bed canopies (*uttara-cchada*) with a red awning (*ratta-vitāna*); and the use of pillows (*upadhāna*, < *upa* + *dhā*, “to place under”) for both the head and feet (all of which are of course forbidden).

Decorations

The monks were also forbidden to wear any decorations, which were listed in section sixteen. The section starts with a binary gloss of *maṇḍana-vibhūsana* (“decoration-decoration”) in the *mūla* text (*maṇḍana-vibhūsana-tṭhāna-anuyogaṃ anuyuttā viharanti* (“they live applying themselves to the

practice of ornamentation” at DN 1, 71⁷⁻⁸), with *maṇḍana* a word of Dravidian etymology (Burrow 1948: 389, cp Tamil *maṇṇu*, “to wash, clean; to anoint, adorn, beautify, decorate; to polish, perfect, finish”), and *vibhūsana* its IA equivalent (< *vi* + *bhūṣ*, “to adorn, decorate; to be brilliant”). There are twenty-three terms in the *mūla* of which thirteen are indigenous and approx. eighteen further *desi* terms in the commentary.

7) Ornament List

Pāli	Old Indic	Derivation	Source	Comments
<i>maṇḍana</i> , “decoration” (<i>Nikāyas</i>).	idem (MBh).	Dravidian.	M1 vol. 2: 558, “not convincingly explained”; Burrow 1948: 389; Kuiper 111.	
<i>kucchi</i> , “womb” (Jā).	<i>kukṣi</i> , idem (R), as “belly” (RV).	uncertain.	M1 vol. 1: 219, “not wholly certain,” perhaps related to <i>kośa</i> , “treasury” which is also uncertain; M2 vol. 1, 360 perhaps Iir.	cp Santali <i>kukhi</i> ; Dravidian <i>kūl</i> , “womb, belly” (DED #2244); <i>kūcci</i> , “pulp of fruit.” ²⁴
<i>gandha</i>	as above.	non-IA.		
<i>malla</i>	as above.	Dravidian.		
<i>muggara</i> , “club, hammer, mallet” (Jā).	<i>mudgara</i> , idem MBh.	see <i>mugga</i> above, Dravidian/Munda.	M1 vol. 2: 652 “not satisfactorily explained”; Kuiper 146, note 35 < Munda.	cp Tamil <i>mottu</i> , “to strike, to beat”; Kannada <i>mōdu</i> , <i>mōhu</i> , idem.
<i>mālā</i> , “wreath, garland” (Sn, Th, Jā).	idem (MBh).	Dravidian.	Burrow 1948: 390.	cp Tamil <i>mālai</i> , “garland.” ²⁵
<i>mukha-(cuṇṇa)</i> , “face-powder” (<i>Nikāyas</i>).	<i>mukha-(cūrṇa)</i> , idem (RV).	Dravidian.	Bloch 1929: 55- 8; M1 vol. 2: 648-49; M2 vol.	cp Tamil <i>mukam</i> ; Kannada <i>moga</i> ;

²⁴ It is intriguing that Dravidian has the same word (with long *-ū-*), here meaning, “the pulp of a fruit” (analogous of course to the embryo) and it has a fairly wide distribution in Tamil *kūcci*, “pulp of wood-apple”; Malayalam *kūññū*, “centre of a fruit”; Kannada *kusuri*, “pulp of some vegetables and fruits”; and various cognates in Tuḷu, Telugu, Gadaba and Gondi, that is in PSD and PCD (see DED #1880, suggesting a pre-RV date of approx. 1500 BCE (Southworth 51).

²⁵ M1 vol 2: 628 agrees with the Dravidian source; M2 vol. 2: 351, “probably a loanword.” See also Southworth 77 who derives the word from proto-South Dravidian **mālai*, “garland, necklace.”

			2: 360; Southworth 93; Levman 2021a: Chapter three, Appendix four #4.	Telugu <i>mogamu</i> ; etc., “mouth, face”; further, Tamil <i>mūḱku</i> , “nose.
(<i>mukha</i>)- <i>cunṇa</i> , “face powder” (Vin, <i>Nikāyas</i>).	(<i>mukha</i>)- <i>cūrṇa</i> (VarBrS).	Dravidian/Munda.	M2 vol. 1: 547, “not clear.”	cp Telugu <i>guṇḍa</i> ; Parji, Kuwi, <i>guṇḍa</i> ; Malto <i>kunḍo</i> , etc., “powder”; for Munda, cp proto Kherwarian * <i>guṇḍa</i> ; Mundari, Santali <i>guṇḍa</i> ; Korwa <i>guḍa</i> ; Bondo <i>guṇḍ</i> ; “powder.”
<i>sikhā</i> , “crest, topknot” (Sn, Jā).	<i>śikhā</i> , “tuft of hair on the crown of the head, crest, topknot, plume” (ŚBr).	probl. non-IA.	M1 vol. 3: 333- 34, “not satisfactorily explained”; Kuiper 148 < PM <i>ḍa-ga</i> “high.”	
<i>kāḷa</i> , “black.”	idem (MBh).	Dravidian.	Kittel 1894: xxviii; Bloch 1930: 738; Burrow 1946: 16; Levman 2021a: Chapter three, Appendix four #14.	M1 vol. 1: 203, “probably a loanword from Dravidian”; M2 vol. 2: 343, “Dravidian to Kannada <i>kāḍu</i> , etc.?”
<i>pīḷaka</i> , “boil” (Vsm).	<i>piḍaka</i> , idem (Suśr).	Dravidian/Munda.	M1 vol. 2: 273, “not certainly interpreted”; Kuiper 142 < AA; Burrow 1948: 384 < Dravidian.	cp Tuḷu <i>puḷa</i> , <i>poḷa</i> , “pustule, blister”; <i>puḍi</i> , “sore, ulcer”; Munda, Juang <i>pucuka</i> , “boil.”
<i>kakka</i> , “paste” (Vin, Jā). A black paste used on the face as a	<i>kalka</i> , idem (MBh).	Dravidian.	M1 vol. 1: 183, possibly Dravidian”;	cp Tamil <i>kalakku</i> , “to mix up”; <i>kalavai</i> , “mixture”;

boil-remover (comm).			Burrow 1948: 371.	Kannada <i>kalaka kalka</i> , “mixture.”
<i>sāsapa</i> , “mustard seed” (<i>Nikāyas</i>).	<i>sarṣapa</i> , idem (Mn).	non-IA.	M1 vol. 3: 447, “perhaps non-IA”; Przulski-Régamey 1936: 704 < AA.	
<i>tila</i>	as above.	Dravidian.		
<i>kaṇṇikā</i> , “ear ornament” < <i>kaṇṇa</i> , “ear” (Sn, Jā).	<i>karṇikā</i> , idem (Pāṇ).	? IA/non-IA ?	Burrow 1943: 125, note 1; M1 vol. 1: 172, “Burrow’s derivation < Drav. too bold.”	“A convincing etymon is missing” per M2 vol. 1: 315.
<i>makara</i> , “mythical fish or sea-monster” (Jā).	idem, “crocodile, shark, sea-monster” (VS).	? prob. non-IA	M1 vol. 2: 539, “not clearly determined”;	cp Santali <i>maṅgar</i> , “alligator”
<i>mora</i> , “peacock” (Jā).	<i>mora/mayūra</i> , idem (VS).	non-IA.	M1 vol. 2: 587; M2 vol. 2: 317; Przulski 1929: 131-32; Burrow 1945b: 609-10 and 1946: 19; Witzel 15; Southworth (92-3); Levman 2021a: Chapter three, Appendix four #12.	cp Tamil <i>mayil</i> , Tuḷu <i>mairu</i> (“peacock”) or < AA, cp Santali <i>marak</i> , Mundari, <i>mara</i> , Kharia, <i>mara?</i> , Juang, <i>marag</i> ; Korku, <i>mara?</i> , <i>mhara?</i> (<i>idem</i>).
<i>piñcha</i> , “tail feather” (Vin).	<i>piccha</i> (MBh).	uncertain, possibly non-IA.	M1 vol. 2: 270-71, “without convincing explanation”; Burrow 1946: 28.	cp Malto <i>pice</i> , “feathers of a peacock’s tail”; Tamil <i>pittai</i> , tuft or bundle of hair.”
<i>cīraka</i> , “strip.”	see <i>cīra</i> above.	Dravidian.		
<i>muttā</i> , “pearl.”	<i>muktā</i> , idem (Mn, MBh).	Dravidian.	Burrow 1946: 11; M1 vol. 2: 647-48; Southworth 77-8.	cp Tamil, Malayalam, Kannada <i>muttu</i> , “pearl.”

<i>latā</i> , “creeper” (<i>Nikāyas</i>).	idem (MBh).	? IA/non-IA ?	M1 vol. 3: 88, “not certainly explained.”	cp Parji, Gondi <i>lāṭi</i> , “tall, long”; modern Tamil <i>latā</i> , “creeper” (borrowed?).
<i>daṇḍaka</i>	as above, <i>daṇḍa</i>	Dravidian/Munda.		
<i>nālīka</i>	as above.	Dravidian/Munda		
<i>nalāṭa</i> , “forehead” (<i>Nikāyas</i> , Jā).	<i>lalāṭa</i> , idem (AV).	prob. Dravidian.	M1 vol. 3: 92, “probably non- Aryan...perhaps < Dravidian kinship.”	cp Dravidian, Tamil <i>nūtal</i> , “forehead” (DED #3705)
<i>uṇhīsa</i> , “turban” (<i>Nikāyas</i>). - <i>paṭṭa</i> (see above, Dravidian).	<i>uṣṇīṣa</i> , “turban, crown” (ŚBr).	prob. Dravidian.	M2 ol. 1: 239, “unclear.”	cp Tamil <i>uccī</i> , “crown of head, summit, zenith”; Toda <i>uṣky</i> “top of tree, zenith.”
<i>cūlā</i> -(<i>maṇi</i>), (jewel worn in a) “crest, diadem” (Jā).	<i>cūḍa</i> , “crest, plume, diadem” (med).	Dravidian/Munda.	M1 vol. 1: 396- 7, “most likely from the Dravidian”; Kittel 1894: xxxiv; Bloch 1930: 741; Burrow 1948: 379.	cp Tamil <i>cūtu</i> , “to be crowned, crest, comb”; <i>cūṭtu</i> , “to crown, peacock’s crest”; Kuiper suggests the Dravidian words may be borrowings from PM.
(<i>cūḷa</i>)- <i>maṇi</i> , “jewel” (<i>Nikāyas</i>).	idem (RV).	Munda.	M1 vol. 2: 556– 57; Kuiper 1955: 153; cp Santali, <i>maṇik</i> , “gem”; Mundari <i>mani</i> , “jewel.”	cp DED #4672, Tamil, Malayalam <i>maṇi</i> , “little bells worn as jewels.”
<i>camara</i> , “yak” (Jā)	idem (MBh).	non-IA.	PTS, “prob. non- Aryan”; M1 vol. 1: 375, “not satisfactorily explained.”	cp Tamil <i>kavari</i> , “chowrie (yak’s tail)” (DED #1327).
<i>vāla</i> , “tail” (Vin, Jā)	idem, (ŚBr).	Dravidian.	M1 vol 3: 192-3, “uncertain,” but not a loan word; M2 vol. 2: 545.	cp Tamil <i>vāl</i> , “tail”; <i>vālam</i> , “tail, hair of head”; Malayalam <i>vāl</i> ,

				“tail”; Kannada <i>bāla</i> , “tail, long hair”; Koḍagu <i>ba·li</i> , “tail” (DED #57).
<i>bījanī/vījanī</i> , “fan” (Vin, Jā).	<i>vījana</i> , “fanning” < <i>vīj</i> , “to fan” (MBh).	Munda/Dravidian.	M1 vol. 3: 272 sv <i>vyajanam</i> , “not clarified”; Bloch 1929: 53.	cp Tamil, Telugu <i>vīcu</i> , “to fan” <i>vīcīri</i> , “a fan” (DED #5450), a very old verbal root with reflexes in all Drav. language branches.
<i>dasā</i> , “fringe.”	as above.	Munda.		

The last compound in the commentary— *cāmara-vāla-b(v)ījanīṃ* (“fan made from a yak’s tail”)—is a direct lift from the Dravidian *kavari-vālam-vīcīri* (idem), suggesting perhaps that the underlying work from which this was taken may actually have been composed in Dravidian. See further discussion below.

This section provides a firsthand glimpse of the different vanity practices of some of the monks. To remove pimples, for example, they would first apply a mud-paste on their face, then “when the blood had been stirred” (*lohite calite*) they would apply a mustard-seed paste, then a paste made of sesame seeds followed by a paste of tumeric, and finally a face powder (Sv 1, 88²⁸⁻³³). Some monks wore bracelets of coloured shells, sported topknots, and ornamented themselves with gold brocade, strings of pearls, jewels and earrings. They carried around bottles of medicine hanging from their left side, sharp swords, five coloured umbrellas ornamented with crocodile teeth, and wore gold and silver sandals decorated with peacock tail feathers. Some wore jewels on the ends of their hair, wore a turban on their forehead with a jewel on the crest, and carried a yak-tail chowrie.

The root text and commentary of this section contain the largest number (thirty-one) of non-IA, indigenous terms and is the end of the upward trend on the graph; after this there is a very quick decline of indigenous words—less than a quarter of the total number remain in the following sections.

There are three words for “massage” in the *mūla*, but they are all IA in origin (*ucchādanam*, “rubbing the body” < *chad*, “to cover, spread”; *parimaddanam*, < *pari* + *mṛd*, “to rub”; *sambāhanam* < *sam* + *brh*, “to strengthen”); the most pejorative words are those relating to the vanity practices, and most of the keywords are from the indigenous vocabulary. Presumably some or all of these practices were adopted from the local culture along with the words; this points to

extensive bilingualism and a certain amount of linguistic condescension on the part of the Indo-Aryans to the local population's practices and terminology.

Sections seventeen to twenty, completion of *Majjhima-sīla*

The remainder of the sections of the *Majjhima-sīla* (sections seventeen to twenty) have only three non-IA words in the *mūla* (*mālā* “wreath”; *gandha* “fragrance”; *nagara* “town, city”; and perhaps *kuhaka*, “deceitful”) and seven in the commentary (*pūjā* “worship”; *sāgara* “ocean”; *dāsi* “servant”; *naccituṃ* “to dance”; *kāka* “crow”; *baka* “heron” *vitaṇḍā* “fallacious controversy” which is “unclear” per M1 vol. 3: 207). Many of these have already been discussed above so they will be omitted here as they are for the most part not germane to the overall discussion. Here the subject of the *mūla* is much more general than the preceding sections and there are very few technical terms: engaging in frivolous talk (*tiracchāna-kathā*, section seventeen) or in argumentation (*viggāhika-kathā*, section eighteen), or in delivering messages (*dūteyya-paṇḍita-gamana-anuyoga*, section nineteen) or in “deceit” (*kuhaka*, section twenty). Most of the words are IA (except as noted) and the non-IA words are of reduced significance as the practices described are for the most part not specific to one linguistic group and would apply to both. The last three sections (sections eighteen to twenty) which basically have no non-IA words at all (with the possible exception of *kuhaka* which is contested) are a good example of a typical IA “translation”; that is, whatever the underlying transmission was, it has been fully assimilated into the IA language.

The *Mahā-sīla*: Predictions, Oblations, Charms,

As can be seen from the chart, the first *Mahā-sīla* portion begins with a section on prophesy which is more technical in nature and seventeen terms are introduced on non-IA provenance (of which seven have already been discussed above). However the balance changes noticeably here in that the preponderance of technical terms are IA, and not indigenous. Of the thirty fortune telling terms in the *mūla* of section twenty-one only six are *desi* words, well below the proportions noted above. Five of these relate to the practice of making oblations of *thusa*, “husk of grain”; *kaṇa* “husk powder”; *taṇḍula* “rice-grain”; *tela* “sesame-oil”; and *mukha* “mouth,” spitting mustard and other seeds into the fire. All of these are *desi* words. With the exception of *sakuṇa-vijjā* (“knowledge of birds”; *sakuṇa* is a non-IA word), all the other practices use technical terms from the IA language which suggests very strongly (when counterposed against what has been detailed above) that these practices originate in the IA ethno-linguistic milieu.²⁶ This tallies well with our understanding of the brahmanical culture, whose preoccupation with auguries and knowledge (*vijjā*) of various crafts and charms is embedded in their sacred writings, especially the *Arthava-Veda*; which is not to say that the Dravidians were not interested in these arts, but that their influence on the IA culture was probably negligible, judging from the linguistic analysis. The commentary is also fairly sparse

²⁶ There is no need to list all these as they may be found on pages 9-11 of the DN. A few examples: prophesying on the basis of one's limbs (*aṅga*), signs (*nimitta*), unusual celestial events (*uppāta*), dreams (*supina*); oblations by fire (*aggi*) or from a ladle (*dabbī*); knowledge of building sites (*vatthu*), snakes (*ahi*), poisons (*visa*), demons (*bhūta*), etc.,

with *desi* words, having a total of eleven (noted in Appendix A). Many of these are simple synonymic glosses (*vāyasa-kāka* “crow”; *taṇḍula-sali/tiṇa* “rice-grain-rice/grass”; *sakuṇa-sapakkhaka* (“bird”); *undūra-mūsika* “mouse”) with an IA word glossed with its *desi* counterpart).²⁷ Several of these have already been discussed above (*muttā*, *muṭṭhi*, *tila/tela*, *sāsapa*, *kukkuṭa*), so there is no need to go into the few remaining here.

Section twenty-two is also about augury with respect to interpreting the significance of the characteristics (*lakkhana*) of various items. Twenty-seven are listed of which six (*maṇi* “jewel”; *daṇḍa* “stick”; *dāsa/dāsi*, “servant”; *meṇḍa* “ram”; *kukkuṭa* “cock”; and *kaṇṇikā* “earring”) are indigenous (*kaṇṇikā*, contested); most of these have already been discussed above. The commentary is all pure IA.

Section twenty-three concerns predictions about current political events. There are no indigenous words in the *mūla* or the commentary.

Predictions concerning celestial events is the subject of section twenty-four. Most of the language is IA derived. In the *mūla* there is only one word which is a *desi* term *dudrabhi*, (var. *dundubhi*, “kettledrum”) to indicate the sound of a thunderstorm. All the astronomical/astrological terms are IA, which is what one would expect for a culture immersed in that art. The commentary has only three or four indigenous words, all describing the IA technical term *disā-dāho* (“direction-glow”), an unusual redness in the sky which it defines as *disā-kālusiyam aggi-sikha-dhūma-sikhāhi ākula-bhāvo viya*, (Sv 1, 95¹⁰⁻¹¹, “an obscurity of the direction like a confusion of fire and smoke crests.” the word *sikhā*, as noted above, is prob. non-IA, *ākula* (“confused”) is proto-Munda (M1 vol. 1: 69; Kuiper 16f), and *kālusiyā* (“obscurity, darkness” < OI *kaluṣa*, “stained, dirty” < *kāla*, “black” see above) is Dravidian. The word *valāhaka* “cloud” in the section on thunderstorms is also of obscure origin and may be native. The rest are all standard IA.

The last three sections are almost exclusively IA with the proportion of *desi* words continuing to decline. In section twenty-five there are thirteen terms to do with prediction of which only one (*gaṇana*, “accounting”) is indigenous (Levman 2021c: 23); the commentary has two words (*piṇḍa*, “ball” and *paṇṇa* “leaf”) both of which are discussed above. Section twenty-six is about auspicious dates, charms and spells and communicating with the gods. This is completely IA language with the one possible exception being the word *kaṇṇa* “ear” (in the context of a spell to induce deafness), which, as noted above, is contested in etymology. The final section twenty-seven is largely about medicine and contains three non-IA words (of twenty-six technical terms) in the *mūla*: *kaṇṇa-tela*, administering sesame oil in the ear as a treatment (the word *kaṇṇa*, as noted above, is unclear as to etymology) and *sālākiya* (“ophthamology”~ OI *śālākya*, < OI *śalākā*, Pāli *salākā*, “chip, splinter,” presumably used as an instrument for operations; M1 vol. 2: 314; Kuiper 1955: 167), and only one in the commentary (*paṭala*, “membrane covering the eye” < *paṭa* “cloth” see above). Again, the field of medicine has very little terminology borrowed from the local culture, suggesting

²⁷ The *desi* words here are *kāka*, *taṇḍula*, *sakuṇa* and *undūra*; the others are IA. The pair *kaṇa-kunḍaka* “husk-powder” are both *desi* words.

that the Indo-Aryans had their own developed art, which was independent of Dravidian medicine culture, whatever that was.

Section twenty-eight begins the *Pubbantakappikā*, “speculations about the past” with the first of the sixty-two views, eternalism, which is the heart of the *Brahmajāla*. Like the beginning of the *sutta*, it returns to exclusively IA language with hardly any non-IA words.

Timelines

One might object to the bilingualism thesis propounded here on the basis of timelines. Some of these words (*gandha*, *mukha*, *amba*, *maṇḍala*, *ratha*, etc., see Appendix A) are very old borrowings from the *desi* languages into IA, going back as far as at least the middle period of the RV ~1500 BCE (Witzel 14). Yet the *Dīgha Nikāya* was not “composed” (that is recited) until the death of the Buddha in the early fourth century, and probably not in its present form. So *desi* words in the language do not necessarily indicate bilingualism (or for that matter a potential translation from an earlier work, as discussed below), as the words may have been in the language for centuries. There are three cogent answers to this objection:

1) The massive change in etymological proportions (Table One) indicates that a true linguistic saltation “event” has taking place in these sections of the *Brahmajālasutta*.

2) Many of the words, perhaps the preponderance (it is impossible to tell), are of younger origin and appear to date from the time of the Buddha. A comparison of first appearances (in brackets after the word), suggests that dozens of words first appear in the *suttas* and are then incorporated into OI, or both occur at approximately the same time.²⁸ They are relatively young; some (*pāṭaṅkī*, *paṅga-cīra*, *ciṅgulika*, *paṭalikā*, *kaṭṭissa*) do not occur at all in OI, again suggesting that their provenance in Pāli/MI is coeval with the *suttas*. This is in keeping with Burrow’s observation of the increasing number of Dravidian words which occur in the classical Sanskrit language and in Pāli around the period of 500-300 BCE (1955/1973: 385-86; Witzel 14-20; Levman 2021a: Chapter three, “Objections” section).

3) Two of the *mūla* words (*ciṅgulika*, *paṅga-cīra*) are *hapax legomena* in the *suttas*, with only one other appearance later in the commentary. Similarly, the commentary (which could date anywhere from the time of the Buddha to the time of Buddhaghosa) has unique phrases which occur nowhere else in the canon (e.g. *kāṇa-kuṇi-khujja* and *camara-vāla-bījanī*), and which are direct lifts from Dravidian; these one-time appearances epitomize a singular linguistic event.

Conclusions

²⁸ A few examples (from the *mūla* text only): *kukkuṭa* (“cock”); *maṇḍana* (“decoration”); *vaḷava* (“mare”); *eḷaka* (“sheep”); *visūka* (“show”); *vetāla* (“musical art”); *meṇḍa* (“ram”) and so forth, to take a few from the first few sections of the *sutta*, where MI pre-dates OI or is at least coeval. There are many more. The same observation goes for the non-IA words in the commentary, parts of which may be as early as, or only slightly later than the *mūla*, as noted above (pp. 3-4).

From this body of data several inferences are possible, some more certain than others.

1) There exists a large amount of vocabulary, mainly technical terms, borrowed directly from the indigenous languages into IA. This indicates extensive bilingualism and the adoption or rejection of certain cultural and religious practices from the local people into the brahmanical and Buddhist culture (e.g. Levman 2021a: Chapters two and three, with regard to the adoption of *kaṭhina* practices).

2) The association of these words with certain forbidden practices reflects a well-known hostility and linguistic condescension of the Indo-Aryans for the indigenous peoples (Levman 2013: 154-157).

3) A notable feature of both the root *sutta* and the commentary is the use of “double translations” for the same word, where one word is expressed in Pāli and the second in an Aryanized version of the local language. This has been noted before with respect to some technical terms in the Vinaya (Levman 2021a: 73), where a Dravidian word is prefixed with its Pāli translation; for example in the compound *uttara-āḷumpa* (describing an overflow basin for dyeing robes) from the Vinaya section on robe-dyeing. The first word *uttara* (“overflow”) translates the Dravidian word *āḷumpa*, “waterfall” which occurs in its Dravidian form, slightly Aryanized (Sp 5, 1126¹⁹⁻²¹). The same phenomenon occurs here on numerous occasions.

4) Sometimes indigenous words are imported *holus bolus* into the main text. Two examples of this have been noted above, the Pāli compound *kāṇa-kuṇi-khuḷḷa*, a pejorative phrase to describe physically challenged persons, represents three Dravidian words slightly Aryanized; and the same goes for the phrase *cāmara-vāla-b(v)ījanim*, describing monks carrying yak-tail fans. Some words in Pāli can only be understood as direct imports from the *desi* languages (Levman 2021b: 17-19; Levman 2021c: 37-38).²⁹

5) In a “normal” page of a Pāli *sutta* there are no indigenous words, unless toponyms or proper names are mentioned, which sometimes have preserved their indigenous roots. The sudden appearance of a lot of *desi* words is usually associated with a passage describing local vegetation (as happens here in Section ten with the seeds), or various cultural and religious practices (the Vinaya section mentioned above on *kaṭhinas*).

6) The large number of *desi* words in these sections indicate extensive bilingualism, both on the part of the Indo-Aryans absorbing (or rejecting) local culture, and the indigenous peoples learning the language of their new politically and economically dominant immigrant guests. Since, as Norman and others have long pointed out, all transmissions that have come down to us are translations of earlier works (1990: 34), it is possible that these portions of the *Brahmajāla* are

²⁹ These articles may not yet be available. The first article (2021b) describes the strange word *accharuṃ* (*Apadāna-a* 536¹¹) which appears to be a direct lift from the Dravidian root *accuru* (“to fear, to dread”), and the compound *uggaggā* (*Ap-a* 535¹⁰) which appears to be a form of the Dravidian participle *ukakka* (“soaring”). The second article (2021c) describes several words (*aṭṭivānika*, *āviddhaka*, and others at *Mahāvastu* 113¹⁰, Senart 1897), which are incomprehensible in Pāli, but make sense in Dravidian.

themselves a translation of an originally Dravidian work, where various technical terms in the original were preserved to better identify the prohibited practices and their source, and perhaps because it was felt that IA had no exact equivalent. Although no Buddhist works have been preserved in an indigenous language, they must have existed at one time, as the Buddha and the Sakya clan spoke an indigenous language, easily proven by examining all the toponyms in the Sakya republic, and the names of various Sakya converts to the Buddha's doctrine. But the hypothesis of an underlying Dravidian work cannot be proven; it is just as likely to be simple word-borrowing that we are witnessing here.

7) This paper provides a methodology for further exploring the cultural and linguistic relationship between the native peoples and the IA immigrants through isolating and examining major proportional changes in language etymology. It shows that in certain parts of the Tipiṭaka, the local languages and practices have had a much greater impact on IA culture than has heretofore been assumed and opens a pathway for further investigation: i.e. examining other parts of the canon which show a similar saltatory increase in non-IA word proportions and analyzing other phenomena which point to the interdependence of these two language groups. To take one final example: in the *Mahāsatipaṭṭhānasutta*, sections on *samudaya-sacca-niddeso* and *nirodha-sacca-niddeso* (DN 2, 308-312) the compounds *piya-rūpaṃ sāta-rūpaṃ* (“an enticing form, a pleasant form”) are repeated several dozen times, referring to the clinging to, and relinquishing of that which leads to suffering or liberation. Both these compounds mean the same thing. The first is IA in derivation from the root *prī*, “to please, gladden, delight, gratify, cheer” (Pāli *pīṇeti*); the corresponding adjective is *priya* (Pāli *piya*), “beloved, dear to, liked, favourite, wanted, fond of, attached, or devoted to, pleasant, agreeable.” The second compound *sāta-rūpaṃ* is supposed to be derived from the OI word *śāta* (n. “joy, pleasure, happiness”; adj. “handsome, bright, happy, pleasant, agreeable”), but has no IA/IE etymology (not listed in M1 or M2), and no root verb form; it is not even attested in OI literature until very late, being cited in the *Amarkośa* dictionary (perhaps ninth century CE) and once in the *Gītagovinda* (as *atiśātam*, v. 10.9; 12th century CE). I suggest that this word may come from the Dravidian *cantam* (which has a widespread distribution in the south Dravidian languages: Tamil *cantam*, “beauty, colour, shape, form, pleasure, happiness, manners, habits”; Malayalam idem, “beauty, elegance”; Kannada *canda*, *cenda*, “pleasing, beautiful, lovely, charming, propriety, fitness, niceness, beauty; appearance, shape, form, kind, manner”; Tuḷu, Telugu similar q.v. DED #2328. As is well known, there was no *s-* in PD and the *c-* was pronounced as a sibilant at the beginning of the word. It was also not unusual in MI for a long vowel to appear in place of a nasal (Geiger §5.3 for Pāli; Fussman 1989: 478 for Gāndhārī), e.g. *sīha* in Pāli for *siṃha* in OI “lion” or *vīsati* for *viṃśati*, “twenty; it also works the other way around: *maṅkuṇa* “bug” in Pāli for **māk* or **makk* = Skt. *matkuṇa*, etc. In Dravidian, except for Tamil and Malayalam, most languages lose the nasal after a long vowel (Krishnamurti 2003: 16), so *cantam* may well have been pronounced *cātam*, especially by IA speakers. So this key teaching

about how suffering arises and ceases, *piya-rūpaṃ sāta (canta)-rūpaṃ*, may be another example of a binary pair directed at a bilingual audience, each in their own language.³⁰

Appendix A

List of words designated as “non-IA.”³¹

Section 1-9: *suppiyo, maṇḍala, māla, kaṇṇa* (?)

Section 10: *bīja, nicca, mālā, gandha, maṇḍana, dāsi/dāsa* (?), *kukkuṭa, vaḷavā (vaḍavā), eḷaka (eḷaka)*

Section 11: (*mūla*): *bīja, mūla*.

(commentary): *cīvarāni, siṅgiveraṃ, vacā, vacattaṃ usīraṃ (bhadda)-muttakaṃ, assattha* (?), *nigrodho* (?), *pilakkho, udumbaro, kacchako* (?), *kapitthano, ucchu, naḷo, veḷu, ajjaka* (not in M1/M2), *phaṇijjaka* (?), *hirivera*= 18.

Section 12: (*mūla*): *gandha*

(commentary): *amba (-pāna), (ti-)cīvara, sakata, sivikā, pāṭaṅkī, mañco, kaṇḍu, kacchu, āmiṣa, tila, taṇḍula, mugga, māsa, nāḷikera, loṇa, maccha* (?), *vallūra* (“dried meat”), *tela, munda, kuṭumbika, nāḷi, kuṭi, guḷa, piṇḍa* =24.

Section 13: (*mūla*): *visūka, nacca, vetāḷaṃ, (kumbha)-thūnaṃ, caṇḍāla, vaṃsa, meṇḍa, kukkuṭa, daṇḍa, muṭṭhi* = 10

(commentary): *naṭa, kaṃsa-tāḷa, tāḷa, ambaṇa* (?), *guḷa, veḷum, gandhehi, malla(-yuddham), sakata, kīḷā* = 10.

Section 14: (*mūla*): *khalikaṃ, ghaṭikaṃ, salāka-, paṅgaṭiraṃ* (?), *ciṅgulika* (?), *-āḷhaka* (?) = 6

(commentary): *maṇḍala, sakkharā, daṇḍaka, tāla-paṇṇa, nāḷikā, vāḷukā, kāṇa-kuṇi-khujjādīnaṃ, kīḷāna, pāsaka, guḷa-kīḷā, naṅgala, maṅjiṭṭhikā* = 15.

Section 15: (*mūla*): *pallaṅka, gonaka, paṭika, paṭalikā, tūlika, kaṭṭissa, kadālī, paveṇi* = 8

³⁰ The *Paragaramuthali (Tamil Etymological Dictionary)*, p. 113) gives a derivation of *cantam* from the word *am* (“beauty”) > *antu* > *antam* > *cantam*; *antu* then is a denominative in 3rd neuter sing. (“one that is beautiful”) and the *-am* ending (*antu* + *-am* > *antam*) makes the phrase into a noun (“beauty”; Wilden 2018: 34). The addition of the *c-* in the anlaut is puzzling as it is not necessary; the word beginning without the initial *c-* exists in all the languages (DED #2328). Neither word is attested in Tol. or the Sangam literature (with this meaning), although *am* (“beauty”) occurs many times (Anon, *Index des mots*, pp. 40-42). Thanks to Mohanraj Thiruvengadam, for the reference to the *Paragaramuthali*.

Paragaramuthali | தமிழ் இணையக் கல்விக்கழகம் TAMIL VIRTUAL ACADEMY (tamilvu.org)

³¹ Words are only counted once per section. Words repeated across sections are counted again. Decisions about whether to include a word marked as IA/non-IA with a question mark are subjective; the reader will notice that some are included and some not, based on my own intuitive understanding of the etymology; the ones included are shown here.

(commentary): *vāḷa, kojava, pupphako, -paṭṭo, tūla, dasā (?) , nāṭa, naccana, mañca* = 9

Section 16 (*mūla*): *maṇḍana, mālā, gandha, mukha, cuṇṇa, daṇḍa, nāḷika, unhīsa, vāḷa, bījani, sikhā, dasa, muttā* = 13

(commentary): *kucchito, mallānaṃ, mudgara, kāḷa, tila, pīḷaka (?) , kakka, sāsapa, kaṇṇika (?) , mora, piñcha (?) , nalāṭa, cūḷa-maṇi, camara, cīraka (from cīra), makara, paṭṭa*= 18.

Section 17 (*mūla*): *mālā, gandha, nagara*.

(commentary): *pūja, sāgara, dāsi, naccituṃ, kāka, baka vitaṇḍā (?)*.

Section 18 and 19 (*mūla*): 0

(commentary): 0

Section 20 (*mūla*): *kuhaka (?)*.

(commentary): 0

Section 21 (*mūla*): *tuṣa, kaṇa, taṇḍula, tela, mukha, sakuṇa* = 6

(commentary): *paṇḍu, muttāyo, muṭṭhi, golikā, undūra, kukkuṭa, kuṇḍaka, tila, siṅgāla, kāka, vayāsa (?)*. = 11

Section 22 (*mūla*): *daṇḍa, dāsa/ī, meṇḍa, kukkuṭa, kaṇṇikā (?)*: 6

(commentary): 0

Section 23 (*mūla*): 0

(commentary): 0

Section 24 (*mūla*): *duṇḍubhi (dudrabhi)* = 1.

(commentary): *ākula, sikhā (?) , kalusiya, valāhaka (?)* =4.

Section 25 (*mūla*): *kaṇṇa (?)* = 1

(commentary): *piṇḍa, paṇṇa* = 2

Section 26 (*mūla*):

(commentary) : 0

Section 27 (*mūla*): *kaṇṇa (?) -tela, sālākiyaṃ*, = 3

(commentary): *paṭala* = 1.

Abbreviations

AA =	Austro-Asiatic (of which Munda is a sub-branch)
Ap-a =	<i>Apadāna-aṭṭhakathā</i> or <i>Visuddhajanavilāsini</i>
AV =	Atharvaveda
BhP =	<i>Bhāgavata Purāṇa</i> (medieval).
BHSD/BHSG =	<i>(Buddhist Hybrid Sanskrit Dictionary/Grammar)</i> Edgerton 1953
Br =	<i>Brāhmaṇas</i>
ChUp =	<i>Chāndogya Upaniṣad</i>
CDIAL =	<i>Comparative Dictionary of the Indo-Aryan Languages</i> (Turner 1971)
cp =	compare
DN =	<i>Dīgha Nikāya</i> (5 th –3 rd century BCE)
DED =	<i>Dravidian Etymological Dictionary</i> (Burrow and Emeneau 1984).
IA =	Indo-Aryan
Iir=	Indo-Iranian
Jā =	<i>Jātakas</i>
Kuiper =	Kuiper 1948
Lex =	Lexicographers
MBh =	<i>Mahābhārata</i> (4 th century BCE to 4 th century CE)
M1 =	Mayrhofer 1956–1976
M2 =	Mayrhofer 1992–96
med =	medieval
MED =	<i>Munda Etymological Dictionary</i> (Stampe, D.)

Mn =	<i>Manu</i> (2 nd century BCE to 2 nd century CE)
NIA =	New Indo-Aryan
Nir =	<i>Nirukta</i> (Yāska)
non-IA =	non Indo-Aryan
OT =	Old Tamil
Pāṇ =	Pāṇini (5 th -4 th century BCE)
PCD =	proto Central Dravidian
PD =	proto-Dravidian
Pischel =	Pischel 1900/1981
PM =	proto-Munda
PND =	proto North Dravidian
PSD =	proto South Dravidian
PTS =	Pali Text Society
OT =	Old Tamil
R =	<i>Rāmāyaṇa</i>
ŚBr =	<i>Śatapatha Brāhmaṇa</i>
Sn =	<i>Sutta Nipāta</i>
Southworth =	Southworth 2005
Sp =	<i>Samantapāsādikā</i> (Vin-a)
Suśr =	<i>Suśruta</i> (medical text)
Sv =	<i>Sumaṅgala-vilāsinī</i>
Th =	<i>Theragāthā</i>
Tolk =	<i>Tolkāppiyam</i> (mid to late 1 st millennium BCE) தொல்காப்பியம்
VarBrS =	<i>Varaha-mihira Bṛhat Samhitā</i> (6 th century CE)
VS =	<i>Vājasaneyi Samhitā</i> (Yajur Veda).
Witzel =	Witzel 1999a

~ =	alongside, side by side
> =	develops to, evolves to
<	develops from, derives from

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