

Early Western and Portuguese descriptors of the Indian languages from the 16th century onwards

Image credit: Vocabulário Lusitano- Tamulico [Portuguese-Tamil Dictionary], MS49 (previously MS36), no date, State Central Library, Goa, Panjim/Panaji

Although the attitudes of neglect toward the earliest linguistic (field)works have decreased and the contribution to the study of language by linguists *avant la lettre* is acknowledged today (Zwartjes 2012), attitudes still need to change further, and this is one of the aims of this volume.

At present, it includes five papers which focus on different aspects of the *grammaticisation* (Aurox 1994) of the South Asian languages by earlier descriptors from the 16th century onwards. Among them, the linguists *avant la lettre par excellence* were Jesuit missionaries. Their works, which recorded the linguistic structures, sociolinguistic variations and the pragmatic usages of the South Asian languages, were (re)written, (re-)edited, (re-)copied, and progressively enriched.

Entering different networks of knowledge circulation, their works, as well as those immediately after produced by others, contributed to the diffusion of a new awareness about the language as a human faculty. These works gave an impulse to the study of language, to the development of new ideas about it and its origin: from a divine one, whose diversity had been determined by the confusion of the Tower of Babel, to a socio-historical institution.

Applying both macro and micro approaches, each paper in this volume explores different topics. Hence, the papers discuss the categorisation and classification of the linguistic diversity of South Asian languages through the lens of the Western grammatical tradition; the interface between Western and Indian grammatical traditions; the collection and diffusion of new linguistic knowledge about the *newly* discovered languages throughout later intermediaries and grammarians.

The papers in this Special Collection contribute to understanding how the linguistic works *avant la lettre* played a relevant part in the affirmation of the Science of Language.

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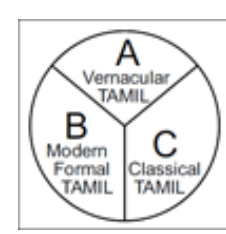
How missionaries applied Portuguese and Latin descriptive categories in the classification and explanation of verb conjugations and *paired* verbs of Tamil

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From grammar to dictionary. The early challenge of lemmatizing Tamil verbal forms, through categories used for Latin and Portuguese

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2021-07-01 Volume 20 • Issue 1 • 2021 • 9

Also a part of:

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RESEARCH PAPER

How missionaries applied Portuguese and Latin descriptive categories in the classification and explanation of verb conjugations and *paired verbs* of Tamil

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Tamil verb stems may be inclusive of a voice morpheme that encodes the degree of agency of the verb. Hence, using Paramasivam's (1979) terminology, these kinds of verbs are *paired verbs* of which one is the *affective* and the other its *effective* counterpart. In the former, the action expressed by the verb is realised by an agent and affects a patient, whereas in the latter the consequences of the action fall on the subject who realises the action.

This paper intends to analyse how missionaries described the verb system of Tamil which differed substantially from their own model of reference (Latin and Portuguese), and how they understood *paired verbs*, as defined above. As such, taking into account the Western sources that missionaries used to compose and organise their descriptions, this paper focuses on both verb conjugations and *paired verbs* in Tamil. It also demonstrates how the Latin grammatical framework was applied for the description of Tamil verbs and discusses the Indian grammatical sources available to missionaries.

Given that the present classification of Tamil verbs is based on the one offered by a missionary, Karl Friedrich Leberecht Graul (1814–1864), this study highlights how earlier missionaries' descriptions contributed to the current classification.

Keywords: paired verbs of Tamil; agency in Tamil; Missionary Linguistics; grammatical voice; Tamil language; extended grammar

1. Premise

This paper analyses how the Tamil verb system was understood and described in six grammars of the Tamil language produced by missionaries between the 16th and 18th centuries with the purpose of creating useful tools to help missionaries how to communicate with natives and, thereby, spread the Gospel. This immediately raises the issue of the diglossic situation that characterises Tamil for, as Chevillard (2018) suggests, it would more correctly be considered triglossia to include the poetic language inasmuch as it is “difficult to separate [the three varieties] in practice, because each component of the Tamil triglossia had its own role to play in the global picture of the everyday life in Tamil Nadu” (Chevillard 2021: 2). As such, the data collected in these texts are representative of three varieties albeit with a different degree of representativeness: variety A which is the vernacular Tamil, variety B which is the Modern formal Tamil, and variety C which is the Classical Tamil – as described in Chevillard's schema (2021: 3). Among the oldest texts, Henriques' *Arte* (cf. below in this §) is more representative of A. Later works are more illustrative of variety B.¹ Unsurprisingly, data from the poetical language are marginal or

¹ See the adaptation of linguistic forms from variety A to variety B which occurs in the passage from Henrique Henriques' *Arte* to Antão de Proença's dictionary discussed in Chevillard (2021: 12, cf. Table 2).

absent from earlier texts – despite missionaries having always been aware of the existence of different varieties (cf. Chevillard 2021; Muru 2010). Nevertheless, data from A, B and C co-exist within the grammars, at least up until when Italian Jesuit missionary Constantius Joseph Beschi [or Costantino Giuseppe Beschi] (1680–1747) compiled two different grammars: one describing the common language (*koṭuntamil*) while the other focused on the high language (*centamil*).

The first text considered in this study is among the most studied Tamil grammars, written in the 16th century, namely the *Arte da lingua Malabar* (ca. 1548) by Henrique Henriques (1520–1600) (henceforth HH, no. 1 in **Table 1**) of which the only extant manuscript is held in the National Library of Lisbon. Published by Vermeer (1982) it also provides an almost complete classification of all the Tamil lexicon found in the grammar, while an English translation by Hein & Rajam appeared later in 2013. The other manuscripts studied in this paper include the Tamil *Arte* wrote by Gaspar de Aguilar (1548–?) and copied by Philippus Baldaeus (1623–1671) (henceforth GA/PB, no. 4 in **Table 1**), already discussed in Francis (2011), Muru (2014, 2020), and Pytlowany (2018). The third text is the Tamil grammar produced by Balthasar Da Costa (c. 1610–1673) (henceforth BC, n. 3 in **Table 1**) which the author of this paper has transcribed and translated into English (as yet unpublished). The fourth text is an anonymous Tamil grammar manuscript now preserved in the French National Library (henceforth Ind. 188, no. 2 in **Table 1**) allegedly written earlier than BC's *Arte* (see discussion in § 4). The fifth is the *Grammatica Damulica* by Bartholomäus Ziegenbalg (1682–1719) printed in 1716 (henceforth BZ, no. 5 in **Table 1**) while the sixth is the famous grammar of *Common Tamil (koṭuntamil)* produced by Constantius Joseph Beschi (1680–1747) (henceforth CJB, no. 6 in **Table 1**). **Table 1** below provides detailed information about these texts, their authors, and their location, as well as accessible editions and translations.

This article is organised into two main sections, each introduced by a paragraph briefly explaining the main features of Tamil verbs (§ 2) as they are described in modern grammars of standard Tamil. The first section discusses (1) how the verb system was described in the Indian grammars with which missionaries were familiar (cf. § 3); and (2) which Western grammatical framework missionaries would have considered while describing the Tamil verb system (cf. § 4). The second section analyses in detail (3) how Tamil verbs were described by early missionaries between the second half of the 16th century and the first half of the 18th century, prior to Graul's classification (of Tamil verbs) (cf. § 5). The conclusion section (§ 6) reveals the way in which the classification of Tamil verbs is used today and the extent to which the system highlighted in the *Grammar Outline* (1855: 38–39) by Karl Friedrich Leberecht Graul (1814–1864) has its roots in these early descriptions, pointing out the achievements of missionaries in the early 18th century. This in turn opens up perspectives for further research and underlines once again the significance of these early documents for the History of the Language Science.

² Borg. Ind. 12 is a composite document made up of a printed book, that is the bilingual dictionary Tamil-Portuguese by Antão De Proença printed in 1679 and the manuscript Tamil grammar composed by Balthasar Da Costa which was copied in 1685 in Verapoli by the Desclace Carmelitan P. Paolo Francesco. The grammar is inserted within the Dictionary and is divided into two parts. The beginning section is placed at the end of the printed dictionary (after f. 247v) and it runs from f. 248r to f. 259v, while the final section (ff. 225r–243r) is placed between f. 246v and f. 247r of the dictionary.

³ MS 50 is also a composite manuscript. Copied in 1670, it includes a manuscript version of Antão De Proença's dictionary along with Balthasar Da Costa's Tamil *Arte*.

Table 1: List of analysed documents.

doc. numb.	Author and abbreviations	Title	metalanguage	Location of manuscript
1	Henrique Henriques (1520–1600) = HH	<i>Arte da lingua Malabar</i> , ca. 1548	Portuguese	Cod. 3141 – Lisbon, Biblioteca Nacional de Portugal. Hein & Rajam (2013, Engl. Transl.); Vermeer (1982, Port. reproduction).
2	Nd = Ind 188	–	Portuguese	Ind 188 – Paris, Bibliothèque Nationale de France. Transcribed by Cristina Muru. English translation in preparation by Muru.
3	Gaspar de Aguilar (1548–?) Philippus Baldaues (1623–1671) = GA/PB	<i>Arte Tamul sive institutio grammatica lingæ Malabaricæ</i> , 1659–1665	Portuguese	Cor. Orient. 283 – Hamburg, Staats und Universitäts bibliothek Hamburg Carl von Ossietzky. Transcribed and partially translated into English by Muru. MS 7107 [Baldaeus 1672] – London, SOAS Library Special Collection. It is an uncompleted Engl. Translation.
4	Balthasar Da Costa (c. 1610–1673) = BC	<i>Arte Tamul</i> , 17th c.	Portuguese	Borg. Ind. 12 – Rome, Biblioteca Apostolica Vaticana [see Costa 1685]. ² MS 50 (prev. MS 34) [Costa 1673]; MS 16 (prev. MS M15) [Costa 1794], ³ MS 66 (prev. MS M49) [Costa n.d.] – Panaji, Krishnadas Shama, Goa State Central Library. MS OC Sloane 3003 [Costa n.d.] – London, British Library. Transcribed and translated into English by Muru [as yet unpublished].
5	Bartholomäus Ziegenbalg (1682–1719) = BZ	<i>Grammatica Damulica</i> , 1716	Latin, printed grammar	MMSL INS-T 65 – London, SOAS Library Special Collection. Jeyaraj (2010, Engl. Transl.)
6	Constantinus Joseph Beschi (1680–c.1746) = CJB	<i>Grammatica Latino-Tamulica</i> , 1728 (1738)	Latin, printed grammar	Horst (1831 [1806], English transl.); Mahon (1848, English transl.).
Auxiliary manuscript	Anão De Proença (1624–1666) = AP	<i>Vocabulario Tamulico-Lusitano</i> , 1670	Tamil, Portuguese	MS 50 (prev. MS 34) – Panaji, Krishnadas Shama, Goa State Central Library. The printed version of the dictionary, found in Borg. Ind.12, has been transcribed and translated into English by J.-L. Chevillard [as yet unpublished].

2. A short introduction to the Tamil verb system

Although an outline of the main features of the verb system (i.e. verb conjugations, verb valency, and codification of agentivity) might appear redundant for those who are familiar with Tamil, it seems useful to include it here since it is functional to the analysis provided in subsequent sections. Indeed, even though data gathered in this section derive from descriptions of standard Modern Tamil, these demonstrate the typological distance from the missionaries' mother tongue and the metalanguage of grammaticisation they encountered while producing their grammars of Tamil.

Verbs in Tamil are divided into finite and non-finite, identified as *muṟṟu* and *eccam* respectively by the traditional Tamil grammars. The distinction between finite and non-finite verbs is syntactical rather than morphological: almost all finite verb forms occur as an end predicate of a sentence and may be inflected for tense, mood, person, number, and gender. Non-finite verb forms, by contrast, occur as a predicate of an embedded or subordinate clause, or in compound verb constructions (Lehmann 1989: 48). The main distinction within non-finite verbs is between *viṇai-y-eccam*, verbs that combine with a following predicate, and *peyar eccam*, verbs that combine with a following nominal expression (Steever 1988: 11). Both the forms, in traditional Tamil grammar, are syntactically incomplete achieving completion only when followed by another verbal or nominal form (see Chevillard 2021: 5). In addition, there are nominalised forms which may or may not display tense inflection (e.g. verbal nouns, participial, and adjectival nouns). As illustrated in **Figure 1**, the elements representative of the morphology of a typical Tamil finite verb are the verb base and two grammatical formative affixes, of which the first denotes the tense and the second the person-number-gender (PNG) agreement:

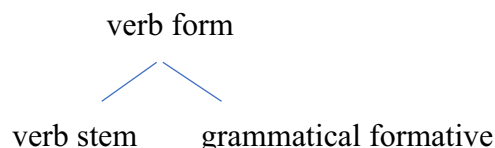


Figure 1: Tamil verb form.

1. nāṅ oru pustakam vāṅk-iṅ-ēṅ⁴
 1SG NUM N.book buy-PST-1SG
 I bought a book.
2. avaṅ oru pustakam vāṅk-iṅ-āṅ
 3SG.M NUM N.book buy-PST-3SG.M
 He bought a book.
3. avaḷ oru pustakam vāṅk-iṅ-āḷ
 3SG.F. NUM N.book buy-PST-3SG.F
 She bought a book.
4. avar oru pustakam vāṅk-iṅ-ār
 3.S.HON.M/F NUM N.book buy-PST-3SG.HON.EPIC
 He (hon) bought a book.

⁴ Most examples in this section come from published sources, which are acknowledged in the text or the indented examples. Where no source is given, the examples are based on the author's personal knowledge.

Additionally, the verb stem to which the inflectional suffixes are added may be simple, consisting of the verb root (a), or derived, consisting of a verb root plus a voice morpheme (b), and both may or may not be followed by a causative suffix (c):

- a. **simple:** *tiru-* ‘turn’;
- b. **derived:** *tirumpu, tiruppu* < verb root *tiru-* ‘turn’ + *-mpu/-ppu* (voice morpheme);
- c. **causative:** *tiruppuvi/tiruppu cey/tiruppu vai/tiruppu paṇṇu* ‘to make someone to turn’.

The verb forms in (b), *tiruppu* and *tirumpu*, are *paired verb* stems derived from the same verb root *tiru* ‘turn’ to which a voice morpheme is added.⁵ Their structure is illustrated by **Figure 2**.

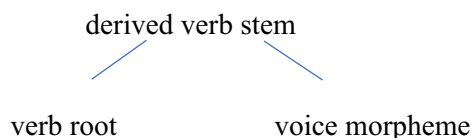


Figure 2: Structure of derived verb stem.

In Lehmann’s (1989) analysis, voice morphemes are considered as part of the derived verb base, in contrast to a simple verb base like *tiru* or *eḷutu*. Steever (1983) provides an alternative analysis, considering the voice markers as combining with an adjacent morpheme to create a portmanteau morph.⁶ Indeed, Steever (1983: 55) states that Tamil verb morphology, despite being “predominantly agglutinative; ... exhibits certain fusional tendencies so that 12 (VII) conjugational patterns are distinguished according to the morphophonemic alternations that take place between the verb base and the grammatical formatives”. Hence, *tirumpu* and *tiruppu* are taken as one morph which combines two morphemes: the root morpheme and the voice morpheme. They are realised by one *portmanteau* morph at the phonological level where the voice combines with the preceding verb root (cf. examples 5–6), or with the following tense marker (cf. examples 7–8):

5. *avan* *iraṅk-iṅ-āṅ*
3SG.M descend-AF + PST-3SG.M
He descended.
6. *avan* *cumai.y-ai.y iraṅk-iṅ-āṅ*
3SG.M load-ACC descend-EF + PST-3SG.M
He put his load down.
7. *avan* *maṅaivi.y-ai.p piri-nt-āṅ.*
3SG.M wife-ACC separate-AF + PST-3SG.M
He separated from his wife.
8. *avan* *maṅaivi.y-ai.p piri-tt-āṅ*
3SG.M wife-ACC separate-EF + PST-3SG.M
He separated his wife (from someone else). (Steever 1983: 58)

⁵ Melćuk (2006: 242–244), in the framework of concepts, methodology, and formalisms of the Meaning-Text theory (ibid., 4–24), does not consider this form (b) as a voice morpheme or transitivity, but rather as a semantic inflectional category of *affectedness*.

⁶ For a historical reconstruction of *paired verbs* in Proto-Dravidian see Krishnamurti (2003: 182–184; 279–291).

Klaiman (1991: 73) states that the basic voice system contrasts weak and strong verbs, while Paramasivam (1979) classifies it as an opposition between *affective* (cf. example 9) and *effective* (cf. example 10) voice. As Zúñiga & Kittilä (2019: 7) state, “studies of grammatical voice can be classified into two groups according to whether the notion of voice is defined structurally or functionally”. While a discussion on voice in Tamil language is not within the scope of this article, I here follow Paramasivam (1979) and Klaiman (1991). The latter stands within the functional approach and suggests different kinds of voices and different values for the same kind of voice.⁷ The alternation of voices in Tamil does not necessarily imply suppression or reassignment of arguments among verbally assigned nominal positions. It signifies that the opposition cannot be easily considered as an intransitive/transitive one, but rather that the selection of voice depends on whether the verb does or does not assign a subject argument upon whose referent the denoted action’s principal effects devolve. As evidence of this, one may cite Klaiman’s (1991: 60): “small and unsystematic sample consisting of 60 invariant Weak and 46 invariant Strong verbs ... [that] have been isolated from a listing of 223 verb roots in Arden (1969: 150–169) and checked against dictionary entries in Burrow & Emeneau (1961) and the *Tamil Lexicon* (1924–36)”. This survey specifically highlights that detransitivisation or valence reduction is not a weak or middle voice function. Both invariant strong and invariant weak verbs may be transitive or intransitive.⁸

9. avan-uṭaiya talai tirump-i.y-atu
 3SG.M-GEN N.head turn.AF + PST-3SG.NT
 His head turned.

10. avan talai.y-ai.t tirupp-i_n-ān
 3SG.M N.head-ACC turn. EF + PST-3SG.M
 He turned his head.

(Lehmann 1989: 50)

As Steever (1983: 59) observes, “affective and effective voice are mutually implicating terms: if a root can occur with one, it can occur with the other [...] morphologically, the two are mutually exclusive; semantically, mutually implicating. Effectivity thus marks an inflectional, not a derivational, relationship between the two members of the opposition”. Examining a small sample of 140 verbs, Paramasivam (1979: 5, fn. 8) also estimated – without counting Sanskrit loans and verbs derived from onomatopoeia – that about 60% of Tamil verbs contain such a voice morpheme in their stem and can be considered as *paired verbs* of the same verb root. However, the observation of the grammars analysed in this article, as well as the investigation carried out by Chevillard (2021) on AP’s dictionary both provide a lower estimation of *paired verbs* compared to Paramasivam’s estimation. Indeed, the value is 15% for the grammars analysed in this article and 14% for AP’s Dictionary, while the percentage may increase up to ca. 31% if one considers the total amount of *paired verbs* which can be identified in the verb list provided in Appendix 3. Despite this, the role played by voice morpheme in Tamil verbs is unquestionable. In addition to the opposition of the morphemes *-mpu* to *-ppu* already discussed above, voice is also marked by further pairs of allomorphs, as summarised by Lehmann (1989: 51):

⁷ Klaiman (1991) lists four voice types that are structurally defined: the *basic voice* which corresponds to the notion of voice developed for the classical languages and the *derived voice* which covers passives and antipassives. The other two types, labelled as *pragmatic voice*, are the “functional counterparts of her two structural voice types” (*ibid.*). Following Zúñiga’s & Kittilä’s (2019: 41–43) definition of anticausative voice and analysis, example 9 could be considered as anticausative of 10 since the event is not caused intentionally and purposefully by a salient agent, while examples 5 and 7 would be non-prototypical anticausatives such as “involuntary agent constructions” (*ibid.* 43–47).

⁸ The survey has also highlighted that the invariant strong verb has an *effective* or *non-affective* sense, while the sense of the semantically related invariant weak verb is *affective* (Klaiman 1991: 60).

-ku vs. -kku
 -ntu vs. -ttu
 -tu vs. -ttu

The examples listed above show how “an affective verb is one the subject of which undergoes, *volitionally* or *not-volitionally*, the action (or state or change of state) described by that verb stem” (Paramasivam 1979: 20) while effective verbs “represent actions of the subject on external object” (Paramasivam 1979: 23). Hence, *affective* and *effective* voices characterise the subject’s role in the narrated event where it appears as an *actor* in *affective voice* and as an *agent* in *effective voice* (Duranti 2004, 2007). The subject of the *affective* verb does not necessarily direct the process expressed by the verb; by contrast, the *effective* verb is characterised as one whose subject directs the action or process named by the verb root which may reflect on another object (animate or inanimate; human or non-human).

From a formal standpoint, the *affective* verb stem *tirumpu* seen in example (9) is characterised by a voice morpheme with a single obstruent, while the *effective* verb stem *tiruppu* seen in example (10) has a voice morpheme with a geminated obstruent. The single/geminated obstruent distinction appears in the inflectional process, but it can also occur in the derivational process since the *affective/effective* distinction can also appear in the first affix-initial position. As such, Paramasivam (1979: 5) argues that “paired verbs fall under three groups on the basis of how the single/geminated obstruent distinction manifests itself”:

- a. Group 1 – distinction in the affix-initial position: verb stem ending in V/C + tense/voice + PNG, i.e. *uṭai-nt-u* (*affective*) vs. *uṭai-tt-u* (*effective*) ‘to break;
- b. Group 2 – distinction in the base-final position, i.e. *āṭ-u* (*affective*) vs. *āṭṭ-u* (*effective*) ‘to move in a swaying motion’;⁹
- c. Group 3 – distinction in the affix-initial position but with geminated obstruent in the base-initial position, i.e. *cel-kir-atu* (‘it goes’); *cen-r-atu* (‘it went’) (*affective*) vs. *celuttu-kir-āṇ* (‘he directs’); *celutt-in-āṇ* (‘he directed’) (*effective*).¹⁰

Additionally, as already stated, a third class of verbs can also be identified: these are morphological and periphrastic causatives. Paramasivam (1979) discusses the contrast between the two. The morphological causatives are distinguished formally by an affix represented by the weak allomorph *-vi-* (cf. example 11) and the strong allomorph *-(p)pi-* (cf. example 12):

11. cāttan ponnan-ai āṭu-vi-tt-āṇ
 Sattan Ponnān-ACC dance-CAUS-PST-3SG.M
Sattan caused Ponnān to dance. (Paramasivam 1979: 55)
12. avāṇ pirāmaṇar-kaḷ-āl caṭaṅku-kaḷ-ai naṭa-ppi-tt-āṇ
 3SG.M brahmin-PL-INST ritual-PL-ACC go on-CAUS-PST-3SG.M
He caused the rituals to be performed by the Brahmins. (Paramasivam 1979: 57)

⁹ In the second group of paired verbs there may be a homorganic nasal preceding the single obstruent (i.e. *vāṅku*), although its distinguishing role is suspect since it appears in all parts of the verb system. For further discussions from a comparative perspective see Paramasivam (1979: 7–8).

¹⁰ Regarding this third group, Paramasivam (1979: 9–10) states that “there are reasons to suspect that the single/geminated obstruent distinction was made in the affix-initial position at an earlier stage of the language and that the geminated obstruent came to be re-analysed as part of the base”. The single obstruent (/k/ or /t/) occurs in the affix initial-position in *cel* while the geminated corresponding /tt/ occurs in the base-final position for *celuttu*, a verb base that ends in an *overshortened u* (*kuṟṟiyal ukaram*) which is the same ending that characterises the verbs of the second group (b). The *kuṟṟiyal ukaram*, a back high vowel further reduced in length, occurs in phonological contexts in which it is immediately preceded by a single obstruent but not by a single short monosyllable. It elides if followed by an affix beginning with a vowel and it remains if it is followed by a consonant.

The second type, the periphrastic (syntactic) causatives, involve the auxiliary verbs *cey* ‘make’ (13), *vai* ‘place’ (14) or *paṇṇu* ‘do’ (15):

13. nān un_n-ai inta pāṭa.tt-ai teri.y-a vai-kkir-ēn
1SG 2SG-ACC PROX.DEM lesson.OBL-ACC know-INF place-PRES-1SG
I will make you know this lesson. (Paramasivam 1979: 63)
14. avaḷ avaṅ-ai.y ēmār-a.c cey-t-āḷ
3SG.F 3SG.M-ACC be disappointed-INF make-PST-3SG.F
She made him disappointed. (Paramasivam 1979: 71)
15. rājā kumār-ai var-a paṇṇ-in-ān
PN PN-ACC come-INF do-PST-3SG.M
Raja made Kumar come.

Today, the conjugational verb patterns are separated into different classes on the basis of the morphophonemic alternations hereto discussed. The number of classes may vary between seven (VII) and thirteen (13). This subdivision into seven (VII) or thirteen (13) classes is based primarily on morpho-phonology and, as Steever (1983: 55) observes, when the contribution of *affective* versus *effective* voice is taken into consideration in the form of the verb class, the number of classes is likely to decrease. It is noteworthy that the subdivision into seven classes (VII), maintained by some authors (i.e. Schiffman 1999), was devised by Karl F. L. Graul (1814–1864),¹¹ a member of the German Oriental Society, who was also the director of the Leipzig Lutheran mission. Graul arrived in South India in 1849 with the Lutheran mission, followed on the Danish–Hale mission (cf. Neill 1985; Pytlowany 2018), and mastered the Tamil language. This same subdivision was later extended by the authors of the *Madras Tamil Lexicon* (henceforth MTL), to a total of 13 classes on the basis of a more specific morphophonemic alternation. **Table 2** summarises both classifications: Graul (1855: 38–39, = KG) is denoted in bold and in Roman numerals, while MTL (1982 [1924–36, 1939] lxvii) is indicated in Arabic numerals.

Table 2: Tamil verb conjugation.

		Weak form			
Present		Past		Future	
I (1) ki(n)r	ceyki(n)rēn	-t-	ceytēn	-v-	ceyvēn
- (2) ki(n)r	āḷkīrēn, āḷukīrēn	-ṅṭ-	āṅṭēn	-v-	āḷuvēn
- (3) ki(n)r	kol(lu)kīrēn	-ṅṛ-	koṅṛēn	-v-	kol(lu)vēn
II (4) ki(n)r	aṛiki(n)rēn	-nt-	aṛintēn	-v-	aṛivēn
III (5) ki(n)r	ākkuki(n)rēn	-iṅ-	ākkiṅēn	-v-	ākkuvēn
IV (6) ki(n)r	nakuki(n)rēn (= KG) naṭukīrēn (= MTL)	the last C doubled	nakkēn naṭṭēn	-v-	nakuvēn naṭuvēn
		Middle form			
V (8) ki(n)r	tiṅki(n)rēn, tiṅṅukīrēn	-ṅṛ-	tiṅṛēn	-p-	tiṅpēn, tiṅṅupēn
- (7) kīr	uṅkīrēn, uṅṅukīrēn	-ṅṭ-	uṅṭēn	-p-	uṅpēn, uṅṅupēn
- (9) kīr	kēṭkīrēn	-ṭṭ-	kēṭṭēn	-p-	kēṭpēn
- (10) ki(n)r	kaṛki(n)rēn	-ṛṛ-	kaṛṛēn	-p-	kaṛpēn
		Strong form			
VI (11) kki(n)r	tīrkkī(n)rēn	-tt-	tīrttēn	-pp-	tīrppēn
VII (12) kki(n)ru - (13) irregular	naṭakki(n)rēn	-nt-	naṭantēn	-pp-	naṭappēn

¹¹ Graul wrote *Tamulica seu Opera Praecipua Tamuliensium* (1854–1865), a work in 4 volumes which was published after his death by his student Wilhelm Germann (1840–1902).

There are two particular issues worthy of note that emerge from Graul's classification: firstly, as the starting point from which the MTL developed its classification, hence it represents the contribution made by missionaries to Tamil studies. Secondly, appearing as it did in the 19th century, Graul's classification can be considered the end product of the later missionaries, achieved as a result of the work of their predecessors, as will be discussed in later sections of this paper (cf. § 5). What path did the earlier missionaries follow in their identification and understanding of Tamil verb paradigms? How did they interpret *paired verbs*? How did missionaries describe verbs applying the Latin grammatical framework? Did they have any awareness of traditional Tamil grammar?

The following sections, which demonstrate how earlier missionaries contributed to Graul's classification, provide answers to these questions.

3. Descriptions of the Tamil verb system in the early Tamil grammars

When I refer to Indigenous Tamil Grammatical Tradition (henceforth ITGT) in this paper, this is represented by two texts, namely the *Tolkāppiyam*¹² (henceforth *Tol.*) which describes Old Tamil and the *Naṇṇūl* 'the good book' (ca. 13th century, henceforth *Naṇ.*) which describes Middle Tamil. Both texts explain the written variety of Tamil. The former, the oldest grammatical treatise, was allegedly compiled by Tolkāppiyānār between the first and third century C.E. and continued to have pre-eminence above all other grammatical texts (cf. Annamalai 2016). The latter, written by the Jain, Pavaṇanti, "is a judicious accommodation of some features from the Sanskrit tradition responding to change in language and the linguistic milieu of the medieval period" (Annamalai 2016: 725). It became the new standard for the description of Tamil despite never eclipsing the *Tol.* Furthermore, the *Naṇ.* was the grammar to which missionaries had access, as it is evident from Beschi's references to its grammatical framework in his description of the Tamil language, such as when he refers to an opposition identified in the *Naṇ.* to explain the difference between Latin *nomina propria* and *nomina appellativa* (cf. Chevillard 1992: 83).

Other than a mention of the 'fluctuations' that occur in verb forms expressing tense, represented by the diversity of letters placed before word endings, neither the *Tol.* nor the *Naṇ.*¹³ explain Tamil tense morphology and verbs are only described in terms of their endings.¹⁴ With regard to *paired verbs*, the only reference in the *Tol.* is found in its distinction between *itaṅ pālāṅ* and *pīraṅ pālāṅ* (sūtra 243), which in the *Naṇ.* are rendered as *ēval viṅai* and *pīra viṅai* (Subramanya Sastri 1934: 146). The terms *taṅ viṅai* (*self-act verbs*) and *pīra viṅai* (*other-act verbs*) appeared for the first time only in later commentaries on these grammars in order to differentiate verbs with a single obstruent from verbs with a geminated obstruent (Paramasivam 1979: 34–35; also Chevillard 2008: 414).

¹² It is a grammatical treatise divided into three books which comprises 1300 sūtras. The first book deals with the sound of the Tamil language and the phonological changes which sound undergoes in *sandhi* (internal and external), the second book deals with words, and the third with the language of poetry.

¹³ Considering the translation of Cēṇāvaraiyar by Chevillard (1996), in *Tol.* verbs (*viṅai iyal*) are discussed in the second book on *col* (words) (sūtras 198–248) where there is also a reference to particles related to tenses (*kālam*), namely past (*irappu*), present (*nikal*), and future (*etir*) (*Tol.* sūtras 198, 199, 200) also mentioned in the book on *itaic col* (i.e. Chevillard 1996: 387, § 250). If compared with the *Tol.*, the *Naṇ.* has a few more details about verb conjugation (cf. Subramanya Sastri 1934: 168). A few relevant remarks are also found in the commentary on *Tol.* composed by Cēṇāvaraiyar (13th–14th cent.) (cf. Chevillard 2013: 16–17).

¹⁴ Indeed, as Chevillard (1993: 306) underlines "... la morphologie verbale temporelle ne sera pas exposée dans le Tolkāppiyam et que nous devons nous contenter d'explications sur le finales". [... the temporal verb morphology will not be exposed in the Tolkāppiyam and that we will have to content ourselves with explanations on the finals].

By contrast, the Latin and Greek grammatical traditions, as does Sanskrit *Aṣṭādhyāyī* (cf. Klaiman 1991: 82), not only specify information about verb conjugations, but also provide rules for the selection of *active*, as opposed to *middle*, voice inflections. In fact, in Indo-European languages like Sanskrit, and indeed Greek, the middle voice has semantic functions consistent with *affectedness*. In addition, it is also associated with neuter verbs, which are considered as special subcategories of the intransitive verbs, semantically inchoative and alternating formally with the related transitive, or are associated with non-eventuality, non-punctual, or atelic temporal-modal senses (Klaiman 1991: 103). Similarly, in some Latin grammars, special emphasis is placed upon *media tantum* (middle-only) class as opposed to *activa tantum* (active-only) class: the former consists of verbs that are characterised as non-active in form, but which have an active meaning. They are referred to as deponents and cannot be marked by the passive inflection (Klaiman 1991: 78, 97). This matter could be expanded further but a deeper examination falls beyond the scope of this paper. Suffice to say that, with regard to the treatment of verbs in Tamil and the identification of *paired verbs*, we can confidently state that missionaries were better informed by their Western grammatical framework than by the Tamil grammatical tradition since the latter neither differentiates between *paired verbs* and morphological causatives, nor does it provide a paradigm of verbs declension on the basis of the tense morpheme.

4. The missionaries' grammatical model of reference for their description of Tamil

In terms of a model of reference for these early missionaries, I considered João de Barros' grammar (1540) for HH's *Arte* (MS no. 1, **Table 1**) as suggested by author at the beginning of his text where he points out to the reader the need to be familiar with Barros or any Latin grammar in order to navigate his Tamil grammar (cf. Muru 2018: 15). Indeed, examining his technical terminology and the conceptual framework, it seems that HH made use of Barros' theoretical framework and process (cf. Appendix 1) in devising his Tamil grammar, although he did not strictly follow the structure of Barros' grammar. Additionally, HH's *Arte* shares some features with manuscript no. 2 (Ind. 188) in **Table 1**. Both authors itemise declensions for nouns, both identify different conjugations in Tamil (nine conjugations in HH, five conjugations in Ind 188), both include categories such as *personal* and *impersonal verbs* absent in later works and employ technical terms such as *especies* (species)¹⁵ and *creçencias* (augments),¹⁶ largely found in Barros' text. Based on the metalanguage used in the description of Tamil I am inclined to consider manuscript no. 2, or at least its contents, to be older than manuscripts no. 3–6 in **Table 1**. However, this hypothesis of dating for manuscript no. 2 requires further investigation.¹⁷

Indisputably, manuscripts no. 1 and no. 2, and manuscript no. 3 in part, differ from the other missionary grammars. This is likely due to the innovation introduced by the *Ratio studiorum* in 1599 which promoted the Latin grammar composed by Manuel Álvares (1526–1582) *De Institutione Libri Tres* (1572), and in particular its abridged version (*Ars*

¹⁵ This term is typical in the Latin grammatical tradition, it is attested in different Latin authors like Donato, Prisciano, Carisio, to mention but a few. This term is used in HH for discussing sub-classes of the main parts of speech, among which the verb conjugations of Tamil (see § 5.1).

¹⁶ The same terminology is also found in manuscript no. 3 in **Table 1** which is GA/PB's *Arte* while it is never used by BC who uses the verb *acrescentar* (augmenting, adding, increasing) rather than the noun *creçencias* (augments, additions).

¹⁷ The stamp found in the title page suggests that the manuscript came into the collection not earlier than the first half of the 18th century. For further details on this manuscript see *BnF Indien 188: On Tamil Language* by E. Francis & C. Muru available at <https://tst.hypotheses.org/426>.

Minor, 1573), as a textbook for teaching Latin language in Jesuit colleges. Subsequently, Álvares' grammar became one of the texts most widely translated into different European languages (Fernandes 2007; Gómez Gómez 2002: V; Springhetti 1961–62: 287), and was adapted to the study of non-European languages in various parts of the world, becoming the principal reference model for most missionaries (Assunção & Toyoshima 2012; Fernandes 2015; Muru 2020).

As stated above, all these grammars (cf. **Table 1**) are representative of the earliest versions of Tamil descriptions which today exist in the form of autograph, or copied, manuscripts and printed books among which CJB's grammar represents a turning point, since he was the first missionary to attempt to combine and find the links between the ITGT and Western Grammatical Tradition (henceforth WGT).

A detailed reconstruction of the circulation and diffusion of these manuscripts within the missionary community is beyond the scope of this paper; nevertheless, a few facts about the interweaving of these grammatical works in the missionary network (some of which were already addressed by Muru 2018; 2020) might provide a better appreciation of how the knowledge and description of Tamil (verbs) progressed.

There are two kinds of references which offer evidence of the connections among these works. The first is a direct reference to an author/work by another author. For example, in two manuscripts of BC's *Arte* and in the preface in PB's *Arte* there are (not entirely favourable) references to GA's work (see Muru 2018: 15; Muru 2020: 60–63). Connections are also evidenced by indirect references, such as those inferred by comparisons of the contents of the manuscript, as when Jeyaraj (2010) demonstrates that BZ's grammar relied a lot on the copy of BC's work – even though the Tamil verb forms found in BZ's text are unique when compared to the other manuscripts (cf. Appendix 3). Indeed, in reproducing BZ's grammar, Jeyaraj (2010) identifies all instances of BZ copying from BC's manuscript without even mentioning it. These connections highlight how the first contribution of Westerners to Tamil studies, made by Jesuits, also found a following among the networks of Protestant missionaries, who relied on the Jesuits' work for their translations of religious books (cf. Israel 2011; Muru 2019). As such, for manuscripts no. 3 and no. 4 (cf. **Table 1**), and indirectly also for manuscript no. 5 (cf. **Table 1**),¹⁸ Álvares' text offers the best reference model, extended by missionaries to describe the Tamil language (cf. Muru 2020). Appendix 1 compares Álvares's (1573) table of contents with the manuscripts no. 3–5 (cf. **Table 1**) highlighting the similarities between Álvares' content and organisation and those of the missionary grammars.

As already mentioned, manuscript no. 6 stands apart, CJB being the first to have worked to establish a theoretical connection between ITGT and WTG. Manuscript no. 6 also marks the differences between these manuscripts and those for which Barros (1540) can be considered as a model of reference (cf. manuscripts no. 1 and 2). Since, however, the detailed analysis of the application of Western or Indian grammatical frameworks is not the focus of this paper, this aspect will not be discussed further. Germane to this paper is specifically the treatment of verbs in both traditions, through which the principle behind missionaries' classifications of Tamil verbs can be better understood, and to which I will return in the conclusions, having first discussed in detail how missionaries classified Tamil verbs.

¹⁸ As per manuscript no. 5 (cf. Table 1), Álvares (1573) should still be taken as model of reference but not as the direct source who inspired BZ, but rather the model of reference for the grammar that BZ wrote (see Jeyaraj 2010). In so doing he extended it in some areas and elaborated on some of BC's interpretations (*infra*).

5. The description of verbs in the early missionary grammars of Tamil

Each of the following sub-section discusses in detail how the missionaries, analysed in this study, classified, and understood Tamil verbs. A comparison of their descriptions highlights the progression the missionaries made in their understanding of Tamil verb paradigms and *paired verbs* (see also Chevillard 2021: 25–29)– which will be further discussed in the conclusion –, and it clearly reveals how much the classification of Tamil verbs provided by later descriptors like Graul owed to these early missionary descriptions.

5.1 Tamil verb conjugations and paired verbs in HH

HH identified three main groups of verbs on the basis of the present tense morpheme (cf. Appendix 2, section A). The first group included verbs ending in *quiren* (*-kkir-ēn*) – the present tense morpheme with the geminated velar stop *-kkir*, to which I refer as TYPE A. The verbs of the second group, representative of TYPE B, that “do not have most of the time either *-qui* (kk) or *-gui* (k) before the *-Rren*” (Hein & Rajam 2013: 137), evidence the present tense morpheme typical of spoken Tamil –variety A in Chevillard’s *triglossia* figure–, where there is assimilation and reduction of the morpheme *-kkir* (cf. Schiffman 1999: 51–57). The final group of verbs that end in *quiren* (*-kir-ēn*), thus corresponding to the present tense morpheme with a single obstruent, is representative of TYPE C. However, in order to detail the observed variation that occurs on the verb stem and in the tense morphemes, HH was compelled to subdivide these groups further. Consequently, for each group (TYPE ‘X’), HH made three sub-groups to which he refers as ‘*n^x CONJUGATION*’ for a total of nine conjugations (Cf. Chevillard 2021: 9–10, for a discussion on tenses and sub-tenses in HH). All the verb forms listed by can be found in Appendix 2, section A: they correspond to a specific verb class. As such, TYPE A mainly includes strong verbs, TYPE B includes weak verbs along with a few exceptions of irregular verbs, while TYPE C has middle and weak verbs, as well as two strong and two irregular verbs.

In his identifying of these three groups and the nine conjugations, HH was constrained in two separate ways: firstly, he had to identify conjugations in Tamil comparable to those in Latin or Portuguese but found that he could not rigidly apply the Latin model since Tamil verbs do not show variation in their endings, but rather demonstrate “internal fluctuation” (cf. § 3). Secondly, he was compelled to explain and organise the variation occurring in the suffixation of tense morphemes to the verb stem. These different exigencies led HH to separate the Tamil verb paradigm into nine different conjugations.

In addition, applying the Latin grammatical framework and following Barros (1540: ff. 19r–v), HH also differentiated between *personal* and *impersonal* verbs.¹⁹ The latter, in

¹⁹ Barros (1540: ff. 18r–v) states that Latin has verbs divided into *Personal* and *Impersonal* which all have eight *açidentes*: *genero, especial, futura, tempo, módo, pessoa, numero, coniugaçam*. The *personal* verbs have five genders (*active, passive, neuter, common, and deponent*) while the Portuguese language only has two of these: the *active* and the *neuter*. The *active* verbs are those which can be converted into the passive mood and through which we define those activities which pass into another thing which are encoded by the accusative case. By contrast, the *neuter* verbs (in Portuguese) are those which cannot form the passive and whose action does not pass into another thing, thus *I stay, I go, I come, I remain*. With regard to the *Impersonal verbs*, Barros (1540: 19r) states that “Chamam os latinos verbo Impesoál, todo aquelle q(ue) se coniuga pelas terceiras pessoas do número do singular, e nam tem primeira nẽ segunda pessoa. Estes verbos impesoães, sam em duas maneiras, a hũus chamama da vóz autiva, e outros da vóz passiva ... os verbos impesoães da vóz passiva, açerca dos latinos sempre denótam auçam cõ generalidãde de obrar: e prõpriadamente vem de todo los verbos neutros. ausolutos”. [Latins call impersonal those verbs which are conjugated from the third person singular and lack the first and second person. These impersonal verbs may be of two kinds: we call one (of these kinds) active voice, the other – passive voice. ... The impersonal verbs of the passive voice, among Latins, always denote action with a generalisation about the action (*obrar*) and they are properly derived from the neuter verbs. Absolutes. Translation from Portuguese into English is mine] (Barros 1540: 19r).

either the active or passive voice, is used both in the singular and in the plural. Thus, HH recognised two types (species) of impersonal verbs. The first of these includes forms only derived from the third person singular of the Tamil personal verbs with nine conjugations, while the second type includes verbs corresponding to the inherent *active tantum* (only active) (Klaiman 1991). Therefore, as shown below, HH distinguished the Tamil verbs without a paired counterpart, belonging to the 11th class – with the exception of examples (e) and (f) which are in both the 11th and 4th class:

a.	teriquidu , <i>teri-kkir-atu</i> , ‘it strikes and flies off’	11 th
b.	codiquidu , <i>koti-kkir-atu</i> , ‘it boils’	11 th
c.	uluquidu , <i>ulu-kir-atu</i> , ‘it decays’	11 th
d.	erhuquidu , <i>etu-kkir-atu</i> , ‘it raises’	11 th
e.	eriquidu , <i>eri-kkir-atu</i> , ‘it burns’	11 th /4 th
f.	verhiquidu , <i>veti-kkir-atu</i> , ‘it bursts’	11 th /4 th
g.	coluidu , no Portuguese gloss	not identified

The more noteworthy observations – HH’s discussions of the passive voice – are detailed in the following sections. He states that no passive exists in Tamil but “in some of the conjugation there is a way of speaking that is almost like the passive” (Hein & Rajam 2013: 211). He is referring here to verbs in the *affective* voice. Indeed, he was unable to identify this kind of ‘like passive’ for all the conjugations, but only for some verbs of the 3rd, 4th, and 5th of HH’s conjugations corresponding to TYPE A and TYPE B respectively. These three sub-groups of verbs, as highlighted above, include verbs belonging to the 11th class (*effective*) which enter in HH’s 6th conjugation or in HH’s second type of the 5th conjugation when they are ‘like passive’, meaning when they are of the 4th class (*affective*). In conclusion, HH differentiated the verbs according to the variation in the agentivity which characterises the subjects of (some) verbs belonging to the 4th and 11th classes respectively.

5.2 Verb conjugations and paired verbs in MS Ind 188

As already stated, the author of MS Ind 188 (manuscript no. 2) – as did HH – differentiated between *personal* and *impersonal* verbs. He, however, only identified five conjugations. He found that there is no passive in Tamil, although there are some verbs through which it is possible to derive it (i.e. *paṭu* ‘to suffer’ when added to the infinitive).

However, with regard to the verb paradigm (cf. Appendix 2, section B), he went further than HH. He not only reduced the number of conjugations but also made almost every conjugation correspond to a specific verb class. In fact, apart from the 1st conjugation which includes strong and weak verbs, all the others include verbs belonging to the same class. Thus, the 2nd conjugation includes strong verbs, while the remaining conjugations include weak class verbs. Furthermore, he also clearly states that some verbs cannot be included in any conjugation. These are the verbs belonging to the 7th, 8th, and 13th classes.

As HH did, the author of MS Ind 188 identified the conjugations on the basis of the final ending of the verb stem when it precedes the present tense morpheme. Thus, verbs of the first conjugation have *-i*, *-ai*, and *-a* as the final sound of the verb stem. In the identification of this first conjugation, the past tense morpheme is not included as a selective criterion since it varies among the verbs included in this conjugation.²⁰ By contrast, past tense

²⁰ In fact, verbs of the 11th class have the geminated *-tt-* in the past tense, those of the 12th and 4th class have the allomorph *-nt-*, while those of the 5th class have the allomorph *-it-*.

allomorphs are used in the identification of the 3rd and 5th conjugations for which all the verbs form the past in *-nt-* (i.e. *uri-tal*, ‘to peel’) and *-iṅ-* respectively (i.e. *ettu-tal* ‘to inveigle, lure, cheat’). With regard to the 4th conjugation, once again the only valid criteria are the sounds which precede the present tense morpheme (i.e. *lu*, *lu*, *ru*) rather than the past tense allomorphs which vary greatly. Indeed, the verbs included in this conjugation belong to different classes, specifically the 2nd, 3rd, 4th, and 5th, and form the past with different allomorphs, namely *-nt-* for verbs in the 4th class (i.e. *akal-tal* ‘to leave, vanish’), *-t-* for verbs of the 2nd class (i.e. *koḷḷu-tal* ‘to buy, size’), and *-iṅ-* for verbs in the 5th class (i.e. *pal(u)ku-tal* ‘to increase in measure, to multiply’). Finally, as was the case with HH and for later missionaries discussed in the following sections, the author of MS Ind 188 based the verb paradigm exclusively on formal aspects. The semantics of the verb, as well as the arguments that a verb may take, is not remotely considered.

In terms of the kind of verb stem, the author of MS Ind 188, as well as HH did (cf. Hein & Rajam 2013: 99; Vermeer 1982: 47) identified the morphological causative *-(p)pi-* and *-vi-*, and interpreted it as deriving from the future tense and as being used for generating compound verbs:

- a. “há verbos compositos que fazem executar a sua significação e compõe da 1ª pessoa do futuro do Indicativo, mutando o, en, em, icren, ut விசுவசிபபென eu crerey, விந்ருவாசிபபிககிறென fazo crer; செயவென eu fazerey, செயவிககிறென, fazo fazer, ou mando fazer e vaõ pella prima coiugaçaõ” (MS Ind 188, f. 41r).

[There are compound verbs which make [someone else] execute their meaning, [the action expressed by the verb]. They are composed of the first person of the future of the Indicative. changing en, in, icren, as in *vicuv[ā]cippēn* ‘I will believe’, *vicuvācippikkirēn*, ‘I make someone to believe’; *ceyvēn*, ‘I will do’, *ceyvikkirēn*, ‘I make someone to do, I order someone to do’. They are in the first conjugation.]

The morphological causatives, formally distinguished by an extra affix and considered *compound verbs*, are compared to other compound verbs with a similar causative meaning (verbs meaning “fazer que outrem faça” [‘make others do’] (MS Ind 188, f. 41r), formed by adding a particle *-tugren-*, that results in the geminated obstruent (*-tt-*) occurring in the base-final position of *affective* verbs followed by the present tense morpheme (*-kir-*) and the PNG marker (*-ēn*). Indeed, the listed verb forms are *paired verbs* of *affective* versus *effective* voice, like *naṭa* (12th) vs. *naṭattu* (5th) corresponding to the second class of basic Tamil verbs identified by Paramasivam (1979: 11) and included in the third group of *paired verbs*, characterised by a single obstruent in the affix-initial position but with a geminated obstruent in the base-final position (Paramasivam 1979: 9–10).

5.3 Verb conjugations and paired verbs in GA/PB

GA/PB’s *Arte* does not provide a detailed description of verb conjugations, unlike previous authors, but instead simplifies his account into two main groups (cf. Appendix 2, section C): verbs which form the present tense with a geminated voiceless obstruent (*-kkir*) with a future tense in *-(p)p-*, and verbs which have a single voiceless obstruent (*-kir*) with a future tense in *-v-*: thus, strong and weak verbs.

Indeed, the author states that Tamil differs from Latin, since it does not multiply the conjugations according to variety of second person in the present and infinitive, but rather there exists one sole conjugation since all verbs end in *-ay* in the 2nd person, and in

-a in the infinitive. This single conjugation includes all verbs, including those that have passive, neuter, simple, and compound meanings:

- b. “...pella qual tambem vaõ todos os Verbos de significação passiva, neutra, com [vê] simples, e compostos.” (Cod. Orient. 283, f. 33v, lines 12–13).

[...within which all the verbs with passive sense are also included, [that means] neuter, both simple and compounded.]

GA/PB also states that it is impossible to give a general rule for the formation of the past tense that includes all verbs, since there is substantial variation, above all among verbs ending in *cradu* (-*kkiratu*).²¹ Consequently, he does not discuss how the past tense is formed and this decision is also motivated by the fact that his *Arte* was only intended to be a practical tool for teaching the language to beginners rather than to be a theoretical grammar. Despite this, AG/PD deems it useful to add some information about verbs, for the sake of clarity and out of respect for the structure of Latin grammar:

- c. “Dos quais com tudo daremos alguã noticia, não por necessid(ad)e, mas pera m(ai)or clareza; e pera nos conformarmos cõ a arte Latina, conforme a qual poremos tambem algũ exemplo de Verbo impessoal; e algũs Verbos anômalos, e defectivos, q(eu) não vão por leis de conjugação”. (Cod. Orient. 283, f. 33v, lines 14–18).

[Of which, despite everything, we will give some information, not because it is necessary, but only for more clarity and in order to conform with the Latin *arte*. On the model of it [the Latin *Arte*], we will also make some examples of Impersonal Verbs, and some Anomalous and defective Verbs, which do not follow the law of the conjugation.]

With regard to *paired verbs*, it seems to me that AG/PB was acquainted with HH’s *Arte*, or at least with a Tamil grammar where the *affective* verbs were considered ‘like passive’. Furthermore, he compares them to the verb *comunnia* of the Latin language which can have both the active and the passive *signification* as shown by the following quote:

- d. “Deixando oppinioões se Verbos em gradu nacidos de outros em cradu tem lingoagem passiva, ou não? porey os passivos, e modos delles mais ordinários, deixando os outros em gradu pera os Verbos neutros, ou comũs, quaes cuidô que elles são.
... somente advirto que há algu’s Verbos em gradu que tem significação passiva, estes são cômummente nacidos d’outros Verbos em iccradu que tem a mesma significação activa.” (Cod. Orient. 283, f. 34r, lines 21–24; f. 34v, lines 34–36; f. 35r, line 1).

²¹ “Mas como os verbos em cradu são muito vários, assi os präteritos, a formações delles nem se pode dar regra geral, que valha em todos” (MS Cod. Orient. 283, f. 40v, lines 4–6). [But since the verbs (ending) in *cradu* vary a lot, as do their preterites, it is not possible to provide a general rule under which to include all (the verbs)]. GA/PB states that more details about their formation will be given in the treatise on the preterite that, however, is not included in manuscript Cod. Orient. 283.

[Leaving aside [those] opinions [which wonder] if the verbs in *gradu* (-kiratu) born from others in *cradu* (-kkiratu) have passive significance or not, I will put the passives, and the most ordinary moods, leaving aside the others in *gradu* (-kiratu) [and including them] in the Neuter verbs, or common verbs, as I consider them to be.

... I only warn that there are some verbs in *gradu* (-kiratu) which have passive meaning, these are commonly derived from other verbs in *iccradu* (-ikkiratu) which have the same *active* meaning.]

Thus, rather than drawing a distinction between *personal* and *impersonal* verbs as HH and MS Ind 188 did, AG/PB introduces a *new* Latin category in the description of Tamil, the *neuter* verb and consequently a *new* term, *active*. He also clearly states that the verbs in *gradu* (*affective*) are derived from those in *cradu* (*effective*), the latter being considered as *neuter*, rather than passive.²² Finally, AG/PB also takes some *paired verbs* with one being the causative form of the other, derived throughout the addition of the suffix *-ttu*, as in his example *paṭu-tal* (6th) and *paṭuttu-tal* (5th). In the section where he explains causative verbs, he enumerates three kinds of causatives, all morphologically derived throughout the addition of suffixes such as *vi*, *pi*, and *tu*:

- e. “Verbo acabado em cradu podeselhe acrescentar hum pi ou vi antes do cradu. E aos acabados em gradu, podeselhe acrescentar hum tu antes do gradu. E cõ as taes adições ficaõ significando fazer fazer aquillo, que os simples significam. Como agora vasicren quer dizer leo, ponhaõlhe hum pi antes do cren, fica visipicren, faço ler. Paṭugren significa padecer, ponhaõlhe hum tu antes do gren fica paṭutugren faço padecer”. (Cod. Orient. 283, f. 39r, lines 2–9).

[To verbs ending in *cradu* (-kkiratu) it is possible to add a *pi* or *vi* before the *cradu* (-kkiratu). To those ending in *gradu* (-kiratu) it is possible to add a *tu* before the *gradu* (-kiratu). And with this addition [or augmentation] they come to mean to do, to do what the simple [verb] means. Like now *vasicren* (vācikkirēṇ) means ‘I read’, if we add a *pi* before the *cren* (-kirēṇ), it becomes *vicipicren* (vācippikkirēṇ), ‘I make read’. *Paṭugren* (paṭukirēṇ) means ‘to suffer’, if we add a *tu* before the *gradu* (-kiratu) it becomes *paṭutugren* (paṭuttukirēṇ), ‘I make suffer’.]

As the following sub-sections reveal, the next two authors, BC and BZ, do not add further comments to what GA/PB had earlier stated. Indeed, following his interpretation, they simply described the verb paradigms in more detail, even though they referred to *rules* rather than conjugations because, in just as GA/PB did, they only recognised one single conjugation. For this reason, GA/PB can be considered the first missionary grammar where an important change of the categorisation of Tamil verbs occurs: he rejected the idea of conjugation as intended in the Latin grammatical framework for the Tamil verb system, and instead identified a different kind of verb stem (strong, weak, and middle). He also introduced the idea of the *neuter* which has the *affective voice* defined above, which thus, enters into opposition with an *active voice* (which corresponds to the *effective voice* as explained above).

5.4 Verb conjugations and paired verbs in BC and BZ

As highlighted in the previous section, the texts of BC and BZ share similarities above all in their discussion of the verbs. Given this, I have considered them as a single work,

²² One cannot be sure that he is referring to HH specifically, however the link is evident, since HH treated what GA/PB defines neuter as passive verbs.

since the sole differences between the two authors are the different verb forms used for explaining the rules, the different number of rules for the formation of the preterite in Tamil found in BZ, compared with those outlined in BC, and in some misinterpretations BZ made while he was relying on BC's *Arte*.²³ As already mentioned, this is due to the fact that, as Jeyaraj (2010: 20) states, "BZ made use of Da Costa's Tamil grammar entitled *Arte Tamulica*"²⁴ while composing his *Grammatica Damulica* printed in 1716. For this reason, I will refer exclusively to BC's work and will mention BZ only when differences occur, or it is relevant to the discussion.

BC deals with Tamil verb conjugations and *paired verbs* in the *Third Title*, after having explained, through the verb *vicuvāci-ttal* ('to believe'), the only declension existing in the Tamil language. In this section, BC explains how to form past and future tenses, the imperative mood, and noun genders. He starts by declaring how forming the past tense is awkward and confusing for beginners because verb conjugations cannot be reduced to one general rule. Thus, in order to overcome this difficulty and to limit problems for beginners, he provides just twelve *simple* rules (rather than conjugations) for forming the preterite, leaving aside the usage of the language and all other information necessary for the Tamil teacher to know about Tamil verbs:

- f. "Daõse alguãs regras per preteritos Futuros Imperativos e plurais dos pretéritos. He materia esta assãs embaraçada e cõfuzza p(ar)a os Principiantes porq(ue) pella variedade de preteritos se não pode todos reduzir a regras geraes, se bem depois de poucos annos de exerciçios se vem a cair sem se sentir tanto, nesta materia q(ue)em nenhu' ou poucos preteritos se erra. Nos p(er)a q(ue) nella digamos alguã cousa e por evitar por todos os preteritos, no vocabulario, formaremos algumas regras gerais, ou quase gerais Remettendo os preteritos que nellas senão cõprenderem, ao Vocabulario, e deixando muitas particularidades ao uzo por não cauzar confuzzaõ aos principiantes". (MS 50, f. M-34–42, Left column, lines 9–28)

[Wherein some rules are given for preterite Future Imperatives and plurals of preterites.

This is a rather awkward and confusing matter for Beginners, for due to the variety in preterites we cannot reduce them all to general rules, although after a few years of exercises one comes to use them properly, so that one will eventually barely misuse them, if at all. We will state a few things so that we do not need to have all preterites in the vocabulary, we will form some general rules or quasi-general. We will place the preterites not included in (these rules) in the vocabulary, leaving their many particularities to usage, so as not to create confusion among beginners.]

Essentially, BC started from the key distinction identified by GA/PB (cf. Appendix 2, section D), namely that the 1st rule involves verbs ending in *cradu* (*-kkiratu*) which correspond to the class of the strong verbs, while the 2nd rule regards weak – those verbs ending in *gradu* (*-kiratu*). It is hardly surprising that BC abandoned the intention

²³ Comparing BC's and BZ's works, one may notice that the latter inserted new verbs forms and the following changes when discussing about the *formation of Tenses* (Jeyaraj 2010: 125–134): BC's 10th rule becomes the 6th, the 11th rule becomes the 7th, the 12th rule becomes the 8th. Furthermore, BZ misinterprets BC's second exception of the 3rd rule and the 4th and 5th rules that BZ differentiated on the basis of the endings in *e* and *ẽ*; *o* and *õ*, while BC was focussing on geminated vs. single voiceless velar obstruent (for BZ's verb rules see Jeyaraj 2010: 128–129).

²⁴ Jeyaraj has identified in the British Library (OC Sloane 3003) an incomplete manuscript of BC's *Arte* which is mentioned in Ayscough's catalogue (1782: 710): "3003: *Arte Tamulica*; i.e. *Grammatica Linguae Malabaricae, verbis Lusitanicis explicate*".

identify different conjugations in Tamil, suggesting instead only *rules* for the formation of different tenses and moods. In reality, BC was reproducing and, at the same time, extending what GA/PB included in his *Arte*, a grammar with which BC (or the copyist of his *Arte*) seems to have been well acquainted. As already discussed in Muru (2018, 2020) and stated above (cf. § 4), BC mentions GA's *Arte* on several occasions in his work, at times critically. However, it is evident that he agreed with GA that there is no variation in the final declension of Tamil verbs, that thus there are no conjugations, and that some verbs are derived from others. To what extent then, did BC extend GA's grammar? He explored the variation, identified but not explained by GA, which occurs in the formation of the past tense – to which the 3rd –12th rules are devoted. These rules are identified on the basis of the final sound of the verb stem (V or C) that precedes the present tense morpheme and on the type of present tense morph, with or without gemination of the obstruent. These two parameters are also combined, as was the case in HH, with the type of past tense allomorphs taken by the verb. Nevertheless, the number of verb classes identified and the divisions into classes vary; and BC's verb classification is better defined than GA/PB's. The rules outlined by BC are as follows:

- 3rd rule = verbs ending in *a + kkir* → pst: *nt* includes verbs of the 12th class
- 4th rule = verbs ending in *ē/ō + kir* → pst: *nt* includes irregular verbs (13th), 4th and 5th class
 - but *ō + kkir* → pst: *in*
- 5th rule = verbs ending in *u + kir* → pst: *in* includes verbs of the 5th class
- 6th rule = verbs ending in *lu + kir* → pst: *ṅṅ* includes verbs of the 2nd class
- 7th rule = verbs ending in *lu + kir* → pst: *ṅṅ* includes verbs of the 3rd and 5th class
- 8th rule = verbs ending in *ru + kir* → pst: *nr, nn* includes irregular verbs (13th), 4th and 5th class
- 9th rule = verbs ending in *tu + kir* → pst: *tṭ* includes verbs of the 6th class
- 10th rule = verbs ending in *ṅ + kir* → pst: *in* includes verbs of the 5th class
(*neuter verbs = effective*)
- 11th rule = verbs ending in *r + kkir* → pst: *tt, rr* includes verbs of the 6th class

The final rule (12th) is connected to the 10th, since it includes all the *active* (of the) *neuter* forms given under the 10th rule.

- 12th rule = in *kkir* = *active verbs (= effective)* includes the corresponding pairs of verbs of the 5th class (*effective*)

What emerges thus far is that in BC verbs are classified, as in GA, largely according to morpho-phonemic criteria, taking into consideration:

- 1) verbs which differentiate between geminate (*cradu, -kkiratu*) versus non-geminate (*gradu, -kiratu*) present tense morpheme;
- 2) the final sound of the verb stem;
- 3) the past tense allomorphs taken by verbs;

but he also took into account verb diathesis inasmuch as:

- 4) verbs in the 12th rule are a counterpart to those in the 10th rule, the former being *active* and the latter *neuter*.

If one excludes HH, all the manuscripts discussed so far differentiate between *active* and *neuter* based on a morpho-phonological criterion (gemination vs. non-gemination). However, when discussing the *causative* in addition to the *passive*, their differentiation is also based on semantic criteria.

With regard to the opposition within *paired verbs*, as in HH, it is perceived as a contrasting of verbs in the *active* and ‘like passive’ voice, presumably taking into consideration both the formal structure and the meaning:

g. “Da Voz Passiva

Naõ fallando nos verbos passivos que há nesta lingoa acabados em *gren*, q(ue) como naõ tem regra certa só cõ o uzo se podem aprender, como saõ de முகிக்கிறென *eu acabo*, முகிக்கிறென *eu sou acabado*; de முறிக்கிறென *eu quebro*, முறிக்கிறென *eu sou quebrado*, e outros muitos. Há outros compostos e propriamente passivos.” (MS 50, M-34–36, Left column, lines 4–13)

[Of the Passive Voice

Leaving aside the passive verbs in this language ending in *gren* (*-kirēn*), which, as they have no certain rule, can only be learned by use, as is the case of முகிக்கிறென (*mukikkirēn*) *I finish*, முகிக்கிறென (*mukikirēn*) *I am finished*; from முறிக்கிறென (*murikkirēn*) *I break*, முறிக்கிறென (*murikirēn*) *I am broken*, and many other modes; there are other [verbs] that are composite and passive proper.]

In this respect, it is worth mentioning that BZ stated that the formation of the passive voice is twofold: passives which occur without adjustments within the same verbs and passives that are formed through the compounding of the infinitive with the verb *paṭu-tal* (to suffer). The *paired verbs* are listed as the first kind of passive that “must be learnt, not by many rules, but from practice” (Ziegenbalg 1716: 80–81; Jeyaraj 2010: 111):

(h)	“முகிக்கிறென	Finio	[<i>mukikkirēn</i>	I complete [something]
	முகியிறென	Finior	<i>mukiyirēn</i>	I get completed
	முறிக்கிறென	Frango	<i>murikkirēn</i>	I break
	முறிகிறென	Frangor	<i>murikirēn</i>	I get broken
	அழிக்கிறென	Corrumpo	<i>alikkirēn</i>	I destroy
	அழிகிறென	Corrumpor	<i>alikirēn</i>	I get destroyed [i.e., I perish]
	நசுக்குகிறென	Contero	<i>nacukkukirēn</i>	I crush [something]
	நசுங்கிறென	Conteros	<i>nacuṅkirēn</i>	I am crushed
	வளைக்கிறென	Flecto	<i>valaikkirēn</i>	I bend [something]
	வளைகிறென	Flector	<i>valaikirēn</i>	I am bent [i.e., I bend]
	செரிக்கிறென	Concoquo	<i>cerikkirēn</i> *	I digest
	செரிகிறென	Concoquor	<i>cerikirēn</i> *	I digest [myself]
	எழுப்புகிறென	Excito	<i>eḷuppukirēn</i> *	I arise
	எழுமபுகிறென	Excitor”	<i>eḷumpukirēn</i>	I am caused to arise [i.e., I stand up]
	(Ziegenbalg, 1716: 80–81)		Jeyaraj 2010: 111, *	apart from the vowel length which has been added, these transcriptions respect what is written in BZ’s original book and differ from Jeyaraj]

Morphological causatives are explained in BC in the section devoted to *verb composition*:

- (i) “3^o se fâz cõ o verbo do mesmo modo, ut விசுவாசங்கொள்கிறென *Eu creyo*. Esta composição se acha as vezes cõ significação passiva, ut அடிகொள்கிறென *sou espancado*, mas õ ordinario he significação activa, ut மெய்கொள்கிறென *creyo*, செயங்கொண்டென *venci* நம்பிக்கைகொள்ளான *naõ confia*, etc.²⁵ Tembem da p(rimei)ra pessoa do futuro affirmativo de qualquer verbo se formaõ outros *effectivos* [emphasis mine] mudando o பென, என்^{ou} வென em பிக்கிறென, et விக்கிறென, e signifiçãõ [o fazer] exercitar por outro tem a significação do verbo simples ut விசுவசிப்பிக்கிறென *Eu faço crer* அழைப்பிக்கிறென *Eu faço chamar*. செயவிக்கிறென *eu faço fazer* etc. E vem a formar outros verbos q(ue) tẽ todos os [modos], tempos e pessoas.” (MS 50, M-34–37, Left column, lines 7–31)

[3rd [composition of verbs] is made with the verb of the same mode, as in விசுவாசங்கொள்கிறென (*vicuvācaṅkollukirēṅ*) ‘I believe’. This composition can sometimes be found with the passive *signification* [meaning], as in அடிகொள்கிறென (*aṭikollukirēṅ*) ‘I am [beaten]’, but (the most common) is the active *signification* [meaning], as in மெய்கொள்கிறென (*meykollukirēṅ*) ‘(I) believe’, செயங்கொண்டென (*ceyṅkoṇṭēṅ*) ‘(I won)’; நம்பிக்கைகொள்ளான (*nampikkaikollāṅ*) ‘(he) does not trust’, etc. Also, from the first person of the future affirmative of any verb, other *effective* [emphasis mine] verbs are formed by changing the பென (*pen*), or வென (*ven*) into பிக்கிறென (*pikkirēṅ*), or வக்கிறென (*vakkirēṅ*), meaning to make someone do something, and another has the *signification* (meaning) of the simple verb as in விசுவசிப்பிக்கிறென (*vicuvācippikkirēṅ*) ‘I make someone believe’. அழைப்பிக்கிறென (*alaippikkirēṅ*) ‘I make someone call’ செயயிக்கிறென (*ceyyikkirēṅ*) ‘I make someone do’ and forms other verbs that have all moods, tenses, and persons.]

It is worthy of note that, for the first time, the term *effectivos* appears to define the semantics of the Tamil morphological causative verbs. The same term is also found in the version of BC’s *Arte*, copied in 1685, and attached to AP’s dictionary, printed in 1679 (manuscript Borg. Ind. 12 from the Vatican Library). Surprisingly, the three copies of the original exhibit differences: those found at the State Central Library of Goa (MS 15 and MS 49) display the term *affectivos* rather than *effectivos*, while the manuscript traced by Jeyaraj (2010) at the British Library (OC Sloane 3003) does not include either term.²⁶ Despite the fact that both *effectivos* and *affectivos* seem to anticipate Paramasivam’s terminology, in this context they should be interpreted through the lens of the Latin grammatical framework where the term *affectus*,²⁷ an imperfect calque from Greek, is used along with *significatio*, *genus*, and *vox* in reference to the verb diathesis and, only in certain Latin authors, is used to address the *patientive* role in the pair *agere* and *pati* (cf. Benedetti 2001: 225–226; Coccia 2012: 58). Thus, in this context, they should be understood as expressing the semantic and formal change which Tamil verbs undergo with certain suffixes, and through which the verb expresses a cause, or a result of an action produced on someone by the influence of another.

²⁵ In this case BC interprets the function of the *reflexive* auxiliary *kol* as a way of distinguishing between *active* vs. *passive voice* at a semantic level rather than at a morphological one, since the verb form does not display any variation.

²⁶ The term *effectivos* appears at f. 234v in MS Borg. Ind. 12, the term *affectivos* appears in f. 28v of MS 66 and on f. M-15–56 of MS 16 from the State Library in Goa. This difference among manuscripts of BC’s *Arte* raises the problem of identifying which is BC’s original manuscript—if there is one among those accessible— and which are later copies. This topic is not discussed here further, but is explored, in more detail, in the introduction to my translation of BC’s *Arte*.

²⁷ For a discussion of the use of *affectus/affectio* for addressing ‘emotions’ see Haskell et al. (2016: 521–543).

BZ added to BC's list of verbs (included in Appendix 3), but reduced the explanation regarding verb composition and, in terms of the morphological causative, he merely stated:

- (j) “Non minus fit quædam verbi compositio, quando prima persona Futuri affirmativi வேன vel பென mutatur in பிக்கிறென, qua mutatione significatio majorem habet valorem, quam in verbo simplici...” (BZ, 1716: 84–85)

[“A certain adjustment of the verb occurs when the first person of the future affirmative – வேன (*vēṇ*) or பென (*pēṇ*) is changed into -பிக்கிறென் (*pikkirēṇ*). As a result of this mutation the meaning has greater force than in the simple form of the verb ...” (Jeyaraj 2010: 115)]

5.5 Verb conjugation and paired verbs in CJB

I conclude this investigation into how missionaries organised the Tamil verb conjugation and treated Tamil *paired verbs* with Constantius Joseph Beschi (henceforth CJB), one of the most prominent Western grammarians of Tamil of the early 18th century, whose work, translated into several languages (see Chevillard 2021, cf. § 2), was to become the model of reference for later descriptors of the Tamil language. For example, Rhenius (1836: 79) acknowledged CJB's deep appreciation of the Tamil verb paradigm, by contrast with the ITGT:

- (k) “the past tense is characterised by the middle particles *t*, *ṭ*, *r*, and *iṅ*. The native grammarians do not point out which roots require the one or the other of these middle particles. I shall therefore deviate from their course, and rather follow Beschius in describing the formation of this tense; the only one that has any difficulty.”

CJB may be considered as the turning point from the previous missionary tradition for two more key reasons: as already stated, he described Tamil with reference to the WGT and to the ITGT with which he was familiar; secondly, in particular with the *Naṅ.*, he shed light on those questions that had arisen among his predecessors, such as questions relating to the passive meaning of the *neuter* (*affective*) verbs.

However, CJB would not have accomplished so much if his predecessors had not worked so extensively on the Tamil language and had not collected linguistic data: primary evidence of this is his explanation of the past tense formation where the synthesis is clearly derived from the grammatical descriptions that preceded CJB. He summarised in eight rules the formation of the past tense, taking into account the same formal criteria that were based on the observation of the final sound of the verb stem preceding the present tense morphemes *cradu* (*-kkirau*) or *gradu* (*-kiratu*), thus on internal sandhi. As is the case for the other manuscripts, the full list of verb forms found in CJB's grammar (Beschi 173: 50–58, parag. 54–65; Mahon 1848: 44–63) is given in Appendix 2, section E. CJB provided three rules for present tense in *-kkir-* (strong verbs):

- | | | | | |
|------------------------|--|-----|-------------------------|---|
| •1 st rule: | a. verbs with <i>y, r</i>
b. verbs with <i>i, ai, u</i> | } → | pst = <i>tt-ēṇ</i> | verbs of the 11 th class |
| •2 nd rule: | verbs in <i>ā</i> | → | pst = <i>nd-ēṇ</i> | verbs of the 12 th class ²⁸ |
| Except. | if monosyllabic verbs in <i>ā</i> | → | pst = <i>(kk)-iṅ-ēṇ</i> | verbs of the 5 th class |
| •3 rd rule: | verbs in long syllable | → | pst = <i>(kk)-iṅ-ēṇ</i> | verbs of the 5 th class |

²⁸ There is only one verb included in this conjugation that does not belong to the 12th class: *para-ttal* ‘to fly’ since it belongs to the 4th class.

The first rule (a, b) includes the strong verbs of the 11th class; the second rule includes verbs which mainly belong to the 12th class,²⁹ while the third rule includes weak verbs of the 5th class³⁰ that have a long vowel in the final syllable of the verb stem preceding the present tense morpheme. CJB considers these forms the correspondent *active* form of the *neuters* that he lists in the rule n. 2 among those verbs with a single velar stop in the present tense marker (Beschi 1738: 53, parag. 60; Mahon: 1848: 46), i.e. “*aṭakkīratu* (‘to shut’) is the *active* form of the *neuter* *aṭaṅkīratu* (‘to be shut’) that has the past in *iṅēṅ*”.

With regard to the verbs ending in *gradu* (-kīratu), five further rules are given along with some exceptions:³¹

- 1st rule: a. verbs with *ṅga* (*ṅ-kīr*) → pst = *ṅk-iṅ-ēṅ* verbs of the 5th class
- b. verbs with *ṅ* (*ṅ-kīr*) → pst = *ṅt-ēṅ* verbs of the 7th, 13th class
- c. verbs with *ṅ* (*ṅ-kīr*) → pst = *ṅr-ēṅ* verbs of the 8th class
- 2nd rule: verbs ending in over short *u* → pst = *iṅ-ēṅ* verbs of the 5th class³¹
- Except.** Verbs ending in *ku, ru, tu* → pst = dropping ‘u’ and doubling the final C (verbs of the 6th class)
- 3rd rule: a. verbs ending in single *l+u* → pst = *ṅt-ēṅ* verbs of the 2nd class
- b. verbs ending in geminated *l+u* → pst = *iṅ-ēṅ* verbs of the 5th class
- c. verbs ending in *ru* → pst = *nt-ēṅ* verbs of the 4th class
- d. verbs ending in *lu* → pst = *ṅr-ēṅ* verbs of the 3rd class
- e. verbs ending in *lu* → pst = *varies* verbs of the 1st and 4th class
- 4th rule verbs ending in *ya, i, ai* → pst = *nt-ēṅ* verbs of the 4th class
- 5th rule verbs ending in *long vowel* → pst = *varies* verbs of the 4th, 5th, 13th class

It is worth noting, from the above rules, how CJB identified almost all the classes included in the contemporary MTL with a re-organisation of BC’s classification. Indisputably, he achieved this thanks to earlier missionaries, in particular BC via BZ, as is suggested by the similarities among verbs used as examples (cf. Appendix 3) as well as his references to a previous author – presumably BZ.³²

CJB mentions *paired verbs* in a section on the *passive voice* but, unlike his predecessors, he is adamant that they are not passive or ‘like passive’ verbs, but rather that they should be considered as *neuter* verbs carrying an *intransitive* meaning:

- (1) “Siquidem quæ ab Alio passiva dicuntur, v.g. முகிகிறது, வளடுகிறது, விளங்கிறது, &c. non passiva, sed neutra dicenda sunt; non enim passionem a causa exprimunt, sed sensum intransitivum important: v.g. வளர்க்கிறது *ex augere*, activè; numquid வளடுகிறது erit *augeri*, passivè? Non certè, sed est *crescere*,

²⁹ See endnote 39 in Appendix 2.

³⁰ CJB (Beschi 1738: 51, parag. 56, Mahon 1848: 44) points out that these verbs are syncopate forms which have lost the syllable *ku* before the present tense: *nakkīratu* < *nakkukīratu*, pst = *nakkīṅēṅ*. CJB states that, in order to understand whether a verb has undergone a syncope, one should check the imperative. He is referring here to *paired verbs*. See endnote 40 in Appendix 2.

³¹ Verb forms that end in *tu, ku, ru* (i.e. *muṭu, tiru, tavaru*), or in single long syllable (i.e. *ēku*), or in a geminated consonant (i.e. *takku*) also take *iṅ* in the past; but if there is only a short syllable preceding the *tu, ku, ru* (i.e. *naku, paṭu, peru*) thus they form the past dropping the ‘u’ and doubling the final consonant.

³² The 39% of CJB’s verb forms that are listed in Appendix 2, section E, is also found in the other manuscripts discussed in this article. Among them, 37% of the shared forms are found only in BC’s grammar (cf. Appendix 2, section D).

neutrum. Sic dicitur, உனமகனவளர்ந்தான, *crevit filius tuus*: et ad explicandum *augeri*, passivè, dicendum வளர்க்கப்படுகிறது. Sic முகிகிறது, non est *compleri*, passive; sed *desinere*, neutrum. [...] Quod ut calrius adhuc pateat, Latini habent *luceo*, neut. *illumino*, act. *illuminor*, pass. his correspondent விளங்கிறது, neut. விளக்கிறது, act. விளக்கப்படுகிறது, pass”. (Beschi 1738: 69, parag. 77)

[Those which, by Another person, are called passives, e.g. முகிகிறது (*mukkīratu*), வளடுகிறது (*vaḷarukīratu*), விளங்கிறது (*vaḷaṅkīratu*), &c. are not to be called passive, but neuter; for they do not express passion or suffering from a cause, but import an intransitive sense: e.g. வளர்க்கிறது means, *to increase*, actively; is there any வளடுகிறது (*vaḷarukīratu*) that will mean *to be increased*, passively? Certainly not, but it means *to grow larger*, a neuter verb. Thus it is said, உன்மகன்வளர்ந்தான் (*uṅ makaṅ vaḷarntāṅ*), *your son has increased in size*: and to express, *to be increased*, we must say வளர்க்கப்படுகிறது (*vaḷarkkappaṭukīratu*). So too முகிகிறது (*mukkīratu*) does not mean *to be completed*, passively; but *to cease, to leave off*, neuter. ... To make this appear yet more clearly; the Latins have *luceo*, *I shine*, neuter; *illumino*, *I illumine*, active; *illuminor*, *I am enlightened*, passive. To these correspond விளங்கிறது (*vaḷaṅkīratu*), neuter; விளக்கிறது (*vaḷakkīratu*), active; விளக்கப்படுகிறது (*vaḷakkappaṭukīratu*), passive (Mahon 1848: 59)].

With regard to morphological causatives, following the *Nan*. (cf. § 3), CJB calls these the *verbs of command* (*ēval viṇai*), which means verbs that imply an action done at the command, or at least at the persuasion of that person, who is in the nominative. As in earlier missionary grammars, the causative morphemes are considered as derived from the *word* used in the formation of the future tense; the word for the future *-pēṅ* gives *-pikkīratu*; and the word for the future *-vēṅ* gives *-vikkīratu* (Beschi 1738: 115–116; Mahon 1848: 95).

In conclusion, following the main subdivision already identified by earlier missionaries that split verbs into two main groups – with and without gemination of the velar stop in the present tense morpheme, CJB managed to provide a classification of verbs identifying the different classes. In addition, CJB categorises the *paired verbs* on the basis of verb diathesis. As such, *neuter* verbs carry an intransitive significance because the action expressed by the verb refers to the subject itself, while the action expressed by the *active* verbs produces effects on a referent other than the subject and for this reason, these are different from the neuter.

6. Conclusions

My analysis of the classification of verbs by missionaries between the second half of the 16th century and the first half of the 18th century demonstrates the progress these early descriptors made in understanding Tamil verbs through their application of a Latin grammatical framework. It was a gradual process of comprehension which led them to certain assumptions about the nature of Tamil verbs that had not previously been observed by the ITGT.

There are three principal issues related to the Tamil verbs under observation: the verb conjugations, the *paired verbs*, and the causative verbs. All six manuscripts, through the adoption of formal criteria, identified a variable number of verb conjugations (in HH and MS Ind 188) or rules (in BC, GA/PB, BZ, CJB) for the formation of present, past, and future tenses in Tamil. In defining these, missionaries also became aware of certain types of verbs which appeared to be the counterpart of other verbs (Tamil *paired verbs*) which they struggled to describe using categories of Latin grammar. As such, in HH, *paired verbs* were

impersonal forms with a significance ‘like a passive’ which could be derived from *personal verbs*; in the other manuscripts, they were the *neuter* of the *active* verbs. In addition, missionaries also encountered verb forms that signify ‘to make someone do something’ which they deemed to be derived from the paradigm of the future tense because of the formal similarity between the causative morphemes *-vi-* and *-ppi-* and the morpheme of the future tense, *-v-*, *-p-*, and *-pp-*.

Although none of the missionaries discussed here made any attempt to identify or isolate a proper ‘voice morpheme’, by applying the category of *neuter* and *active*, they all clearly recognised a connection between some *paired verbs*, including a deviant form (*neuter*) from another one (*active*). As observed in earlier sections, only HH and MS 188 offer a differentiation between personal and impersonal verbs, including within the latter the *active tantum* verbs (HH) and *kuṛippu viṇai* (MS 188). Only HH articulates that “in some of the conjugation there is a way of speaking that is almost like the passive” (Hein & Rajam 2013: 211), although he acknowledges that the case to which he is in fact referring, namely the *affective voice*, cannot be considered as completely overlapping with the Latin passive. Despite this, later grammarians like GA/PB continued to question the possibility of considering these verbs as passive, and also introduced a new category, the *neuter*, while BC, anticipating Paramasivam’s terminology– albeit with a slightly different meaning– made use of Latin categories such as *effectivos/affectivos*, one of the terms used along with *significatio*, *genus*, and *vox* to refer to the verb diathesis, even though he still considered the verb ending in *gradu* (*-kiṛatu*) as a passive. However, both GA/PB and BC, as well as, BZ, abandoned the differentiation between *personal* and *impersonal* verbs and the idea of conjugations for the Tamil verbs. Lastly, CJB clarified these uncertainties, arguing that certain verbs should be considered as *neuter* rather than passive forms of the corresponding *active* ones, because they “do not express passion or suffering from a cause but import an intransitive sense” (Beschi 1738: 69, parag.; Mahon 1848: 59).

In summary, missionaries:

- 1) identified the Tamil verb classes on the basis of the final sound of the verb stem and of the tense morphemes – in particular of the present and past tense;
- 2) identified the morphologically causative verbs from each of the *paired verbs*;
- 3) identified the *paired verbs* on the basis of the subject’s role in the narrated event as *active* verbs (i.e. the subject works as an *agent* producing effects on another entity who is not the subject), or as *neuter* verbs (i.e. the action carried out by the verb does not necessarily involve another entity and may affect the subject itself), which were associated with intransitive verbs in the first half of the 18th century.

In establishing the main criteria guiding the missionaries’ identification of classes and classified verbs, one can consider Duranti’s (2004: 453) definition of agency: “agency is understood as the property of those entities (i) that have some degree of control over their own behaviours, (ii) whose actions in the world affect other entities (and sometimes their own), and (iii) whose actions are the object of evaluation (e.g. in terms of their responsibility for a given outcome)”. This appears to suggest that for the missionaries the prevailing criteria in the definition of the *neuter* in Tamil were semantic despite the fact that the main criterion for the differentiation into conjugations or rules was formal. In fact, in their identification of *affective* verbs with ‘like passive’ or ‘neuter’, there is an implicit understanding of a different degree of agentivity for the subject of the verb, codified through the presence or absence of a gemination of the obstruent in the tense morpheme,

or in the verb base. Hence, it is clear that for the division of verbs into *neuter* and *active*, missionaries were thinking of the Latin *Genera Verbi*, which found its roots in the Greek grammar (*diathesis*) and became, in Latin linguistics, an autonomous inflection category from the 4th century onwards (see Hovdhaugen 1986: 315–329; Hovdhaugen 1987: 133–147). The selection of the category of *neuter* may have been a device to explain a feature of a linguistic item that differed from a prototype. The Latin *Genera Verbi* identifies verb species or significations. There were nine³³ species in the 4th century which were later reduced to five distinct types:³⁴ *activum*, *passivum*, *neutrum*, *commune*, *deponens*. As such, active verbs are *straight*, and the neuters come from a deviation of this *straightness*; they are defective in forming the passive voice.³⁵ Furthermore, the active verbs, like the passive, involve two people (two arguments), the agent and the patient. In contrast, those verbs that do have none of these forms are considered as *neuters* or *absolutive* (Stoppie, Swiggers & Wouters 2007: 213–215).

As Benedetti (2001: 228) states, “the *Genera Verbi* may be considered as the extreme attempt grammarians made to integrate the semantic with the formal description in order to be able to cover all the possible combinations among the series of endings and the conceptual categories of *facere* and *pati* [translation mine].” In the same way, the application of two categories of the *Genera Verbi* to the description of Tamil verbs by missionaries may be considered as an extreme attempt to give an account of the semantic variation that the *affective* verbs display when compared to the *effective* ones.

As the definition of *affective* verbs progressed, it seems that, through the use of *impersonal* and *neuter* categories, missionaries were applying the canonical definitions as given in the WGT such as Barros (1540) and Álvares (1573)³⁶ but were also extending them, taking into account not solely the formal aspect but also the *significatio* related to *neuter*. As such, one should trace the principle of categorisation within the semantic, rather than the formal sphere, despite the fact that *affective* differs from *effective* in the stops that precede the tense morpheme. Indeed, missionaries were trying to explain a slightly different meaning which is codified through the tense morpheme combined with the voice morpheme, according to which certain verbs not only change their tense, but also the degree to which the subject is involved in the action described by the verb. If two entities are involved in active forms, in the neuter form it seems that the only entity predominantly interested by the action is the semantic subject (cf. CJB’s definition of neuter as intransitive).

³³ As Benedetti (2001: 227) points out, attempts were made by the Greeks to find a parallelism between the verb diathesis and the nominal gender. Thus, neuter verbs are associated with neuter nouns which are unable to designate gender. The neuter verbs do not have either the actor or the patient of the verb, thus they differ from the *active* and the *passive* verbs.

³⁴ “Le genre dans les verbes, c’est-à-dire l’espèce ou l’*affectus* ou la *significatio*, est divisé en neuf sortes: l’actif, le passif, le déponent, le neutre, le commun, l’inchoatif, le défectif, le fréquentatif, l’impersonnel” [the gender among verbs, namely the type or the *affectus* or the *significatio*, is divided into nine types: active, passive, deponent, neuter, common, inchoative, defective, frequentative, and impersonal] (Stoppie, Swigger, & Wouters 2007: 211).

³⁵ The verb gender in the Greek tradition is the *diathesis*, the Latin correspondent for the Greek term, which was introduced by Quintilian, is *genus* or *significatio*. Before that time, the word *adfectus* also used by GA/PB in his Tamil grammar, had been used by Latin grammarians like Macrobio, Sacerdote, and Prisciano (Benedetti 2001: 224–226). Until the 4th century it was not an autonomous category and it is interpreted both morphologically and semantically, where the formal criteria based on inflection is preeminent. In fact, traditional grammars consider also the inchoative, the defective, the frequentative, and the impersonal as part of the *genera verborum*. From the 4th century onwards, frequentative and inchoative verbs are no longer considered part of the verb *genus* since they are considered a pure inflectional category. For a detailed discussion on the development of *genera verborum* in the Roman grammatical tradition see Hovdhaugen (1986: 315–329; 1987: 133–147).

³⁶ In Álvares (1572) *active* verbs are those which mean some kind of action and which can be transformed into the passive by adding a final *-or*, while the *neuters* are those which cannot be converted into the passive. He also specifies that the sixth order of the neuter verbs means *passion* and that they are called *passive neuter*.

In conclusion, this paper demonstrates how throughout the application of the Latin framework and its extension, missionaries were able to account for some of the peculiarities of the Tamil verb system, which are not described by the Tamil grammatical tradition. It also highlights how the data offered by these first external descriptions of Tamil, in part representative of data collected through missionaries' fieldwork, may enable, even today, a better comprehension of the Tamil language – i.e. according to these sources, the incidence of *paired verbs* in Tamil is lesser if compared with Paramasivam's estimation thereof (1979). Furthermore, bearing in mind the fact that the missionaries' identification of Tamil verb classes, as well as of *affective* versus *effective* voice continues to be used in modern descriptions of Tamil, it seems almost redundant to highlight the missionaries' contribution to Tamil studies and to the History of the Language Science in general.

Abbreviations

1	first person
2	second person
3	third person
ACC	accusative
AF	affective
CAUS	causative
DEM	demonstrative
EPIC	epicene
EF	effective
F	feminine
GEN	genitive
HON	honorific
INF	infinitive
INST	instrumental
M	masculine
N	noun
NT	neuter
NUM	numeral
OBL	oblique
PL	plural
PN	proper noun
PRES	present
RPOX	proximate
PST	past
SG	singular

Appendix

A brief note about the Appendices

The **First Appendix** shows the organisation of arguments in manuscripts 1–5 (cf. Chart 1) and compares them with the table of contents found in Álvares (1573) and Barros (1540). This appendix relates to § 4.

The **Second Appendix** reproduces the verb forms found in each analysed manuscript and it is structured in the following way:

1. the first column contains the transcription of verb forms as they appear in the manuscripts;
2. the second column contains the Portuguese or English glosses found in the manuscript;

3. the third column provides the English translation of the Portuguese glosses – if present;
4. the fourth column disambiguates the Tamil verb forms contained in the first column;
5. the fifth column specifies the conjugation or the rule given in the manuscript for the verb form in the first column;
6. the sixth column points out the class to which the verb forms belong as it is found in the MTL.

The **Third Appendix** provides the full list of Tamil verbs found in Appendix 2.A, 2.B, 2.C, 2.D, 2.E plus those found in BZ with their meaning as it is found in the *Dravidian Etymological Dictionary* [DED, 1961] and its supplement [DEDS, 1968] by Emeneau. If it was not possible to find the form in the DED or DESS, I took the corresponding meaning from the *Madras Tamil Lexicon* [MTL]. The Appendix 3 also specifies the manuscript where the verb form is found.

- **Appendices.** Appendices 1 to 3. DOI: <https://doi.org/10.5334/jpl.268.s1>

Acknowledgements

This article is the final result, derived from the discussion held at the 32nd *South Asian Language Analysis Roundtable* (SALA-32, 2016), for which I would like to acknowledge the organizer, Hugo Cardoso (University of Lisbon), where I presented a paper entitled, *Tamil missionary grammars and the development of linguistic ideas: their contribution to the history of Linguistics*.

I would like, therefore, to express my deep gratitude to friends and colleagues, who read the text of my presentation at SALA-32 and the draft of this paper, for their sharp comments and advice. They are listed here in alphabetical order: E. Annamalai, Jean-Luc Chevillard, Giovanni Ciotti, Luca Lorenzetti, Harold Schiffman, Barbara Turchetta, Mariarosaria Zinzi.

I also express my gratitude to the two anonymous reviewers for their insightful observations and suggestions, as well as to the editor-in-chief Sónia Frota, the associate editor Telmo Moia, and the editorial assistant Marisa Cruz of the *Journal of Portuguese Linguistics* for their support and patience.

Finally, I would like also to express my sincere gratitude to the project *Texts Surrounding Texts* (ANR, DFG) and particularly to the P.I. Eva M. Wilden and Emmanuel Francis, who made it possible to have a digitized copy of two of the manuscripts analysed in this article: manuscript Indien 188 from the French National Library and the manuscript Cod. Orient. 283 from the Staats–Und Universitäts Bibliothek Hamburg Carl von Ossietzky.

Competing Interests

The author has no competing interests to declare.

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Danica, concinnata a Bartholomæo Ziegenbalg, Serenissimi Regis Daniæ Missionario inter Indos Orientales, & ecclesiæ ex Indis collect Præposito. Halle Saxonium. Litteris & imprensus Orphanotrophei MDCCXVI. [Tamil grammar, which through a variety of paradigms, rules and necessary vocabulary demonstrates the shortest route to learn the Tamil language, which is also known as *Malabarian* and is used by the East Indians and until this time was unknown in Europe, may easily be learned by those who at this time wish to use it and desire to lead those peoples [lit. nations] from the worship of the true God and to eternal life [revealed] by the Gospel of Christ. Prepared en route to Europe, in a Danish ship [named Friedrich IV] by Bartholomæus Ziegenbalg, Appointed Missionary of His Most Serene Majesty, the King of Denmark, to the East Indians and to their churches gathered in India. Halle in Saxony: Typeset and Printed in the Orphanotrophei in 1716]. Special Collection, (MS INS–T 65), SOAS Library, University of London, UK.

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How to cite this article: Muru, C. (2021). How missionaries applied Portuguese and Latin descriptive categories in the classification and explanation of verb conjugations and *paired verbs* of Tamil. *Journal of Portuguese Linguistics*, 20: 8, pp. 1–32. DOI: <https://doi.org/10.5334/jpl.268>

Submitted: 17 February 2021 **Accepted:** 04 May 2021 **Published:** 01 July 2021

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Appendix 1: Comparison of table of contents

Álvares 1573 – <i>Ars minor</i>	Barros 1540 – <i>Grammatica da lingua Portuguesa</i>	Manuscript n. 1 (HH)	Manuscript n. 2 (Ms Ind 188)	Manuscript n. 3 (GA/PB)	Manuscripts n. 4 (BC)	Manuscript n. 5 (BZ)
[title page]	[title page]	[title page]	[missing]	[title page]	[title page]	[title page]
[licences]	[short preface and dedication]	[Table of contents]				[dedication]
Privilegio Real	<i>Definição da Grammatica e as partes della</i>					
Emmanuelis Aluari. Societate Jesu de Institutione Grammatica Liber primus						
Praefatio						
Auctoris carmen ad librum. / Idem ad christianum praeceptorem						
Auctor Lectori				Auctor Lectori.	Auctor Lectori (this section is found only in Ms Borg.Ind. 12)	[Foreward]
	Da Letras Da syllabae Da diçam	As Letras do abece malavar		Letras	Letras Tamulicas (this section is found in Ms 16 [ex Ms 15]) which appears as Lettras Tamuls pella ordem do nosso alphabeto in Ms Sloane 3003)	Literis Lectioe ac pronunciatione hujus linguae
Nominum declinatio (five declensions)	Do nome & das suas espeçias <i>Do nome próprio & comum</i>	[Declension of Nouns] (five declensions)	[Declensions of Nouns] (six declensions)	Declinações (four declensions)	Dos nomes e pronomes (one declension and four different nouns)	Nominibus substantivis (four declensions)
De nominum adiectivum	Do nome Sustantivo e Atetivo <i>Do nome Relativo e Antecedente</i> <i>Da espeçia do nome</i> <i>patronymico</i>	Dos nomes adiectivos	Dos Nomes Adiectivos <i>Dos Comparativos</i> <i>Dos Superlativos</i> <i>Dos nomes de qualidade e quantitate</i> <i>Dos nomes Numerais</i>	Adiectivos		Adiectivis

	<p><i>Do nome Possessivo</i> <i>Do nome Diminutivo</i> <i>Do nome Aumentativo</i> Do nome Comparativo <i>Do nome denominativos</i> <i>Do nome Verbâes</i> Do nome Participiâes <i>Do nome Averbâes</i> <i>Das Figuras do nome (simple e composta)</i> Do genero do nome Do numero que tem o nome <i>Dos nomes irregulâres</i> Dos cásos do nome <i>Dos Artigos</i> <i>Declinações dos artigos, os quáes tambem servem de relativos</i> Das declinações do nome <i>Da formaçam dos nomes em o plurár</i></p>					
De pronominum primitivorum De pronominum derivatorum	Do pronome e seus acidentés <i>Da figura do pronome (simples e compostos)</i> <i>Da Especia</i> <i>Da Figura</i> <i>Do genero, pessoa e numero</i> <i>Dos cásos da primeira declinaçam</i> <i>Declinaçã dos pronomes possessivos</i> <i>Declinaçam dos nomes Relativos</i>	Os pronomes	Dos pronomes	Pronomes	Dos pronomes Do Relativo	Pronominibus
		Dos partecipios			Dos Adjectivos Dos Generos	

De verborum coniugatione (four conjugations)	Do verbo <i>Definiçãm e divisãm do verbo</i> <i>Do genero do verbo pessoál</i>	[Verb conjugations] (nine conjugations)	Livro 2º Dos Verbos (five conjugations)	Verbos (one conjunction) Verbo passivo	Da Conjugaçãõ dos verbos (one conjugation) <i>Muitos outros modos de fallar avulsos</i>	Verbis (one conjugation)
De uerbis anomalis De uerbis defectivis	Dos verbos autivos Dos verbos neutros		Dos Verbos compostos Dos verbos passivos	Verbo passivo Passivo impersonal, ou neutral	Da voz passiva Da composiçãõ dos verbos	De voce passiva
				Verbos defectivos e anomalos	Do verbo substantivo, e A(n)nomalos Verbos A(n)nomalos	De verbo substantive De verbis anomalis
De uerborum impersonalium declinatione	Dos verbos impesoães <i>Da espeçia do Verbo</i> <i>Das figuras do verbo</i> (simples e compostas) Dos tempos do verbo Dos módos de Verbo Das pessoás e numeros do verbo Da coniugaçãm do verbo <i>As conjugações</i> <i>Dalgũus suprimentos que temos dos tempos per maneira de rodeo</i> <i>Da formaçam dos verbos per seus tempos e módos</i> Dos preteritos e participios Das formações	Verbos jmpersoais ou das cousas jrracionaēs Dos verbos passivos <i>Sum, es, fui</i>	Dos Verbos Impessoaes Dos verbos defeictivos Dos Participios <i>Do dativo</i> <i>Por acusativo</i> <i>Partecipio do præterito</i> <i>Do nominativo</i> <i>Modos do dativo</i> <i>De acusativo</i> <i>De ablativo</i> <i>Do participio do futuro</i> <i>Do nominativo</i> <i>Do dativo</i> <i>Do ablativo</i> <i>Dos participios do infinito</i> <i>Dos tempos meno principaes</i> <i>[...]</i> <i>Da particula am</i> <i>Da particula acum</i> <i>Do tempo peculiar</i>	Verbos compostos activos Verbos compostos passivos		<i>De formatione Temporum</i> <i>De formatione praeteriti</i> <i>De formatione imperativi</i>
Rudimenta siue de octo partibus orationis <i>Audimenta de nomine</i> <i>De nominibus positivis,</i> <i>comparativis & superaltivis</i> <i>De pronomine</i> <i>De varijs verborum</i>	Do averbio e suas partés <i>Da espeçia e figura</i> <i>Da signifiçaçãm</i> Da Preposicam <i>Da figura</i> Da interieicam		Das proposicoens <i>[...]</i> Adverbios <i>[de tempo, de lugar, de causa, de perguntar, ...]</i>		Das mais partes da oraçaõ <i>Proposiçoēs</i> (this section is entitled <i>Posposiçoēs</i> in Ms 50 [ex Ms 34]) <i>Adverbios</i> <i>Interjeiçoēs</i> <i>Disjunçoēs</i>	Particulis <i>De præpositionibus</i> <i>De Adverbiis</i> <i>De interjectionibus</i> <i>De conjunctionibus</i>

<p><i>De participio</i> <i>Declinatio verbi communis</i> <i>Declinatio verbi deponentis</i> <i>De præpositione</i> <i>De adverbio</i> <i>De interiectione</i> <i>De coniunctione</i> <i>De accentibus, sive attributis partum orationis</i></p>						
<p>De generibus nominum, quæ ex significatione cognoscuntur. (genders of nouns)</p>						
<p><i>De præteritis & supinis verborum deponentium</i></p>						
<p>De Octo partium orationis constructione <i>Liber II</i> <i>De constructione intransitive</i> <i>De constructione verbi activi</i> <i>Verbum passivum</i> <i>Gerundia</i> <i>Participiale verbum in dum</i> <i>Participia</i> <i>Constructio transitiva pronominis</i> <i>Præpositionum construction</i> <i>Constructio adverbii</i> <i>Coniunctioniis</i> <i>De figurata constructione</i></p>	<p>Da construcam das pártes <i>Divisám da construiçã</i> <i>Da concordança do nome sustantivo com o aietivo</i> <i>Do regimento dos verbos</i> <i>Dos verbos impesoães</i> <i>Do regimento dos nomes</i> <i>Do Regimento do Averbio</i> <i>Da preposiçam</i> <i>Da coniunçam</i> <i>Da interieicám</i> Das figuras</p>	<p>Regras pera saber fazer oraçoês nesta lingoa malavar e assi algûs exêmplos de oraçoês</p>	<p>Modo de formar os verbos</p>	<p><i>Formaçõs dos tempos, e modos dos verbos no conjugar</i></p>	<p>Daõ se algumas regras para preteritos, futuros, Imperativos, Infinitivos, e Pluraes (In Ms. Borg. Ind. 12 and Ms Sloane 3003 this section is entitled <i>Appendix</i>)</p>	<p>Syntaxi</p>

<p>De grammatica intititione <i>Liber III</i> <i>De syllabarum dimensione</i> <i>De caesura</i> <i>De patnymicis</i> <i>De prosodia</i></p>	<p>Da orthografia</p>				<p>Da collocação das letras Tamues pella orde(m) do nosso alfabeto (this title is found in Ms 66 [ex Ms 49]; Ms 16 [ex Ms 15]; Ms 50 [ex Ms 34])</p> <p>De Alguns sinaes que nesse vocabulário se observaõ (this title is found in Ms 66 [ex Ms 49]; Ms 16 [ex Ms 15]; Ms 50 [ex Ms 34])</p> <p>Regras de ortographia (this title is found in Ms 16 [ex Ms 15]; Ms 50 [ex Ms 34])</p>	
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Appendix 2: Verb forms and their classification in manuscripts

A) HH (Cod. 3141, ff. 37r–139v; Hein & Rajam 2013: 76–220; Vermeer 1982: 30–113)

Verb form in MS (present, 1sg) ¹	Portuguese gloss (present, 1sg)	English translation of the Portuguese gloss	Corresponding verb form	Group Type A	Class [MTL]
aliquiren	<i>desfaço</i>	I destroy, I undo	<i>alī-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th intr.
aVæiquiren	<i>fecho</i>	I close	<i>aṭai-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th intr.
aVaiquiren	<i>moo</i>	I grind	<i>arai-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th intr.
azæiquiren	<i>movo</i>	I move	<i>accai-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th intr.
chamæquiren	<i>co(n)certo</i>	(I construct)	<i>camai-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th intr.
chivaliquiren	<i>gasto</i>	I spend	<i>celavaḷi-ttal</i>	1 st sub-group = 1 st conjugation	tr. intr.
erhuquiren ²	<i>tomo ou tiro</i>	I take or I take off	<i>eṭu-tal</i>	1 st sub-group = 1 st conjugation	11 th tr.
meyquiren	<i>apace(n)to</i>	I graze, I plant	<i>mēy-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th tr.
ninæiquiren	<i>cuido</i>	I mind [care for]	<i>niṅai-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. 4 th tr.
parhiquiren	<i>aprender</i>	I learn	<i>paṭi-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. 4 th intr.
poVuquiren	<i>perdo</i>	I pardon	<i>poru-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr.
tæiquiren	<i>cozo costura</i>	I sew	<i>tai-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr.
teiquiren	<i>esfrego</i>	I rub	<i>tēy-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr. caus. 4 th intr.
vichuvadiquiren	<i>creo</i>	I believe	<i>vicuvāci-ttal</i>	1 st sub-group = 1 st conjugation	11 th tr.
piLaquiren	<i>fendo</i>	I split	<i>piḷa-ttal</i>	2 nd sub-group = 2 nd conjugation	4 th intr.
piraquiren	<i>naço</i>	I am born	<i>piṛa-ttal</i>	2 nd sub-group = 2 nd conjugation	—
quirhaquiren	<i>estar deitado</i>	I lie down	<i>kiṭa-ttal</i>	2 nd sub-group = 2 nd conjugation	12 th intr.
tagaquiren	<i>quebrar cousa da loica</i>	I break to pieces	<i>takar-ttal</i>	2 nd sub-group = 2 nd conjugation	11 th tr. caus. 4 th intr.
tiraquiren	<i>abro</i>	I open	<i>tiṛa-ttal</i>	2 nd sub-group = 2 nd conjugation	12 th tr.
valaquiren	<i>crio</i>	I sustain	<i>valar-ttal</i>	2 nd sub-group = 2 nd conjugation	11 th tr. caus. 4 th intr.
cathquiren ³	<i>vigio</i>	I watch, I observe	<i>kā-ttal</i>	3 rd sub-group = 3 rd conjugation, 1 st species	11 th tr.
pathquiren	<i>olho</i>	I look at	<i>pār-ttal</i>	3 rd sub-group = 3 rd conjugation, 1 st species	11 th tr.
quorquiren ⁴	<i>ēfio, enfio</i>	I string [the needle]	<i>kō-ttal</i>	3 rd sub-group = 3 rd conjugation, 1 st species	11 th tr.
tithquiren	<i>julgo</i>	I judge	<i>tīr-ttal</i>	3 rd sub-group = 3 rd conjugation, 1 st species	11 th tr. caus. 4 th intr.
varquiren ⁵	<i>deito cousa liquida</i>	I pour	<i>vār-ttal</i>	3 rd sub-group = 3 rd conjugation, 1 st species	11 th tr. caus. 4 th intr.
aviLquiren	<i>desato</i>	I untie	<i>aviḷ-tal</i>	3 rd sub-group = 3 rd conjugation, 2 nd species	4 th intr. 11 th tr. caus.
nilquiren	<i>espsero</i>	I wait	<i>nil-tal</i>	3 rd sub-group = 3 rd conjugation, 2 nd species	3 rd intr.
queLquiren	<i>ouço</i>	I hear	<i>kēḷ-tal</i>	3 rd sub-group = 3 rd conjugation, 2 nd species	9 th tr.
vilquiren	<i>vêdo, vendo</i>	I sell	<i>vil-tal</i>	3 rd sub-group = 3 rd conjugation, 2 nd species	10 th tr.

Verb form in MS (present, 1sg)	Portuguese gloss (present, 1sg)	English translation of the Portuguese gloss	Corresponding verb form	Group Type B	Class [MTL]
aRRiRRen	<i>bailo</i>	I dance	<i>āṭu-tal</i>	1 st sub-group = 4 th conjugation	5 th intr.
cachiren	<i>cozo</i>	I cook	<i>kāyccu-tal</i>	1 st sub-group = 4 th conjugation	5 th tr. caus. of <i>kāy</i>
caLatiren	<i>aparto</i>	I take apart	<i>kaḷarru-tal</i>	1 st sub-group = 4 th conjugation	5 th tr. caus. of <i>kaḷal</i>
eduvagui ⁶	no PT	—	<i>eṭu-tal</i>	1 st sub-group = 4 th conjugation	11 th tr.
enniren	<i>conto</i>	I count	<i>enṇu-tal</i>	1 st sub-group = 4 th conjugation	5 th tr.
eRRen	<i>carrego</i>	I load	<i>ērru-tal</i>	1 st sub-group = 4 th conjugation	5 th tr. intr.
eRiRRen	<i>subo</i>	I climb	<i>ēru-tal</i>	1 st sub-group = 4 th conjugation	—
mandarhugui ⁷	<i>rogo</i>	I implore	—	1 st sub-group = 4 th conjugation	—
naLpogurren	<i>faço vida</i>	I pass the days	<i>nāl (N) pō-tal</i>	1 st sub-group = 4 th conjugation	4 th & 5 th intr. (<i>pō</i>)
niquiren	<i>aparto</i>	I remove	<i>nīkku-tal</i>	1 st sub-group = 4 th conjugation	5 th tr. caus. of <i>nīnku</i>
paRRumaRRugui ⁸	no PT	—	—	1 st sub-group = 4 th conjugation	—
palugui ⁹	no PT	—	—	1 st sub-group = 4 th conjugation	—
parhigui ⁹	<i>canto</i>	I sing	<i>pāṭu-tal</i>	1 st sub-group = 4 th conjugation	5 th tr.
porê	no PT	(I go)	<i>pō-tal</i>	1 st sub-group = 4 th conjugation	4 th & 5 th intr.
udaviren	<i>ajudo</i>	I help	<i>utavu-tal</i>	1 st sub-group = 4 th conjugation	5 th tr.
vanangui ⁹	no PT	(I worship)	<i>vaṇaṅku-tal</i>	1 st sub-group = 4 th conjugation	5 th intr.
coLiren	<i>co(m)pro</i>	I buy	<i>koḷḷu-tal</i>	2 nd sub-group = 5 th conjugation, 1 st sp.	2 nd tr.
coliren	<i>mato</i>	I kill	<i>kol-tal</i>	2 nd sub-group = 5 th conjugation, 1 st sp.	3 rd tr.
molliren ¹⁰	<i>mijo</i>	I urinate	<i>moḷḷu?</i>	2 nd sub-group = 5 th conjugation, 1 st sp.	—
pelliren ¹¹	<i>verter agoa</i>	I pour water	<i>pelo?</i>	2 nd sub-group = 5 th conjugation, 1 st sp.	—
neruRRen ¹²	—	—	—	2 nd sub-group = 5 th conjugation, 2 nd sp.	—
puduren	<i>entro</i>	I enter	<i>pūtu-tal</i>	2 nd sub-group = 5 th conjugation, 2 nd sp.	13 th intr.
taruRRen	<i>dou</i>	I give	<i>tā-tal</i>	2 nd sub-group = 5 th conjugation, 2 nd sp.	13 th tr.
taviruren	<i>deixo</i>	I leave	<i>tavir-tal</i>	2 nd sub-group = 5 th conjugation, 2 nd sp.	4 th intr 11 th tr. caus.
vaLaruren	<i>creço</i>	I grow	<i>vaḷar-tal</i>	2 nd sub-group = 5 th conjugation, 2 nd sp.	4 th intr 11 th tr. caus.
vaRRen	<i>venho</i>	I come	<i>vā-tal</i>	2 nd sub-group = 5 th conjugation, 2 nd sp.	13 th intr.
meýRRen ¹³	<i>coubro cousa da casa</i>	I roof the house	<i>mēy-tal</i>	3 rd sub-group = 6 th conjugation	4 th tr. & intr. 11 th tr. caus.
payRRen	<i>salto</i>	I jump	<i>pāy-tal</i>	3 rd sub-group = 6 th conjugation	4 th intr. & tr.
eyýRRen	<i>tiro co(m) seta</i>	I shoot an arrow	<i>ey-tal</i>	3 rd sub-group = 6 th conjugation	1 st tr. (11 th <i>ey-tal</i> , intr. to grow...)
aRRiýRRen	<i>sei</i>	I know	<i>ari-tal</i>	3 rd sub-group = 6 th conjugation	4 th tr.
cheiýRRen	no PT	(I do)	<i>cey-tal</i>	3 rd sub-group = 6 th conjugation	1 st tr. (11 th <i>cey-tal</i> , tr. to overcome)
paRRæýRRen	<i>falo</i>	I speak	<i>parai-tal</i>	3 rd sub-group = 6 th conjugation	4 th tr. 11 th tr.
tiriýRRen	no PT	(I turn)	<i>tiri-tal</i>	3 rd sub-group = 6 th conjugation	4 th intr. & tr.
væýRRen ¹⁴	<i>(deso(n)ro)</i>	I curse	<i>vai-tal</i>	3 rd sub-group = 6 th conjugation	1 st tr. (11 th <i>vai-tal</i> , tr. to put, place)

Verb form in MS (present, 1sg)	Portuguese gloss (present, 1sg)	English translation of the Portuguese gloss	Corresponding verb form	Group Type C	Class [MTL]
irhuguiren	<i>meto</i>	I put	<i>iṭu-tal</i>	1 st sub-group = 7 th conjugation	6 th tr.
poRRuren	no PT	(I pardon)	<i>poru-ttal</i>	1 st sub-group = 7 th conjugation	11 th tr. & intr.
caLuviRRen	<i>lavo</i>	I wash	<i>kaḷuvu-tal</i>	1 st sub-group = 7 th conjugation	5 th tr.
parhuguiren	<i>padeço</i>	I suffer	<i>patu-tal</i>	1 st sub-group = 7 th conjugation	6 th intr.
thorhuguiren	<i>toquo</i>	I touch	<i>toṭu-tal</i>	1 st sub-group = 7 th conjugation	6 th tr. (intr. to occur)
peruguiren¹⁵	<i>andar ao paio</i>	—	<i>peru-tal</i>	1 st sub-group = 7 th conjugation	11 th intr. (<i>peru-ttal</i>)
aLuguiren	<i>choro</i>	I cry	<i>aḷu-tal</i>	2 nd sub-group = 8 th conjugation	1 st intr.
poruguiren	<i>peleiyo=pelejo</i>	I fight	<i>poru-tal</i>	2 nd sub-group = 8 th conjugation	1 st intr. (tr. to play...)
biluguiren	—	—	—	2 nd sub-group = 8 th conjugation	—
canguiren¹⁶	<i>veio</i>	I see	<i>kāṇ(ṇu)-tal</i>	3 rd sub-group = 9 th conjugation	13 th irr. tr.
unguiren	<i>como</i>	I eat	<i>uṇ(ṇu)-tal</i>	3 rd sub-group = 9 th conjugation	7 th tr.
enguiren	<i>digo</i>	I say	<i>eṇ(ṇu)-tal</i>	3 rd sub-group = 9 th conjugation	8 th tr.
tynguiren	<i>como</i>	I eat	<i>tiṇ(ṇu)-tal</i>	3 rd sub-group = 9 th conjugation	8 th tr.
caLavanguiren	<i>furto</i>	I steal	<i>kaḷavāṇ(ṇu)-tal</i>	3 rd sub-group = 9 th conjugation	? intr

B) Ms Ind 188 (Indien 188, ff. 24r-40v)

Verb form in MS (present, 1sg)	Portuguese gloss (infinitive)	English translation of the Portuguese gloss	Corresponding verb form	Conjugations	Class [MTL]
vicuvātikkiṛeṇ ¹⁷	<i>crer</i>	to believe	<i>vicuvāci-ttal</i>	1 st conjugation	11 th tr.
takakkiṛeṇ	<i>quebrar</i>	to burn	<i>takaṇi-ttal</i>	1 st conjugation	11 th tr.
cinakkiṛeṇ ¹⁸	<i>agatarse</i>	to get angry	<i>ciṇa-ttal</i>	1 st conjugation	12 th tr. & intr.
uḷakkiṛeṇ	<i>criar</i>	to sustain	<i>uḷatā-tal</i>	1 st conjugation	intr.
pilakkiṛeṇ ¹⁹	<i>estar forte</i>	to be strongh	<i>pila-ttal</i>	1 st conjugation	11 th intr.
piḷakkiṛeṇ	<i>fender</i>	to split	<i>piḷa-ttal</i>	1 st conjugation	4 th intr. & tr.
iḷakkiṛeṇ	<i>perder</i>	to lose	<i>iḷakku-ttal</i>	1 st conjugation	5 th intr. caus.
cumakkiṛeṇ	<i>acaretar</i>	(to bear)	<i>cuma-ttal</i>	1 st conjugation	12 th intr.
parakkiṛeṇ	<i>avocar</i>	to fly	<i>para-ttal</i>	1 st conjugation	4 th intr.
marakkiṛeṇ	<i>esquecer</i>	to forget	<i>marā-ttal</i>	1 st conjugation	12 th tr.
karakkiṛeṇ	<i>tirar, ordinar</i>	to order	<i>kaṛa-ttal</i>	1 st conjugation	12 th tr.
kaṭakkiṛeṇ	<i>passar</i>	to pass through	<i>kaṭa-ttal</i>	1 st conjugation	4 th tr. & intr.
kalakkiṛeṇ	<i>misturar</i>	to mix	<i>kala-ttal</i>	1 st conjugation	12 th intr.
piṛakkiṛeṇ	<i>nasser</i>	to be born	<i>piṛa-ttal</i>	1 st conjugation	—
kiṭakkiṛeṇ	<i>deitarse</i>	to lie down	<i>kiṭa-ttal</i>	1 st conjugation	12 th intr.
naṭakkiṛeṇ	<i>andar</i>	to walk	<i>naṭa-ttal</i>	1 st conjugation	12 th intr.
aḷakkiṛeṇ	<i>medir</i>	(to measure)	<i>aḷa-ttal</i>	1 st conjugation	12 th tr.
vikkirēṇ ²⁰	<i>vender</i>	to sell	<i>vil-tal</i>	2 nd conjugation	10 th tr. & intr.
urikkirēṇ	<i>tirar pella, pellar</i>	to peel	<i>uri-ttal</i>	2 nd conjugation	11 th tr. caus. 4 th intr.
tirikirēṇ	<i>torzer corda</i>	to twist rope	<i>tiri-ttal</i>	2 nd conjugation	11 th tr. caus 4 th intr.
ārikirēṇ ²¹	<i>saber</i>	to know	<i>āri-tal</i>	3 rd conjugation	4 th tr.
urikirēṇ	<i>dispir</i>	to remove clothes	<i>uri-tal</i>	3 rd conjugation	4 th intr.
umikirēṇ	<i>cospir</i>	to spit	<i>umiḷ-tal</i>	3 rd conjugation	4 th tr.
eṛikirēṇ	<i>tirar pedra, lançar</i>	to throw stone, to cast	<i>eṛi-tal</i>	3 rd conjugation	4 th tr. & intr.
tirikirēṇ	<i>andar</i>	to walk	<i>tiri-tal</i>	3 rd conjugation	4 th intr.
akalukirēṇ ²²	no PT	—	<i>akal-tal</i> ²⁵	4 th conjugation	4 th tr.
amarukirēṇ	no PT	—	<i>amar-tal</i>	4 th conjugation	4 th intr.
makiḷukirēṇ	<i>estar contente</i>	to be happy	<i>makiḷ-tal</i>	4 th conjugation	4 th intr.
palukirēṇ	<i>multiplicar</i>	to multiply	<i>pal(u)ku-tal</i>	4 th conjugation	5 th intr.
meḷukirēṇ ²³	<i>bostiar</i>	to cleanse the floor with cow-dung water	<i>meḷuku-tal</i>	4 th conjugation	5 th tr.
vaḷukirēṇ	<i>escorregar</i>	to slip	<i>vaḷukku-tal</i>	4 th conjugation	5 th intr. & tr.
taḷḷukirēṇ	<i>fazer pincher</i>	—	<i>taḷḷu-tal</i>	4 th conjugation	5 th intr. & tr.
aḷḷukirēṇ	<i>apanhar</i>	to take, to catch	<i>aḷḷu-tal</i>	4 th conjugation	5 th intr.
collukirēṇ	<i>falar</i>	to speak	<i>col(lu)-tal</i>	4 th conjugation	5 th tr.
kollukirēṇ	<i>mattar</i>	to kill	<i>kol(lu)-tal</i>	4 th conjugation	3 rd tr.
koḷḷukirēṇ	no PT	—	<i>koḷḷu-tal</i>	4 th conjugation	2 nd tr. & intr.
ettukirēṇ ²⁴	<i>engannar, fallere</i>	to cheat	<i>ettu-tal</i>	5 th conjugation	5 th tr.
erakkirēṇ	<i>bottar bache(?)</i>	(to cast forth)?	<i>eraṭṭu-tal (?)</i>	5 th conjugation	5 th tr.

urukkireṅ	<i>fonder</i>	to liquefy	<i>urukku-tal</i>	5 th conjugation	5 th tr. caus.
amukkireṅ	<i>afogar</i>	to drown	<i>amukku-tal</i>	5 th conjugation	5 th tr. caus.
iṅaṅkireṅ	<i>aiuntar, se por amigo</i>	to unite, to be friend	<i>iṅaṅku-tal</i>	5 th conjugation	5 th intr.
tiṅkireṅ	<i>comer</i>	to eat	<i>tiṅ(ṅu)-tal</i>	No conjugation	8 th tr.
uṅkireṅ	<i>comer</i>	to eat	<i>uṅ(ṅu)-tal</i>	No conjugation	7 th tr.
ākireṅ	<i>ser ou estar</i>	to be	<i>āku-tal</i>	No conjugation	Intr.
poreṅ	<i>ir</i>	to go	<i>pō-tal</i>	No conjugation	4 th /5 th intr.
kāṅkireṅ	<i>ver</i>	to see	<i>kāṅ-tal</i>	No conjugation	13 th tr.
cākireṅ	<i>morer</i>	to die	<i>cā-tal</i>	No conjugation	13 th intr.

C) GA/PB (Cod. Orient. 283, f. 40v)

Verb form in MS (present, 1sg)	Portuguese gloss (infinitive)	English translation of the Portuguese gloss	Corresponding verb form	Groups	Class [MTL]
pīlacren	<i>fender</i>	to split	<i>piḷa-ttal</i>	<i>acren>nden</i>	4 th tr. & intr.
nařacren	<i>andar</i>	to walk	<i>nařa-ttal</i>	<i>acren>nden</i>	12 th intr.
carracren	<i>ordinar</i>	to order	—	<i>acren>nden</i>	—
quiřacren	<i>jazer</i>	to lie down	<i>kiřa-ttal</i>	<i>acren>nden</i>	12 th intr.
virumbugren	<i>desejar</i>	to wish	<i>virumpu-tal</i>	<i>gradu>inen</i>	5 th tr.
vuřugren	<i>deixar, largar</i>	to leave, to release	<i>viřu-tal</i>	<i>gradu>inen</i>	6 th tr.
pugalugren	<i>louvar</i>	to praise	<i>pukal(lu)-tal</i>	<i>gradu>inen</i>	3 rd tr. & intr.
tirugren	<i>concluir negocio</i>	to complete business	—	<i>gradu>inen</i>	—
tingren	<i>comer</i>	to eat	<i>tiṅ(ṅu)-tal</i>	<i>gradu>inen</i>	8 th tr.

D) BC (Ms 50, from fol. M-34-42, Left column, line 8 to fol. M-34-44, Left column, line 25, *Third Title*)

Verb form in MS (present, 3sg or verbal noun)	Corresponding verb form	Rules	Class [MTL]
vicuvacikkiratu	<i>vicuvāci-ttal</i>	1 st rule ²⁶	11 th tr.
aṭaikkiratu	<i>aṭai-ttal</i>	1 st rule	11 th tr. caus. 4 th intr.
mēykkiratu	<i>mēy-ttal</i>	1 st rule	11 th tr. caus. 4 th intr.
aṭaikiratu	<i>aṭai-tal</i>	2 nd rule ²⁷	4 th intr.
arikkiratu	<i>ari-tal</i>	2 nd rule	4 th intr.
peykiratu	<i>pey-tal</i>	2 nd rule	1 st intr.
vaikiratu	<i>vai-tal</i>	2 nd rule	—
neykiratu	<i>ney-tal</i>	2 nd rule	—
marakkiratu	<i>maṛa-ttal</i>	3 rd rule ²⁸	12 th tr.
naṭakkiratu	<i>naṭa-ttal</i>	3 rd rule	12 th intr.
vekiratu	<i>vē-tal</i>	4 th rule ²⁹	13 th intr.
nokiratu	<i>nō-tal</i>	4 th rule	13 th intr.
pokkiratu	<i>pō-tal</i>	4 th rule	4 th & 5 th intr.
nokkiratu	<i>nōkku-tal</i>	4 th rule	5 th tr.
pēcukiratu	<i>pēcu-tal</i>	5 th rule ³⁰	5 th intr.
ūttukiratu	<i>ūtu-tal</i>	5 th rule	5 th tr.
koḷḷukiratu	<i>koḷḷu-tal</i>	6 th rule ³¹	2 nd tr.
piralukiratu	<i>piral(!)u-tal</i>	6 th rule	2 nd intr. or 4 th intr.
ālukiratu	<i>āl(!)u-tal</i>	6 th rule	2 nd tr.
kollukiratu	<i>kol(lu)-tal</i>	7 th rule ³²	3 rd tr.
vellukiratu	<i>vel(lu)-tal</i>	7 th rule	3 rd tr.
collukiratu	<i>collu-tal</i>	7 th rule	5 th tr.
cellukiratu	<i>cel(lu)-tal</i>	7 th rule	3 rd intr. & tr.
varukiratu	<i>vāru-tal</i>	8 th rule ³³	5 th tr.
vaḷarkiratu	<i>vaḷar-tal</i>	8 th rule	4 th intr.
paṭukiratu	<i>paṭu-tal</i>	9 th rule ³⁴	6 th intr. & tr.
iṭukiratu	<i>iṭu-tal</i>	9 th rule	6 th tr.
vaṅkiratu	<i>vāṅku-tal</i>	10 th rule ³⁵	5 th tr. & intr.
piṭuṅkiratu	<i>piṭuṅku-tal</i>	10 th rule	5 th tr.
pārkiratu	<i>pār-tal</i>	11 th rule ³⁶	11 th tr.
koṟkiratu	<i>kol(lu)-tal</i>	11 th rule	3 rd tr.
viṟkiratu	<i>vil-tal</i>	11 th rule	10 th tr.
aṭakkiratu	<i>aṭakku-tal</i>	12 th rule ³⁷	5 th tr. Caus.
maṭakkiratu	<i>maṭakku-tal</i>	12 th rule	5 th tr. Caus. & intr.
otukkiratu	<i>oṭukku-tal</i>	12 th rule	5 th tr. Caus.

E) CJB (Beschi 1728 [1738]: 49–58, §§ 54–65; Mahon 1848: 43–49, §§ 54–65)

Verb form in MS (present, 3sg. or verbal noun)	English gloss [in Mahon 1848] (infinitive)	Corresponding verb form	Rules for the first group: verbs in <i>cradu</i> (-kkir-)	Class [MTL]
mēykkīratu	to feed	<i>mēy-ttal</i>	1 st rule ³⁸	11 th tr. Caus. 4 th tr., intr.
moykkīratu	to agglomerate	<i>moy-ttal</i>	1 st rule	11 th intr.
vaḷarkkīratu	to nourish	<i>vaḷar-ttal</i>	1 st rule	11 th tr. Caus. 4 th tr.
tīrkkīratu	to end strife	<i>tīr-ttal</i>	1 st rule	11 th tr. Caus. 4 th tr.
pārkkīratu	to see	<i>pār-ttal</i>	1 st rule	11 th tr.
virikkīratu	to extend	<i>virī-ttal</i>	1 st rule	11 th tr. Caus. 4 th tr.
paṭikkīratu	to learn	<i>pāṭi-ttal</i>	1 st rule	11 th tr.
paṭaikkīratu	to create	<i>paṭai-ttal</i>	1 st rule	11 th tr.
utaikkīratu	to kick the heel	<i>utai-ttal</i>	1 st rule	11 th tr.
paṭukkīratu	to lie down	<i>paṭu-ttal</i>	1 st rule	11 th tr. Caus. 6 th intr.
uṭukkīratu	to clothe	<i>uṭu-ttal</i>	1 st rule	11 th tr.
veḷukkīratu	to mash	<i>veḷu-ttal</i>	1 st rule	11 th intr.
maṛakkīratu	to forget	<i>maṛa-ttal</i>	2 nd rule ³⁹	12 th tr.
paṛakkīratu	to fly	<i>paṛa-ttal</i>	2 nd rule	4 th intr.
piṛakkīratu	to be born	<i>piṛa-ttal</i>	2 nd rule	—
irakkīratu	to descend or to die	<i>ira-ttal</i>	2 nd rule	12 th tr.
maṇakkīratu	(to be united, mingled...)	<i>maṇa-ttal</i>	2 nd rule ⁴⁰	12 th intr.
ākkīratu	to make	<i>ākkū-tal</i>	3 rd rule ⁴¹	5 th tr. Caus.
nīkkīratu	to put to fight	<i>nīkkū-tal</i>	3 rd rule	5 th tr. Caus.
tēkkīratu	to be filled	<i>tēkkū-tal</i>	3 rd rule	5 th tr.
tūkkīratu	to suspend from a cross	<i>tūkkū-tal</i>	3 rd rule	5 th tr.
nōkkīratu	to look at	<i>nōkkū-tal</i>	3 rd rule	5 th tr.

Verb form in MS (present, 3sg verbal noun)	English gloss [in Mahon 1848] (infinitive)	Corresponding verb form	Rules for the II group: verbs in <i>gradu</i> (-kir-)	Class [MTL]
vaṇāṅkīratu	to venerate	<i>vaṇāṅku-tal</i>	1 st rule (a) ⁴²	5 th intr.
aṭāṅkīratu	to shut in	<i>aṭāṅku-tal</i>	1 st rule (a)	5 th intr.
iṭāṅkīratu	to agree	<i>iṭāṅku-tal</i>	1 st rule (a)	—
uṅkīratu	to devour	<i>uṅṅu-tal</i>	1 st rule (b)	7 th tr.
kāṅkīratu	to see	<i>kāṅṅu-tal</i>	1 st rule (b)	13 th irr. Tr.
tiṅkīratu	to devour	<i>tiṅṅu-tal</i>	1 st rule (c)	8 th tr.
eṅkīratu	to say	<i>eṅṅu-tal</i>	1 st rule (c)	8 th tr.
pēcukīratu	to speak	<i>pēcū-tal</i>	2 nd rule ⁴³	5 th intr.
naccukīratu	to desire	<i>naccū-tal</i>	2 nd rule	5 th tr.
eḷutukīratu	to write	<i>eḷutu-tal</i>	2 nd rule	5 th intr.
tiruttukīratu	to perform	<i>tiruttu-tal</i>	2 nd rule	5 th tr.

tampukiratu	to confide	<i>tampu-tal</i>	2 nd rule	5 th tr.
appukiratu	to fix one another	<i>appu-tal</i>	2 nd rule	5 th tr.
paṇṇukiratu	to make	<i>paṇṇu-tal</i>	2 nd rule	5 th tr.
ulāvukiratu	to walk about	<i>ulāvu-tal</i>	2 nd rule	5 th intr. & tr.
tummukiratu	to sneeze often	<i>tummu-tal</i>	2 nd rule	5 th intr.
pinṇukiratu	to interweave	<i>pinṇu-tal</i>	2 nd rule	5 th tr.
tiruttukiratu	to perform	<i>tiruttu-tal</i>	2 nd rule	5 th tr.
muṭukiratu	to turn flight	<i>muṭukku-tal</i>	2 nd rule	5 th tr. Caus. & intr.
tiruṭukiratu	—	<i>tiruṭu-tal</i>	2 nd rule	5 th tr.
tavarukiratu	—	<i>tavaru-tal</i>	2 nd rule	5 th intr.
ēkukiratu	—	<i>ēku-tal</i>	2 nd rule	5 th intr.
tēṭukiratu	—	<i>tēṭu-tal</i>	2 nd rule	5 th tr.
tērukiratu	—	<i>tēru-tal</i>	2 nd rule	5 th intr.
takkukiratu	—	<i>takku-tal</i>	2 nd rule	5 th intr.
aṇṭukiratu	—	<i>aṇṭu-tal</i>	2 nd rule	5 th tr.
kaṭṭukiratu	—	<i>kaṭṭu-tal</i>	2 nd rule	5 th tr.
kaṇṇukiratu	—	<i>kaṇṇu-tal</i>	2 nd rule	5 th intr.
cuṛṛukiratu	—	<i>cuṛṛu-tal</i>	2 nd rule	5 th intr.
ālukiratu	—	<i>āḷ(lu)-tal</i>	3 rd rule (a) ⁴⁴	2 nd tr.
mālukiratu	—	<i>māḷ(lu)-tal</i>	3 rd rule (a)	2 nd intr.
uruḷukiratu	—	<i>uruḷ(lu)-tal</i>	3 rd rule (a)	2 nd intr.
veruḷukiratu	—	<i>veruḷ(lu)-tal</i>	3 rd rule (a)	2 nd & 5 th intr.
taḷḷukiratu	—	<i>taḷḷu-tal</i>	3 rd rule (b)	5 th intr.
tuḷḷukiratu	—	<i>tuḷḷu-tal</i>	3 rd rule (b)	5 th intr.
aḷḷukiratu	—	<i>aḷḷu-tal</i>	3 rd rule (b)	5 th intr. & tr.
vaḷarukiratu	—	<i>vaḷar-tal</i>	3 rd rule (c) ⁴⁵	4 th intr.
tīrukiratu	—	<i>tīr-tal</i>	3 rd rule (c)	4 th intr. & tr.
cērukiratu	—	<i>cēr-tal</i>	3 rd rule (c)	4 th intr. & tr.
tavirukiratu	—	<i>tavir-tal</i>	3 rd rule (c)	4 th intr. & tr.
cuḷalukiratu	—	<i>cuḷal(lu)-tal</i>	3 rd rule (d) ⁴⁶	3 rd intr.
aḷalukiratu	—	<i>aḷal-tal</i>	3 rd rule (d)	3 rd intr.
cellukiratu	—	<i>cel(lu)-tal</i>	3 rd rule (d)	3 rd intr. & tr.
vellukiratu	—	<i>vel(lu)-tal</i>	3 rd rule (d)	3 rd tr. & intr.
kollukiratu	—	<i>kol(lu)-tal</i>	3 rd rule (d)	3 rd tr.
niṛkiratu<nillukiratu	—	<i>niḷ-tal</i>	3 rd rule (d)	3 rd intr.
aḷukiratu	—	<i>aḷu-tal</i>	3 rd rule (e) ⁴⁷	1 st intr.
uḷukiratu	—	<i>uḷu-tal</i>	3 rd rule (e)	1 st tr.
toḷukiratu	—	<i>toḷu-tal</i>	3 rd rule (e)	1 st tr.
umilukiratu	—	<i>umiḷ-tal</i>	3 rd rule (e)	4 th tr.
aviḷukiratu	—	<i>aviḷ-tal</i>	3 rd rule (e)	4 th intr.
tavaḷukiratu	—	<i>tavaḷ-tal</i>	3 rd rule (e)	4 th intr.

vālukiratu	—	<i>vāl-tal</i>	3 rd rule (e)	4 th intr.
tālukihratu	—	<i>tāl-tal</i>	3 rd rule (e)	4 th intr. & tr.
aṭaikiratu	—	<i>aṭai-tal</i>	4 th rule ⁴⁸	4 th intr. & tr.
kaṭaikiratu	—	<i>kaṭai-tal</i>	4 th rule	4 th tr.
aṛikiratu	—	<i>aṛi-tal</i>	4 th rule	4 th tr.
ākiratu	—	<i>āku-tal</i>	5 th rule	5 th intr.
pōratu < pōkiratu	—	<i>pō-tal</i>	5 th rule	4 th & 5 th intr.
cākiratu	—	<i>cā-ttal</i>	5 th rule	13 th intr.
vēkiratu	—	<i>vē-tal</i>	—	13 th irr. intr.
nōkiratu	—	<i>nō-tal</i>	—	13 th irr. intr.

Appendix 3: Complete list of verbs found in the analysed manuscripts

VERB	DED and DEES; MTL	Author/Ms	
1. அகழ்	akaḷ-tal	DED.12: to excavate, dig out, pluck out	Ind 188
2. அசை	acai-ttal	DED.43: to join with, to tie; MTL: to shake	HH
3. அடக்கு	aṭakku-tal	DED.56: to control, repress, hide conceal	BC, CJB
4. அடங்கு	aṭaṅku-tal	DED.56: to submit, be subdued, be compressed, cease...	CJB
5. அடுக்கு	aṭukku-tal	DED.70: to pile up one on the top of another	CJB
6. அடை	aṭai-tal	DED.74: to collect, gather	BC, CJB
7. அடை	aṭai-ttal	DED.73: to shut, close	HH, BC
8. அண்டு	aṇṭu-tal	DED.68: to fit, be appropriate to	CJB
9. அப்பு	appu-tal	DED.1928(b): to stick with the hand (as sandal paste)...	CJB
10. அமர்	amar-tal	DED.137: to abide, remain, become tranquil...	Ind 188
11. அமுக்கு	amukku-tal	DED.143: to crush, press, squeeze...	Ind 188
12. அருக்கு	arukku-tal	DED.184: to make scarce; cause to diminish; DED.186: to show disinclination in bargain	BC
13. அருள்	aruḷ-tal	DED.190: to be gracious	BC, CJB
14. அரை	arai-ttal	DED.191: to grind; <i>arai-tal</i> : to become macerated	HH
15. அவிழ்	aviḷ-ttal	DED: —; MTL: to become loose	HH, CJB
16. அழல்	aḷal-tal	DED.234: to burn, glow	CJB
17. அழி	aḷi-tal	DED.235: to perish, be ruined, decay, be defeated	BZ
18. அழி	aḷi-ttal	DED.235: to destroy; <i>aḷi-tal</i> : to perish	HH, BZ
19. அழு	aḷu-tal	DED.240: to cry	HH, BC, CJB
20. அள்ளு	aḷḷu-tal	DEDS.38: to take up in the hollow of the hand	Ind 188, CJB
21. அள	aḷa-ttal	DED.252: to measure	Ind 188
22. அறி	aṟi-tal	DED.365: to know	HH, Ind 188, BC, CJB
23. அறு	aṟu-tal	DED.267: to digest	CJB
24. ஆ	ā-tal	DED.282: to come into existence, happen, be	CJB
25. ஆக்கு	ākku-tal	DED.282: to effect, make, cause to be	CJB
26. ஆகு	āku-tal	DED.282: to come into existence, happen, be	Ind 188
27. ஆடு	āṭu-tal	DED.290: intr. to dance; tr. Cause to dance	HH, BC
28. ஆளு	āḷ(ḷu)-tal	DED.341: (<i>al</i>) to rule, reign over, control or manage	CB, CJB ⁴⁹
29. இடங்கு	iṭaṅku	DED: —; MTL: —	CJB
30. இரு	iṭu-tal	DED.375: to place, deposit, put in	HH, Ind 188, BC
31. இணங்கு	iṇaṅku-tal	DED.387: to consent, comply with	Ind 188
32. இரு	iru-ttal	DED.407: to exist, remain, sit down, love, belong to, aux	Ind 188
33. இள	iḷakku-tal	DED.433: to slacken, relax (as a spring), loosen (as a rope)...	Ind 188
34. இற	iṟa-ttal	DED.437: to die ...; DED.438: to go beyond	CJB
35. இறு	iṟu-tal	DED.443: to break, snap (as a stick), become severed (as a limb)	CJB
36. ஈன்	īṇ(ṇu)-tal	DED.473: to bear, bring forth, yield, produce, yield, bring into being	CJB

37. உடு	uṭu-ttal	DED.502: to put on, as clothes	CJB
38. உண்	uṇ(ṇu)-tal	DED.516: to eat or drink	HH, Ind 188, CJB
39. உதவு	utavu-tal	DED.522: to give, contribute, help, assist	HH
40. உதை	utai-ttal	DED.527: to kick, spurn, beat; MTL: to kick, spurn, reject, discharge, beat	CJB
41. உமிழ்	umiḷ-tal	DED.547: to gargle, spit, vomit	Ind 188, CJB
42. உரி	uri-tal	DED.561: to peel, strip off, deprive of, rob	Ind 188
43. உரி	uri-ttal	DED.561: to slough off, flay, strip off	Ind 188
44. உருக்கு	urukku-tal	DED.569: to dissolve with heat, melt, liquefy	Ind 188
45. உருள்	uruḷ(lu)-tal	DED.571: to roll, tumble over and over	CJB
46. உலாவு	ulāvu-tal	DED: 2218: to move about, walk or ride for recreation	CJB
47. உழு	uḷu-tal	DED: 592: to plough, dig up, root up	CJB
48. உளதா	uḷatā-tal	DED: —; MTL: to originate, come into being	Ind 188
49. ஊது	ūtu-tal	DED. 638: to blow (as a wind instrument, a fire), blow out (as a lamp)	BC
50. எடு	eṭu-tal	DED.723: to rise (as from seat or bed), ascend (as heavenly body), rise by one's own power (as a bird)...	HH
51. எடு	eṭu-ttal	DED.723: to take up, bear, carry, hold up...; MTL: to take up, bear, carry	HH
52. எண்ணு	eṇṇu-tal	DED.678: to think, consider, determine, esteem, conjecture, count, reckon...	HH
53. எத்து	ettu-tal	DED.681: <i>et-</i> , to take /by picking up and carrying, take off (cloak), rise (as legs to the sky...)	Ind 188
54. எய்	ey-tal	DED.691: to discharge arrow	HH, Ind 188
55. எழுது	eḷutu-tal	DED.725: to write, paint, draw...	CJB
56. எழும்பு	eḷumpu-tal	DED: —; MTL: <i>eḷu</i> , to rise, as from a seat or bed	BZ
57. எழுப்பு	eḷuppu-tal	DED: —; MTL: to cause or help to rise	BZ
58. எறட்டு	eṛaṭṭu-tal	DED: —; MTL: 5 th , to radiate, caste forth	Ind 188
59. எறி	eṛi-tal	DED.731: to throw, discharge, hack, chop, smash, destroy, beat, pounce, kick	Ind 188
60. எறு	eṛu-tal	DED.731, N: throw, beating	HH
61. என்	eṇ(ṇu)-tal	DED.737: to say, utter, express	HH, BC, CJB
62. ஏகு	ēku-tal	DED.740: to go, pass, walk	CJB
63. ஏற்று	ēṛru-tal	DED.776: to lift up, raise, increase (as price), load (as a cart or ship)	HH
64. ஏறு	ēṛu-tal	DED.776: to rise, ascend (...). Mount, climb, abound in number...	HH
65. ஒடுக்கு	oṭukku-tal	DED.804: to subjugate, deduce, restraint, subdue, rob	BC, CJB
66. ஒடுங்கு	oṭuṅku-tal	DED.804: to be restrained, become tranquil, become reduced	CJB
67. கக்கு	kakku-tal ⁵⁰	DED.909: to vomit, eject	BC, CJB
68. கட்டு	kaṭṭu-tal	DED.963: to remit, pay up	CJB
69. கட	kaṭa-ttal	DED.929: to pass through, traverse, cross... to cause to drive, go, transport	Ind 188
70. கடை	kaṭai-tal	DED.957: to churn, turn in lathe, mash to pulp	CJB
71. கரு	karu(kku)-tal	DED.1073: (a) to be charred, scorched to char; (b) to darken, grow black	BC
72. கல	kala-ttal	DED.1092: to mix, unite in friendship; DED.1093: to appear, come into being, spread	Ind 188
73. கழற்று	kaḷaṛru-tal	DED.1136: to unfasten, loosen,..., to take off	HH
74. கழுவு	kaḷuvu-tal	DED.1154: to wash, purify	HH
75. களவாண்	kaḷavāṇ(ṇu)-tal	DED.1156: <i>kaḷ</i> , to rob, steal, deceive	HH

76. கற	kaṛa-ttal	DED.1166: to milk, yield milk (as a cow), extort	Ind 188
77. கன்று	kaṇṇu-tal	DED.1186: to be scorched, sunburnt, melt (as the heart), become sore [...], fade, become pale [...]	CJB
78. கா	kā-ttal	DED.1192: to preserve, shelter, watch, guard, ward off, rescue, wait for	HH, CJB
79. காண்	kāṇ(ṇu)-tal	DED.1209: to see, consider, investigate, appear, become visible	HH, Ind 188, BC, CJB
80. காய்ச்சு	kāyccu-tal	DED.1219: to cook	HH
81. கிட	kiṭa-ttal	DED.1277: to lie, lied own as in sleep, in inactivity	HH, Ind 188, GA/PB
82. கூடு	kūṭu-tal	DED.1562: to come together, join, meet, assemble, combine...	BC
83. கூப்புடு	kūppuṭu-tal	DED.—; MTL: —	Ind 188
84. கெல்லு	kellu-tal	DED:—; MTL: to irritate or corrode and waste the stomach, as excessive stimulus	BC
85. கேள்	kēḷ-tal	DED.1677-78: to hear, listen, learn, ask, inquire, question, investigate, require...	HH
86. கொய்	koy-tal	DED.1763: to pluck	Ind 188
87. கொல்	kol(lu)-tal	DED.1772: to kill	HH, Ind 188, BC, CJB
88. கொள்	kol(lu)-tal	DED. 1788: to seize, receive, buy, acquire	HH, Ind 188, BC, CJB
89. கோ	kō-ttal	DED.1468, 1809: to string (as beads, flowers), insert, thread	HH
90. சமை	camai-ttal	DED.1934: to create; to be made, constructed	HH
91. (சர்/சார்)	—	DED.2030 (<i>cār</i>): to reach, approach, depend upon, take shelter in, be near to, be associate or connected..	GA/PB
92. சா	cā-tal	DED.2002: to die, be spoiled or blighted (as crops), be exhausted	Ind 188
93. சின	ciṇa-ttal	DED.1332: to be enraged, be very angry, become red with inflammation	Ind 188
94. சுடு	cuṭu-tal	DED.2183: to be hot, burn, warm; tr. heat, burn up, roast, toast, bake, fry...	Ind 188
95. சும்	cuma-ttal	DED.2204: to become heavy as debt or interest, be burdened; bear, support...	Ind 188
96. சுழல்	cuḷal(lu)-tal	DED.2223: to whirl, spin, rotate, roll, turn on axis (as wheel), revolve in an orbit	CJB
97. சுற்று	curru-tal	DED.2238: to revolve, circulate, turn around, spin [...]	CJB
98. செதிக்கு	ceti(kku)-tal	DED.2269 (Ma): to be angry	BC
99. செதுக்கு	cetu(kku)-tal	DED.2278: to lose lustre, shrink, be weak; <i>cetukku</i> that which is faded, dried as flowers	CJB
100. செய்	cey-tal	DED.1628: to do, make	HH, Ind 188, CJB
101. செரி	ceri-tal	DED: —; MTL: —	BZ
102. செரி	ceri-ttal	DED: —; MTL: to be digested	BZ
103. செல்(லு)	cel(lu)-tal	DED.2286: to go, flow, pass, occur...	BC, CJB
104. செல்வழி	celavaḷi-ttal	DED: no; MTL: intr. to be spent, used up, consumed; to die	HH
105. சே	cē-ttal	DED.1656: to dwell, lie, remain, sleep	CJB
106. சேர்	cēr-tal	DED.2312: to become united, incorporated, joined together... to join, attach admix...	CJB
107. சொல்லு	col(lu)-tal	DED.2335: to say, speak, tell, mention, utter, express	Ind 188, BC, CJB
108. தக்கு	takku-tal	DED.2443: to stay, sojourn, abide, remain, be stable, firmly established, be retained in the mind, be stable...	CJB
109. தகர்	takar-ttal	DED.2429: to break to pieces... to be broken into pieces...	HH
110. தகனி	takaṇi-ttal	DED—; MTL: intr. to burn, consume by fire	Ind 188
111. தகு	taku-tal	DED.2435: to be fit, appropriate, suitable, proper [...]	CJB
112. தம்பு	tampu-tal	DED: —; MTL: 5 th , to approach	CJB
113. தரு	taru-tal	DED.2526: to give to 1st or 2nd person	BC, CJB
114. தவழ்	tavaḷ-tal	DED.2535: to creep, crawl, as infants, lizards	CJB

115. தவறு	tavaru	DED.2498: to slip, trip, fail, miscarry [...]	CJB
116. தவிர்	tavir-tal	DED.2539: intr. to abstain, refrain, to cease to cause to put away	HH, CJB
117. தள்ளு	tal lu-tal	DED.2559: to push, force forward, shove away...	Ind 188, CJB
118. தாரு	tā-tal	DED.— MTL: to give	HH
119. தாழ்	tāl-tal	DED.2597: to fall low, be lowered, be low (as a roof)...	CJB
120. திரி	tiri-tal	DED.2655: to turn, revolve; tr. to turn, cause to revolve	HH, Ind 188
121. திரி	tiri-ttal	DED.2655: tr. to turn, cause to revolve	Ind 188
122. திரு	tiru(ku)-tal	DED.2655: to twist, turn, wring + intr. to be intense	GA/PB
123. திருட	tiruṭu-tal	DED.2658: to steal, rob, pilfer	CJB
124. திருத்து	tiruttu-tal	DED.2659: to correct, rectify, reform, mend... <i>tiruntu-tal</i> : to be correct, perfect...	CJB
125. திற	tira-ttal	DED.2667: to open	HH
126. தின்	tiṅ(ṇu)-tal	DED.2670: to eat, chew, bite, gnash, eat away	HH, Ind 188, GA/PB, BC, CJB
127. தீக்கு	tīkku-tal	DED: —	CJB
128. தீர்	tīr-tal	DED.2683: to leave, quit, finish...settle (dispute) to end, vanish, be completed, finished...solve	HH, CJB
129. தும்மு	tummu-tal	DED.2740: to sneeze, breathe	CJB
130. துள்ளு	tu lu-tal	DED.2767: to leap, frisk, spring up, jump up	CJB
131. தூக்கு	tūkku-tal	DED.2777: (a) to hang, be suspended, swing, sway from side to side...to lift	CJB
132. தேக்கு	tēkku-tal	DED.2843: to dink to the fill, be full, copious...	CJB
133. தேடு	tēṭu-tal	DED.2844: to seek, search for, inquire after, acquire [...]	CJB
134. தேய்	tēy-ttal	DED. 2846: to rub, rub away, waste by rubbing	HH
135. தேரு	tēru-tal	DED.2856: to be accepted as true, be clarified, made clear as water, be strengthened [...]	CJB
136. தை	tai-ttal	DED. 2858: to sew, stitch, nail, fasten beams with nails, spikes	HH
137. தொடு	toṭu-tal	DED.2865: to touch, come into contact with...	HH
138. தொழு	to u-tal	DED. 2904: to worship, adore, pay homage to	CJB
139. நக்கு	nakku-tal	DED.2945: to lick	BC, CJB
140. நசுக்கு	nacukku-tal	DED.2949: <i>naci</i> , to be crushed; MTL: to squeeze, press with the hand, crush, squash, crumple, as paper	BZ
141. நசுக்கு	nacukku-ttal	DED.2949: <i>naci</i> , to crush; MTL: —	BZ
142. நச்சு	naccu-tal	DED.2951: tr to desire, long for, like, love	CJB
143. நட	naṭa-ttal	DED.2957: to walk, go, pass, proceed, happen	Ind 188, GA/PB, BC
144. நடுக்கு	naṭukku-tal	DED.2950: to shiver, tremble, stutter; <i>naṭuṅku-tal</i> : to cause to shake, shiver, quiver tremble through fear	CJB
145. நடுங்கு	naṭuṅku-tal	DED.2950: to shake, shiver, quiver, tremble through fear, stutter	CJB
146. நாக்கு	nākku-tal	DED.3009: N, tongue; MTL: —	BC
147. நாள் போ	nāl pō	DED.3734: <i>pō</i> , to go, proceed, go away, reach a destination	HH
148. நில	nil-tal	DED.3043: to stand, stop, halt...wait	HH, Ind 188, BC, CJB
149. நினை	niṇai-ttal	DED.3050: to think, to resolve, to determine; to think, to consider	HH
150. நீக்கு	nīkku-tal	DED.3052: to remove < <i>nī</i> to separate from	HH, BC, CJB
151. நெய்	ney-tal	DED.3103: to wave as clothes, string, link together	Ind 188, BC, CJB
152. நோ	nō-tal	DED.3143: to feel pain, ache, suffer...	BC
153. நோக்கு	nōkku-tal	DED.3144: to see, look at, behold; MTL: <i>caus</i> , to reduce by eating	BC

154. படி	paṭi-ttal	DED.3186: to occur, happen, come into existence	HH
155. படு	paṭu-tal	DED.3191: to suffer	HH, Ind 188, BC, CJB
156. படு	paṭu-ttal	DED.3191: to do, make, effect, catch, establish, entrust, cause to grow	CJB
157. பாடு	pāṭu-tal	DED.3348: to sing, chant, warble, hum	HH
158. படை	paṭai-ttal	DED.3191: to create, form produce	CJB
159. பண்ணு	paṇ(ṇu)-tal	DED.3209: to make, effect, produce, accomplish	CJB
160. பல்கு	pal(u)ku-tal	DED.—; MTL: to increase as in number or in quantity	HH, Ind 188 (<i>paluku</i>)
161. பற	para-ttal	DED.3311: to hasten hurry to fly, hover, flatter	Ind 188, CJB
162. பறை	paṛai-tal	DED.3318: to speak, say	HH
163. பாடி	pāṭi-ttal	DED.3348: to sing, chant, warble, hum	CJB
164. பாய்	pāy-tal	DED.3362: to spring, leap, gallop, flow or gush out	HH, BC
165. பார்	pār-ttal	DED.3666(a): to see, look at	HH, CJB
166. பிடுங்கு	pitunku-tal	DED: —; MTL: to pull out, pull off. . .	BC
167. பிரிந்து	piral(lu)-tal ⁵¹	DED: —; MTL: to roll over	BC
168. பில	pila-ttal	DED: —; MTL: to strengthen, confirm	Ind 188
169. பிள	piḷa-ttal	DED.3446: to be split, cleaved; tr. to cleave	HH, Ind 188, GA/PB
170. பிற	piṛa-ttal	DED.3622: to be born, be produced	HH, Ind 188, CJB
171. பிறள்	piṛal(l)u-tal or piṛal-tal	DED: N, another woman; MTL: intr. to roll over, or DED.3450: to tremble	BC
172. பின்னு	piṇṇu-tal	DED.3454: to plait, braid, lace to become united	CJB
173. புகல்	pukal(lu)-tal	DED: —; MTL: to say, declare, state; to desire; to learn; intr: to sound, rejoice	GA/PB
174. புகு	puku-tal	DED. 3481: to reach, attain, enter, commence, go, ride, happen	CJB
175. பூ	pū-ttal	DED.3564: to blossom, flower, bloom	CJB
176. பூது	pūtu-tal	DED: —; MTL: to enter < intr. of <i>pukutu</i>	HH, Ind 188
177. பெய்	pey-tal	DED.3610: to rain, fall, pour down or into; tr. put, place, serve up	BC, CJB
178. பெரு	peru-tal	DED.3612: to grow thick, large, stout, become numerous	HH, BC
179. பெலு	pel(lu)-tal	DED: —; MTL: tr. & intr. to ease oneself	HH (?)
180. பெறு	peru-tal	DED.3622: to get, obtain, beget, generate, bear	HH (?), Ind 188, CJB
181. பேசு	pēcu-tal	DED.3269: to talk, speak	BC, CJB
182. பொரு	poru-tal	DED.3708: to fight, engage in a battle	HH, CJB
183. பொறு	poṛu-ttal	DED.3279: to bear, sustain [...], excuse; MTL: (+) intr. to be patient	HH
184. போ	pō-tal	DED.3734: to go, proceed, go away, reach a destination	HH, Ind 188, BC, CJB
185. போக்கு	pōkku-tal	DED.3734: to cause to go, send, complete, perform, pass or spend (as time), ruin, kill	CJB
186. போடு	pōṭu-tal	DED.3742: to ast down, cast away, put, set in a position	Ind 188, BC, CJB
187. மகிழ்	makiḷ-tal	DED.3770: to rejoice, exult, forget oneself in joy	Ind 188
188. மடக்கு	maṭakku-tal	DED.3795: to bend as the arms or knees, draw in, fold, shut	BC
189. மடை	maṭai-tal	DED.3810: N. small sluice of channel or stream, hole. . .	BC
190. மண	maṇa-ttal	DED.3818: to be united, mingled, come together, happen, be fixed	BC
191. மற	maṛa-ttal	DED.3897: to forget, neglect, disregard, put an end to, give up	Ind 188, BC, CJB
192. மாள்(ளு)	māḷ(lu)-tal	DED.3958: to die, perish, be exhausted, expanded or finished	CJB

193. மிகு	miku-tal	DED.3962: to exceed, surpass, be in excess, grow, increase [...]	CJB
194. முடு	muṭu(kku)-tal	DED.4034: to urge, bring pressure on...	CJB
195. முழு	muḷu(ku)-tal	DED.4095: to be whole, entire	CJB
196. மூடு	mūṭu-tal	DED: 4132: to cover, shroud, veil, hide, screen, obscure...	BC
197. மெழுகு	meḷuku-tal	DED. 4169: to cleanse floor with cowdung solution, smear as the body with sandal paste, gloss over	Ind 188
198. மேய்	mēy-tal	DED.4179: to graze, feed	HH
199. மேய்	mēy-ttal	DED.4179: to make, graze, feed	HH, BC
200. மொய்	moy-ttal	DED.4025: to cover, enclose	CJB
201. மொள்(ளு)	moḷ(ḷu)-tal	DED.4209: to take in a vessel, as water.	HH, BC
202. முகி	muki-tal	DED.4005: to end, terminate, be finished	BZ
203. முகி	muki-ttal	DED.4005: to finish, conclude, achieve, accomplish	BZ
204. முறி	muri-tal	DED.4080: to bend, lack in strenght, be gentle; to curve; MTL: to break off; to perish; to be ruined	BZ
205. முறி	muri-ttal	DED: —; MTL: to break off, snap off; to ruin; to defeat	BZ
206. வணங்கு	vaṇaṅku-tal	DED.4281: to bend, worship	HH, CJB
207. வரு	varu-tal	DED.4311: to come, happen, come into being, be known, become clear...	BC
208. வலர்	valar-ttal	DED: —; MTL: to cause to increase; <i>valar-tal</i> : to grow	HH
209. வழக்கு	vaḷukku-tal	DED.4336: to slip, slide as in slippery places, err, commit a mistake, make an escape, be forgetful	Ind 188
210. வளக்கு	vaḷakku-?	DED:—; MTL: —	BC
211. வளர்	vaḷar-tal	DED.4340: to grow, lenghten, be elongated, increase	HH, BC
212. வளர்	vaḷar-ttal	DED.4340: to cause to increase	CJB
213. வளை	vaḷai-tal	DED.4384: to surround, hover around, walk around	BZ
214. வளை	vaḷai-ttal	DED.4384: to surround	BZ
215. வா	vā-tal	DED: —; MTL: to come	HH
216. வாங்கு	vāṅku-tal	DED.4372: to receive, take, buy, get, obtain [...]	BC
217. வார்	vār-ttal	DED.4387: to pour; cast (as metal in a mould) to flow, trickle, overflow	HH
218. வாரு	vāru-tal	DED.4392: to take by handfuls, take in a sweep scoop, take in or grasp with avidity, gather	BC, CJB
219. வாழ்	vāḷ-tal	DED.4402: 4th intr. to be, exist	CJB
220. விசுவாசி	vicuvāci-ttal	DED: —; MTL: one who has faith in God	HH, Ind 188, BC
221. விடு	viṭu-tal	DED.4419: to leave, quit, pat with, get rid of, abandon, forsake, let go, dispatch, send away...	Ind 188, GA/PB
222. விரி	virī-ttal	DED.4438: to cause to expand, open, unfold -tal 4th intr expand	CJB
223. விரும்பு	virumpu-tal	DED.4443: to wish, desire, long for, covet, love	GA/PB
224. வில்	vil-tal	DED.4448: to sell, put on sale, be sold	HH, Ind 188, BC
225. விழு	viḷu-tal	DED.4457: to fall, fall down, descend, fall sick, be destroyed	CJB
226. விள்ளு	viḷḷu-tal	DED.4459-50: to open out, expand, unfold as a blossom, crack, split... <i>viḷ</i>	CJB
227. வெட்டு	veṭṭu-tal	DED.4507: to cut as with sword or axe, cut off, engrave, dig as a well	BC
228. வெருள்	veruḷ(ḷu)-tal	DED.4519: to be startled, perplexed, be frightened	CJB
229. வெல்(லு)	vel(ḷu)-tal	DED.4522: to conquer, overcome, subdue; destroy, remove intr. excel	CB, CJB
230. வெளு	veḷu-ttal	DED.4524: to become white or pale, dawn, become clear or manifes...	CJB
231. வே	vē-tal	DED.4540: to burn, be hot, be scorched, be boiled, cooked	BC, CJB

¹ When the Tamil example does not have a corresponding Portuguese gloss or if the meaning is uncertain, the English translation is written into round brackets.

² I am inclined to read HH's transcription as *etu-tal* rather than *erru-tal* despite the Portuguese translation allowing both readings.

³ Both Vermeer (1982: 156) and Hein & Rajam (2013: 135) provide the following forms for the reading of *cath*. The former interprets it as *kār* 'to be vigilant', while the latter as *kārka* 'to watch over'. According to Hein & Rajam the same form is also found in Henriques' *Flos Sanctorum* (1586) as well as in Henriques' *Doctrina Christam em Lingua Malauar Tamul. Tambirān vaṅakkam* printed in Quilon (1578: 9, e.g. *kāttu*).

⁴ Not listed in Vermeer (1982).

⁵ Vermeer (1982: 164) translates this form as 'to pass a sentence', while Hein & Rajam (2013: 136) translate it as 'to render'.

⁶ In Vermeer (1982: 159) the corresponding form for *etuva* is 'to be adapted'.

⁷ Hein & Rajam (2013: 147) gives 'to beseech' as a translation for the Portuguese *rogar*.

⁸ This is a dubious form that does not allow the identification of a Tamil correspondent. However, considering Henriques' transliteration criteria, I would be inclined to read it as *parrumarrukirēṇ*, even though this does not resolve the problem.

⁹ Henriques does not provide the Portuguese translation for this verb and Vermeer (1982: 162) does not give any correspondence, while Hein & Rajam (2013: 149) translate it as 'to become familiar with; to practice', without, however, giving the correspondent Tamil verb. The solutions here are different. Considering two other Portuguese manuscripts: MS Ind 188 (approx. 17th cent.) and AP (MS 50 [ex MS 34], fol. M-34-220, Right column, line 6) respectively, one finds: *palukiratu* glossed as *multiplicarse* 'to multiply', we can take it as *pal(u)ku* (5th). We would exclude *paḷu-ttal* (11th) not only because it does not correspond to Henriques' transliteration but also because it would not fit within the class that Henriques is describing.

¹⁰ In AP (MS 50 [ex MS 34], fol. M-34-174, Right column, line 23) one finds *molḷukiratu: tirar agoa com naso. Ite' em algumas partes ourinar. Satiamangalão* மெளண்டென. [take water with the nose. Also in some parts it means to urinate. Satiamangalão]. Satiamangalão was a Jesuit province nearby Madurai. See also Hein & Rajam (2013: 165 – footnote 330).

¹¹ In AP (MS 50 [ex MS 34], fol. M-34-244, Right column, line 11) one finds *pelukiratu: cagar* [to defecate]. See also Hein & Rajam (2013: 165 – footnote 329).

¹² *neruRRen* may correspond to *neruṭṭukiratu: embrulharse* (to get confused, to mix the sense of a word with another one) found in AP (MS 50 [ex MS 34], fol. M-34-198, Left column, line 19).

¹³ This meaning is found in AP (MS 50 [ex MS 34], fol. M-34-168, Left column, line 2), although the first meaning is 'to graze'.

¹⁴ In Vermeer (1982: 164) the corresponding meaning is 'to abuse, revile', in Hein & Rajam (2013: 176) it is 'to dishonour'. We have taken it as 'to curse' according to the meaning found in AP (MS 50 [ex MS 34], fol. M-34-425, Right column, line 14): *vaikiratu: chamar ruindades* [to call ruins].

¹⁵ One possible solution for this form would be *peru-tal* as it is found in Vermeer (1982: 1639) who, however, translates *peru* as 'to experience, be affected' (DED.3622: to get), Hein & Rajam (2013: 185) give *perukirēṇ* as 'I give birth', while in AP (MS 50 [ex MS 34], fol. M-34-246, Left column, line 8) one finds *perukiratu: encherse* [to fill], (MS 50 [ex MS 34], fol. M-34-246, Left column, line 10) *pērukiratu: arrencarse, dizem caixars* [pluck up; they say crates]; *kāruppōukiratu: ventar, assoprar do vento pendadu* [blow, blow from the ? wind]. According to the *Corpus Lexicográfico do Português* (henceforth, CLP) the term *paíro*, which is part of Henriques' translation, is a nautical term 'andar ao paíro. Ad ventos incertos vela'. It remains a dubious form.

¹⁶ Hein & Rajam (2013: 194) translate it as 'to behold'.

¹⁷ The first conjugation in MS 188 includes all the verbs ending in *-ikki-*; *-aikki*; *-yakki*; as well as verbs ending in *-ākkirēṇ*.

¹⁸ The meaning in the 16th cent. for the word *agastarse* is: *stomachor, aris, Indignar-se, encolerizar se, enfadar-se, saepe sine casu, interdum dat. vel accus. ut: Mihi stomachatus est, agastou-se contra mim. Omnia stomachatur, de tudo se enfada* [to be indignant, to be angry, to be upset, often without a case, sometimes with dative or accusative: it annoyed me, he got upset with me, he got bored of everything] (in Obra Velez, Index totius artis, 1599?, de António Velez (1545–1509), cf. CLP at <http://clp.dlc.ua.pt/DICIweb/default.asp?url=Concordancias>).

¹⁹ In AP (MS 50 [ex MS 34], fol. Ms34-M- 248, Left column, line 26) the meaning for *pila* is: *fortalecerse, tomar força* [to strengthen, to take strength].

²⁰ The second conjugation in MS 188 includes verbs which have *u, ra, or rā* and form the preterite in *ten*. Exceptions to the second conjugation given in MS 188 are *irukkirēṇ* (4th), *estar* that form the past in *-den*, the future in *ppen* and *nikkirēṇ* (3rd), *estar em pe* [to stand] that form the past in *-ṇṇēṇ* [*ṇṇēṇ*] or *-ṇṇēṇ*.

²¹ The third conjugation in MS 188 includes verbs ending in *-kirēṇ* or *-yitukirēṇ* or *-aikirēṇ*, and in the preterite they have *-(n)den* and the future *-ven*. The exception are those verbs that have the preterite in *-ten* and that are not preceded by *n*: *eykirēṇ, tirar frechas* [to shoot arrows] (1st); *koykirēṇ, colhar* [to pluck] (1st); *ceykirēṇ, fazer* [to do] (1st); *neykirēṇ - tiver panes (?)* [to have clothes?] (1st); *vaikirēṇ - chamar mindade (?)* [to call ruins] (1st).

²² The fourth conjugation in MS 188 includes verbs ending in *-lukirēṇ, -lurēṇ* that have *l, ṇ, or r* before *-kirēṇ*. They form the preterite in *-enrēṇ* with the *ru, r, lu*.

²³ For the translation of this word see Dalgado (1919: 140): *bostear: v. t. é muito usado este verbo na india Portuguesa, no sentido de 'barrar com bosta, embostar'*. [it is largely used in Portuguese India, with the sense of to spread the cow's dung].

²⁴ The fifth conjugation in MS 188 includes verbs ending in *-ukirēṇ* or *-irēṇ*. They must not be preceded by *i*, *l*, and *r*, before *u*. They form the preterite in *-inen*, and the future in *ven*. The exceptions are: *pūtukirēṇ*, *entrar* [to enter] (13th); *perukirēṇ*, *alcancar* (see footnote 15); *cuṭukirēṇ*, *queimar* [to burn] (6th); *viṭukirēṇ*, *deixar ou largar* [to leave or to drop] (6th); *iṭukirēṇ*, *meter* [to place] (6th); *paṭukirēṇ*, *padeecer* [to suffer] (6th); *pōṭukirēṇ*, *bottar* (?) (6th); *totukirēṇ*, *tocar* [to touch] (6th); *kūppuṭukirēṇ*, *gritar ou fazer matizada* [to shout or to reach morning] (6th). In this conjugation verbs ending in *-ākkirēṇ* and *-ukkirēṇ* and in *-ñkirēṇ* are also included. They all form the past in *ṇēṇ*.

²⁵ MS Ind 188 does not provide a Portuguese gloss for this verb. However, I selected *akal-tal* rather than *akal-tal* because the former fits within the class of verbs that the author of MS Ind 188 was describing.

²⁶ The first rule in BC includes verbs that form the present in *-icradu* and the past in *-ichen* or *-iten*. He says that the last form is used by poets and Brahmans. There are two exceptions: *ceti(kku)* [?], *nī(kku)* (11th), and *nil* (3rd). Other exceptions are related to the spoken variety. Considering the verb form given under this rule, it is possible to connect it with the verbs belonging to the 11th class (*-kkir-/-tt-/-pp*).

²⁷ The second rule includes verbs forming the present in *-igradu* and the past in *-ngen* or *-ten* that are referred to as typical among poets and Brahmans. Therefore, one would expect verbs belonging to the 4th class (*-kir-/-nt-/-v-*), however, this is not always the case.

²⁸ The third rule includes verbs forming the present in *-acradu*, the past in *-nden*, and the future in *-p*. They correspond to verbs of the 12th class (*-kkir-/-nt-/-pp-*). The only exceptions to this rule are represented by those *active* verbs that have ‘ñ’ in the *neuter* form, as happens in the 10th and 12th rules. Some examples are represented by: *aṭakku* (5th, causative); *maṭakku* (5th, causative); *oṭukku* (5th, causative). The verbs that should also be excluded from this rule are those that in front of *a* have a single consonant such as: *nakku-tal* (5th tr.); *nākku* (?); *kakku-tal* (5th tr.) and verbs such as *vaḷakku* and *maṇakku* (*maṇa*?).

²⁹ The fourth rule includes verbs that form the present in *-ógradu*, the past in *-nden*, and the future in *-v*; as well as the verbs that form the present in *-óccradu*, the past in *-inen*, and the future in *-v*.

³⁰ The fifth rule includes verbs that form the present in *-ugradu*, the past in *-inen*, and the future in *-v*. This rule is applied without exception to all the verbs that in front of *-u* have *-p(p)-*, *-tt-*, *-v-*, *-m-*, *-c(c)-*. BC includes here the verbs of the 5th class (*-kir-/-iṇ-/-v-*). The verb form *ūtukiratu* creates some problems since *ūtū* is a noun meaning *blowing* while the verb form is *ūtū-tal*. Consequently, another option would be to read this form as *uḷattu* but even as such it remains a problem since it is not found either in DED or in MTL.

³¹ The sixth rule includes verbs that form the present in *-lukiratu*, the past in *-ṇten*, and the future in *-v*. Exceptions to this rule are the following verbs: *aruḷ(lu)-tal* (5th); *aḷu-tal* (1st) and those that geminate the *ḷ* with the exception of *koḷ(lu)-tal* (2nd).

³² The seventh rule refers to verbs that form the present in *-lukiratu* and the past in *-ṇren*; the only exception given is represented by the verb *kellu-tal* (5th).

³³ Verbs which follow the eighth rule form the present in *-rukiratu*, the past in *-nden* and the future in *-v*. Exceptions to this rule are found in those verbs that follow the fifth rule such as *vāru-tal* (5th) which BC translates as *ajustar com as maos o que cayo; ou está no chão* [to adjust by hand what fell down or what is on the floor]; *taru(kku)-tal* (5th) meaning *abaixarço* [to go down]; *peru-tal* (11th); *karu(kku)-tal* (5th); *aru(kku)-tal* (5th).

³⁴ Verbs that follow the ninth rule form the present in *-ṭukiratu*, the past in *-ṭēṇ* and the future in *-v*. Exceptions to this rule are found in those verbs that form the past in *-iṇ* such as *pōṭu-tal* (5th and 6th), *āṭu-tal* (5th), *veṭṭu-tal* (5th), *mūṭu-tal* (5th), *kūṭu-tal* (5th).

³⁵ Verbs that follow the tenth rule, belonging to the fifth class, form the present in *-ṇgradu*, the past in *-inen* and the future in *-v*. BC compares them to those verbs that follow the 12th rule which he calls *neutre*. However, if the verbs have *ṇ* rather than *ṇ* as a final sound, they form the past in *-ṇr* and the future in *-p-*, such as: *tiṇ(ṇu)-tal* (8th); *eṇ(ṇu)-tal* (8th).

³⁶ Verbs that follow the eleventh rule form the present in *-ṛkiratu*, the past in *-ten*, and the future in *-p*. Exceptions are represented by the following verbs: *nil-tal* (3rd); *moṛkiratu* (*mol*?).

³⁷ The twelfth rule includes the correspondent *active* forms of the tenth rule which forms the present in *-kkir*, the past in *iṇēṇ* and the future in *-v* such as: *aṭakku-tal* (5th); *maṭakku-tal* (5th); *oṭukku-tal* (5th).

³⁸ The first rule includes verbs ending in *y*, *r*, *i*, *u*, *ai* that form the past in *-ttēṇ*. The only exception is represented by *irukkīratu* (Beschi 1738: 50-51, § 55; Mahon 1848: 44, § 55).

³⁹ Verbs in the second rule end in *a* and form the past in *andēṇ*. Exceptions are monosyllabic verbs ending in *-a* that form the past in *-kkinēṇ* such as *nakkīratu* (5th) from *nakkukīratu* and *kakkīratu* (5th) from *kakkukīratu*.

⁴⁰ In regard to this form CJB says: “You need not except however *maṇakkīratu*, although another has written, that it has *maṇakkīṇēṇ*, which is not true: for it has, according to the general rule, *maṇantēṇ*”. (Beschi 1738: 51, § 56; Mahon 1848: 44, § 56). It seems to me that he is referring to BC.

⁴¹ These verbs are included in the third rule to show the gemination in the present tense morpheme. However, as CJB states, these verbs, which have a long syllable, form the past in *-kkinēṇ*. Exceptions are represented by the following forms: *pūkkīratu* whose past is *pūttēṇ* because, according to CJB, it is not abbreviated by syncope; *kākkīratu* (to watch over) whose past is *kāttēṇ* “they cannot be written, as from ignorance most of the Tamilians do= *kārkīratu cārcradu*, for when written in this way means to cause a certain warmth of the tongue, such as pepper and similar things occasion, whence that warmth is called *kāram*, *caram*. Many verbs by syncope end in *-kkīratu* and in truth end in *-kukīratu*, all which, according to the rule which I shall presently give at number 50, have in the preterite *-kkīrēṇ*. But these are generally verbs active from the neuter, which ends in *-ṇkiratu*. Thus, *aṭaṅkīratu*, to (be) shut > *aṭakkukīratu* > *aṭakkīratu* ‘to shut’ in *active*; *oṭuṅkīratu* ‘to withdraw into a corner’ > *oṭukkukīratu* > *oṭukkīratu*, ‘to put into a corner’; *naṭuṅkīratu*, ‘to tremble’ > *naṭu(kku)kīratu*, ‘to cause to tremble’; *tūṅkīratu*, ‘to flee’ > *tīkkukīratu* > *tikkīratu*, ‘to put to flight’. All these have in the preterite *kkinēṇ*. There are other which of themselves ought to end in *kkukīratu*: *cetu(kku)kkīratu* ‘to scrape up grass’; *muṭu(kku)kkīratu* ‘to turn to flight’; *aṭu(kku)kkīratu*, ‘to put one on another’. All which have the preterite in *-kkinēṇ*” (Beschi 1738: 52-53, §§ 58-59; Mahon 1848: 45-46, §§ 58-59). Other verbs are *ākkīratu* (5th caus.) and *pōkkīratu* (5th caus.).

⁴² The first rule includes verbs which have *n* in front of the *-kiratu* and form the preterite in *kiñēñ* such as *vañkiratu* ‘to venerate’, *añankiratu* ‘to shut in’, *iñankiratu* ‘to agree’. Other verbs under the first rule are those which have *n* before *-kiratu* and form the past in *-ñēñ* shortening the first syllable, such as *uñkiratu* ‘to devour’, *kāñkiratu* ‘to see’. Finally, it also includes those verbs that have the consonant *n* in front of *-kiratu* that add *-rēñ* in the past, such as *tiñkiratu* ‘to devour’, *eñkiratu* ‘to say’ (Beschi 1738: 53, § 59; Mahon 1848: 45-46, § 59).

⁴³ The only exception to the second rule is represented by *ñukiratu* which forms the preterite in *-ñrēñ*. However, if the verb ending in *u* is polysyllabic or monosyllabic but with a long vowel, the exceptions are represented by verbs such as *pōñukiratu* (6th) whose past is *pōññēñ*, or *takukiratu* (6th and 4th) whose past is *takkēñ*; *pañukiratu* (6th) which forms the past in *paññēñ*; *perukiratu* (6th) which forms the past in *perñēñ*; *irukiratu* (6th) which forms the past in *irñēñ*; *arukiratu* (6th and 4th) which forms the past in *arñēñ*. All these forms belong to the sixth class. Furthermore, *mikukiratu* (6th) and *pukukiratu* (6th) are exceptions since they have the past in *-ntēñ*.

⁴⁴ Exceptions to the first class of the third rule are represented by the following verbs for which the past form is also given: *arulukiratu* (5th) which forms the past in *aruliñēñ*; *viñlukiratu* (2nd) which forms the past in *viññēñ* but also in *viññēñ* and *koñlukiratu* (2nd) which always form the past in *koññēñ*.

⁴⁵ Exceptions to the second class of the third rule are represented by *vārukiratu* (5th) which forms the past in *vāriñēñ* even though it also has *vantēñ*; *tarukiratu* (5th) which forms the past in *tantēñ*; and *porukiratu* (1st) which forms the past in *poruntēñ*.

⁴⁶ An exception to the third class of the third rule is represented by the verb *collukiratu* (5th) which forms the past in *coññēñ*.

⁴⁷ Exceptions to the fourth class of the third rule are represented by the verbs *vilukiratu* (4th) which form the past in *viluntēñ* and the verb *mulu(ku)kiratu* (11th) which forms the past in *mulukkiñēñ*.

⁴⁸ Exceptions to the fourth rule are represented by verbs such as *vaikiratu* (1st) which forms the past in *vaitēñ*; *peykiratu* (1st) which forms the past in *peytēñ*; *ceykiratu* (1st) which forms the past in *ceytēñ*; *neykiratu* (1st) which forms the past in *neytēñ* “to which sometimes by the very lowest people, *ñ* is usually added” (Beschi 1738: 56, § 62; Mahon 1848: 47, § 62).

⁴⁹ In BC this form is written as *ālu* as it is also found in AP (MS 50 [ex MS 34], fol. M-34-98, Right column, line 8): *governar* [to rule].

⁵⁰ In AP (MS 50 [ex MS 34], fol. M-34-285, Right column, line 20): *vomitar dos animais, ao homem se aplica se botar sangue pella boca* [vomiting of animals, it is applied to man if they shed blood by their mouth].

⁵¹ In AP (MS 50 [ex MS 34], fol. M-34-258, Left column, line 28) the translation for this verb is *espojarse* that, according to [CLP](#), is: *andarse roçando sobre a terra. pulverare se. plin. in pulvere volutari, ou se volutare. § espojarse com riso. lançarse, ou deixarse cahir no chaõ, bolindo com os pés, & remexendose com a força do rir* [walking scuffing / brushing along the land. Pulverize. Smack yourself with laughter. to launch oneself, or fall on the floor, kicking with one feet, & stir by force of laughter].