# Existence, location, possession, and copula in Malabar Indo-Portuguese

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#### **Abstract**

This paper offers a diachronic and a contact-based analysis of existential, locative, possessive, and copulative constructions in Malabar Indo-Portuguese creole (MIP). The existential, locative, and possessive predicates are all expressed with the copulative verb t x, and nominal and property-denoting predicates can either have the copula t x or zero copula. I analyze these copulative constructions by establishing their sources in the Portuguese lexifier and Malayalam substrate/adstrate. I show that although the Portuguese verbs t x 'have' and t x 'be' have paved the way to the semantics of t x, Malayalam had a strong impact on the morphosyntax and semantics of existential, locative, possessive, and copulative constructions in MIP. This influence is most notable in the case of possessives, which take dative subjects. These findings are compared to the relevant structures in other South Asian languages and taken to show that the existence of locative possession is a strong areal feature of South Asia. I also show that the variability of copula usage in nominal and property-denoting predicates can be explained by variable input from Portuguese and Malayalam copulative constructions. One of the most salient features influenced by Malayalam is the choice of etymologically Portuguese nouns instead of adjectives in property-denoting predicates.

**Keywords**: copula, existence, location, possession, Malabar Indo-Portuguese

#### 1 Introduction

This paper analyzes the existential, locative, possessive, copulative, and zero-copula constructions in Malabar Indo-Portuguese (MIP), a creole language formed in a situation of language contact between the Portuguese colonizers and the native Malayalam-speaking community of the Malabar Coast in the 16th century. The Portuguese colonial expansion in Asia began in Calicut, on the Malabar Coast (today Kerala, India), see Figure 1. Malabar Indo-Portuguese (MIP) emerged as a Portuguese-based creole with Malayalam (Dravidian) substrate and adstrate. Similarly to other Indo-Portuguese creoles, MIP was formed in the context of intermarriage, including official and unofficial liaisons, between the Portuguese and the local community, and can be referred to as a "settler" or "fort" creole (see Holm 2000; Bakker et al. 2011). Although MIP used to be spoken in many locations on the Malabar Coast (see Cardoso 2014b), the Indo-Portuguese communities

began to shift to English and Malayalam, probably with the beginning of the English rule over the region (Cardoso 2014d). At present it is spoken only by a few elderly people in Cannanore (Kannur), and in 2010 it was no longer spoken in Cochin (Kochi) (see Pradeep 2010).<sup>1</sup>

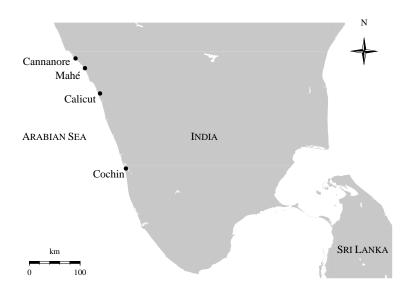


Figure 1: Map of South India with locations mentioned in this work, where MIP is or was spoken

The first records of MIP gathered for a scholarly linguistic research were analyzed by Schuchardt (1882, 1889) and the most recent material, analyzed in this work, has been collected in Cannanore and Cochin by Cardoso (2006-2015, 2007-2010). There are several published materials dealing with topics in MIP grammar, including Clements (2012), Cardoso (2012, 2014c,d), and Krajinović (2015, 2018). These works typically highlight the high level of convergence between Malayalam and MIP, most notably in the fact that MIP has an SOV order (Cardoso 2014a), deranked adverbial subordination (Krajinović 2017), postpositions expressing case (Cardoso 2014c), and vector verbs (Cardoso 2015; Krajinović 2018).

This paper addresses two problems, namely that a) the existential, locative, possessive, copulative, and zero-copula constructions differ in many ways from the structures available in the Portuguese lexifier, and b) nominal and property-denoting predicates exhibit a high degree of variability in the appearance of the copula. Out of these constructions, all the ones containing a copula have something in common and that is the presence of the copulative verb tx. By adopting a diachronic and language-contact approach, I show that the facts described under a) and b) result from a complex interplay of Portuguese and Malayalam influences. Portuguese is analyzed as offering etymological and partially functional sources for specific copulative structures in MIP, and Malayalam, as a substrate and an adstrate language, had a strong influence on both the functions and morphosyntax of copulative structures in MIP. Additionally, I argue that at least in the domain of locative possession the extent of Malayalam influence on copulative structures in MIP is a manifestation of a strong areal feature of South Asia.

<sup>&</sup>lt;sup>1</sup>Different varieties of Indo-Portuguese creoles used to be spoken along the coast of India and Sri Lanka. Today Indo-Portuguese creoles are still spoken in Diu, Daman, and Korlai in India, and Trincomalee and Batticaloa in Sri Lanka.

The paper is organized as follows. Section 2 outlines the methodology, and Section 3 analyzes the functions of the copulative verb  $t \approx (3.1)$ , its origins (3.2), and its relation to locative possession as an areal feature of South Asia (3.3). Section 4 discusses zero-copula structures (4.1) and their origins (4.2), while Section 5 offers a conclusion.

## 2 Methodology

The contrastive analysis of MIP, Portuguese, and Malayalam carried out in this paper relies on four different sets of data. The sources of the analyzed data are listed below.

- Modern MIP: fieldwork-based corpora from Cannanore (Cardoso 2006-2015) and Cochin (Cardoso 2007-2010)
- 19th-century MIP: written data from Cochin (Schuchardt 1882), Cannanore and Mahé (Schuchardt 1889)
- 16th-century Portuguese: *Chronica dos Reis de Bisnaga* (CRB) (Lopes 1897) published in *Corpus Informatizado do Português Medieval* (CIPM) (Xavier et al. 2003),<sup>2</sup> and a few additional sources cited together with the relevant examples
- Malayalam: reference grammar by Asher and Kumari (1997) and a publication by Menon and Pancheva (2014)<sup>3</sup>

Regarding the MIP data, the fieldwork-based corpora from Cannanore (Cardoso 2006-2015) and Cochin (Cardoso 2007-2010) are used as the basis for the description of copulative constructions in Sections 3.1 and 4.1.<sup>4</sup> As MIP is a moribund language, it is not used to the same extent by the different participants, and only one of them uses it daily. One caveat to this study is the interpretation of language variation. Although there are no perceivable differences in MIP depending on the geographical location, each speaker shows certain linguistic differences with respect to the other speakers, some of which might be due to language attrition. Since there no longer exists a coherent community of speakers of MIP, it would be very difficult to understand the factors governing this variation. In this work, I focus only on features that are constant across several speakers, i.e. the ones that I interpret as forming the language system. This does not preclude, however, that some truly idiosyncratic characteristics might be unintentionally described as general features of MIP.

 $<sup>^2</sup>$  Chronica dos Reis de Bisnaga (CRB) (Lopes 1897) at Corpus Informatizado do Português Medieval (CIPM) (Xavier et al. 2003) is available at http://cipm.fcsh.unl.pt/gencontent.jsp?id=4. Henceforth cited as CIPM:CRB. Every linguistic example has an reference to the numbered part of the text (título in the original) in which it is situated. The orthography of the examples is maintained, except for the  $\sim$  symbol, which is placed above the letters representing vowels. The Portuguese examples do not show morphological boundaries in the text line, but the glosses reflect the morphology of each word, except for the gender of nouns.

<sup>&</sup>lt;sup>3</sup>All Malayalam examples follow the transcription based on IPA symbols used by Asher and Kumari (1997) and Menon and Pancheva (2014). The morphological parsing is maintained as in the original publications. This means that in some cases the morphemes are orthographically separated only in the glossing line (by columns).

<sup>&</sup>lt;sup>4</sup>The corpora amount to around 14.5 hours of audio recordings in total. The recordings are kept at the *Centro de Linguística da Universidade de Lisboa*.

The corpora consist of elicitation conducted in English and spontaneous narratives and dialogs. Only two speakers produced significant quantities of spontaneous speech data. Whenever possible, I aim to use examples from spontaneous speech to represent grammatical structures. However, this is was not always possible mainly for two reasons: a) a given structure was not found in the spontaneous speech, b) a given structure is ambiguous and the context of the spontaneous speech is not sufficiently clear. Therefore, many examples in the following sections are produced in elicitation and this is indicated by the label *elicited* before the number of the sound file and the location.<sup>5</sup> In the free translation of examples, square brackets are used to indicate an omitted argument, important contextual information, or to provide a literal translation of parts of the sentence. The literal translation of a whole sentence or phrase is made within parentheses with an indication "lit.". When the context in which the example was produced is important for its understanding, brief contextual information is indicated preceding the text of the example.

Besides the modern MIP data, the 19-century data (Schuchardt 1882, 1889) will be occasionally considered for additional insights into possible etymologies and functions of different grammatical markers. Data from Schuchardt (1882, 1889) represents a written form of MIP, which includes a variety of basilectal (i.e. more creole-like) and acrolectal (i.e. Portuguese-like) structures (see Cardoso 2014b; Krajinović 2018).

The study of the Portuguese contribution to the formation of MIP is approached here from the perspective that 16th-century Portuguese is the most important source for the formation of the lexicon and grammar of MIP. For that purpose I use a 16th-century text, *Chronica dos Reis de Bisnaga*, written by Domingo Paes and Fernão Nunes, and later published by David Lopes (1897). This text describes the history and life in the Vijayanagara (Pt. *Bisnaga*) Empire (1336-1646), which at the time of Portuguese colonization comprised most of South India, including the Southern part of the Malabar Coast. *Chronica dos Reis de Bisnaga* is a good text for the purposes of comparison with MIP, because it deals with life in South India in the 16th century and describes daily activities in the kingdom. Both of these features make this text relatable to local and daily matters for which Portuguese must have been used in the 16th century. However, whenever the interpretation of *Chronica dos Reis de Bisnaga* may be lacking a more fine-grained semantic understanding, other academic works on 16th-century Portuguese, and occasionally modern European Portuguese, were considered. Examples labeled with *constructed by the author* reflect grammatical judgments about constructions in modern European Portuguese.

The Malayalam data used in comparisons with MIP consist of examples taken from the grammar by Asher and Kumari (1997). This comprehensive grammar offers a theoretical discussion and examples in every field that is relevant for this analysis, and is therefore the major source of Malayalam data in this work. It is accompanied by Menon and Pancheva's (2014) data of relevant structures in Malayalam. Regarding the analysis of Malayalam influence, in this work I do not distinguish between the substrate and adstrate influence of Malayalam structures on MIP (see also Cardoso et al. 2012). As mentioned in the introduction, Malayalam can be labeled with both the substrate and adstrate role and these cannot be easily discretely distinguished.

<sup>&</sup>lt;sup>5</sup>All examples follow the Leipzig Glossing Rules, except PRET – preterite.

<sup>&</sup>lt;sup>6</sup>Cochin and Cannanore were under the rule of the Zamorin of Calicut (see Correia 1997).

### 3 Existence, location, and possession

#### 3.1 The verb tx

- (1) æla ali tæ.

  3FSG.NOM there be.PRS

  'She is there.' (elicited, 02.1, Cannanore)
- (2) nɔzə agə dæntrə tinha.

  1PL.NOM water LOC be.PST

  'We were in the water.' (elicited, 03.2, Cannanore)

As has been repeatedly noted in literature (e.g. Freeze 1992; Wang and Xu 2013; Myler 2018), in many languages the locative predicates can easily give rise to existential interpretations. The subject of the locative predicate, 'the book' in (3), can become a pivot of an existential predicate, as 'a book' in (4). Cases like (4), where what is being asserted is the location of a specific book, are also called *inverse locative predication* (Creissels 2016), *rhematic location* (Koch 2012), and *presentative locative* (Hengeveld 1992). I follow the descriptive tradition in referring to the construction in (4) as existential.

- (3) The book is on the table.
- (4) There is a book on the table.

In MIP, the existential interpretation of locative predicates can arise due to two motives. The first is the omission of the location previously established in discourse. For example, although the location is omitted in (5), it is retrievable from the context that it refers to a wedding. The second motive is an indefinite pivot, for example  $ung \circ igreji$  in (6), which is also called definiteness effect (Freeze 1992). The definiteness effect captures the fact that the definite nouns or pronominals tend to be interpreted as subjects of locative predicates, while the indefinite ones are interpreted as pivots of an existential predicate, as in (6). Thus, the existential interpretation of tx can be derived from its basic locative function.

- (5) bastantə jenti **tinhara**.
  many people be.pst
  'There was a lot of people [at the wedding].' (05.1, Cannanore)
- (6) hotel=sə pærtə ungə igreji tæ. hotel=gen near indf church be.prs

<sup>&</sup>lt;sup>7</sup>Examples (3) and (4) are illustrations of these cross-linguistic constructions in English.

'There is a church near the hotel.' (elicited, 04.1, Cannanore)

Nevertheless,  $t \approx can$  be used in "real" existentials, where the only thing that is asserted is the existence of the pivot, without implying its physical location. Such constructions are very common when referring to weather conditions (7)-(8) or people (9). In (9), a proper name has been made indefinite, just like the pivot in (6).

- (7) bəmba chuya tini swida iskəla ja=ficha.
  a.lot rain be.pst because school pret=close
  'Since there was a lot of rain, the school got closed.' (elicited, 14.1, Cannanore)
- (8) *oji chuva lɔ=tæ te=læmbra*.
  today rain IRR=be IPFV.PRS=think
  'I think there will be rain today.' (elicited, 17.1, Cannanore)
- (9) dispoz ungə Gonsalves **tinhi**, ja=mora ja=foy.
  afterward INDF Gonsalves be.PST PRET=die PRET=go.PST
  'Then there was one Gonsalves, he/she died [unfortunately].' (06.2, Cochin)

I now turn to the possessive constructions with the copula tx. When tx is in the possessive function, the possessor needs to be in the dative case, as in (10) and (11).

- (10) **pærmi** dozə irmo-sə ungə irma **tæ**.

  1sg.dat two brother-pl one sister be.prs

  'I have two brothers and one sister.' (09.1, Canannore)
- (11) rey=kə oytə kriansa tinhi. king=dat eight child be.pst 'The king had eight children.' (19.3, Cannanore)

This type of locative constructions with an oblique possessor has also been analyzed as a *Locative Possessive* construction (Stassen 2009). Heine (1997:59) calls this strategy a *Goal Schema* and identifies it as follows: "this schema typically consists of a verb of existence or of location, where the possessor is encoded as a dative/benefactive or goal case expression and the possessee typically as a subject constituent". Thus, in MIP  $t\alpha$  should be analyzed as a locative copula that receives the possessive interpretation via the oblique possessor.<sup>8</sup>

# 3.2 Malayalam and Portuguese sources for existence, location, and possession

The etymological source of the verb  $t\omega$  is the Portuguese transitive possessive verb ter 'have' in its present form tem 3sg.prs. The past form of  $t\omega$ , tinha, originates from the past imperfective form of the same Portuguese verb – tinha 1/3sg.prv.pst. In this section I analyze possible diachronic sources for the development of the locative, existential, possessive, and copulative functions of

<sup>&</sup>lt;sup>8</sup>There are isolated cases in elicitation where speakers produced possessive constructions with the nominative case. It is possible that these productions were a result of interference with English in the elicitation (see Cardoso 2014a) or language attrition, but it is also possible that transitive possessive structures exist in MIP. Although they are rare and appear only in elicitation, they might have survived as more acrolectal counterparts of the locative possession. These constructions are not discussed in this article.

tæ/tinha. Firstly, I outline the comparison of locative, existential, and possessive strategies in MIP and Malayalam, and in the second part of the section I compare MIP and Portuguese.

In MIP  $t \approx$  can have locative, existential, and possessive readings, and in Section 3.1 I showed that all of these interpretations derive from its core locative meaning. We find a similar situation with the Malayalam locative copula  $u\eta t$ , used with locative (12), existential (13), and possessive functions (14). In existential and locative sentences the subject is in the unmarked nominative case, as in (12) and (13), and in a possessive construction the subject is in the dative case, as in (14).

- (12) uηηί viiţţil uηţə.
  Unni house:Loc be.PRS
  'Unni is at home.' (Asher and Kumari 1997:101)
- (13) keeralattil aanakal **unto**.

  Kerala:Loc elephant:PL be.PRS

  'There are elephants in Kerala.' (Asher and Kumari 1997:100)
- (14) avalkkə rantə sahoodarimaar **untə**.

  3FSG:DAT two sister:PL be.PRS

  'She has two sisters.' (Asher and Kumari 1997:176)

Both the morphosyntax and the semantics of the locative, existential, and possessive constructions with  $u\eta t \vartheta$  are essentially identical to the MIP constructions with  $t \varkappa$ . They both express existence and location with unmarked nominative subjects and possession with dative subjects.  $U\eta t \vartheta$  is also phonetically quite similar to  $t \varkappa$ . Although  $u\eta t \vartheta$  must have been a major source in establishing existential, locative, and possessive functions of  $t \varkappa$ , the semantics of  $t \varkappa$  incorporates other equally important influences. I turn to the comparison of each of the functions of  $t \varkappa$  with their Portuguese sources.

Since we know that the etymon of  $t\bar{x}$  is the Portuguese verb ter 'have', I begin by comparing these two verbs regarding their morphosyntax and semantics. In (15) we can see the 3sg.prs form of the verb ter in 16th-century Portuguese. Although semantically ter expresses possession, the morphosyntax of its possessive constructions is quite different from that of MIP. The verb ter is a transitive verb that requires a direct object. Thus, the possessum cavallos 'horses' in (15) is a direct object of the verb ter, and the possessor este rey 'this king' is the subject, with a function comparable to the nominative case in other languages. On the other hand, MIP and Malayalam are different in that their possessors are in the dative case, and the possessums behave like syntactic subjects, in the unmarked nominative case.

(15) este rey, que agora he, **tem** na sua estrebaria this king COMP now be:3sg.prs have:3sg.prs in:def.fsg 3sg.poss:fsg stable setecentos e tantos cavallos seven.hundred and many:pl horse:pl

 $<sup>^9</sup>$ It is morphosyntactically possible for the Malayalam copula  $aa\eta\vartheta$  to appear in locative and some possessive constructions (Mohanan and Mohanan 1999). However, Mohanan and Mohanan (1999) show that in these contexts  $aa\eta\vartheta$  would receive an interpretation equivalent to clefts in English. If the sentence in (12) had  $aa\eta\vartheta$  instead of  $u\eta t\vartheta$ , it would mean 'It is Unni who is at home'. Thus, constructions with  $u\eta t\vartheta$  are the only available strategy in Malayalam that can express the basic meaning of locative and possessive predication.

'The one who is now the king has in his stable seven hundred and more horses.' (CIPM,CRB[22])

The locative constructions in Portuguese employ the stage-level<sup>10</sup> and locative copula *estar*, as shown in (16).

(16) a gente que dentro na fortalleza **estava**, hera muyta DEF.FSG people COMP inside in fortress be:3sg.ipfv.pst be:3sg.ipfv.pst many 'the people that were in the fortress were many' (CIPM:CRB[1])

Since tem is the etymon of tæ, it is surprising that in Portuguese only estar can be used as a locative copula. A possible solution to this problem is to assume a convergence of the functions of estar and ter under the present-tense form of the verb ter.<sup>11</sup> For instance, in (15) the location of the possessums is indicated by na sua estrebaria 'in his stable'. The co-occurrence of ter and an expressed location must have been susceptible to a reanalysis of the functions of ter as locative. Moreover, the verb estar, also attested as [ta] (from esta) in 3sg.prs in colloquial European and Brazilian Portuguese, is phonetically quite close to tem, the etymon of tæ. The phonetic similarity and salience of esta and tem may have played a crucial role in merging their copulative functions in the form tæ in MIP. In Schuchardt's data of MIP the locative copula is most often written as tem (17), especially in basilectal texts.

(17) tudo tem na grande perigo de morte everyone be.prs in big danger of death 'Everyone is in a great danger of death.' (Schuchardt 1882:6-7, lines 50-51)

In existential predicates, Portuguese uses the verb *haver*, which was not inherited by MIP, except for the grammaticalized negative irrealis na(d) from Pt.  $n\tilde{a}o$   $h\acute{a}$  de 'it will/should not be'. The verb *haver* has a fixed form of 3sg, as we can see in (18) where it does not agree with the plural subject.

(18) *em suas terras ha muitos cavallos* in 3PL.POSS:PL countries exist:3SG.PRS many:PL horse:PL 'In their countries there are many horses.' (CIPM:CRB[1])

Despite the standard usage of *haver* for existentials, Portuguese seems to have a tendency towards extending *ter* to existential contexts. Existential *ter* is a feature of Brazilian and African Portuguese varieties, and it is also found in the European Portuguese dialects of Madeira and of Azores (Carrilho and Pereira 2011).<sup>13</sup> As to the standard European Portuguese, it is very common

<sup>&</sup>lt;sup>10</sup>In the terminology of Carlson (1977), stage-level predicates express temporary states or properties of an individual.

<sup>&</sup>lt;sup>11</sup>There is some independent evidence for influences of the Portuguese *estar* on  $t \alpha$ . The verb  $t \alpha$  can also be used as a preverbal imperfective marker in MIP, and in that function it must have been influenced by *estar* used in progressive constructions in Portuguese.

 $<sup>^{12}</sup>$ In some Indo-Portuguese creoles the positive Pt.  $h\acute{a}$  de resulted in an irrealis/future marker, such as a in Daman (Clements and Koontz-Garboden 2002:220) and a(d) in Diu Indo-Portuguese (Cardoso 2013:148).

<sup>&</sup>lt;sup>13</sup>All of the enumerated Portuguese varieties were formed following the Portuguese colonization and expansion in the 15th century.

to find constructions that are ambiguous between the possessive and existential readings (19).<sup>14</sup>

(19) por que tenho Recado que no Cabo de Geez no he necessária for that have:1sg.prs notice comp in:def.msg cape of Geez neg be:3sg.prs necessary mais gente da que tem.

more people than comp have:3sg.prs
'because I have a notice that more people are not necessary in Cabo de Geez — than there already are/than it already has' (Mattos e Silva 2002b:156)

In (19), as noted by Mattos e Silva (2002b), there is a location ('in Cabo de Geez') associated with the verb *tem*, but since there is no overtly pronounced subject before the verb, we cannot determine if 'people' is a possessum or the pivot of an existential construction. The ambiguity exemplified in (19) might have been a fruitful ground for restructuring the otherwise transitive possessive constructions with *ter*.

We can conclude that the locative, existential, and possessive predicates with tx must have been created by merging the functions (and forms) of the Portuguese verbs estar and ter. However, the most important drive for the adoption of all of these functions that are kept separate in Portuguese was the Malayalam influence of the verb unt. As I have shown in the beginning of this section, unt is used in locative, existential, and possessive predicates, with morphosyntactic features parallel to MIP, such as dative subjects in possessive clauses. Table 1 summarizes the comparison of location, existence, and possession in MIP, Malayalam, and Portuguese.

Function	MIP	Malayalam	Portuguese
Possessive	tæ	untə	ter
Locative	tx	uηţə	estar
Existential	tæ	uηţə	haver, (ter)

Table 1: Sources of possessive, locative, and existential functions of tx

#### 3.3 Existence, location, and possession in South Asia

The expression of existence, location, and possession by a single locative or existential copula in MIP diverges drastically from its Portuguese lexifier. In this section, I argue that the reason for such a strong Malayalam influence on these constructions in MIP is a manifestation of an areal feature of South Asia, which can be easily transferred in situations of language contact. I compare the properties of existence, location, and possession in MIP with corresponding properties of other languages of the South Asian area, including other Indo-Portuguese creoles. I show that, regarding locative possession, MIP and other Indo-Portuguese creoles are strongly characterized as South Asian, and therefore distinct from other Portuguese-based creoles.

The connection between existence, location, and possession has been observed in many typologically diverse languages (e.g. Koch 2012; Creissels 2016; Myler 2018). A common pattern

<sup>&</sup>lt;sup>14</sup>Mattos e Silva (2002b) cited this example as coming from her corpus of letters of *Cartas de D. João III* edited by Ford (1931). The example is taken from *Carta 323*, written in 1541 by Fernam d'Alvarez.

exemplifying this connection is the use of the same locative or existential copula in existential, locative and possessive constructions, as is the case in MIP. This pattern is also frequently found in other languages of the South Asian linguistic area. Examples (20)-(22) show the copula *hai* used in a locative (20), existential (21), and a possessive construction with an oblique subject (22) in Hindi.<sup>15</sup>

- (20) ram ghar-mẽẽ hai.
  Ram house-in COP.3SG.PRS
  'Ram is at home'. (Kachru 1968:38)
- (21) kamree-mẽẽ aadmii hai.
  room.obl-in man cop.3sg.prs
  'There is a man in the room.' (Freeze 1992:576)
- (22) larkee-kee paas kuttaa hai.
  boy.obl-gen proximity dog cop.3sg.prs
  'The boy has a dog.' (lit. 'By the boy is a dog.') (Freeze 1992:576)

South Asia has often been classified as one of the big linguistic areas (Emeneau 1956; Masica 1976) whose linguistic features spread by contact and span across Austroasiatic, Dravidian, Indo-Iranian, Tibeto-Burman, Tai languages (Coupe 2018), and even some Austronesian languages. Although the expression of existence, location, and possession by a locative/existential copula has not been extensively analyzed as an areal feature of South Asia, <sup>16</sup> I offer evidence that locative possession is pervasive in various language families of South Asia, including several creole languages.

Locative possessives, as (22) in Hindi, are intransitive possessive constructions with a locative copula and with the possessor typically in an oblique case (Stassen 2013). In these types of constructions in languages of South Asia, the possessor can be in the dative, genitive, or comitative case (Stassen 2009). Examples (23)-(26) show locative possession in three languages from three different language families that belong to the linguistic area of South Asia. Although the case marking can vary depending on the language, all four exhibit the same morphosyntactic pattern glossed by Stassen (2009:50) as *at/to Possessor*, (there) is/exists a Possessee. As visible from the genetic affiliations in examples (23)-(26), locative possession is found in genetically distant languages of South Asia, which provides evidence that it is indeed an areal feature.

(23) Kannada (Dravidian)

Arsar-ig dod aramane ide king-dat big palace exist.3sg.neut.prs

'The king has a big palace.' (Schiffman 1984:95, cited in Stassen 2009:52)

(24) Kurku (Austro-Asiatic, Munda)

Dich-ken khiti bangu 3sg-dat field not.be.prs

<sup>&</sup>lt;sup>15</sup>The transcription used for Hindi follows Freeze (1992) in all examples.

<sup>&</sup>lt;sup>16</sup>Except for quirky (non-nominative) subjects which are often present in possessive constructions (Verma and Mohanan 1990; Bhaskararao and Subbarao 2004).

'He does not have a field.' (Drake 1903:16, cited in Stassen 2009:312)

(25) Hindi (Indo-European, Indo-Aryan)

baccee-kee dããt safeed hãĩ. child.obl-gen.pl teeth white cop.3pl.prs

'The child has white teeth.' (lit. 'The child's white teeth are.') (Freeze 1992:591)

(26) Burmese (Sino-Tibetan, Tibeto-Burman, Burmese-Lolo)

Cunto-hma pai-hsan hyí 1sg-at money exist

'I have money.' (Okell 1969:130, cited in Stassen 2009:52)

The feature of locative possession is also included in the database of The Atlas of Pidgin and Creole Language Structures (APiCS). Four South Asian creoles are included in the sample of 75 creoles analyzed for the feature *Predicative possession* (Michaelis and the APiCS Consortium 2013). Three of these creoles are Portuguese-based (Diu Indo-Portuguese, Korlai Indo-Portuguese, and Sri Lanka Portuguese) and one is Malay-based (Sri Lankan Malay). Regarding the feature about predicative possession, all four South Asian creoles have locative possession as a possible construction<sup>17</sup> (Michaelis and the APiCS Consortium 2013). These structures in the South Asian creoles from APiCS and in MIP are exemplified in (27)-(31). As we can see, Korlai Indo-Portuguese has a genitive subject (27), similar to Hindi in (25), while other creoles feature dative subjects. All of them use locative copulas as predicates of possession and follow the pattern *at/to Possessor, (there) is/exists a Possessee* (Stassen 2009:50), mentioned above. It is important to mention that none of the South Asian languages represented in (23)-(25) are substrates or adstrates of the creoles from examples (27)-(31). Thus, the only relationship between Kannada, Kurku, Hindi on the one side, and Diu Indo-Portuguese, Korlai Indo-Portuguese, Sri Lankan Malay, and MIP on the other side is the fact that they are spoken in the geographical area of South Asia.

(27) Korlai Indo-Portuguese

Lvidz su pert mot paisa  $t\varepsilon$ . Lwidz GEN near much money COP.PRS

'Lwidz has a lot of money.' (Clements 2013:40-106)

(28) Diu Indo-Portuguese

*a* mĩ **te** ũ irmã i doy irmãw Go.

DAT 1SG.OBL be/have one sister and two brother Goa

'I have one sister and two brothers in Goa.' (Cardoso 2009:296)

(29) Sri Lanka Portuguese

 $<sup>^{17}\</sup>mbox{To}$  varying degrees, in some creoles it is more common than in others. In APiCS this is indicated by different portions in a pie chart.

eli-**pa** trees fεεmiya irumaam-s **(teem)** 3MSG-DAT three female sibling-PL (PRS.be)

'He has three sisters.' (Smith 2013:41-130)

(30) Sri Lankan Malay

Itu oorang-na tangang ka punnung rambut aða. that person-dat hand/arm in much hair exist

'That man has a lot of hair on his arms.' (Slomanson 2013:66-129)

(31) Malabar Indo-Portuguese

Anthony= $k \rightarrow dos \ f \approx mi \ krans \sim krans \rightarrow t \approx$ . Anthony=DAT two female child $\sim$ PL be.PRS

'Anthony has two daughters.' (elicited, 17.1, Cannanore)

In the rest of the sample analyzed for the *Predicative possession* feature in APiCS, only 5 out of the remaining 71 creoles have locative possession as a possible strategy (Michaelis and the APiCS Consortium 2013). Out of the remaining 11 Portuguese-based creoles in the sample, outside of South Asia, only Casamancese Creole has locative possessives as an available strategy. This means that in the case of possessive constructions, South Asian creoles are distinguished from other creoles in the sample by their areal typology. The fact that the Portuguese creoles of South Asia have the intransitive possession of locative/existential 'be' type instead of the transitive possession of 'have' type, 18 unlike Portuguese creoles elsewhere, tells us something important about possession in South Asia. Locative possession, including oblique subjects, is a strong areal feature which is easily transfered in situations of language contact in South Asia, even when the initial language system uses transitive possession.

### 4 Nominal and property-denoting predicates

### 4.1 The verb $t\boldsymbol{x}$ and zero copula

Nominal and property-denoting predicates in MIP can have both overt and zero copulas. In this section I firstly describe the synchronic properties of nominal and property-denoting<sup>19</sup> predicates and in Section 4.2 I explore Portuguese and Malayalam sources that led to the variability in the present system of MIP.

Nominal predicates can have a zero copula or an overt tx. In the present tense, the zero copula is the only grammatical strategy (32), as shown by the agrammaticality of (33), while in the past tense we find both the zero copula (34) and the overt tinha (35).

<sup>&</sup>lt;sup>18</sup>Despite the fact that some creoles still have the 'have' type as a possible strategy.

<sup>&</sup>lt;sup>19</sup>The term *property-denoting*, adopted from Dixon (1982), is used here because of the uncertain categorial status of adjectives in the predicate position. The property-denoting predicates have developed from Portuguese nouns and adjectives, and even today present some characteristics of these two categories.

- (32) minha pay ungə "policeman".1sg.gen father indf policeman'My father is a policeman.' (elicited, 02.1, Cannanore)
- (33) \*isti ungə igreja tæ.
  this INDF church be.PRS
  \*"This is a church." (elicited, 17.1, Cannanore)
- (34) minha pay polis əmi madansə.

  1sg.gen father police man before
  'My father was a policeman a long time ago.' (elicited, 03.2, Cannanore)
- (35) *eli madansə bə əmi tini.*3MSG.NOM before good man be.PST
  'He was a good man.' (elicited, 17.1, Cannanore)

In both nominal and property-denoting predicates the choice of zero or overt copula is in part governed by tense.<sup>20</sup> In property-denoting predicates the overt copula frequently appears in temporal references other than the present, cf. (36) for past and (37) for the future.

- (36) mænga tv=vendæ fæmi bəmba pikæn tinhi.
  mango ipfv.prs=sell girl very small be.pst
  'A girl that sold me mangoes was very small.' (elicited, 09.3, Cannanore)
- (37) [Context: My younger sister is having a baptism. I really want to go.] aka yo nuka vay sə bəmba sintamæntə lə=tæ. that 1sg.nom neg.pst go cond very sad IRR=be

  'If I don't go I will be sad.' (19.1, Cannanore)

In property-denoting predicates, a zero copula is attested both in the past and in the present reference, as in (38). Moreover, there are other specific constructions in which the usage of tæ is preferred or obligatory even in the present. An example like (39) is a typical zero-copula construction, but in comparative constructions like (40), the usage of tæ seems to be obligatory or at least highly preferred. In the remainder of this section I discuss the types of property-denoting predicates that prefer overt tæ.

- (38) Cochin madantə bəm erni, bəm erni, agəra bəmba mizerar.

  Cochin before very quiet very quiet now very bad

  'Cochin used to be very quiet, but now it is very bad [busy].' (elicited, 05.2, Cochin)
- (39) nosa portugeza altə, bosa pisin pikæn.

  1PL.GEN Portuguese tall 2.GEN a.bit small

  'Our Portuguese women are tall, yours are a bit short.' (07.3, Cochin)
- (40) Olivia nosa maz kurtə tæ.
  Olivia 1pl.gen more short be.prs
  'Olivia is shorter than us.' (elicited, 14.1, Cannanore)

<sup>&</sup>lt;sup>20</sup>It is typologically very common for the present tense to have an obligatory zero copula, while other tenses might require an overt copula to varying degrees (see Hengeveld 1992). Stassen (1994) calls this a *Present Parameter*.

There are two types of property-denoting predicates that seem to highly prefer overt tx: comparative constructions (40) and etymological nouns used as property-denoting predicates.<sup>21</sup> Based on the data in the corpora, it seems that whenever these nouns are used as property-denoting predicates, the copula is obligatorily overt. Compare example (41), which has the etymological noun idadi (< Pt. idade 'age') and the overt copula, with (42), where the etymological adjective vxlhi (< Pt. vxlho 'old') and zero copula are used.

(41) [Context: The interlocutor asks the speaker: How old is this house? And the speaker answers:]

```
isti kaza=pə ungə oytænta idadi lə=tæ. this house=dat indf eighty age irr=be
```

'This house is around eighty years old.' (07.3, Cochin)

(42) isti kaza bəmba **vælhi**. this house very old 'This house is very old.' (elicited, 09.4, Cannanore)

Although zero-copula constructions with etymological adjectives are much more frequent in the corpora, these adjectives often allow both zero (43) and overt copula (44).

- (43) aka pres grandi.
  that price big
  'That price is high.' (05.1, Cannanore)
- (44) nosa kaza grandi tæ.

  1PL.GEN house big be.PRS

  'Our house is big.' (elicited, 17.1, Cannanore)

Table 2 summarizes the presence or absence of the copula as described in this section.

Table 2: Nominal and property-denoting predicates in MIP

Predicate	Present tense	Other than present tense
Nominal	Zero copula	Zero and overt copula
Property-denoting	Zero and overt copula	Zero and overt copula

<sup>&</sup>lt;sup>21</sup>That is to say words that are nouns in Portuguese, but whose synchronic status in MIP is not entirely clear because they are used with property-denoting meanings often associated with adjectives. Since I do not wish to make claims about the synchronic status of property-denoting words as either adjectives or nouns in MIP, I use the terms "etymological nouns" and "etymological adjectives", referring to their categorial status in Portuguese.

# 4.2 Malayalam and Portuguese sources for nominal and property-denoting predicates

In this section I analyze the Malayalam and Portuguese sources that contributed to the usage of  $t\omega$  and zero copula in nominal and property-denoting predicates in MIP. I show that although from a synchronic perspective the distribution of  $t\omega$  seems to be random, it is in fact governed by specific Malayalam and Portuguese influences.

The copula used with nominal predicates in Portuguese is the individual-level<sup>22</sup> verb ser (45). Although no form of this Portuguese verb has been attested in modern MIP, we find it in Schuchardt's acrolectal data (see (50) below).<sup>23</sup>

(45) grão senhor, que **he** rey de Serigapatão great sir COMP be:3sg.prs king of Serigapatão 'A great sir, who is the king of Serigapatão.' (CIPM:CRB[9])

In Malayalam, nominal predicates include the copula  $aa\eta a$ , which can be either expressed or omitted, as shown in (46). Asher and Kumari (1997) note that the zero copula is more common in the present tense, but it is also possible in the past tense.

(46) avan (oru) tiiccar (aaqə).

3MSG.NOM DET teacher be.PRS
'He is a teacher.' (Asher and Kumari 1997:97)

The availability of zero copula in Malayalam must have influenced the fact that MIP nominal predicates in the present tense are ungrammatical with an overt copula in MIP. Moreover, the phonological 3sg form of the verb *ser* as  $[\varepsilon]$  in Portuguese is not salient, which could have facilitated its omission in MIP, at least in the modern variety studied here.

Property-denoting predicates in MIP display a similar behavior to nominal predicates, except that the copula tx can be overt even in the present tense. Although the zero-copula strategy (47) is more frequent than the overt copula, we also find the overt tx/tinha, as in (48). The usage of the copula seems to be preferred particularly in certain constructions. This preference has been attested in comparative constructions (40) and with words that are etymologically Portuguese nouns – altura < Pt. altura 'height' in (48). Below I offer a possible contact-based explanation for this preference.

- (47) nosa portugeza altə, bosa pisin pikæn.

  1PL.GEN Portuguese tall 2.GEN a.bit small

  'Our Portuguese women are tall, yours are a bit short.' (07.3, Cochin)
- (48) nɔzə bəmba altura tæ.

  1PL.NOM much height be.PRS

  'We are very tall.' (elicited, 2.1, Cannanore)

In cases like (47) and (48), Portuguese employs the individual-level copula *ser* mentioned above. In Portuguese, the stage-level *estar* is also possible if the intended reading is that of a temporary

<sup>&</sup>lt;sup>22</sup>In the terminology of Carlson (1977), the individual-level predicates express defining properties of an individual.

<sup>&</sup>lt;sup>23</sup>This could indicate that the verb *ser* coexisted with the basilectal zero copula in MIP or that it was used in the written form due to the knowledge of European Portuguese (see also Cardoso 2014b).

state of the subject. In Schuchardt's data, the property-denoting predicates also vary between the zero copula (49), he (50) (< Pt. 3sg.prs of ser) for individual-level predicates, and estar (acrolectal) or tem (< Pt. 3sg.prs of ter) for stage-level predicates (51). At the end of this section, it will be shown that even in modern MIP there is a preference for an overt tæ with certain stage-level predicates.

- (49) esti anno inverno muito forti.
  this year winter very strong
  'This year the winter is very strong.' (Schuchardt 1882:7, line 77)
- (50) pouco car he
  little expensive be.prs
  'It is bit expensive.' (Schuchardt 1882:5, line 10)
- (51) eu tem muito fatigado. 1sG be.prs very tired 'I am very tired.' (Schuchardt 1889:517, line 33)

In Malayalam, property-denoting predicates can be formed as two different constructions. In the first one, the property-denoting concepts<sup>24</sup> are "nominalized" with the morphology of number and gender and marked with the copula  $aa\eta a$  (Asher and Kumari 1997; Menon 2012), as shown in (52). The second one is a possessive construction with the copula  $u\eta t a$ , where the property-denoting concept is a noun that is the possessum of the possessor in the dative case (53).

- (52) aval nalla-val aana.

  3FSG.NOM good-F.SG be.PRS

  'She is good.' (Lit 'She is one being good/having goodness.')<sup>25</sup> (Menon and Pancheva 2014:292)
- (53) avalkkə pokkam untə.

  3FSG:DAT tallness be.PRS

  'She is tall.' (Lit. 'To her there is tallness.') (Menon and Pancheva 2014:294)

Comparative constructions in Malayalam are formed with the possessive property-denoting predicate with the copula  $u\eta t \partial$ , as shown in (54).

(54) enikkə avanre atra pokkam untə.

1sG:DAT 3MSG:GEN that.much height be.PRS

'I am as tall as him.' (Lit. 'To me there is as much tallness as to him.') (Asher and Kumari 1997:173)

While some property-denoting predicates in MIP have an adjectival origin, others are nouns etymologically. This is frequently attested in comparative constructions, such as (55), but also in expressing properties in general. In (41), repeated here as (56), the property of being of a certain age is expressed by the noun idadi 'age' and the overt copula tx. Although this is not the

<sup>&</sup>lt;sup>24</sup>For the issue of whether Malayalam has a productive class of adjectives see Menon (2012), Menon and Pancheva (2014), Francez and Koontz-Garboden (2016), and Menon (2016).

<sup>&</sup>lt;sup>25</sup>This example is translated as 'She is one being good' by Menon (2012:162) and 'She is one having goodness' by Menon and Pancheva (2014:292).

case with all property-denoting predicates in MIP (48), in (56) the subject is dative, which indicates we are dealing with a possessive construction. Interestingly, the etymological nouns used as property-denoting predicates are attested exclusively with the overt copula. This shows that they are formally distinguished from etymological adjectives, which more frequently form predicates with the zero copula (42).

- (55) eləfənti nəsa mazə altura tæ.
  elephant 1PL.GEN more height be.PRS
  'Elephants are taller than us.' (elicited, 02.1, Cannanore)
- (56) [Context: The interlocutor asks the speaker: How old is this house? And the speaker answers:]

```
isti kaza=pə ungə oytænta idadi lɔ=tæ.
this house=DAT INDF eighty age IRR=be.PRS
```

'This house is around eighty years old.' (07.3, Cochin)

Table 3 offers a list of all attested pairs of etymological adjectives and nouns. However, there are many property-denoting words that are attested only as etymological nouns (e.g sintamæntə 'sad' < Pt. sentimento 'feeling') or only as adjectives (e.g. grandi 'big' < Pt. grande 'big'), and are therefore not presented in Table 3.

Table 3: Pairs of nouns and adjectives and their etymology

MIP noun	MIP adjective
idadi 'age' < Pt. idade 'age'	vælhi 'old' < Pt. velho 'old'
altura 'height' < Pt. altura 'height'	altə 'tall' < Pt. alto 'tall'
forsa 'strength' < Pt. força 'strength'	forti 'strong' < Pt. forte 'strong'
kentur 'warmth' < Pt. quentura 'warmth'	kenti 'warm' < Pt. quente 'warm'

This discussion leads us to assume that property-denoting possessive constructions with *unta* in Malayalam influenced MIP so profoundly that MIP also adopted Portuguese nouns as a part of the property-denoting possessive construction. Indeed, the morphosyntactic parallelism between MIP and Malayalam in example pairs (57)-(58) and (59)-(60) is striking: the case assignment<sup>27</sup> and the usage of the copula is almost identical. However, these examples also show that etymological adjectives can be used equally well with the overt copula. Both *alægri* (< Pt. *alegre* 'joyful') and *kumprid* (< Pt. *cumprido* 'long') are etymologically adjectives, while *santooṣam* and *pokkam* are nouns in Malayalam. Since comparative constructions in MIP are attested only with the overt copula, the best explanation is that MIP modeled its comparative constructions on Malayalam by

<sup>&</sup>lt;sup>26</sup>Although two columns in Table 3 state 'MIP noun' and 'MIP adjective', I do not wish to attribute them either of those categories as a synchronic label. Further research will show whether this distinction is held synchronically in MIP, apart from the differential behavior in the predicate position.

<sup>&</sup>lt;sup>27</sup>In (57) the dative case of the experiencer subject could also be triggered by the emotive meaning of the predicate (see Cardoso 2014a).

following the overt expression of the copula *untə* and putting the point of comparison in the genitive case (59)-(60). However, MIP did not maintain the obligatory dative case of the subject, as is the case in Malayalam. Thus, despite not being completely congruent with Malayalam, comparative constructions in MIP must have been at least partially modeled on Malayalam morphosyntax.

- (57) yo lɔgə chega sə, pærmi bəmba alægri tæ.

  1sg.nom fast come cond 1sg.dat very happy be.prs

  'If I get there fast, I am very happy.' (elicited, 17.1, Cannanore)
- (58) niŋŋal vannatil enikkə santooşam untə.
  2SG.NOM come:PST:NMLZ:LOC 1SG.DAT happiness be.PRS
  'I am glad you came.' (Asher and Kumari 1997:44)
- (59) Olivia æl=sə irma=sə astantə kumprid tæ.
  Olivia 3fsg=gen daugther=gen as.much tall be.prs
  'Olivia is as tall as her sister.' (Cardoso 2006-2015:14.1)
- (60) enikkə avanre atra pokkam untə.

  1SG:DAT 3MSG:GEN that.much height be.PRS

  'I am as tall as him.' (Lit. 'To me there is as much tallness as to him.') (Asher and Kumari 1997:173)

Another factor contributing to the variability of the copula in property-denoting predicates are conventionalized structures, which can explain why certain expressions usually have the overt copula, and others do not. For instance, while in (61) and (62) the adjectives *bɔ* and *sigur* express temporary physical or mental states, *grandi* and *prigiz* in (63) and (64) express more permanent individual-level properties of the subject.

- (61) padrə no=tæ bə, hospital dæntrə tæ.

  priest neg=be.prs good hospital loc be.prs

  'The priest is not well, he is in the hospital.' (05.1, Cannanore)
- (62) pæmi sigur nu=tæ.1sg.dat sure Neg=be.prs'I am not sure.' (elicited, 02.4, Cannanore)
- (63) aka pres **grandi**. that price big 'That price is high.' (05.1, Cannanore)
- (64) aka rapaz bəmba **prigiz**, nu=te prenda. this boy very lazy NEG=IPFV.PRS study 'This boy is very lazy, he doesn't study.' (15.2, Cannanore)

The distinction between stage-level and individual-level copula properties is grammatically indicated in Portuguese by the choice of the copulas *estar* and *ser* respectively.<sup>28</sup> Although this distinction does not seem to be fully integrated in the system of MIP,<sup>29</sup> it left a trace in the form

 $<sup>^{28}</sup>$ The distinction between the stage-level meanings of *estar* and individual-level meanings of *ser* is attested as a feature of 16th-century Portuguese (Mattos e Silva 2002a).

<sup>&</sup>lt;sup>29</sup>This is to say that the stage and individual-level meanings do not correspond discretely to the presence and the

of conventionalized constructions like (61) and (62), where *estar* would be used in Portuguese, as in (65) and (66), respectively.

- (65) O padre não **está bem**.

  DEF.MSG priest NEG be:3SG.PRS well

  'The priest is not well.' (Constructed by the author)
- (66) Ele não **está seguro** da sua decisão.

  3MSG NEG be:3SG.PRS sure of:DEF.FSG 3SG.POSS:FSG decision

  'He is not sure about his decision.' (Constructed by the author)

The Portuguese input in MIP formation must have contained both ser and estar used with adjectival predicates. In the case of nominal predicates, ser must have been much more dominant because nominal predicates typically express individual-level meanings. Thus, MIP acquired the zero-copula strategy for nominal predicates in the present tense, probably influenced by the Malayalam possibility of omission of the copula in similar structures. The copula tæ then pragmatically extended its usage to past tense contexts in order to allow tense disambiguation. And finally, property-denoting predicates in MIP were influenced by two diachronic developments: Pt. ser > MIP zero copula, Pt. estar > MIP tæ.<sup>30</sup> This allowed for a variable input which resulted in both the zero and overt-copula strategies being available in morphosyntactically similar structures. However, depending on the construction, MIP was influenced both by the Portuguese estar (in temporary states) and by the Malayalam possessive constructions with  $u\eta to$ , including comparative constructions. Such conventionalized constructions maintained the overt tæ, while others might have a variable appearance of the copula. Table 4 summarizes the comparison of nominal and property-denoting predicates in MIP, Malayalam, and Portuguese.

Table 4: Nominal and property-denoting copulas and respective sources

Function	MIP	Malayalam	Portuguese
Nominal predicates present	Ø	aanə/ø	ser
Nominal predicates past	tinha/ø	aanə/ø	ser
Property-denoting predicates	tæ, tinha/ø	untə/aanə/ø	ser/estar

The case of  $t\omega$  in nominal and property-denoting predicates shows how variability can be accounted for when a diachronic and a contact-based approach are adopted. Despite the seeming complexity of the MIP copula system, specific Malayalam and Portuguese influences can be identified as governing factors for the appearance or the omission of the copula  $t\omega$ .

absence of the copula tæ.

<sup>&</sup>lt;sup>30</sup>These developments could have happened early in the process of creolization and/or later within the creole continuum, in which case the acrolectal varieties would have shifted towards the basilectal varieties. I thank an anonymous reviewer for commenting on this.

#### 5 Conclusion

This paper focused on two topics: a) origins of predicative expression of existence, location, and possession in MIP, and b) origins of variability of copula usage in nominal and property-denoting predicates.

I have shown that the expression of existence, location, and possession by the copulative verb tx in MIP is highly influenced by the the same functions of the Malayalam verb  $u\eta t$  (Section 3). However, different types of reanalysis of the Portuguese etymon tem 'has' and the convergence with the locative copula estar are shown to be additional important factors for the development of its meanings. I also argued that the usage of a single copulative verb to express existence, location, and possession is an areal feature of South Asia. The feature of locative possession is present in genetically diverse languages of South Asia and in the APiCS creole sample it is basically restricted to the creoles of South Asia, which shows its pervasiveness in situations of language contact.

The variability of  $t extbf{x}$  as a copula in nominal and property-denoting predicates, discussed in Section 4, was shown to be governed by different Malayalam and Portuguese diachronic sources. While nominal predicates followed the single development of Pt. ser > MIP zero copula, property-denoting predicates were additionally influenced by Pt. estar > MIP  $t extbf{x}$ , and by Malayalam  $u extbf{n} t extbf{a}$  used in property-denoting possessive constructions. One of the most striking features of Malayalam influence on property-denoting predicates in MIP is the existence of etymologically Portuguese nouns expressing properties in the predicate position.

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#### References

Asher, Ronald E. and T. C. Kumari. 1997. Malayalam. London: Routledge.

Bakker, Peter, Aymeric Daval-Markussen, Mikael Parkvall and Ingo Plag. 2011. Creoles are typologically distinct from non-creoles. In Parth Bhatt and Tonjes Veenstra (eds.), *Creoles and typology, Special issue of Journal of pidgin and creole languages*, vol. 26, 5–42.

Bhaskararao, Peri and Karumuri Venkata Subbarao. 2004. *Non-nominative subjects*. Amsterdam: John Benjamins.

Cardoso, Hugo C. 2006-2015. Oral corpus of Cannanore Indo-Portuguese creole. Unpublished.

Cardoso, Hugo C. 2007-2010. Oral corpus of Vypeen [Cochin] Indo-Portuguese creole. Unpublished.

- Cardoso, Hugo C. 2009. The Indo-Portuguese language of Diu. Utrecht: LOT.
- Cardoso, Hugo C. 2012. Luso-Asian comparatives in comparison. In Hugo C. Cardoso, Alan N. Baxter and Mário Pinharanda Nunes (eds.), *Ibero-Asian creoles: Comparative perspectives*, 81–123. Amsterdam: John Benjamins.
- Cardoso, Hugo C. 2013. Diu Indo-Portuguese. In Susanne Maria Michaelis, Philippe Maurer, Martin Haspelmath and Magnus Huber (eds.), *The survey of pidgin and creole languages. Volume 2: Portuguese-based, Spanish-based, and French-based Languages*, Oxford: Oxford University Press. http://apics-online.info/surveys/39 (accessed 14 March 2018).
- Cardoso, Hugo C. 2014a. Convergence in the Malabar: The case of Indo-Portuguese. University of Lisbon, Ms.
- Cardoso, Hugo C. 2014b. Factoring sociolinguistic variation into the history of Indo-Portuguese. *Revista de Crioulos de Base Lexical Portuguesa e Espanhola* 5. 87–114.
- Cardoso, Hugo C. 2014c. The case of addressees in Dravido-Portuguese. PAPIA 24(2). 307-342.
- Cardoso, Hugo C. 2014d. The Indo-Portuguese Creoles of the Malabar: historical cues and questions, Ms. In Pius Malekandathil (ed.), *Minutes of the XIV international seminar on Indo-Portuguese history*, Primus Books.
- Cardoso, Hugo C. 2015. *Vector verbs in Malabar Indo-Portuguese.* Paper presented at 31st South Asian Languages Analysis Roundtable, Lancaster University, 14 16 May.
- Cardoso, Hugo C., Alan N. Baxter and Mário Pinharanda Nunes (eds.). 2012. *Ibero-Asian creoles: Comparative perspectives*. Amsterdam: John Benjamins.
- Carlson, Gregory. 1977. Reference to kinds in English: University of Massachusetts dissertation.
- Carrilho, Ernestina and Sandra Pereira. 2011. Sobre a distribuição geográfica de construções sintácticas não-padrão em português europeu [About the geographical distribution of non-standard syntactic constructions in European Portuguese]. *Textos seleccionados do XXVI Encontro Nacional da Associação Portuguesa de Linguística. Lisbon: APL* 125–139.
- Clements, J. Clancy. 2012. Notes on the phonology and lexicon of some Indo-Portuguese creoles. In Hugo C. Cardoso, Alan N. Baxter and Mário Pinharanda Nunes (eds.), *Ibero-Asian creoles: Comparative perspectives*, 15–46. Amsterdam: John Benjamins.
- Clements, J. Clancy. 2013. Korlai structure dataset. In Susanne Maria Michaelis, Philippe Maurer, Martin Haspelmath and Magnus Huber (eds.), *Atlas of pidgin and creole language structures online*, Leipzig: Max Planck Institute for Evolutionary Anthropology. http://apics-online.info/contributions/40 (accessed 14 March 2018).
- Clements, J. Clancy and Andrew J. Koontz-Garboden. 2002. Two Indo-Portuguese creoles in contrast. *Journal of Pidgin and Creole Languages* 17(2). 191–236.
- Correia, José M. 1997. Os portugueses no Malabar (1498–1580) [The Portuguese in Malabar (1498–1580)]. Lisbon: Imprensa Nacional Casa da Moeda.
- Coupe, Alexander R. 2018. Grammaticalization processes in the languages of South Asia. In Heiko Narrog and Bernd Heine (eds.), *Grammaticalization from a typological perspective*, 189–218. Oxford: Oxford University Press.
- Creissels, Denis. 2016. *Existential predication in the world's languages*. Paper presented at the Workshop between EXISTENCE and LOCATION, University of Tübingen, 1–2 December 2016.

- Dixon, Robert M. W. 1982. *Where have all the adjectives gone? And other essays in semantics and syntax.* The Hague: Mouton de Gruyter.
- Drake, John. 1903. A grammar of the Kurku language. Calcutta: Baptist Mission Press.
- Emeneau, Murray B. 1956. India as a linguistic area. Language 32(1). 3-16.
- Ford, Jeremiah Denis Matthias (ed). 1931. *Letters of John III, King of Portugal: 1521-1557.* Cambridge: Harvard University Pres.
- Francez, Itamar and Andrew Koontz-Garboden. 2016. Malayalam property concept sentences and the locus of variation. In Rahul Balusu and Sandhya Sundaresan (eds.), *Proceedings of formal approaches to South Asian languages* 5, 21–35. https://ojs.ub.uni-konstanz.de/jsal/index.php/fasal/article/viewFile/88/50 (accessed 30 April 2019).
- Freeze, Ray. 1992. Existentials and other locatives. *Language* 68(3). 553–595.
- Heine, Bernd. 1997. *Possession: Cognitive sources, forces, and grammaticalization.* Cambridge: Cambridge University Press.
- Hengeveld, Kees. 1992. Non-verbal predication. Berlin: Mouton de Gruyter.
- Holm, John. 2000. An introduction to pidgins and creoles. Cambridge: Cambridge University Press.
- Kachru, Yamuna. 1968. The copula in Hindi. In John W. M Verhaar (ed.), *The verb 'be' and its synonyms*, vol. 2, 35–59. Dordrecht: D. Reidel.
- Koch, Peter. 2012. Location, existence, and possession: A constructional-typological exploration. *Linguistics* 50(3). 533–603. doi:10.1515/ling-2012-0018.
- Krajinović, Ana. 2015. O sistema verbal dos crioulos indo-portugueses do Malabar [The verbal system of Indo-Portuguese creoles of Malabar]. Universidade de Lisboa. MA thesis.
- Krajinović, Ana. 2017. Influence of Malayalam on temporal clauses in Malabar Indo-Portuguese. *Language Ecology* 1(2). 137–157.
- Krajinović, Ana. 2018. *Malabar Indo-Portuguese: Structure and origins of the verbal system.* München: Lincom.
- Lopes, David (ed.). 1897. *Chronica dos Reis de Bisnaga [The chronicle of the kings of Bisnaga].* Lisbon: Imprensa Nacional.
- Masica, Colin P. 1976. *Defining a linguistic area: South Asia.* Chicago: University of Chicago Press.
- Menon, Mythili. 2012. The apparent lack of adjectival category in Malayalam and other related languages. In Nobu Goto, Koichi Otaki, Atsushi Sato and Kensuke Takita (eds.), *The Proceedings of Generative linguistics in the old world (GLOW) in Asia IX*, 157–171.
- Menon, Mythili. 2016. Building adjectival meaning without adjectives: University of Southern California dissertation.
- Menon, Mythili and Roumyana Pancheva. 2014. The grammatical life of property concept roots in Malayalam. In Urtzi Etxeberria, Anamaria Fălăuş, Aritz Irurtzun and Bryan Leferman (eds.), *Proceedings of Sinn und Bedeutung 18*, 289–302.
- Michaelis, Susanne Maria and the APiCS Consortium. 2013. Predicative possession. In Susanne Maria Michaelis, Philippe Maurer, Martin Haspelmath and Magnus Huber (eds.), *The atlas of pidgin and creole language structures*, Oxford: Oxford University Press. http://apics-online.info/parameters/77 (accessed 14 March 2018).
- Mohanan, Tara and Karuvannur P. Mohanan. 1999. Two forms of BE in Malayalam. In Miriam Butt

- and Tracy Holloway King (eds.), *Proceedings of the LFG99 Conference, Manchester, UK*, Stanford: Center for the Study of Language and Information.
- Myler, Neil. 2018. Complex copula systems as suppletive allomorphy. *Glossa: a journal of general linguistics* 3(1). 1–43. doi:https://doi.org/10.5334/gjgl.214.
- Okell, John. 1969. A reference grammar of colloquial Burmese. Abingdon: Routledge.
- Pradeep, K. 2010. Tribute to Cochin Creole Portuguese. *The Hindu. Kochi. September 26* http://www.thehindu.com/news/cities/Kochi/tribute-to-cochin-creole-portuguese/article795353.ece (accessed 24 September 2015).
- Schiffman, Harold F. 1984. *A reference grammar of spoken Kannada*. Seattle: University of Washington Press.
- Schuchardt, Hugo. 1882. Kreolische Studien II. Über das Indoportugiesische von Cochim [Creole studies II. About the Indo-Portuguese of Cochin]. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften zu Wien (Philosophisch-historische Klasse) 102. 799–816.
- Schuchardt, Hugo. 1889. Beiträge zur Kenntnis des kreolischen Romanisch. VI. Zum Indoportugiesischen von Mahé und Cannanore [A contribution to Romance creoles. VI. About the Indo-Portuguese of Mahé and Cannanore . Zeitschrift für Romanische Philologie 13. 516–524.
- Mattos e Silva, Rosa V. 2002a. A definição da oposição entre ser/estar em estruturas atributivas nos meados do século XVI [The definition of the *ser/estar* opposition in attributive structures in the mid-16th century]. In Rosa V. Mattos e Silva and Américo V. L. Machado Filho (eds.), *O português quinhentista: Estudos lingüísticos*, 103–118. Salvador: EDUFBA/UEFS.
- Mattos e Silva, Rosa V. 2002b. A variação ser/estar e haver/ter nas cartas de D. João III entre 1540 e 1553: comparação com os usos coetâneos de João de Barros [The *ser/estar* variation in the letters of John III between 1540 and 1553: A comparison with the contemporary uses of João de Barros]. In Rosa V. Mattos e Silva and Américo V. L. Machado Filho (eds.), *O português quinhentista: Estudos lingüísticos*, 143–160. Salvador: EDUFBA/UEFS.
- Slomanson, Peter. 2013. Sri Lankan Malay structure dataset. In Susanne Maria Michaelis, Philippe Maurer, Martin Haspelmath and Magnus Huber (eds.), *Atlas of pidgin and creole language structures online*, Leipzig: Max Planck Institute for Evolutionary Anthropology. http://apics-online.info/contributions/66 (accessed 14 March 2018).
- Smith, Ian R. 2013. Sri Lanka Portuguese structure dataset. In Susanne Maria Michaelis, Philippe Maurer, Martin Haspelmath and Magnus Huber (eds.), *Atlas of pidgin and creole language structures online*, Leipzig: Max Planck Institute for Evolutionary Anthropology. http://apics-online.info/contributions/41 (accessed 14 March 2018).
- Stassen, Leon. 1994. Typology versus mythology: The case of the zero-copula. *Nordic Journal of Linguistics* 17(2). 105–126. doi:10.1017/S0332586500002961.
- Stassen, Leon. 2009. Predicative possession. New York: Oxford University Press.
- Stassen, Leon. 2013. Predicative possession. In Matthew S. Dryer and Martin Haspelmath (eds.), *The world atlas of language structures online*, Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/117 (accessed 14 March 2018).
- Verma, Manindra K. and Karuvannur Puthanveettil Mohanan (eds.). 1990. *Experiencer subjects in South Asian languages*. Stanford: Center for the Study of Language and Information.
- Wang, Yong and Jie Xu. 2013. A systemic typology of existential and possessive constructions.

Functions of language 20(1). 1–30.

Xavier, M. Francisca, M. de Lourdes Crispim, Graça Vicente, Maria Lobo, M. Alexandra Fiéis, M. Cristina Silva, Ana Castro, Sandro Dias, M. de Fátima Martins, João Loureiro, Ana Espírito Santo and Raquel Oliveira. 2003. Corpus informatizado do português medieval [Digital corpus of medieval Portuguese]. http://cipm.fcsh.unl.pt/gencontent.jsp?id=4 (accessed 29 July 2016).