



# Macanese Negation in Comparative Perspective: Typology and Ecology

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#### **Abstract**

Macanese, the near-extinct Portuguese creole of Macao, is an Asian Portuguese Creole language closely related to Malaccan Papia Kristang. In this paper, I argue that a distinctive feature of Macanese *vis-à-vis* other Asian Portuguese Creoles is its system of negation; specifically, its usage of the negators *nunca* and *nádi*. Negators deriving from Portuguese *nunca* 'never' and *não há-de* 'shall not' are attested in several Asian Portuguese Creoles: while their usage varies considerably, the former usually acts as the negator for realis predicates, whereas the latter typically negates irrealis predicates. In this paper I argue that, differently from other Asian Portuguese Creoles, Macanese *nunca* is also the only available negator for adjectival and nominal predicates, independently from TAM features. Through a comparison with other Asian Portuguese creoles, and with the adstrates and substrates of Macanese, I also discuss the possible origin of these features.

## Keywords

Asian Portuguese creoles – irrealis – Macanese – Makista – negation – Patuá

#### ı Introduction\*

The Macanese language, also known as Maquista/Makista, but often referred to by its local name (autonym) patuá (Chin. 澳門土語 Àomén tǔyǔ or 澳葡土生土語 Ào-Pú tǔshēng tǔyǔ), is the near-extinct Portuguese-based creole of Macao. It is a language associated with the Macanese (Port. macaense, Mac. maquista) people, i.e., the people of mixed Portuguese and (mainly) Asian descent whose roots are in Macao (Pinharanda Nunes, 2012a).

Macanese was spoken in the Macanese community roughly until the first half of the xx century. With the gradual diffusion of education in Standard European Portuguese (from the beginning of the xx century) and outward emigration, Macanese underwent decreolization and, eventually, disappeared from everyday use (Pinharanda Nunes, 2014): although exact figures are lacking (to the best of our knowledge), it is safe to assume that there are less than a handful of native speakers left in Macao,¹ although there is a somewhat larger number (perhaps near 50–100) of (semi-)speakers with varying degrees of fluency, possibly also among members of the Macanese communities in North America, Portugal, Brazil and Australia (Pinharanda Nunes, 2012a-b; p.c. 2016). While there are at present activities aimed at preserving Macanese, notably involving the *Dóci Papiaçám di Macau* ('sweet language of Macau') theatre group,² and even language courses offered by the *Universidade de São José* in Macao,³ its use in everyday life is extremely limited.

<sup>\*</sup> Traditional characters have been used as a default for Sinitic languages. For the Macanese data, we use the orthography devised by José dos Santos Ferreira as a default, but quoted examples are in the transcriptions provided by the sources. For Mandarin Chinese, we use the *Pinyin* romanization system; for Cantonese, we use the *Yale* romanization; for Hokkien, we use the *Taiwanese Romanization System* (臺羅拼音 *Tâi-lô Phing-im*). For all other varieties, we use the transcriptions as provided by the sources. The glosses follow the general guidelines of the *Leipzig Glossing Rules* (additional gloss: SFP 'sentence-final particle'). List of abbreviations: APC = Asian Portuguese Creole; Chin. = Mandarin Chinese; Eng. = English; Mac. = Macanese; Port. = Portuguese; TSYK = *Ta-Ssi-Yang-Kuo*.

<sup>1</sup> For instance, in an interview published in the 1/12/2010 issue of the English-language newspaper *The Macau Post Daily, patuá* scholar Alan Norman Baxter suggested that, at the time, there were "maybe about four to five dominant Patua speakers" in Macao. Lebel suggests that "functional L1 speakers" of the creole no longer exist nowadays (2018: 160).

<sup>2</sup> Some of their video clips are freely available at the *Dóci Papiaçám di Macau* Youtube channel: www.youtube.com/channel/UCxRaAKi5QGPlfGi3Vbr8Ngg (last access: 28/7/2019).

<sup>3</sup> https://www.usj.edu.mo/en/courses/patua/ (last access: 16/8/2018). A course module in "Patuá - Macau's creole" is now also offered as part of the curriculum for the "Master of Lusophone Studies in Linguistics and Literature" at São José (https://www.usj.edu.mo/en/courses/ma-lusophone-studies-linguistics-literature/; last access: 25/7/2019).

Macanese shares many key features with other Asian Portuguese Creoles: for instance, the postnominal genitive marker -sa, and the typical preverbal TAM markers já 'PFV' (< Port. já 'already'), tá 'PROG' (< estar 'be, stay') and lôgo | lô 'FUT/IRR' (< logo 'soon'; Pinharanda Nunes and Baxter, 2004; Ansaldo and Cardoso, 2009). Among APCs, Macanese most closely resembles Malaccan Papia Kristang (see Baxter, 1996; Ansaldo, 2009; Cardoso, 2012; Pinharanda Nunes, 2012a-b): actually, Macanese has sometimes been seen as the continuation of Kristang in Macao (Tomás, 2009; Pinharanda Nunes, 2014; see below, Section 3.1). Perhaps unsurprisingly, Macanese is also the APC which was arguably most influenced by Sinitic languages (specifically, Hokkien and Cantonese; see Pinharanda Nunes, 2008; Arcodia, 2017; Lebel, 2018), although the role of Sinitic has often been downplayed in the literature (see Tomás, 1988; Cardoso, 2012).

In this paper, I argue that a distinctive feature of Macanese *vis-à-vis* other Asian Portuguese Creoles, especially Kristang, is its system of negation; specifically, its usage of the negator nunca for adjectival and nominal predication ('ascriptive negation'; see below, Section 2). A negator deriving from Portuguese nunca 'never' is attested in several Asian Portuguese Creoles, as well as (arguably) in some African Portuguese Creoles, and even in some dialects of European Portuguese<sup>4</sup> (Teyssier, 1986). While its usage varies considerably, one of the features of *nunca* is that it negates states of affairs in the past, as e.g., Malabar Creole Portuguese nuka (Krajinović, 2018: 69), or in the past and present, as Kristang *ńgka*/*nungka* (Baxter, 1988: 138; see below, Section 5.1); Macanese nunca too is either seen as a negator for the past (Ferreira, 1978), or for both, past and present (Pinharanda Nunes, 2011; Lebel, 2018). These negators are generally opposed to forms deriving from Portuguese não há-de 'shall not' (Ansaldo and Cardoso, 2009: 4), as e.g., Macanese and Kristang nádi, negators for irrealis predicates (Ferreira, 1978: 30; Baxter, 1988: 141). Compare the following Macanese examples.

(1) acunga noite, eu nunca vai that night ISG NEG go 'On that night, I didn't go' (Pinharanda Nunes, 2011: 379)

<sup>4</sup> Indeed, 'never' evolved into a negator also in some varieties of English (see Lucas and Willis, 2012), as well as in some English-based creoles, as e.g., in Belizean Creole English (for past tense; see Kortmann, Lunkenheimer and Ehret, 2020).

(2) iou nádi vai co vôs 1SG NEG.IRR go with 2SG 'I won't go with you' (Ferreira, 1978: 30)

In what follows, I will argue that the different reality status of negators does not apply to adjectival and nominal predication in Macanese: *nunca* is virtually the only marker for this subtype of negation, independently from TAM features. See e.g., example (3), in which the state of affairs negated (namely, being a beach) is located in the future, in an irrealis context.<sup>5</sup>

(3) quando nom tem mar, certo já nunca sam praia when NEG there.be sea sure already NEG COP beach 'when there is no sea, it sure won't be a beach' (Mas um-a disgraça, 1887; in Pereira, 1899–1901)

Through a comparison with other APCs, and with the adstrates and substrates of Macanese, I will also discuss the possible origin of this pattern of usage for *nunca*.

The paper is organized as follows. Firstly, I will provide a brief sketch of a typology of negation, based on Veselinova's (2013; 2015a-c) and Miestamo's (2005) work, thus setting the stage for my analysis (Section 2). Secondly, I will elaborate on the history and ecology of Macanese, and I will introduce the corpus on which the present research is based (Section 3). I will then present in detail the evolution of the Macanese negation system, focusing on the functions of *nunca* and *nádi* at different stages of the creole (Section 4). Lastly, I will propose a comparative overview of the systems of negation of a sample of APCs and of the substrates/adstrates of Macanese, discussing the possible pathway(s) of development for Macanese *nunca* (Section 5).

# 2 Theoretical Background: a Typological Overview of Negation

As pointed out by Dahl (2010) and Veselinova (2013; 2015a-c), typological studies of negation have tended to focus on 'standard negation' (see i.e., Miestamo, 2005), defined as 'the negation strategy used in main declarative sentences where the predicate is a full lexical verb' (Veselinova, 2013: 107–108).

<sup>5</sup> Example (3) is taken from a letter, in which the author complains about a land reclamation plan which has not been put into practice yet: this is the reason why we interpret it as referring to the future.

## (4) Mary does not sing

Needless to say, there are several more types of negators in the world's languages, often employing a different strategy from standard negation. The most obvious and clear cases are those in which there is 'a complete formal and constructional difference' between the expression used for standard negation and another type of negation (Veselinova, 2013: 112). However, the differences may be more subtle, and include morphological differences, i.e., formal identity, but different boundedness status (free morpheme in one case, bound morpheme in another), and constructional differences, i.e., formal identity, but different syntactic constructions (Veselinova, 2013: 113–114); there are also cases of 'alternating' strategies for specific types of negation, i.e., both a construction identical to standard negation and another construction, depending on various factors (Veselinova, 2013; 2015a).

In Veselinova's (2015a, 2015c) typology, the following types are included, besides standard negation (my examples).

- a. Ascriptive(/attributive) negation, i.e., 'the negation strategy used in clauses with a nominal predicate (...) or predications of property assignment' (Veselinova, 2015c: 548); this covers 'the predication of inclusion in a certain class', 'the predication of a stable quality', and 'the predication of a temporary state' (Veselinova, 2013: 110)<sup>6</sup>
- (5) a. I am not a footballer. b. John is not tired.
- b. Existential negation, i.e., the negation of clauses 'which state the plain existence of an object' (Veselinova, 2015c: 548)
- (6) There are no tigers in Iceland.
- c. Locative negation, i.e., the negation of clauses which 'specify the location of the predicated entity' (Veselinova, 2013: 108)
- (7) She is not here.
- d. Negation of predicative possession (for a narrow definition, see Stassen 2009)
- (8) Daniel does not have a car.

<sup>6</sup> The label 'ascriptive predication' is also used in Hengeveld (1992), albeit with a broader meaning (see Veselinova, 2013: 142). Mettouchi (2009) labels it as 'identificational negation'.

The term 'stative negator' can refer to a negator which is used for all the four types of predication seen just above (i.e., ascriptive, existential, locative and possessive predication); also, all negators which differ from standard negation may be termed 'special negators' (Veselinova, 2013; 2015c; see below).<sup>7</sup>

Preliminary typological research (on a 96-language sample) by Veselinova (2015a) suggests that special constructions (i.e., distinct from the construction used for standard negation) marking existential negation (b.) seem to be cross-linguistically widespread (but conspicuously rare in the languages of Western Europe and parts of Southeast Asia; Veselinova, 2013: 117); special ascriptive negators (a.) are also quite common, as they are found in nearly a third of the languages of her sample (see below). On the other hand, special negators for predicative possession (d.) seem to be very rare – and, indeed, often special negative existentials also negate predicative possession (as e.g., Turkish *yok*; Göksel and Kerslake 2005; Veselinova, 2013; 2015a). Locative negation (c.) too is often conveyed by the same construction as existential negation, although this association is not as frequent as the identity of existential and possession (Veselinova, 2013; 2015a).

Going back to ascriptive negation, the focus of the present study, its distinctiveness was recognized already in Horn (1989: 451), who highlights that the negator for "negative identity statements" and for "constituent (especially nominal) negation" is often distinct from that used in standard (and existential) negation. Special constructions for this subtype of negation are found in 30 out of the 96 languages in Veselinova's (2015a) sample, as hinted at above. Ascriptive negation is not so strongly associated with another type of negation, as is instead the case for existential and possessive negation: special ascriptive negators are used as a 'general negative copula' in only 7 languages in Veselinova's sample (2013: 119). Also, ascriptive negation seems to overlap to some degree (in 5 out of the 30 languages with special ascriptive negators) with standard negation for the future.

Another important parameter in the analysis of systems of negation is that of symmetry, which is central in Miestamo's (2005) often-quoted work on the typology of (standard) negation. According to Miestamo's analysis, symmetry

<sup>7</sup> In addition to the above, a further subtype of special negation is the so-called 'not-yet' expressions, often described as negators for the anterior or perfect (Veselinova, 2015b), as e.g., Indonesian(/Malay) belum (Sneddon et al., 2010). We shall not deal with this subtype of negation here as there does not seem to be a special 'not-yet' negator in Macanese. Also, we shall not discuss negators of the '(already) no longer'-type: while Macanese does have a specific form for 'no longer', i.e., na-más (< Port. não mais?), we could not find it in an ascriptive construction. This is most likely due to limitations of the data. I would like to thank an anonymous reviewer for pointing this out to me.

may be understood on two levels: constructions and paradigms. Thus, a symmetric negative construction is one in which a negative marker is added, with no further structural changes, whereas in an asymmetric construction, besides the addition of the marker(s) of negation, there are further structural changes (Miestamo, 2005: 52). Compare Italian (9; own knowledge) and Diola Fogny (Niger-Congo; Sapir, 1965: 33, qtd. in Miestamo, 2005: 53).

- (9) a. *Giacinto am-a Lucia*Giacinto love-PRS.1SG Lucia
  'Giacinto loves Lucia'.
  - Giacinto non am-a Lucia
     Giacinto NEG love-PRS.1SG Lucia
     'Giacinto does not love Lucia'.
- (10) a. pan-i-man FUT-1SG-want 'I will want'.
  - b. *let-i-maŋ*FUT.NEG-1SG-want
    'I won't want'.

While in examples (9a-b) the only difference between the affirmative and the negative sentence is the addition of the negator *non* (symmetric), in examples (10a-b) 'marking of the future is affected by negation, since the negative future marker replaces the positive future marker' (asymmetric; Miestamo, 2005; 53).

As to the paradigmatic level, symmetric paradigms, generally speaking, are characterized by 'a one-to-one correspondence between the members of affirmative and negative paradigms' (Miestamo, 2005: 52); asymmetric paradigms, on the other hand, lack this one-to-one correspondence. Italian may be used, again, as an example of symmetric negation, as every verb form can be negated (Miestamo, 2005: 63–64; due to space constraints, we list only a few randomly selected verb forms).

#### (11) Cantare 'to sing'

affirmative negative
PRS.1SG canto non canto
FUT.1PL canteremo non canteremo
PST.2SG cantasti non cantasti

Each affirmative verb form has a negative counterpart in Italian, and hence no distinctions get lost. Other cases may be less clear (see the discussion in Miestamo, 2005: 67–72), but on the whole, the definition of paradigmatic symmetry is quite straightforward.

Paradigmatic asymmetry, on the other hand, occurs when the distinctions made in the affirmative and in the negative are not the same. Often, distinctions get lost in the negative, leading to 'neutralization' (Miestamo, 2005: 54), as in the following Komi-Zyrian example (Uralic; Rédei, 1978: 105–108, qtd. in Miestamo, 2005: 11). In example (12), we can see that the tense distinction between the present (12a) and the future (12b) is lost in the negative: (12c) negates both.

However, neutralization is not the only manifestation of paradigmatic asymmetry: affirmative and negative paradigms, for instance, may be based on a distinct set of TAM values ('different-system asymmetry'; Miestamo, 2005: 54). In fact, asymmetry is a more complex notion than symmetry, in Miestamo's typology. An extensive discussion of the possible asymmetries between affirmative and negative constructions and paradigms is obviously beyond the scope of the present work (and the reader is referred to Miestamo, 2005: 72–162): what we want to stress here is that there are indeed many ways in which asymmetry may surface. A simple case of constructional asymmetry in the TAM domain is the dropping of a TAM marker of the affirmative in the corresponding negative construction, with no replacing counterpart, or the other way around (i.e., 'a marker not used in the affirmative is added in the negative'; Miestamo, 2005: 118). At the paradigmatic level, TAM categories which are available for the affirmative may not be available for the negative; also, the affirmative and negative paradigms can be based on different categories, as e.g., in Swahili, in which '[t]he affirmative and negative TAM-markers categorize the temporal and aspectual properties of an event in different ways' (Miestamo, 2005: 126), and it is not possible to set up a one-to-one correspondence between TAM categories in the affirmative and in the negative.

In short, there are many ways in which asymmetry is manifested in systems of negation. While for the sake of conciseness I chose not to present them exhaustively here, I will refer to Miestamo's typology in what follows, whenever appropriate.

## 3 The Macanese Language: History, Context, Sources

# 3.1 A Historical Overview of the Ecology of Macanese

What is now known as the Macao Special Administrative Region of the People's Republic of China is famous as the last European settlement in Asia, having been returned to Chinese sovereignty only in 1999. Portuguese traders were active in Macao probably already in 1553, although it appears that they became a permanent presence only a few years later, between 1556 and 1557 (Pinharanda Nunes, 2014). By the time of the settlement of Macao, Goa and Malacca had already been occupied for almost fifty years, and the Portuguese had already started developing a trade network in Southern China (Ansaldo, 2009). Tomás (2009: 50) pointed out that the Portuguese presence in Asia 'was based on a network system rather than on the control of a territory for the production of goods', which led to 'cross-pollination' of cultural and linguistic elements among the settlements (see also Ansaldo, 2009: 75). The convergence of features among APCs is easily explained in this context.

It is important to stress the point that the 'Portuguese' traders and settlers in Asia had in fact different backgrounds, and, besides European nobles and merchants, the Portuguese population of Macao included casados, i.e., European Portuguese men married to Asian women from other Portuguese enclaves, often speakers of varieties of Malay (Tomás, 2009; Pinharanda Nunes, 2012b), and *mestiços*, i.e., the mixed-blood offspring of those European-Asian unions (Pinharanda Nunes, 2014: 39). Indeed, the 'Portuguese' population of Macao mostly came from the Asian settlements, often Goa and Malacca, rather than from Europe. This trend became especially strong after the fall of Malacca to the Dutch (1641), which brought large numbers of residents to Macao (Tomás, 2009), and continued well into the 19th century (Pinharanda Nunes, 2012b). Moreover, African slaves were present in significant numbers since the early days of Portuguese Macao, and until the end of the slave trade in the 19th century; we can reasonably assume that they may have had a role in the formation of the Macanese creole (Pinharanda Nunes, 2014: 29). Pinharanda Nunes (2014: 30) describes the linguistic landscape of the Portuguese community in the early days of Macao as such:

[...] the historic and demographic data referenced allow us to envisage a dominant ruling Portuguese society in Macao at that time, composed of a fluctuating minority speaking sixteenth-century European Portuguese. On the other hand, a vast majority was made up of L1 and L2 speakers of Kristang from Malacca, as well as other Asian Portuguese-based Creoles, non-creole Asian varieties of Portuguese, pidginized varieties of creoles

spoken by South and Southeast Asians from regions not occupied by the Portuguese, and varieties spoken by the African slaves who could have been native speakers of African Portuguese-based Creoles as well.

According to Pinharanda Nunes's analysis, the 'vast majority' of speakers of non-standard varieties of Portuguese, creoles, and other languages did not have close contacts with the minority speaking European Portuguese, and hence received little input in the metropolitan Portuguese of the time. In this scenario, it is likely that Kristang had a major role in the formation of Macanese, and perhaps, as hinted at earlier (Section 1), the latter might even be seen as the continuation of the former (Pinharanda Nunes, 2014: 30).

What about the languages spoken by the ethnic Chinese population? The Sinitic languages native to the area surrounding Macao belong to the Yue/Cantonese group (especially, the Zhongshan dialect). However, Hokkienspeaking fishermen and traders were active in Macao too (Baxter, 2009). Actually, in the context of the so-called "China trade", i.e., the trade between China and (some) Western countries between the 16th and the early 20th century, a form of pidginized Portuguese developed as a *lingua franca*: the main ports involved in the early days of the China trade were Macao and Canton, and the first speakers of this pidgin probably were Chinese traders who developed this variety in contact with speakers of 'Portuguese' (used here as an umbrella term for all the non-standard and creolized/pidginized varieties mentioned above) and/or Macanese (Baxter, 2009; Li and Matthews, 2016). We will return to this point below.

However, there is some debate as to the role of Sinitic languages in the formation of the Macanese creole. Differently from Malacca, at least until the mid-19th century the contacts between the Portuguese and the Chinese population were regulated: only few Chinese traders could enter the inner city, which was protected by walls, and they had to leave at nightfall. While a significant number of ethnic Chinese had converted to Christianity by the mid-17th century, their integration into the community was slow, (again) before the 19th century (Pinharanda Nunes, 2012b). Also, while, as said above, mixed Portuguese-Asian families were common in Macao, apparently this did not include Chinese wives at the beginning, and the Chinese presence in Macanese households was mostly limited to the *muitsai* (maidservants; Pinharanda Nunes, 2012b: 316).

In this scenario, Sinitic varieties should have had a very limited role in the formational period of Macanese. There is however some consensus on the point that Cantonese, the dominant Yue dialect in Guangzhou, Hong Kong and in present-day Macao, had a role in the later development of the Macanese creole, after the relaxation of the rules on the separation between the Portuguese and the Chinese population, and with the diffusion of intermarriage with ethnic Chinese. This is visible, for instance, in the use of the copula  $s\tilde{a}$  (< Port.  $s\tilde{a}o$ ), under the likely influence of the Cantonese copular verb  $\hbar haih$  (Baxter, 2009: 286–287), inter alia.

Also, there are reasons to hypothesize that the segregation between foreigners and ethnic Chinese in early Macao was not as rigid as is usually assumed, and some (Hokkien-speaking) Chinese traders were allowed to live in the settlement from very early on (Ansaldo and Matthews, 2004: 2). Moreover, while marriages between the Portuguese and the Chinese were not common, a distinguishing feature of Macao was the presence of many ethnic Chinese concubines (and illegitimate offspring) in Macanese households (Ansaldo, 2009: 77).<sup>8</sup> As Ansaldo and Matthews (2004: 4) point out, "[a] s mothers and nannies, these Chinese women must have played a significant role in the development of Macanese from an early stage". Thus, it is probably advisable to keep an open mind as to possible Sinitic influence throughout the entire history of Macanese (see Arcodia, 2017).

In sum, there is little doubt that Yue dialects, particularly Cantonese, have provided an ongoing influence on the later development of Macanese. As to the early phase of development of the Creole, the Malayo-Portuguese blueprint and restructured Malay varieties were obviously dominant; however, there is reason to believe that Hokkien may also have played a role.

In this connection, it is worth citing the observations made at the end of the 19th century by Pereira (1899–1901: 55, my translation; see also Cabreros, 2003), according to whom there were three distinct varieties (sociolects?) of Macanese.

- a. macaista cerrado / puro, 'pure Macanese', "spoken by the lower classes"
- b. macaista fallado pelos chins, 'Macanese as spoken by the Chinese'
- c.  $\it macaista$  "modified to approximate standard (Metropolitan) Portuguese"

Taken at face value, Pereira's remarks illustrate two more important aspects of the linguistic ecology of Macanese at the end of the 19th century. Firstly, what we call 'Macanese' must have had more basilectal and more acrolectal varieties. Secondly, some form of Macanese was spoken also by the ethnic Chinese, and thus the creole might have been subject to 'double' language contact – in the speech of the bilinguals of Eurasian ancestry, and in the speech of the bilinguals whose dominant language was a Sinitic variety.

<sup>8</sup> We have in fact historical evidence of the fact that out-of-wedlock sexual liaisons with native women were common for Portuguese settlers also in Malacca and in the Indian settlements (see Tomás, 2009).

However, an alternative interpretation could be that Pereira's *macaista fallado pelos chins* is rather a pidginized variety, perhaps related to the earlier Portuguese pidgin (used in the China Trade) which we mentioned above. It could have been a rudimentary second language with much variation, ongoing influence from Cantonese, and with a set of crystallized, frequent structures.

The issue is far from trivial: given that, as we shall see below (Section 3.2), we have (very limited) data available for a form of pidgin Portuguese, we might want to know whether this is a stage in the development of Macanese, or just a separate, parallel variety. While we cannot elaborate on this here due to space constraints, there are both important differences and similarities between the pidgin and Macanese; given the early model provided by Kristang (as well as, arguably, other APCs), we see as unlikely that the pidgin is a source language for Macanese. We tend to agree with Li and Matthews (2016: 143), who suggest that the three varieties mentioned by Pereira may have represented a continuum "from Portuguese via Macanese spoken natively to pidgin Portuguese spoken by Chinese traders". Be it as may, the available evidence points toward the existence of a pidginized form of Portuguese/Macanese, still spoken in 19th century Macao; this variety must have thus been yet another player in the linguistic ecology of Macao.

The last phase in the history of Macanese begins in the mid-19th century, as mentioned in the introduction, when schooling in European Portuguese for the Macanese population became more common, and Macanese went through a process of decreolization (i.e., convergence towards European Portuguese). In point of fact, Arana-Ward (1978) refers to the variety spoken before World War II as the 'Old Dialect' or 'Old Macanese', as opposed to the more acrolectal variety spoken in her time. This process of decreolization was halted by the end of intergenerational transmission of the creole starting from the 1920s-1930s, when Portuguese (in Macao) and English (in Hong Kong and elsewhere in the Macanese diaspora) came to be seen as more valuable languages by Macanese families (Pinharanda Nunes, 2014: 38). This is mainly because speaking Portuguese was important to obtain good employment in Macao.

To conclude this overview, a summary of the evolution of the linguistic ecology in the history of the Macanese is presented in Table 1 (adapted from Arcodia, 2017: 166).

## 3.2 The Corpus Used in the Present Study

While Macanese has never enjoyed official recognition and has never been taught in schools (except for the very recent academic efforts mentioned above, Section 1), we do have at our disposal a significant amount of written

	16th-18th century	10th century	20th century
Main events	Establishment of the settlement; migration from Malacca increased after 1641; migration from the Canton region after 1652	Establishment of the settlement; Expansion of the Canton trade; defeat of Diffusion of instruction migration from Malacca increased China in the Opium Wars; steady growth in Portuguese in Macao; after 1641; migration from the of the Chinese population; beginning of migration towards Hong canton region after 1652 schooling in Portuguese for the (Catholic) Kong, Shanghai and the West; masses	Diffusion of instruction in Portuguese in Macao; migration towards Hong Kong, Shanghai and the West; diffusion of English
Main languages	Kristang, other APCs, pidgin Portuguese, vehicular Malay varieties, African Portuguese varieties, Hokkien (?), other African languages (?), Indian languages (?)	Kristang, other APCs, pidgin Portuguese, vehicular Malay varieties, African Portuguese varieties, Of Portuguese, other Sinitic varieties Of Portuguese varieties, Hokkien (?), other African languages (?), Indian languages (?) languages (?)	Macanese, Cantonese, Standard Portuguese, English
Sociolinguistic characteristics	'Portuguese' population probably multilingual; limited contacts between the Macanese and the Chinese, no intermarriage, but concubinage and illegitimate offspring	Portuguese' population probably Increased contact between the Portubetween the Macanese and the Chinese, no intermarriage, but concubinage and illegitimate  Portuguese, population probably Increased contact between the Portuberse and the Chinese, bilingual; macanese and the Chinese, different warieties/registers of Macanese concubinage and illegitimate	Decreolization and shift towards Standard Portuguese and Cantonese; disappearance of Macanese from daily use

documentation from different historical periods. Moreover, apart from written records, a recent (2007) corpus of spoken Macanese has been collected by Mário Pinharanda Nunes of the *Universidade de Macau*.

The oldest extant data of a Portuguese variety spoken in Macao, most likely the pidginized variety mentioned above (Section 3.1; see Li and Matthews, 2016), come from two sources: the 澳門紀略 Àomén Jìlüè 'Monograph of Macao' (1751), and the 澳門番語雜字全本 Àomén Fānyǔ Zázì Quánběn 'Compendium of Assorted Phrases in Macau Pidgin' (printed circa 1870–1890, but most likely older; Li and Matthews, 2016). The Monograph contains geographical, historical and administrative information on Macao, but also a small Chinese-Portuguese glossary (with Chinese characters suggesting the pronunciation of the Portuguese word, following Cantonese phonology); the later Compendium is but an expanded and revised version of the glossary in the Monograph (Li and Matthews, 2016: 149). The Compendium is especially valuable as a source of data because it provides more (short) phrases than the Monograph, and not only individual lexical items.<sup>10</sup> While, as said earlier (Section 3.1), we do not believe that the Compendium language is a direct antecedent of Macanese, we shall anyway take the Compendium data into consideration, as it was arguably part of the linguistic landscape of Macao.

As to the Macanese creole *senso strictu*, the earliest body of data in our sample comes from the *Ta-Ssi-Yang-Kuo* (Chin. 大西洋國 *Dàxīyáng Guó*, 'The Atlantic Country', i.e., Portugal). The TSYK was a Portuguese language journal concerning the Portuguese Far East, and the issues from 1899 to 1901 are available as scanned copies on the web.<sup>11</sup> The oldest text published in the TSYK dates back to 1824, and while the journal is written, as expected, in Standard Portuguese, it also contains texts written in (some form of) Macanese, presented as "aids for the study of the creole dialects of the Far East" (*subsidios para o estudo dos dialectos crioulos do Extremo Oriente*). The series contains 8 *subsidios* on Macanese, which include three poems, five letters from the readers, two *descomposturas* ('quarrels'), two collections of riddles and two songs.

However, the larger set of data comes from the œuvre of José dos Santos Ferreira, also known as "Adé" (1919–1993), by far the most prolific writer in the Macanese language. He belonged to the last generation of fluent speakers of Macanese, and his work represents a conscious attempt to record the language before it disappeared (Ansaldo and Matthews, 2004). Within the vast

<sup>9</sup> For a bibliography of early texts in Macanese, see Reinecke et al. (1975: 107–109).

A scanned copy of the surviving part of the *Compendium* is freely available at https://bit. ly/2Qefwa8 (last access: 27/9/2018).

<sup>11</sup> URL: https://bit.ly/2xUoZsz (last access: 27/9/2018).

production of this author, we collected a sample of 8 short stories, 3 plays and eleven poems. While this is an extremely valuable set of data, it is important to stress the fact that it might not be representative of the actual language spoken at the time, especially given the broad range of variation that was likely to be present in Macanese society, since the texts all come from a single individual.

Lastly, as mentioned above, there is one corpus of contemporary spoken Macanese, collected by Jean Michel Charpentier (in 1984) and Mário Pinharanda Nunes (in 1999 and 2007). For the present study, we could access (courtesy of the author) the transcriptions of the 2007 recordings, which were conducted in the Macanese community in Vancouver and San Francisco. This is the only significant body of data of the 'decreolized', acrolectal spoken variety of Macanese, and is thus of immense value for research on the Macao creole. The transcriptions we used involve seven women and men aged between 78 and 85 at the time of the interview, all born in the 1920s in Hong Kong (except for one informant); also, they had all been in their new countries for at least forty years then.

Besides raw language data, there are also a few grammatical sketches of Macanese available, and they come from different periods in the creole's history. The oldest references are a 1-page sketch by Coelho (1881), and a brief sketch by Leite de Vasconcellos (1892; 1901). More extensive descriptions are offered by José dos Santos Ferreira himself (1978), and Arana-Ward (1978); note, however, that the variety described by Adé is far more conservative than the one described in Arana-Ward, which is representative of the post-wwII dialect (as spoken in Hong Kong), and reflects the variety of Macanese spoken in Hong Kong at the time. More recent descriptions of the interaction of TAM and negation in decreolized Macanese may be found in Pinharanda Nunes and Baxter (2004), Pinharanda Nunes (2011), and Lebel (2018); we will turn to this in the next section.

#### 4 Negation and TAM in Macanese

As hinted at in the introduction, Macanese may be described as an aspect-prominent language: with the notable exception of the most acrolectal/decreolized varieties (see below, Section 4.4), verbs generally appear in one form only (based on the Portuguese infinitive for most verbs), and may be preceded by one of the three (optional) aspectual markers  $j\acute{a}$  'PFV',  $t\acute{a}$  'PROG' and  $l\acute{o}go / l\acute{o}$  'FUT/IRR'. The system of negation is based also on three terms: apart from the above mentioned nunca and  $n\acute{a}di$ , a negator non (also spelled nang, nom, nu, no,  $n\~{a}o$ ; Lebel, 2018: 163) is also attested.

	Present	Past	Future
Preverbal marker	ta	já	lôgo
Negator	non	nunca	nádi

TABLE 2 Negation and TAM in Macanese according to Ferreira (1978)

Given the heterogeneity of the available data and descriptions of the Macanese creole, we chose as a starting point for the discussion of the system of negation and TAM dos Santos Ferreira's (1978) sketch grammar. Ferreira's sketch is the most comprehensive and systematic (despite being very short – only 29 pages) general description of the language prior to decreolization, and is also representative of previous descriptions (see below). In Ferreira's grammar, the three Macanese negators are said to cover, respectively, the semantic space of past (nunca), future ( $n\acute{a}di$ ), and present (non); in his view, the same tense categories are expressed by the three preverbal markers, thus yielding a symmetric tense-based paradigm, as summarized in Table 2.

On the other hand, the system is clearly asymmetrical at the constructional level, since aspect markers should not appear in the negative construction (e.g., \*nádi lôgo would be ungrammatical). However, constructional symmetry is seen when no preverbal TAM marker is present in the affirmative construction (e.g., dançá 'dance' vs. nunca dançá 'doesn't dance'; Lebel, 2018: 163).

This characterization of the set of preverbal markers and negators as tense markers is found in nearly all descriptions of the (pre-decreolization) Macanese creole, albeit with some differences. Ta,  $j\acute{a}$  and  $l\acute{o}go$  are described in the same terms in Coelho (1881) and Leite de Vasconcellos (1901), who however do not discuss negation. In the TSYK, the same description of preverbal markers is provided again (with some minor differences), and the negators are presented pretty much as in Ferreira's grammar, except for the fact that nunca is said to be a negator also in the present tense for some verbs (we will return to this below, Section 4.2).

In fact, the primarily aspectual (rather than temporal) value of preverbal markers has been convincingly argued in Pinharanda Nunes and Baxter (2004).<sup>13</sup> Interestingly, the aspectual nature of the same three markers has been argued not only for Macanese's closest relative, i.e., Kristang (Baxter,

Note that dos Santos Ferreira was not a trained linguist or philologist. His description of Macanese is clearly influenced by his knowledge of traditional Portuguese grammar.

<sup>13</sup> An early mention of the progressive value of *ta* may be found in Thompson (1961); the only negator he mentions is *nádi* (seen as a negator for the future).

1988), but also e.g., for Malabar Creole Portuguese (Krajinović, 2018). However, the characterization of  $l\hat{o}go$  differs slightly from that of  $j\acute{a}$  and ta: the former is in fact defined primarily as a mood marker (irrealis), rather than as an aspect marker; it also contains an element of relative future (including future in the past), and is hence best seen as a mood/tense marker (Pinharanda Nunes and Baxter, 2004; see also Pinharanda Nunes, 2011; Pinharanda Nunes, 2019).

To the best of our knowledge, the only comprehensive study of negation in Macanese is Lebel's recent article (2018). Lebel highlights that, differently from what has been claimed in many previous descriptions, tense is not a primary factor in the choice of negators, and that both non and nunca are but general negative markers "for all verb, aspect and tense [sic!]", except for the future-irrealis, which is negated by  $n\acute{a}di$  (Lebel, 2018: 163). Thus, the actual opposition would be between a general negator for anything but the future-irrealis, appearing in two variants, and a specific negator for the future-irrealis. How does one choose between non and nunca, then? According to Lebel's analysis, the choice is item-based, in that non is used almost only with the verbs  $p\^{o}de$  'can',  $quer\^{e}$  'want', sabe 'know', tem 'have, there be', and rarely with the copula  $s\~{a}$ , while nunca is used virtually always with all other verbs. <sup>14</sup>

Lebel's analysis is convincing and well supported by his own corpus study (Lebel, 2018: 176; Table 1). He shows that, in the overwhelming majority of occurrences, the above-mentioned  $p\hat{o}de$ ,  $quer\hat{e}$ , sabe and tem are negated by non, sometimes by  $n\hat{a}d\hat{i}$  and very rarely by nunca. Non is also used in a minority of cases (approx. 5% of the total occurrences) with the copula  $s\tilde{a}$ , and almost never with all other verbs. Thus, we see that the choice between non and nunca does not appear to be motivated by TAM differences, but rather by the individual lexical item. The only choice motivated by TAM is that between non/nunca and  $n\hat{a}d\hat{a}$ .

Besides, in the related Malaccan Kristang creole, we find exactly the same lexically conditioned split. As we shall see below (Section 5.1), the main standard negator for Kristang is  $\acute{n}gka$  / nungka, cognate to Mac. nunca, but the verbs podi,  $ker\acute{e}$ ,  $sab\acute{e}$  and teng are negated by nun/num, often shortened to n/m: mpodi/numpodi,  $ngg\acute{e}/nggere/nungere$ ,  $ns\acute{e}/nsabe$ ,  $nt\acute{e}/nunteng$  (Baxter, 1988: 139). However, Baxter believes that nun/num and its reduced forms are but the result of the "reduction and assimilation" of  $\acute{n}gka$  / nungka, rather than

<sup>14</sup> Besides *non*, *nunca* and *nádi*, Lebel (2018) identifies four more negators with modal features: the negative imperative *ne-bom* / *nunca bom* 'not good', the deontic negators *non mestê* 'must not' and *nuncassá* 'there is no need to', and the volitional negator *non quêro* (also univerbated; Lebel, 2018: 164–165). Due to space constraints, we shall not discuss further these four additional negators here (but see below, Section 5.3).

another negator (derived from Port.  $n\tilde{ao}$ ). Baxter's analysis could be extended to Macanese, given the close relation between it and Kristang, especially since the verbs involved and the type of reduction appear to be the same; another possible analysis would be that non derives directly from Port.  $n\tilde{ao}$ . In what follows, we remain agnostic and treat non as if it were a negator distinct from nunca based on its shape and distribution, but we remain open to the alternative view, namely that it is but a lexically conditioned allomorph of nunca (we will get back to this in Section 4.4). Of course, treating non as a distinct negator entails that it is not a standard negator (as pointed out by an anonymous reviewer), as it is used only for a subset of predicates: however, given that the distinction between nunca and non has very limited relevance for the object of this study, we shall not discuss the matter any further here.

Given the data presented above, it is tempting to see the system of negation in Macanese as primarily mood-based, i.e., based on a distinction between realis (non/nunca) and irrealis  $(n\acute{a}di)$ . There is, however, a major exception: namely, the copula  $s\~a$ , which is negated by  $n\acute{a}di$  only once (out of 415 occurrences of negated  $s\~a$ ) in Lebel's (2018) corpus, and never in our own data. Also,  $s\~a$  is negated by non only in 7.2% of the total occurrences in Lebel's corpus. This applies also to (bare) adjectival predicates: while Lebel did not take those into consideration, as he focusses on standard negation, adjectival predicates are virtually always negated by nunca in our corpus.

This suggests that *nunca* is the only ascriptive negator in Macanese, regardless of TAM values. Thus, ascriptive negation differs from standard negation in two aspects:

- a. There is one construction, namely the one based on *nádi*, which is apparently unavailable for ascriptive negation (constructional difference);
- b. the marking of TAM values for standard and ascriptive negation is different, since ascriptive negation does not involve the irrealis marker.

Moreover, we argue that the irrealis semantics of *nádi* extends not only to habituals, even in past tense contexts, but also to the expression of volition (similarly to Eng. *will/would*; see de Haan, 2012, for a treatment of Eng. *will* as an irrealis marker). Lastly, the difference in the reality status of *nunca* and *nádi* extends to conditional sentences, in that *nunca* is used in the protasis, and *nádi* in the apodosis (again, just as Eng. *will/would*).<sup>16</sup>

<sup>15</sup> The treatment of reality status (realis  $\nu$ s. irrealis) as mood is not universally accepted. However, a proper discussion of the issue is beyond the scope of the present paper; the reader is referred to Mauri and Sansò (2012) for an overview.

Note that our use of the category 'reality status', and of the labels 'realis' and 'irrealis' does not entail that we believe that the meaning and functions of these labels correspond to

In what follows, we shall illustrate the above with data taken from the four subcorpora we used in our research. The results of our survey are summarized in Table 3 and 4.

#### 4.1 The Compendium

As mentioned above (Section 3.2), the relation between the language represented in the *Compendium* and Macanese proper is open to debate; hence, the data which comes from this source has to be taken with a pinch of salt. In the *Compendium* we find two preverbal markers,  $j\acute{a}$  and logo (only one occurrence of the latter; Li and Matthews, 2016: 169), and two negators, namely nung (transcribed in Cantonese as  $\frac{111}{110} n\grave{u}hng)^{17}$  and nunca ( $\frac{111}{110} n\grave{u}hngg\bar{a}$ ); they are seen as deriving from Port.  $n\~{a}o$  and nunca, respectively (Li and Matthews, 2016: 177).  $J\acute{a}$  and logo are characterized as in Macanese, i.e., as a perfective marker and as a future/irrealis marker; nung is interpreted by Li and Matthews (2016: 177) as a negator for "imperatives" and "modal verbs", while nunca is analyzed as a general negator "for other cases".

However, in our perusal of the *Compendium* material, we found that *nung* is used also for existential negation (13) and for the negation of possession; and, in one instance, to negate a past/perfective event (14).

- (13) 噥 叮 挽度
  nùhng dīng wáahndouh
  NEG there.be wind
  'there is no wind'
- (14) 噥 可剌
  nùhng hōlaaht
  NEG see
  '(I?) haven't seen'

*Nung* is used to negate the verbs *sabe* 'know', *pôde* 'can' (referred to by Li and Matthews, 2016 as 'modal' verbs; see above) and *querê* 'want' which, as said above (Section 4), are the same verbs which are normally negated by *non* in Macanese; in one sentence, it is used to negate the verb *conhecê* 'to know'. It is also used for locative negation.

some universal definition, or even just to a universal prototype. Following de Haan (2012), we adopt a bottom-up approach in defining the categories and values at issue as language-specific categories, and in looking for the pathways of evolution behind the semantic space covered by 'realis' and 'irrealis' in individual languages.

For the sake of simplicity, we use the modern (Hong Kong) Cantonese pronunciation, although the variety represented in the *Compendium* might be somewhat different.

*Nunca*, on the other hand, is used almost only for ascriptive/attributive negation, with adjectival predicates (15) or with the copula (16).

- (15) 噥加 哩話
  nùhnggā līwah
  NEG light
  'not light'
- (16) 噥加 僧
  nùhnggā jāng
  NEG COP
  'it is not (the case)'

While any claims based on such a small amount of data have limited reliability, we may tentatively suggest that, in the Compendium, *nung* appears to be a general standard negator, with no apparent TAM features, and also an existential, possessive and locative negator (just as in later texts in Macanese). *Nunca*, on the other hand, is used almost exclusively for ascriptive negation in the *Compendium*: adjectives and the copula are consistently negated by *nunca* already at this stage.

#### **4.2** *The TSYK*

In Section 4, we hinted at the fact that in the TSYK we find a brief analysis of the Macanese system of negation: what is said is that *nunca* is used as the standard negator in past tense contexts, while in the present some verbs require *non*, while others use *nunca*. According to the description in the TSYK, the verbs which require *non* include the above-mentioned *querê* 'want' and *sabe* 'know'. *Nádi* is presented as the negator for the future; interestingly, it is claimed that, when used to negate past events, *nunca* may combine with the perfective aspect marker *já* (e.g., *nunca já fazé* 'did not do'), something which is not normally possible at later stages of Macanese, as said above (Section 4).

If we look at the data, non is in fact the usual negator not only for  $quer\hat{e}$  'want' and sabe 'know', but also for  $p\hat{o}de$  and tem, the latter being used for existential negation and for the negation of predicative possession, just as in later texts. See the following example. In (17), we see that the choice between non (nun) and nunca does not appear to be conditioned by TAM, but is rather lexically determined.

falá sabe Latim, (17) Eu jά nun que *e*11 know Latin PFV sav that 1SG NEG nôn. nôde. entendê «folhetim de baratro» que cusa. sã. NEG can understand leaflet abyss COP what Minha neta que tamêm nunca entendê *latim* [...] granddaughter that also NEG understand Latin 'I already said that I don't know Latin, I can't understand what is a «romance of abyss». 18 My granddaughter, who also doesn't understand Latin (...)' (O senhor *«bem o sabe»*, 1888; in Pereira, 1899–1901)

As for ascriptive negation, the association between nunca and this subtype of negation is rather strong, but not as in the dos Santos Ferreira corpus (see below, Section 4.3). While the copula  $s\tilde{a}$  is most often negated by nunca, we have also many examples in which it is negated by non, as in the following sentence:

(18) nun sã gente cunhecido?

NEG COP people known

'Isn't it people we know?' (*Ajuste de casamento*, 1886; in Pereira, 1899–1901)

On the other hand, the use of *nunca* as a negator for (bare) adjectival predicates is almost exceptionless.

In the TSYK, we can find the earliest examples of conditional sentences. As hinted at above (Section 4), nunca is used in the protasis, while  $n\acute{a}di$  is used in the apodosis.

(19) Se nunca mulà sua rópa nosso linha nádi achá if NEG soak his clothes our line NEG.IRR find 'If he doesn't soak his clothes, our [fishing] line won't find anything'. (Ajuste de casamento, 1886; in Pereira, 1899–1901)

This is reminiscent of English conditional sentences, in which the more 'realis-leaning' (for lack of a better term) present tense is used in the protasis, while the more 'irrealis-leaning' will future is used in the apodosis (see de Haan, 2012). However, this does not seem to be the case if the copula  $s\tilde{a}$ , and hence ascriptive negation, is involved; see example (3), repeated here for the sake of convenience.

<sup>18</sup> We hypothesize that here folhetim de baratro '(lit.) romance of abyss' is a misunderstanding for folhetim barato 'cheap fiction'.

(3) quando nom tem mar, certo já nunca sam praia when NEG be sea sure already NEG COP beach 'when there is no sea, it sure won't be a beach' (Mas um-a disgraça, 1887; in Pereira, 1899–1901)

In the TSYK corpus, the functions of  $n\acute{a}di$  are pretty much the same as in later texts:  $n\acute{a}di$  is the general negator for irrealis, and can be used with any verb except the copula  $s\~{a}$  and adjectives. Hence, while the use of nunca with the copula does not seem to be the only option, it appears that  $n\acute{a}di$  cannot be used for ascriptive negation. Interestingly,  $n\acute{a}di$  here is apparently used also to negate habituals.

(20) [...] que tem ôlo vivo e nádi iscapá nada who have eye alive and NEG.IRR escape nothing 'who has an attentive gaze, and nothing escapes (his attention)' (Carta de Siára Pancha, 1865; in Pereira, 1899–1901)

Example (20) is a positive comment on the Governor of Macao of the time, José Rodrigues Coelho do Amaral. The fact that he was very attentive, and wouldn't miss a thing, is framed as something stable, which happens regularly.

Thus, in the TSYK we see that, as to standard negation, the 'division of labour' among *non*, *nunca* and *nádi* is very close to what we suggested above (Section 4), with *nádi* covering the semantic space of irrealis, while *non* and *nunca* are the default (realis) negators; the choice between them mostly depends on the lexical item. As for ascriptive negation, the difference between *non* and *nunca* is perhaps not as sharp as in the later dos Santos Ferreira corpus (see below, Section 4.3): *non* is used also with the copula, as mentioned above, in quite a few cases. The association between *nunca* and (bare) adjectival predicates, on the other hand, appears to be very solid, just as seen above for the *Compendium* data. Besides, in the latter *nádi* appears to have developed the function of negator for habitual events, something which we find more often in later texts: the overlap of irrealis and habitual has parallels in other APCs, as we shall see below (Section 5.1).

## 4.3 The dos Santos Ferreira Corpus

In the dos Santos Ferreira corpus, the roles of the three negators are neatly distinguished. *Non* is used almost exclusively to negate *pôde* 'can', *querê* 'want', *sabe* 'know' and *tem* 'have, there be'; it is thus not only the standard negator for the above-mentioned verbs, but it is also the existential (and locative) negator, and the negator of predicative possession. While it can sometimes combine

with the copula  $s\tilde{a}$ , this is exceedingly rare (only four occurrences in our corpus; see also Lebel's data mentioned above, Section 4).

Besides the stabilization of *nunca* as an ascriptive negator, one more significant difference between the dos Santos Ferreira data and the TSYK materials is that, here, *nádi* can be used also to negate existentials and predicative possession, as in the following examples.

- (21) Sômente sandê candia-cera nâdi têm calor only light candle-wax NEG.IRR there.be heat "There won't be any heat if you just light a candle'. (Macau di nôsso coraçám; in Ferreira, 1988)
- (22) *Uví, Tom, iou agora nádi têm tempo pa mas ninguim* listen Tom 18G now NEG.IRR have time for more no.one 'Listen, Tom, now I won't have time for anyone else...' (*Padrinho*; in Ferreira, 1973)

In examples (21) and (22), the verb  $t\hat{e}m$  is negated by  $n\acute{a}di$ , rather than non. Example (21) appears to be a conditional sentence, and hence  $n\acute{a}di$  is the expected negator in the apodosis, even though it is an existential sentence. In example (22), on the other hand,  $n\acute{a}di$  negates  $t\acute{e}m$  in a main clause. Lastly, in the dos Santos Ferreira corpus, we find the only example of ascriptive negation with  $n\acute{a}di$ .

(23) Comê minchi, nádi infastiá/ Vida nádi assi insonso eat minchi NEG.IRR bore life NEG.IRR so tasteless 'If you eat minchi, 19 you won't get bored/ And life won't be tasteless'. (Cuzinhaçám di Macau; in Ferreira, 1988)

Note, also, that this apparent exception is found in the apodosis of a conditional sentence (compare example 3 above), rather than in a main clause.

In short, the system of negation in the dos Santos Ferreira corpus appears to be stable and consistent, with each negator having defined functions. Here, *nádi* appears to be the irrealis negator not only for standard negation, but also for existential and possessive negation; ascriptive negation is the only subtype which is consistently negated by *nunca*, with one exception (23). However, as pointed out above (Section 3.2), this corpus is based on the language of a single speaker, and hence it is expected to be more coherent, if compared to the TSYK data.

## 4.4 The Contemporary Spoken Corpus

In the spoken corpus we find the widest degree of variation in the use of negators. At this stage, the data appear to represent different points of a continuum between more conservative/basilectal and more innovative/acrolectal constructions, with variation even in the language of the same speaker.

In the spoken corpus, we see a shift towards superstrate (Portuguese) grammar in the domain of TAM: besides the characteristic creole preverbal markers  $j\acute{a}$ , ta and logo, verbs appear also in inflected forms which are functionally analogous to the corresponding superstrate forms: mainly the first and third person singular of the present indicative, and the third person singular of the past perfective and past imperfective (Pinharanda Nunes, 2011; 2012b). This applies also to the copula, which does not appear only in the basilectal form  $s\~{a}$ , but also in inflected forms. Note that verb forms with superstate inflection may cooccur with preverbal TAM markers (24); also, they may also have a functional mismatch with the corresponding superstrate forms (25).

- (24) [...] Como ja cai-u? how PFV fall-3SG.PST.PFV 'How did you fall?' (adapted from Pinharanda Nunes, 2012b: 306)
- (25) Nãong essi pae-mãe ensin-a eli

  NEG these father-mother teach-3SG.PRS 3SG

  'No, the parents taught him'. (adapted from Pinharanda Nunes, 2012b: 301)

Pinharanda Nunes (2012b: 302) suggests that the inconsistent use of superstrate inflection (mostly, present tense forms in past contexts, as example 25) indicates the fact that "speakers are not entirely conscious of their superstrate functions" (on the instability of the verb system of post-wwii Macanese, see also Arana-Ward, (1978): 96–101).

As for negation, Pinharanda Nunes (2011) highlights the fact that nunca is widely used with a broad range of verbs, both in present and in past tense contexts, and may even cooccur with the perfective marker  $j\acute{a}$ ; nang (equivalent to non) is used in present, past and imperative contexts;  $n\acute{a}di$ , again, is the future/irrealis negator. However, Pinharanda Nunes also points out that inflected past perfective and imperfective forms are rarely negated, and the basilectal forms seem to be preferred in negative clauses. Given the above-mentioned broad range of variation in the spoken corpus, we will not present a thorough

<sup>19</sup> *Minchi* is the name of a traditional Macanese dish made of minced meat.

analysis of the system of negation due to lack of space; we will thus focus on ascriptive negation, while discussing also examples for other types of negation.

The most salient difference between the written corpora (representing the 'Old Dialect'; see above, Section 3.1) and the spoken corpus is that, in the latter, the copula is most often negated by non. However, the many occurrences of non with the copula are actually combinations with the inflected third person singular form  $\acute{e}$  of the copula; the basilectal form  $s\~{a}$  is consistently negated by nunca. Interestingly, these two patterns coexist even in the same speaker, as shown by the following examples.

- (26) Iloutro mau, nam é ieu 3PL bad NEG be.PRS.3SG 1SG 'Others were bad, not me'. (SF\_13)
- (27) Ela conversâ, nunca sâ aqueli baixo-baixo 3SG.F talk NEG COP that low~low 'She speaks, not in that low style. [i.e., she speaks good Chinese]' (SF\_13)

While in (26), just as in example (25), we have a present tense inflected form in a past tense context, and hence there is a functional mismatch between superstrate inflection and function, the negator nam (i.e., non) is selected; however, in the very same conversation, the speaker chooses nunca as the negator for the basilectal copula  $s\tilde{a}$ . Also, when the speaker in question needs to negate a bare adjectival predicate, she uses again nunca.

```
(28) Nunca londgi

NEG far

'(It is) not far'. (SF_13)
```

The use of *non* to negate the inflected third person singular copula, and *nunca* to negate the basilectal copula and bare adjectives is very consistent throughout the corpus. The only exception is represented by two instances of bare adjectives negated by *non*. While in Section 4 we pointed out that *non* might be either a lexically-conditioned allomorph of *nunca* or a separate negator deriving from Port. *não*, and that we favoured neither hypothesis, we also believe that, at this late stage, *non* is more likely to be the creole version of *não*. This is because, in our opinion, the fact that *non*, differently from *nunca*, is consistently associated with the acrolectal form of the copula, suggests that it is but a construction based on acrolectal material.

For standard negation, however, things are not as neat, and the use of *nunca* with superstrate inflected verb forms is attested.

(29) Priméra coisa, boca nunca tchér-a bem first thing mouth NEG smell-PRES.3SG good 'Firstly, your mouth doesn't smell good [if you smoke]' (SF\_13)

As for *nádi*, it covers much the same functional space as in previous samples of the language, including many instances in which it is used to negate a habitual predicate. In addition to that, it appears that *nádi* may negate volition, as in the following exchange.

- (30) a. Eli querê limpá?
  38G want clean
  'Does he want to clean up?'
  - b. *Nádi, nádi. Podi dipois.*NEG.IRR NEG.IRR can after

    'No, no. He can do it later'. (VF12)

In example (30), the interviewer asks a question based on the verb *querê* 'want', to which the informant replies with *nádi* rather than *non*. Here, it appears that *nádi* conveys a semantic nuance of volition; curiously, this is one more aspect in which the semantics of *nádi* overlaps with English *will* (*not*).

Thus, while we did not provide an exhaustive analysis of negation in the decreolized variety of Macanese represented in the spoken corpus, we may suggest that it represent a transitional system, as expected. If we focus on ascriptive negation, we see that there appear to be two subsystems which coexist: a basilectal subsystem, based on nunca and the copula  $s\tilde{a}$ , and an acrolectal subsystem, based on non and the inflected copula  $\acute{e}$ . Adjectives seem to conform more to the basilectal model, though exceptions are attested.

## 4.5 Summary

To sum up, the picture which emerges from the analysis of our corpus largely confirms Lebel's (2018) analysis of standard negation in Macanese. The key differences lie in the specific behaviour of ascriptive negation, and in the apparently broader functional spectrum of  $n\acute{a}di$ , including the negation of habituals and volition. Also, we are now able to highlight the diachronic evolution of negation, showing the differences between the stages we considered. In Table 3, we summarize the evolution of the markers of negation according to the typology introduced earlier (Section 2).

Subcorpus type	<i>Compendium</i> (? < 1870)	TSYK (1865–1900	)	DSF (1967–1988)	Spoke: (2007)	
Standard	non/nunca	non/nunca/		non/nunca/nádi		,
Ascriptive	nunca	COP	ADJ	nunca	é	sã/ADJ
		non/nunca	nunca		non	nunca
Existential	non	non		non   nádi	non   r	ıádi
Locative	non	non		non / nádi (?)	non / r	ıádi
Possessive	non	non		non   nádi	non / n	ıádi

TABLE 3 Marking patterns for subtypes of negation in our corpus

If we look at Table 3, we see that the full range of negators has been used for standard negation, at least since the XIX century; while *nádi* is conspicuously absent from the Compendium data, given the limited extension of the sample and the unclear relation between the language represented therein and Macanese proper, the significance of this is debatable. Existential, locative and possessive negation are remarkably consistent in being negated by non (with the verb tem): starting at least from the XX century, nádi is also sometimes used with those three subtypes of negation, which thus seem to become part of the realis vs. irrealis distinction that permeates the system. In this respect, ascriptive negation stands out as being apparently 'immune' from the realis vs. irrealis distinction, given that *nunca* is virtually always used to negate the copula and adjectives, also in conditional sentences (see example 3). The main changes in the marking patterns of ascriptive negation is that until the XIX century *non* is often, though not dominantly, used to negate the copula, while this does not happen in later texts; in the most recent spoken corpus, it appears that a basilectal ( $nunca s\tilde{a}$ ) and an acrolectal ( $non \acute{e}$ ) marking pattern coexist, indicating increased influence from superstrate grammar (examples 26-27).

The interaction between negation, the lexicon, and TAM categories is summarized in Table 4 below.

As argued earlier (Section 4), the opposition between realis and irrealis appears to be central to the system of negation in Macanese, at least starting from the TSYK materials. This is immediately apparent for standard negation, but later extends to existential/locative/possessive negation, as may be seen in the dos Santos Ferreira subcorpus. Irrealis also encompasses habituals, as is already evident in the TSYK, and subsequently, in the most recent spoken corpus, it also seems to convey volition. The realis/irrealis opposition is particularly evident in conditional sentences (see example 19), as *nunca* (or *non*, depending on the verb) appears in the protasis, and *nádi* in the apodosis.

TABLE 4 The interaction between negation and TAM in our corpus

Subcorpus marker	Compendium (? < 1870)	TSYK (1865–1900)	DSF (1967–1988)	Spoken (2007)
non	standard negation, existential/ locative/ possessive negation	standard negation (realis) for pôde, querê, sabe, existential/ locative/posses- sive negation; sometimes copula	standard negation (realis) for pôde, querê, sabe, existential/locative/possessive negation	standard negation (realis) for pôde, querê, sabe, existential/locative/ possessive negation, ascriptive negation with inflected copula é
nunca	ascriptive negation	Standard negation (realis), ascriptive negation	Standard negation (realis), ascriptive negation	*
nádi		standard negation (irrea- lis, habituals)	standard negation (irrealis, habitu- als), existential/ locative/posses- sive negation (irrealis)	standard negation (irrealis, habituals, volition), existential/ locative/ possessive negation (irrealis)

However, reality status does not come into play for ascriptive negation, as said above, since the copula and adjectives are almost never negated by *nádi* (but cf. example 23).

Thus, in short, there appear to be three macro-types of negation in Macanese:

- a. Standard negation, based on a realis *vs.* irrealis opposition, with the choice between two realis negation markers (*non* and *nunca*) depending, in essence, on the lexical item involved;
- b. ascriptive negation, with a single marker and no realis  $\nu s$ . irrealis distinction;
- c. existential, locative, and possessive negation, which are overlapping domains in Macanese; they are all based on the negator *non* and the verb *tem*, later becoming part of the realis *vs.* irrealis opposition.

As for macro-type c., we may remark that, as said earlier (Section 2), the marking of existential and possessive negation by the same construction is quite common cross-linguistically, and the use of the same construction also for locative negation is not rare either. It is actually the dominant pattern in APCs (see below, Section 5.1).

Lastly, we argue that the system of negation of Macanese is actually not symmetric, both on the constructional (i) and on the paradigmatic (ii) level.

- i. While, as said above, preverbal TAM markers are optional, negators are (unsurprisingly) necessary to express negation, and markers of negation and TAM markers mostly do not cooccur. Thus, TAM values are carried by the negator itself (compare example 10, above) in negative clauses.
- ii. While there seems to be a near-perfect one-to-one correspondence between  $l\hat{o}go$  and  $n\hat{a}di$ , in that they both mark irrealis status,  $^{20}$  ta and  $j\hat{a}$  are primarily aspect markers, not mood markers: the choice between non/nunca and  $n\hat{a}di$ , on the other hand, is based on reality status. The progressive vs. perfective distinction is thus lost in negation: as said above for Swahili, the Macanese affirmative and negative paradigms are based on partly different TAM categories. Moreover, we may say that the marking of reality status is apparently obligatory in negative sentences (at least for standard and existential/possessive/locative negation), but not in affirmative sentences (i.e., 'asymmetry in the marking of reality status', in Miestamo's terms).

We now turn to the discussion of some comparative data from other APCs and from adstrates and substrates of Macanese, in order to bring to light the possible influences on the Macanese system of negation.

## 5 A Comparative Outlook

As discussed extensively above (Section 3.1) the Macanese creole evolved out of a rich and complex matrix, which, at different periods, included APCs (especially, Kristang), Malay varieties, and Sinitic languages as Hokkien and Cantonese. In what follows, we provide a synthetic overview of negation in these languages, focusing again on ascriptive negation. The results of our analysis are summarized in Table 5, in which the different types of negation (and

In a very recent paper, Pinharanda Nunes (2019) shows that *lôgo* in Macanese is used both as a marker of habitual and in the apodosis of conditional clauses, just as *nádi*. However, *lôgo* is occasionally used also with adjectives (Pinharanda Nunes, 2019: 433), while *nádi* is not: this can be interpreted as further evidence of the specificity of ascriptive negation in Macanese.

their TAM features) in the above-mentioned languages are compared to those of Macanese. A map showing the approximate location of the main varieties discussed here may be found in the Appendix (Figure 1).

## 5.1 Negation in APCs

When discussing possible influences on the development of Macanese, Kristang is the first variety one wants to look at, given the strong historical (and typological) connection between the Malaccan creole and Macanese. In fact, while there are many similarities in the domain of negation between the two creoles, there are also significant differences.

There are four main markers of negation in Kristang: *nang*, a negator with imperative semantics; *ńgka | nungka*, cognate to *nunca*, which is the general standard negator for realis predicates; *nadi*, the future/irrealis negator, and *nenáng*, a 'not-yet' negator with perfect semantics (see above, fn. 7; Baxter, 1988). These negators are compatible with all types of predicates, including verbs, adjectives, and noun phrases; this entails that, apparently, ascriptive negation is not different from standard negation (Alan N. Baxter, p.c. 2016). See the following examples, in which bare adjectives are negated by *ńgka*, *nenáng* and *nadi*.

- (31) fora sa mesa ńgka limpu outside GEN table NEG clean 'The outside table isn't clean'. (Baxter, 1988: 71)
- (32) aké tempu pa nenáng duénti that time father NEG.PERF ill 'At that time father wasn't ill yet'. (Baxter, 1988: 140)
- (33) eli nadi duénti 3SG NEG.IRR ill 'He won't become ill'. (Baxter, 1988: 142)

Note that *nadi*, when combined with stative verbs or adjectives, has an inchoative meaning (Baxter, 1988: 141; see the translation of example 33). Apart from this, *nádi* covers pretty much the same semantic space as in Macanese: it can be used to negate the apodosis of conditional sentences (see e.g., example 78 in Baxter, 1988: 141) and also habituals, including past habituals. However, while we do have examples of *nadi* as a negator for adjectives (33), we could find no example of *nadi* with a nominal predicate in Baxter (1988). We then searched the Kristang corpus stored in the Endangered Languages Archive at soas (Pillai, 2011), and found no example there either. In Baxter's grammar of

Kristang (1988: 67, 141), it is stated that *nadi* is the irrealis negator which occurs before verbal and adjectival predication; he does not mention nominal predication here.

Also, note that the existential verb teng (< Port. ter 'have, there be') may be used as a copula, although this seems to be uncommon (Baxter, 1988: 181–185). The negative form of teng is  $nt\acute{e}$ , or the less frequent long form  $nunt\acute{e}ng$ : however, we did not find examples of  $nt\acute{e}$  /  $nunt\acute{e}ng$  used for ascriptive negation in Baxter (1988). In Pillai's (2011) corpus, we found only one instance  $nt\acute{e}$  /  $nunt\acute{e}ng$  as ascriptive negator (isi nang teng retu 'this is not right'). On the other hand, examples of  $\acute{n}gka$  as the negator for nominal and adjectival predication are very common. We thus suggest that the use of the negative copula for ascriptive negation, while possible, is not the default, unmarked choice.

Thus, to sum up, it appears that in Kristang there is also some sort of 'split' between standard and ascriptive negation: irrealis *nadi* is used (not often) with adjectival predicates, but possibly not with nominal predicates. However, more data is needed (especially, on conditional sentences) to properly assess whether the ban on *nadi* with nominal predication is the norm in the language.

Two more APCs which are regarded as being closely related to Macanese (and Kristang) are the now-extinct Bidau Portuguese Creole of East Timor (Baxter, 1990; Baxter and Cardoso, 2017), and the Batavia and Tugu Creole, formerly spoken in the Jakarta region. The available data for Bidau is extremely limited, and only *nunca* and a negator deriving from Port. *não* have been identified. As to Batavia and Tugu Creole Portuguese, Maurer (2011) describes a system of negation which closely matches that of Kristang. *Nungku* is the general standard negator for verbal predicates; *nada* is the irrealis negator; *nang* is the negative imperative. However, there is a major difference between Batavia/Tugu and Kristang: in the former, the copula *teng* is normally used (less often in the Tugu variety; Maurer, 2011) for nominal and adjectival predication. The negative form *nonteng* is used for ascriptive negation in Batavia/Tugu.

(34) akel non-teng bonitu
that NEG-COP nice
'that is not nice'. (Maurer, 2011: 107)

It would be interesting to know whether *nada* could be used with adjectives, just as in Kristang. This would entail that ascriptive negation in Batavia and Tugu, differently from Macanese, also has a realis *vs.* irrealis distinction.

From the speaker Noel Felix (https://elar.soas.ac.uk/Record/MPI1255866; last access: 28/7/2019).

Unfortunately, the existing corpora both of the Batavia and of the Tugu variety of this creole provide very limited evidence. In the Batavia corpus, there is but one example of *nada*, with the verb *larga* 'leave'. In the Tugu corpus, collected in Schuchardt (1890), we find this example.

(35) *Tjoewa grandi; abri soombreloe. Nada moela.*rain big open umbrella NEG.IRR wet
'if it rains heavily, open an umbrella. You won't get wet'. (Schuchardt, 1890: 76; my glosses and translation)

In the Malay version of this text, the adjective basa(h) 'wet' is used. Schuchardt (1890: 202) seems to interpret it as an adjective (translated as German nass 'wet'); moela is seen by Schuchardt either as a verb or as an adjective, depending on the context (see Schuchardt, 1890: 51, Fn. 64). However, we believe that his interpretation is debatable: if we look at the shape of the word, the Portuguese verb *molhar* 'wet' looks like a better match for *moela* than the adjective molhado 'wet'. In point of fact, elsewhere in the Schuchardt Tugu corpus we find the forms moelain and moeladoe for the Malay adjective basah 'wet'. Incidentally, the form *moeladoe* for the adjective 'wet' is found also in the Batavia corpus. However, Standard Portuguese would have the reflexive form molhar-se 'to get wet'. Another example provided by Schuchardt (1890: 202) is nada danu, translated as "nicht verdorben", lit. 'not damaged'. On the one hand, the Portuguese noun dano 'damage' is surely a better match for danu than the adjective danificado. However, danu is found in the Tugu corpus in the inchoative construction with the verb fika 'become': fika danu 'to become damaged'. Given that fika normally combines with adjectives, this use may be seen as an instance of noun>adjective conversion (Schuchardt, 1890: 204-205).<sup>22</sup> Be it as may, the use of a noun with nada, instead of nunteng, proves that the realis vs. irrealis distinction applies also to ascriptive negation (compare also nada perdisang 'no loss').

To conclude, there appears to be limited evidence that the irrealis marker *nada* was used, at least in the Tugu variety, also for ascriptive negation, just as in Kristang. However, more data would be needed for a proper assessment.

As for the ACPs of the Indian Subcontinent, Diu Creole Portuguese (Cardoso, 2009) has a very different system of negation, based on different parameters, which we shall not discuss here due to space constraints. In Korlai, we have a

<sup>22</sup> Krajinović (2019) uses the term "etymological nouns" to indicate words in Malabar Creole Portuguese which, despite deriving from Portuguese nouns, are used with property-denoting meanings, similarly to adjectives. We may hypothesize that these Batavia/Tugu cases are instances of the same phenomenon.

general negator nu which combines with different auxiliaries to convey a relatively large number of TAM values (see Clements, 2018: 219); among them, we find a future negator nu pa(d) (< Port.  $n\~ao$  pode 'cannot'), but its functions do not overlap entirely with those of Mac. n'adi, and there appears to be no special pattern for ascriptive negation.

In the above-mentioned Malabar Creole Portuguese, we find the same three main negators as Macanese, i.e.,  $nu \mid no$ , nuka, and na(d).  $Nu \mid no$  is the general negator with no TAM semantics; nuka is the negator for past events; na(d) is the irrealis negator (Krajinović, 2018).  $Nu \mid no$  is the negator also for the present tense copula tw (also < Port. ter) and for the past tense copula tinha, which are used in adjectival and nominal predication; nuka is thus not used in ascriptive negation. The copula is generally omitted in the present (always for nouns, often for adjectives), and sometimes also in the past tense: thus,  $nu \mid no$  can be the negator also without the copula  $tw \mid tinha$  in those cases.

However, just as in Kristang and many other APCs, the Malabar copula  $t \alpha$  (/ tinha) covers also the semantic space of existential, possessive and locative (Krajinović, 2019). The irrealis negator na(d) is used also to negate  $t \alpha$ , but only as the existential/possessive negator. It is unclear whether na(d) is ever used for ascriptive negation: the lack of occurrences might be an artifact of the limited data available. In fact, we may remark that the irrealis marker l s, with the same source as Macanese l s g o / l s, is used for ascriptive predication in Malabar.

(36) aka yo nuka vai sə bəmba sintamæntə lə=tæ that 18G.NOM NEG.PST go COND very sad IRR=COP 'If I don't go, I will be sad'. (Krajinović, 2019)

Given that na(d) is described by Krajinović as having the same functions as l2, we may infer that it can be used also for ascriptive negation. In the absence of more data, we must remain agnostic as to whether this use is actually attested. Thus, while there seems to be a marking pattern for ascriptive negation distinct from standard negation in Malabar, this pattern largely overlaps with that of existential, possessive and locative negation. Besides, the categories involved (present, past, irrealis) seem to be the same for standard and 'special' negation constructions. A difference between ascriptive negation and the other types of special negation lies in the optionality of the copula te, which seems to apply only to the former. Another difference, more relevant for our comparison with Macanese, is that it is unclear whether irrealis na(d) is used also for ascriptive negation: this, however, cannot be confirmed with the available data.

Lastly, in Dalgado's (1900) grammar of Sri Lanka Portuguese,  $^{23}$  he describes a system of negation which is a pretty good match for Malabar: he mentions  $n\tilde{a}o$  as the negator for the present, nunca for the past, nada for the future, and nadia for the conditional (Dalgado, 1900: 41). While nada derives from  $n\tilde{a}o$   $h\acute{a}$ -de just as Mac.  $n\acute{a}di$ ,  $nad\acute{a}$  is said to be the univerbation of  $n\tilde{a}o$  and dia (< devia | deveria 'should'). This 'split' between nada and  $nad\acute{a}$  mirrors the categories for the affirmative: apart from the usual  $l\acute{o}$  (< logo), described as a marker "for the future of the indicative and subjunctive", we find also  $lod\acute{a}$  for the conditional mood, which is the product of the contraction of  $l\acute{o}(go)$  and dia. Furthermore, according to Dalgado's description, the verb tem (again, < ter) is negated by nun just as in Macanese: in the Sri Lankan creole, however, besides existential negation, tem covers also the functional space of ascriptive negation, as in the following example (compare example 34 above).

(37) ninguem de nós nun-tem assi dódo nobody of 2PL NEG-COP so crazy 'no one among us is so crazy' (Dalgado, 1900: 62)

This is pretty much the same range of functions we see in the Batavia and Tugu Creole and in Malabar Creole Portuguese, but not in Macanese, which makes use of the copula  $s\tilde{a}$ . Moreover, according to Dalgado (1900), tem can be negated by nunca in the past (but nuntinha is the form of the negative imperfective past, similarly to Malabar), and by nada in the future, thus behaving like any other verb.

To sum up, while in most of the APCs considered here ascriptive predication does not seem to have the features highlighted for Macanese, there is some evidence of a split between adjectival and nominal predication in Kristang, arguably the closest relative of Macanese. As to Malabar, while we did not find examples of na(d) in ascriptive negation, more data is needed to assess the compatibility of irrealis with this subtype of negation.

<sup>23</sup> While very recent data (2015–2018) of Sri Lankan Portuguese are available at the Endangered Languages Archive at SOAS, we believe that Dalgado's description is more relevant for our research: any input for Macanese must have come from an earlier stage of the Sri Lankan creole, rather than from the variety spoken at present.

Smith (2016: 269) points out that the negators in contemporary varieties of Sri Lanka Portuguese mainly convey aspect and modality, rather than tense (just as in Macanese); he believes that this was at least partially the case already in the 19th century. Due to space constraints, we shall leave this issue aside.

#### 5.2 Negation in Malay

As mentioned earlier, there is little doubt that Malay varieties, especially restructured colloquial varieties, had a significant influence on Kristang, and very likely also on Macanese, particularly in the formational period of the creole (see also Smith, 2012). In Modern (Standard) Malay, the main negators are *tidak | tak*, the (clausal) standard negator, which also negates adjectives (38), and *bukan*, the negator for NPs, often without the copula (39).

- (38) Jasnya tidak terlalu besar jacket NEG too big 'His jacket isn't too big'. (Sneddon et al., 2010: 188)
- (39) Dia bukan guru
  3SG NEG teacher
  'She is not a teacher'. (Sneddon et al., 2010: 202)

Additionally, there are the negative imperative *jangan*, and the 'not-yet' negator *belum* (see above, fn. 7); *bukan* may be also used as an emphatic negator for adjectives, implying contrast (on the relation between ascriptive negation and contrastive focus, see Mettouchi, 2009).

However, the Malay variety (or, better, varieties) in use in Macao, especially in the early days of the settlement, may not match the above-described system. We do have access to grammars and dictionaries of Malay written between the 17th and the 19th century: among the early sources, we may mention here George Werndly's *Maleysche Spraakkunst* (published 1736; see Mahdi, 2018), and an English-Malay (and Malay-English) dictionary with a grammatical description compiled by Thomas Bowrey (1701). These mention the negator *bukan*, and another negator which is given in various forms: *tijâda*, *tîda* (Roman, 1674), *tēda* (Bowrey, 1701); while some differences may be attributed to differences in the spelling conventions by these authors, there is no doubt that there was allomorphy for this negator, just as *tidak* / *tak* in Modern Malay.

Two later reference works are Marsden's (1812) and Crawfurd's (1852) grammars of Malay. Marsden mentions only the forms  $b\bar{u}kan$ , glossed as 'it is not', and  $t\bar{u}dak$ , glossed as 'no' (1812: 88): however, in the examples he provides, only  $t\bar{u}dak$  is ever used. In Crawfurd's grammar, he mentions bukan, glossed as 'not at all', and a wide range of (apparent) alternative forms for tiyada, glossed as 'no'. These include tiyadak, tidak, tidak, tidak, tadak, tadak, and tradak: he points out that tradak is a "corrupt pronunciation" for tiyadak, and that tradakk 'not good' is "in vulgar Malay, the most frequent mode of expressing 'bad'" (Crawfurd, 1852: clxviii).

Unfortunately, the sources cited here do not provide enough data to allow us to learn the details on the functional range of each negator. Nevertheless, from the examples we could gather (as well as from the glosses), we believe it is safe to say that  $tij\hat{a}da/t\hat{i}da/t\bar{e}da$  was the standard negator, used also for adjectives, while bukan had a more limited distribution, and likely had an emphatic nuance, similarly to Modern Malay.

However, it is important to stress the point that these reference works may not have had as their main object of inquiry the colloquial varieties of the language used in everyday interactions, also known as Low Malay. Werndly (1736) was essentially based on the High Malay literary language (see Mahdi, 2018); other grammars, while discussing also vernacular conventions, made large use of literary examples. As pointed out by Ansaldo (2009), the linguistic ecology of Malay-speaking territories (at least until the early 20th century) was very complex, with a range of varieties beyond the simple 'high vs. low' dichotomy generally described in the literature. Besides the literary language and regional spoken varieties, there were trade languages and other contact varieties: these restructured varieties were widely used as vehicular languages in Monsoon Asia. As hinted at earlier (Section 3.1), there is little doubt that it is these colloquial and restructured 'Malay' varieties, rather than literary, formal registers of Malay, which could have played a significant role in the ecology of Macanese.

In this respect, a very interesting source of data is Dennys (1878)'s handbook of colloquial Malay. While this reflects the Malay vernacular as spoken in Singapore, and at a time when the Macanese creole was already past its formative period, we believe that Dennys's work is still useful as a point of comparison. This is because Dennys provides numerous examples of actual language use, and he stresses the point that the language represented is a compromise between high ("pure") Malay and the "form of it current amongst the Chinese, Javan, Boyan and Kling residents of Singapore", i.e., the restructured varieties used as *linguae francae* (Dennys, 1878: no page number). The system of negation described in Dennys' handbook, in essence, is largely compatible with that of Modern Malay described above. *Tidak* and *tada* are used as standard negators, both for verbs and for adjectives, while *bukan* (also *bukan-nya*) negates NPs, and is also used as an emphatic negator. Just as in Marsden (1812), *bukan* is glossed as 'is not; it is not', while *tidak* is glossed as 'no; not'. See the following example.

(40) bukan; itu teh tidak baik

NEG that tea NEG good

'no, that tea is not good' (Dennys, 1878: 7; my translation and glosses)

In example (40), *bukan* is used as an emphatic negator, while *tidak* negates the adjective *baik*. However, note that *bukan* is sometimes used to negate adjectives in interrogative questions: it is suffixed with the interrogative particle *-kah* in these cases. This usage is analyzed in an early 20th century grammar of Malay (Maxwell, 1914), as "emphatic denial", "to signify *is it not? is it not so?*". Another grammar from that period, namely Winstedt (1913), provides the following minimal pair.

```
(41)
             dia
                    tidak
                            jahat
      a.
                            wicked
             3SG
                    NEG
             'he is not wicked'
                    bukan jahat
      h.
             dia
             3SG
                    NEG
                             wicked
             'he is not wicked (but he is something else)' (Winstedt, 1913:
             136)
```

Thus, it appears that the 'division of labour' between *tidak* and *bukan* has been in place for the past two centuries, with a seemingly high degree of continuity.

Moreover, it is worth considering here also a (once widespread) vehicular variety of Malay, i.e., (Singapore) Bazaar Malay.<sup>25</sup> In Bazaar Malay, *bukan* is used to negate adjectives without implying contrast.

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(42) Cakap Melayu saya bukan pandai
speak Malay 18G NEG good
'I am not good at speaking Malay'. (Khin Khin Aye, 2005: 71)
```

In point of fact, the occurrence of the so-called 'nominal' negator *bukan* with adjectives is one of the criteria used by Khin Khin Aye (2005) to argue that adjectives are a word class separate from verbs in Bazaar Malay. On the other hand, adjectives may be negated by the verbal (standard) negator *tak* as well in the language. Moreover, negators by themselves do not carry TAM values (with the exception of the not-yet maker *belum*).

In his presentation of the Kristang system of negation, Baxter (1988: 138–144) points out that *nenáng* 'not yet' is the only marker which has a clear functional parallel in Malay (i.e., the above-mentioned *belum*); *ńgka* and *nádi*, on the other hand, are seen as independent from the Malay model. Given that no cognate to *nenáng* is used in Macanese, Malay influence on the Macao

<sup>25</sup> Bazaar Malay is a Malay-based trade language which developed as a *lingua franca* in Southeast Asia; varieties of Bazaar Malay have been in use in the area at least since the 16th century, and are still spoken in some regions, including Singapore (Ansaldo, 2009).

creole should not have been inherited from Kristang; if Malay varieties have influenced Macanese, this is likely to have happened in the early days of the settlement, independently from the Kristang blueprint. In this connection, a restructured variety like Bazaar Malay is a plausible contributor, since it appears to have a specific ascriptive negator, *bukan*. However, there are two important differences between Bazaar Malay and Macanese: firstly, *bukan* does not overlap with the standard negator, differently from *nunca*; secondly, adjectives are not consistently negated with *bukan*, and the negators themselves have no TAM implication. We will return to this below (Section 5.4).

## 5.3 Negation in Sinitic

As for Sinitic languages, we already mentioned that the influence of Cantonese in the later development of Macanese has generally been acknowledged in the recent literature (see above, Section 3.1). For the system of negation, Lebel (2018: 182-183) suggests that the imperative negator ne-bom / nunca bom 'not good' (see above, Fn. 14) could be the relexification of Cantonese 中分子 nh-hóu 'don't', also lit. 'not good'. Lebel (2018: 176) also points out that the combination of nunca and the copula  $s\tilde{a}$  in Macanese is very often found in contrastive focus constructions ('it is not the case that...'), and that this specific usage of nunca may be associated to the parallel Cantonese construction 「告係 m-haih 'NEG-COP'.

Apart from the above, another potential area of overlap is that Cantonese does appear to have a 'split' between standard negation and ascriptive negation, somehow reminiscent of the Macanese system. Both adjectives and the copula are negated by 语  $\dot{m}h$ ; moreover, as said above, in Cantonese the negative copula 语像 mhaih is used for contrastive focus, and, also, to negate modified adjectives.

(43) 嗰 件 唔係 好 靚 啫 gó gihn m-haih hóu leng jē that CLF NEG-COP very nice SFP 'That one's not very nice'. (Matthews and Yip, 2011: 286)

(44) 今日 方 落雨
gāmyaht móuh lohk-yúh
today NEG fall-rain
'It hasn't rained today'. (Matthews and Yip, 2011: 288)

Thus, just as in Macanese, in Cantonese we seem to have TAM distinctions for standard (verbal) negation which do not apply to ascriptive negation; also, the marker of ascriptive negation, namely 语  $\dot{m}h$  (/ 语像 mhaih), overlaps with one of the markers of standard negation, just as nunca. However, the TAM categories at issue are in fact different from the realis/irrealis distinction which is pervasive in Macanese negation.

Cantonese does have a marker of irrealis though, namely 會 wúih, which is also negated by 语 mh. Interestingly, the functions of 會 wúih seem to overlap to some extent with Macanese lôgo: it is used to indicate future events (generally, predictions) in the apodosis of conditional sentences, and to mark an event as habitual (Matthews and Yip, 2011; Chappell and Peyraube, 2016b). This seems to be true also for its negated form; differently from nádi, though, 语會 mh-wúih is used both for standard and for ascriptive negation. See the following Cantonese example.<sup>27</sup>

譮 CFA 都 吃力 如果 唔會 (45)heklihk duhk CFA dōu mh-wúih taai yùhgwo study CFA even NEG-IRR too strenous 'if [I] take up a Chartered Financial Analyst programme, it shouldn't be too strenuous'

As shown in example (45), the use of 唔會  $\grave{mh}$ -w $\acute{u}ih$  as an irrealis negator applies to the domain of ascriptive negation too: there is hence no difference between standard and ascriptive negation in this respect.

Besides Cantonese, Hokkien could also have influenced the development of Macanese, especially in its formative period, as argued earlier. Hokkien has a very complex system of markers of negation which convey different TAM nuances (Chappell and Peyraube, 2016a): due to space constraints, here we shall focus only on the three most common negators, namely  $\boxplus \bar{m}$ ,  $\not \equiv b\hat{o}$  and  $\not \rightleftharpoons b\bar{e}$ . For the sake of convenience, our discussion is based on the Taiwanese variety of Hokkien (also known as 'Taiwanese Southern Min'), as it is arguably the best described variety. In Taiwanese Hokkien, verbs, the copula, and some

<sup>27</sup> From a web forum post (URL: https://forum.hkgolden.com/view.aspx?message=2349431& page=2; last access: 23/7/2019)

adjectives may be negated by #  $\bar{m}$ . However, #  $\bar{m}$  actually functions as the standard negator only for the copula and for a limited set of verbs and adjectives; for most lexical items, negation with #  $\bar{m}$  implies volitionality (Lin, 2015: 299–300), as in the example below.

'He does not want to be honest' / 'he will not be honest'. (adapted from Lin, 2004: 108)

For 'plain' negation of (most) adjectives, either  $mathand b\bar{b}$  or mathand b are used. According to Lin (2015), the choice depends on whether the quality described by the adjective is perceived as 'desirable' (47) or 'undesirable' (48).

彼 塊 肉 無 軟 (47)hit tè hah bô nńg that NEG tender CLmeat 'That piece of meat is not tender'. (Lin, 2015: 311)

(48)車頭 的 便所 袂 垃圾 chhia-thâu ê bē lah-sap piān-só station Poss toilet dirty NEG 'The bathrooms in the train station aren't dirty'. (Lin, 2015: 152)

Both 無  $b\hat{o}$  and 決  $b\bar{e}$ , however, have many other functions, besides negating adjectives. Taiwanese Hokkien 無  $b\hat{o}$ , similarly to Cantonese 冇  $m\acute{o}uh$  (see above, example 44), is an existential and possessive negator, and also negates the occurrence(/completion) of an event. Besides, 無  $b\hat{o}$  in Hokkien is also used to negate habitual actions (with the progressive aspect marker 咧 teh), and to negate the protasis in conditional sentences.

只要 無 落 咱 (49)雨, Chí-iau bô lóh hō. lán only-need NEG fall rain 1PL 外口 會 佇 舉行  $\bar{e}$ tī. gōa-kháu kí-hêng hun-lé perform wedding outside at 'Provided that it doesn't rain, we will have the wedding outside'. (Lin, 2015: 604)

袂  $b\bar{e}$ , on the other hand, has a clear modal function, as it is used to negate possibility, ability and permission (Yang 2012): it is in fact the negator of the irrealis marker 會  $\bar{e}$  (see above, example 48; see Chappell and Peyraube, 2016a). In point of fact, Lien (2015: 174) believes that the difference between 無  $b\hat{o}$  and  $\partial t$   $\partial t$  as negators for adjectival predicates lies in the speaker's perspective on the evaluation: while  $\partial t$   $\partial t$  indicates certainty,  $\partial t$   $\partial t$  indicates a conjecture. This is consistent with the characterization of  $\partial t$   $\partial t$   $\partial t$ 

Thus, in short, the Hokkien system of negation resembles Macanese in having a specific negator for irrealis, namely  $\not \in b\bar{e}$ , and a negator for other types of predicates, mostly in the domain of realis, namely  $\not \in b\bar{e}$ . A third negator,  $\not \in m$ , incorporates the sense of volitionality, similarly to Macanese non  $qu\hat{e}ro$  (Lebel, 2018) or even  $n\acute{a}d\acute{a}$  (see above, example 30). Just as in Macanese, the realisleaning negator  $\not \in b\hat{e}$  is used as the main negator for adjectival predicates, and as the negator for the protasis in conditional sentences. Nevertheless, there are also significant differences between Hokkien and Macanese: ascriptive negation in the former is split between  $\not \in m$  for the copula and  $\not \in m$  for adjectives. Moreover, adjectives too may be negated by the irrealis operator  $\not \in m$  just as ordinary verbs.

However, we cannot take for granted that the system of negation of whatever Hokkien variety was current in Macao in the past was the same as that of contemporary Taiwanese Hokkien. In fact, in the evolution from Early Southern Min, i.e., the language between the mid-16th century to the late 19th century, into Modern Hokkien, we see some significant changes in the functions of the above-mentioned negators (Yang, 2017). Firstly, #  $\bar{m}$  normally negates both the copula and adjectives in early texts; #  $b\hat{o}$  was used in Early Southern Min to negate nouns which, in a sense, 'act' as adjectives, i.e., property nouns (Yang, 2017: 113), and then gradually replaced #  $\bar{m}$  as the main negator for adjectives. Similarly,  $\nleftrightarrow$   $b\bar{e}$  used to be a verbal negator which was later extended to adjectives (also due to the verb-like status of Southern Min adjectives; Yang, 2017: 216–217).

While a more thorough discussion of negation in Early Southern Min is obviously beyond the scope of the present paper, in the light of the discussion above we may suggest that the Hokkien variety which was part of the ecology of Macanese in its formative period might have had a system of negation in which (predicative) adjectives were almost always negated by the same negator

<sup>28</sup> This substitution is explained by Yang as a byproduct of the pragmatic extension of the existential verb  $\not\equiv \bar{u}$  'there be, have' into a marker of emphasis before adjectives. Since  $\not\equiv b\hat{o}$  is also the existential negator, it naturally became the negator for emphatic  $\not\equiv \bar{u}$ , and was later reanalyzed as a non-emphatic negator for adjectives (Yang, 2017: 209–211).

as the copula and verbs, i.e.,  $\boxplus \bar{m}$ . This negator often had a semantic nuance of volition with verbs, just as in present-day Hokkien: verbs were part of a more articulate subsystem, which included the negator  $\boxplus b\hat{o}$  and  $\not\rightleftharpoons b\bar{e}$ , with their own TAM features. Thus, there appears to be evidence of the fact that ascriptive negation was treated differently from standard negation in Early Southern Min, with the latter involving more markers and TAM distinctions, similarly to what happens in Macanese.

### 5.4 Summary

In this section, we briefly discussed the systems of negation of some APCs, and of the main substrates and adstrates of Macanese. In Table 5, we plot the types of negation and TAM features of individual negators in the main languages we considered here, comparing them to the situation of Macanese; for the sake of readability, we omit data on existential negation, as well as on other subtypes of negation (imperative, 'not-yet', etc.).

Thus, it appears that, among the languages which contribute to the 'feature pool' (Mufwene, 2001) of Macanese, Kristang, Cantonese, Early Southern Min and, with a lower degree of consistency in the marking patterns, Bazaar Malay, do seem to have an asymmetry between standard negation and ascriptive negation. However, in none of these varieties the situation is the same as Macanese; the best matches appear to be Early Southern Min and Kristang. In Early Southern Min, standard verbal negation has a three-way distinction between 'plain'/volitional negation, perfective negation, and irrealis negation; perfective and irrealis are unavailable for ascriptive negation, as expected. In Kristang, only adjectival predicates, but apparently not nominal predicates, may be found in the construction with the irrealis negator *nadi*.

We may thus hypothesize that the profile of Macanese, in which ascriptive negation, while using the same marker as standard negation (nunca), does not participate in the TAM distinctions expressed by standard verbal negators (essentially, nunca vs. nádi), could well have developed from this feature pool, as four languages in its ecology show a comparable split. The combined influence of Kristang, (some form of) Bazaar Malay, Cantonese and (premodern) Hokkien might in fact explain why Macanese seems unique in this respect among APCs, despite the strong convergence with the latter in many (if not most) other domains of grammar. This would be yet another case in which a difference between Macanese and other APCs might be because of the stronger role that Sinitic (and Kristang) has in the feature pool of the Macanese creole (see Arcodia, 2017). Besides, as mentioned above (Section 5.3), other aspects of the Macanese system of negation may have developed following a Sinitic model: specificially, the imperative negator ne-bom / nunca bom, as well as

TABLE 5 A comparative view of negation in Macanese, in APCs, and in its substrates/

Type language		Standard verbal negation	Adjectival predicates	Nominal predicates
Kristang		ńgka, nádi (IRR)	ńgka, nádi (IRR), nté   nunténg	ńgka, nté   nunténg (?)
Batavia and Tugu CP		nungku, nada (IRR)	nonteng, nada (IRR)?	nonteng, nada (IRR)
Malabar Creole Portuguese		nu, $nuka$ (PST), $na(d)$ (IRR)	nu (tæ), nu (tinha) (PST), na(d) (IRR)?	nu, nu (tinha) (PST), na(d) (IRR)?
Sri Lanka Portuguese		não, nunca (PST), nada (FUT), nadía (COND)	nuntem, nunca tem (PST), nada (FUT), nadía	não, nunca tem (PST), nada tem (FUT), nadía
Malay		tidak   tak	(COND)  tidak / tak, bukan  (EMPH)	tem (COND) bukan
(Sing.) Bazaar Malay Cantonese		tak 唔 ṁh, 冇 móuh (PFV), 唔會 ṁh- wúih (IRR)	tak, bukan 唔 ṁh, 唔條m- haih, 唔會 ṁh- wúih (IRR)	bukan 唔條 m-haih, 唔會 m̀h-wúih (IRR)
Hokkien (Southern	Early	$ \# \bar{m} \text{ (VOL)}                                    $		毋是 m̄-sī
Min)	Contemporary (Taiwanese)	, , , , , , , , , , , , , , , , , , , ,	毋 m̄ (VOL) 無 bô, 袂 bē (IRR?)	毋是 m̄-sī
Macanese	,	nunca, nádi (IRR)	nunca (sã)	nunca sã

the use of  $nunca\ s\tilde{a}$  in contrastive focus construction, could be attributed to Cantonese (and Hokkien) influence (Section 5.3).

However, a word of caution is necessary here: since we have no direct evidence of which variety (or, better, varieties) of Malay and Hokkien were actually spoken in Macao, this hypothesis must remain speculative. Moreover, a larger set of data of Kristang and, Especially, Malabar Creole Portuguese, is needed to gain a better understanding of the interaction of reality status with negation in these varieties.

Also, given the limitations of the available data, we cannot but take into consideration the possibility that the specific features of ascriptive negation in Macanese are due to language-internal developments. Generally speaking, when the quality and quantity of the data is limited, a supporting

argument for a contact hypothesis would be that the feature at issue is rare, and thus not very likely to arise spontaneously. However, the use of the same negator both for standard negation and for ascriptive negation is not uncommon, cross-linguistically. In Veselinova (2015a)'s sample, 24 out of 96 languages (25%) follow this model, which, incidentally, is widespread in Standard Average European languages (including English). Moreover, while Kristang makes use of nadi for the negation of adjectives (see example 33), we found no attestations of the irrealis negator with nominal predicates: given the close relationship between Macanese and Kristang, perhaps the former entirely abandoned  $n\dot{a}di$  for all types of ascriptive negation, and chose instead the more common general negator nunca — a development that, maybe, could already have been under way in Kristang. Even in this scenario, though, contact could still be part of the picture: the combined influence of the varieties discussed above may have reinforced a tendency which already existed in Macanese (if not already in Kristang, as mentioned above).

## 6 Summary and Conclusions

In this paper, we sought to offer our contribution to the understanding of the development of negation in Macanese, within the ecology in which it evolved. With regard to standard negation, we argued that the main distinction is that between the domain of realis, for which nunca is used, and the domain of irrealis, for which *nádi* is used, much in agreement with Lebel's (2018) analysis. In this respect, Macanese negation appears to be asymmetric both on the syntagmatic and on the paradigmatic level, since TAM markers are not obligatory in affirmative sentences, and the TAM markers já and nunca are primarily aspectual, rather than mood markers. Thus, while the affirmative paradigm involves aspect and mood, the negative paradigm involves mainly mood (or, more precisely, reality status). As for ascriptive negation, we showed that it may be regarded as distinct from standard negation and from existential, possessive and locative negation in Macanese, since it is always conveyed by nunca, without distinctions as to the reality status of the predicate. While the system of negation has distinct features at different historical stages of the Macao creole, the behaviour of ascriptive negation is remarkably consistent. Only in the most recent corpus we find ascriptive negation marked by non rather than nunca, but this occurs only with the acrolectal inflected copula  $\acute{e}$ , and it may be interpreted as a sign of convergence towards the Standard Portuguese model.

<sup>29</sup> I would like to thank an anonymous reviewer for pointing this out to me.

The last part of the paper was devoted to a comparative overview of negation in APCs and in the main substrates and adstrates of Macanese. We showed that the Macanese split between standard and ascriptive negation is generally not found in other APCs: however, we do have in Kristang an apparent division between verbal and nominal predication, thus partly overlapping with that seen in Macanese. As for Malay, while the standard language does not seem to treat ascriptive negation consistently, a restructured colloquial variety as (Singapore) Bazaar Malay indeed uses one and the same negator for the copula and adjectival predicates, although adjectives may be also negated by the standard verbal negator. Sinitic languages, and particularly Early Southern Min (but not contemporary Taiwanese Hokkien), appear to split the marking of standard and ascriptive negation in a similar configuration as Macanese. We thus suggested that the development of ascriptive negation in Macanese might be explained by the combined influence of restructured varieties of Malay and Sinitic, as well as Kristang, which contribute with a converging model to the feature pool out of which Macanese evolved. This might explain the difference between Macanese and other APCs in this domain. On the other hand, we also pointed out that the peculiar configuration of ascriptive negation in Macanese could also be the product of language-internal developments, possibly reinforced by contact, which might have begun earlier in Kristang.

Lastly, regarding the overlaps between ascriptive negation and other subtypes of negation (see above, Section 2), we did not find any significant correlation in Macanese, as *nunca* is but the standard negator. It may however be worth remarking that, of the two main negators *nunca* and *nádi*, ascriptive negation 'chooses' the most frequent (and least marked) exponent. Also, it appears that in all of the languages considered here the TAM distinctions made for standard negation are either the same or more than those made for ascriptive negation. We suggest that this could be the manifestation of a broader typological trend, according to which ascriptive negation, due to its specific semantics, is less likely to make TAM distinctions, if compared to standard negation. We leave this for further research.

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# Appendix. Language Map



FIGURE 1 Approximate location of the main languages discussed in this article  $^{30}$ 

<sup>30</sup> For an interactive version of the map, see https://tinyurl.com/52mutub2.