

The Development of Tense, Mood and Aspect
Markers in Mauritian Creole



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Abstract

This thesis explores how Mauritian Creole's tense, mood and aspect (TMA) markers have changed over time. The main aim is to provide a detailed historical account for the TMA markers: *POU*, *VA*, *TI*, *FINN* and *PE*. I analyse written records from Old (pre-1900), 20th Century and Modern (2000s) Mauritian, and break down the meanings of the markers into 'features' to establish prototypical or 'canonical' usages in each time period, based on Corbett's canonical typology approach. I stress the importance of considering lexifier (French) and substrate languages (e.g. Niger-Congo & Bantu) as well as language-internal change as contributing factors to their development. The changes are investigated from a functional grammaticalization perspective, providing a cross-linguistically comparable framework to examine whether this micro approach to change corresponds with macro grammaticalization paths in the literature.

In addition to diachronic study, I use elicitation tasks (both online and in-person tasks) to investigate the synchronic usage of the markers. Through quantitative analysis, these results show whether tendencies observed in the historical analyses continue today. The main contribution of my thesis is the quantification and clarification of the features which make up the meaning of the TMA markers at different stages of their development, in some cases supporting established cross-linguistic patterns, such as imperfective drift (partly attested in *PE*), in others identifying unexpected developments, such as *VA*'s later possible obligation meaning in future expression.

Overall, I show that Mauritian's TMA development is more complex and nuanced than expected from cross-linguistic grammaticalization paths. The micro approach taken in this thesis does not always align with the macro grammaticalization paths attested in the literature, and I suggest that polygrammaticalization may better account for the multifaceted nature of certain markers. Unexpected developments pose a challenge for theories of language change, which should be refined by taking into account the empirical evidence presented in this thesis.

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Abbreviations

Glosses broadly follow the Leipzig glossing rules. The TMA markers which are investigated in this thesis are not glossed, but simply written in capital letters. Where glosses are applied, the following abbreviations are used:

1 - first person	COP - copula	INTJ - interjection
2 - second person	DEF - definite (article)	NEG - negation, negative
3 - third person	DEM - demonstrative	OBJ - object
sg - singular	DET - determiner	POSS - possessive
pl - plural	DIM - diminutive	PROG - progressive
f - feminine	EMP - emphatic	PST - past
COMP - complementizer	INDEF - indefinite (article)	REL - relative (pronoun)

Preliminary Notes

‘Creole’ in the singular, ‘Mauritian’ and ‘Mauritian Creole’ are used interchangeably to refer to the language in question. I refer to non-overt marking as \emptyset or the ‘zero-marker’.

Dates in square and curly brackets do not refer to a reference entry but to a corpus text. Text references in square brackets can be found in Baker & Fon Sing (2007) or online: <http://concordancemmc.free.fr/>. Sources for text references in curly brackets are as follows:

De Sgrais{1939} - Le Juge de Sgrais (1976)
De Sgrais{1952} - Le Juge de Sgrais (1976)
Virahsawmy {1972} – Kiltir.com (2006)
Baker {1970} - Baker (1972)
Tizan (ar so 8 frer) {2003}- Abaim (2003)
Virahsawmy {2003-2007}- Virahsawmy (2020)
Virahsawmy {2012} - Virahsawmy (2012)
Virahsawmy {2017-2018} - Virahsawmy (2020)
Lalit {2016-2017} - Lalit (2020)

Chapter 1:

General introduction

1.1 Subject of interest

This thesis explores how grammatical markers expressing tense, mood and aspect (TMA) information have developed in Mauritian Creole, a French-based Creole spoken by over 1.3 million people on the island of Mauritius. The island is located in the Indian Ocean approximately 900 km to the east of Madagascar (Baker & Kriegel, 2013:250). See Figure 1.1.



*Figure 1.1: Map showing Mauritius in the Indian Ocean
(source: Michaelis et al., 2013)*

I approach the analysis of the markers from two angles, seeing the importance of both a diachronic study of their development through corpus analysis, and a synchronic analysis of their use today through online and fieldwork elicitation. Furthermore, this integration of the two levels of analysis allows for a fine-grained, microscopic view of the properties and characteristics (i.e. what will be termed ‘features’) of each marker at any one stage of their development, as well as a telescopic view, so to speak, of their overall development and behavioural trajectory.

The markers are investigated from a functional grammaticalization perspective, which provides a cross-linguistically comparable framework, assuming that semantic and pragmatic (contentive) changes are primary, “while formal change is seen as a consequence of or concomitant” with these

contentive changes (Hengeveld et al., 2017:3). Moreover, I investigate whether the micro-approach to change taken in this thesis, based on the detailed investigation of multiple features, corresponds with the macro grammaticalization paths and cross-linguistic patterns attested in typologically-oriented studies, which describe and predict broader tendencies.

Pidgins and Creoles are significant for linguistic theory because they enable us to observe language change in progress, something Bloomfield (1935:347) claimed to be impossible. Their birth and subsequent development within our not-so-distant history facilitates the study of early grammatical changes and means Creoles can serve as “laboratory cases for studying the emergence of grammatical items at close hand” (McWhorter, 2003:204). Although traditionally thought of as ‘special’, it is now considered that after their initial abnormal genesis due to extreme social conditions, Creoles develop much in the same way as any other language and should not be thought of as exceptional (DeGraff, 2003; Heine & Kuteva, 2003:561; Winford, 2012:437). However, the fact Creoles exhibit much more grammaticalization than the average language over a short period of time (McWhorter, 2018:405) means Creoles constitute a rich source of grammaticalization data and are thus important test cases for any theory of change (McMahon, 1999:265).

TMA marking in Mauritian Creole deserves more attention than it has often been paid since it has developed a more complex system than is typical in Creole languages. Rather than the TMA markers posited in Bickerton’s (1981:54) Creole Prototype (‘anterior’, ‘irrealis’ and ‘non-punctual’), common in Atlantic Creoles, Mauritian Creole has competing past (*FINN* and *TI*) and future markers (*POU* and *VA*). Many Creole languages including Hawaii Creole only have one future marker (Michaelis et al., 2013; Spears, 1990:122), although it is generally more common for French-based Creoles to have multiple future markers.

The TMA markers which form the basis of the corpus analysis in this thesis are:

- *POU* (variants: *pour/pu*)
- *VA* (variants: *ava/a*)
- *TI* (variants: *ete/te*)
- *FINN* (variants: *inn*, ‘*nn*’)
- *PE* (variants: *ape*)

Additionally, the elicitation tasks explore zero (\emptyset) and *FEK* marking. The fact that TMA markers are mentioned by most linguists who have an interest in Mauritian Creole, but are rarely examined in detail, means certain assumptions from the 1970s are still cited today and rarely questioned. However, assumptions about their distribution differ substantially over time and from linguist to linguist, partially due to a lack of consensus on terminology which has resulted in inconsistencies (see chapter 2).

Apart from a small number of studies (e.g. Kriegel, 2003; Fon Sing, 2010)¹, the diachronic development of Mauritian's TMA markers has not been systematically investigated. An in-depth, micro, diachronic approach to Mauritian's TMA marking is thus missing and needed to better understand the current situation. Indeed, many synchronic phenomena make little sense without examining their diachronic development. Since language is constantly changing, viewing synchrony as one 'slice' in a series of developments can help "explain the nature of grammar at any particular moment" and also make it easier to see similarities between languages (Bybee et al., 1994:4).

Bybee et al.'s (1994) typological research into grammatical development proposes specific grammaticalization paths which are assumed to apply cross-linguistically. Through the analysis of Mauritian Creole's TMA markers, we can test whether such hypotheses also hold for Mauritian Creole.

1.2 Mauritian Creole: some background information

Earliest records of a Mauritian variety date from 1734, but it was not referred to as an independent language "la langue créole" until 1773 (Baker & Corne, 1982:248). 19th century Creole was considered "a thorough simplification of the French, doing away altogether with that which was deemed superfluous" (Macmillan, 1914:110). Early records mainly consist of travellers' accounts or legal incidents between slaves and slave owners (Baker & Fon Sing, 2007; Chaudenson, 1981).

¹ Unfortunately I have been unable to access Fon Sing's thesis despite contacting him several times.

In early documents, the language is unsurprisingly described negatively as “corrupted French” or “mauvais patois”². Negative attitudes have continued throughout the 20th century until today and mean that Mauritian Creole has been largely absent from the formal written domain until recently. Being a socially stigmatized language can also have consequences for fieldwork if speakers are unwilling to speak a non-prestigious variety in a formal context or are unfamiliar with the written form (Sippola, 2018).

Baissac’s (1880) work is the first study of the language, and, like many texts from this period, was written with a view to recording an oral language which was thought likely to disappear (Baker & Fon Sing, 2007:40; Vaughan, 2005:209). In the 20th century, the language was generally only written formally by activists for political (i.e. Lalit, 2020), cultural (i.e. Virahsawmy, 2020) or academic (i.e. Baker, 1972) reasons. This means that the available texts are in no way generalizable, although early texts can be considered representative of the spoken variety due to lacking written norms (Rajah-Carrim, 2009:486).

To exemplify written Mauritian, its resemblance to and differences from French, see 1) below:

1) Virahsawmy (2012)

li	<u>TI</u>	<u>PE</u>	zwe	ar	so	lisien³
lui	était	après	jouer	avec	son	(le) chien
3sg	PST	PROG	play	with	3sg.POSS	dog
<i>‘He was playing with his dog/ il jouait avec son chien’</i>						

The second line displays words in French, from which the Mauritian words are assumed to be derived. Whilst French encodes tense, mood and aspect (TMA) information via inflectional verbal affixes or conjugated auxiliaries, there is no inflection in Mauritian Creole, as is common for Creoles (Holm, 2000:174). Instead, this information is carried by separate pre-verbal TMA markers (Henri

² Literally “bad patois” or “bad dialect”.

³ Various spelling conventions have been used throughout Mauritian’s history. I use whichever is employed by the author I quote. Virahsawmy introduced a system representing [u] orthographically as ‘ou’, and Baker & Hookoomsing’s (1987:8–9) system is more phonetic, using ‘u’. To complicate matters, older texts used a gallicized system based on French, and official spelling was only introduced in 2011. Today, Mauritians tend to use whichever spelling they like and often mix them, as most speakers never learnt to write Creole (Rajah-Carrim, 2009).

& Kihm, 2015:249), corresponding to the underlined elements in 1), which I labelled *TI*⁴ (past tense) and *PE* (progressive aspect). When markers co-occur, they are said to systematically occur in the fixed order of tense, mood then aspect across Creoles (Syea, 2006). It is commonly assumed that aspect occurs closest to the verb because it expresses information which is specific to the verb, whilst tense and mood pertain to the proposition more generally (Syea, 2013:114). In 1), *TI* was labelled ‘tense’, and *PE* ‘aspect’, adhering to this principle. However, determining whether a marker constitutes tense, mood or aspect is not as straight-forward as often implied, and difficulties with categorization are discussed in chapter 2.

Commonly, Creoles do not systematically use TMA markers overtly (Holm, 1988:150). This means that TMA markers need not be used if tense, mood and/or aspect information is already clear from the context. However, not all linguists agree whether zero marking is possible in all temporal domains in Mauritian Creole⁵, and this thesis investigates different possibilities in chapter 12. Due to limited time and resources, and the difficulty of identifying this marker with no overt form, it was not possible to examine its development throughout the historical texts, but it is investigated systematically in Part II.

The majority of Mauritian Creole vocabulary is derived from French (Baker & Kriegel, 2013:259), which is known as the superstrate or lexifier⁶ language. Since lexical items are more visible than a language’s underlying structure, Mauritian Creole superficially appears similar to French. As a diglossically ‘high’ variety in Mauritius’ complex multi-glossic society, French was traditionally considered to be the language of the middle and upper classes, which means Mauritian’s affiliation with French is often encouraged (Seuren, 1995:532; Sippola, 2018:7). However, many morphosyntactic characteristics of French, such as inflection, gender, number agreement and

⁴ Markers are capitalized when they refer to any variant, and in lower case when I refer to a specific form. Their functions will be discussed in more detail in chapter 2.

⁵ Syea (2013) claims \emptyset is only possible in present contexts, although Stein (2007) believes it is context-dependent.

⁶ Whilst ‘superstrate’ and ‘lexifier’ both refer to French in French-based Creoles and are often used interchangeably, they are not always equivalent (Selbach, 2008), and I choose to adopt the term ‘lexifier’.

suppletion are simply non-existent in Mauritian, another typical characteristic of Creoles (Grant & Guillemin, 2012:52).

During colonization, many languages were brought to Mauritius through slavery and indentured labour (see chapter 5). These other input languages are known as substrates and have been shown to have influenced the structure of Mauritian Creole. Kriegel (2015) highlights reflexives, ditransitives and ablative constructions as showing convincing substrative influence and Van Der Wal & Veenstra (2015:2) attribute Mauritian's long/short verb alternation to the conjoint-disjoint alternation found in some eastern Bantu languages. I investigate the potential input of such influences from a historical perspective, attempting to consider a whole range of possibilities. I recognize that many diverse factors likely contributed to the development of a marker and acknowledge that it is often impossible to draw hard conclusions about their contribution.

1.3 Aims of thesis

This thesis has two main aims. The first aim is to track the diachronic evolution of five Mauritian TMA markers *POU*, *VA*, *TI*, *FINN* and *PE* and provide a detailed historical account until the present day. To achieve this, I identify different stages of development observable in the corpora⁷, which comprise 60 old texts (Baker & Fon Sing, 2007), collections of folktales (Baker, 1972; Le Juge de Segrais, 1976) and texts available online (e.g. Lalit, 2020; Virahsawmy, 2020), amongst others. More abstractly, this approach establishes how Mauritian's TMA development relates to models and patterns identified cross-linguistically, thus evaluating the generalizability of grammaticalization paths and considering how Mauritian Creole compares with predictions made in the literature.

The terminology used to label Mauritian's TMA markers is often inadequately defined and in many cases, the same term may be used with different meanings, or different terms to refer to the same concept (Adone, 1994:40; Detges, 2000; Syea, 2013:33). There is therefore little consensus

⁷ I put together the corpora based on pre-existing texts and text collections (see chapter 4).

regarding the semantics and functions of the markers. The second aim is therefore to quantify and clarify the functions expressed by each marker through identifying features that constitute ideal, or canonical instances, loosely based on Corbett's canonical typology approach (Corbett, 2003a, 2003b, 2007; Round & Corbett, 2017). Through this approach, I can also explore to what extent the hypothesis of source determination (Bybee et al., 1994:9) holds over time.

The methodology involves both corpus analysis and elicitation techniques. The corpus analysis primarily takes a qualitative approach, firstly examining examples in context from Old Mauritian (pre-1900), 20th Century Mauritian and Modern Mauritian (post-2000)⁸ texts, and then systematically coding features that are assumed to account for the TMA markers in these different time periods.

A number of elicitation techniques are used to investigate the current language, ranging from online translation tasks to semi-structured interviews. The larger number of data points mean statistical tests can be carried out. Whilst some of the trends identified in the corpus analysis continue on their expected trajectory, some developments are unexpected or do not seem to have progressed as far as the modern corpus texts suggested.

Despite the language having a relatively short history, Mauritian Creole has changed considerably, "raising interesting questions about the nature of creolization, grammaticalization and language change" (Baker & Syea, 1996:6). This thesis contributes to our understanding of Mauritian TMA markers by providing both an in-depth diachronic perspective and conclusions from current elicited data regarding TMA usage in Mauritian Creole today.

1.4 Outline of thesis

The thesis is structured as follows. This introduction (chapter 1) has provided some relevant background and structural information regarding Mauritian's TMA markers and outlined the aims of this thesis. Chapter 2 reviews the previous research and is divided into the following sections;

⁸ Although this is not common in the literature, I refer to three ages of Mauritian Creole TMA marking throughout the analysis because there are clear differences in both frequency and usage between these periods.

previous research on tense, mood and aspect (2.1), an explanation of terminology used in this domain (2.2) and specific labels which have been applied to Mauritian's TMA markers in the literature (2.3). Section 2.4 examines theories of language change and grammaticalization, before focussing on how these can be applied to the Creole context.

Chapter 3 delves into the general and specific research questions guiding this thesis and outlines the hypotheses regarding the different stages of development. Chapter 4 presents the methodology adopted in the corpus analysis for the historical development and gives a detailed review of the methodology for the elicitation tasks, including the advantages, disadvantages and data analysis approaches of each task. Chapter 5 presents relevant details from Mauritius' socio-historical background in order to better understand the context in which the markers emerged and relevant factors which may have influenced this development.

The analysis is split into two parts. Part I encompasses the corpus analysis chapters, examining Old Mauritian, 20th Century Mauritian and Modern Mauritian texts in turn to see what conclusions can be drawn through applying a canonical approach. Chapter 6 explores the future markers *POU* and *VA*, chapter 7 investigates *TI* and *FINN* in past contexts, and chapter 8 looks into *PE*'s development as a progressive marker.

Part II focusses on the five elicitation tasks. In chapter 9, we return to *POU* and *VA* to see whether they have continued on their expected trajectories, before expanding the focus to explore future marking more generally. Similarly, chapter 10 examines *TI* and *FINN* before looking at other markers used in past contexts. Finally, chapter 11 summarizes the findings pertaining to present expression in the elicitation tasks, and chapter 12 explores what it means to be a zero marker and whether the results support assumptions about \emptyset 's function. Chapter 13 summarizes the diachronic findings, and outlines the limitations and conclusions from this thesis.

Chapter 2:

Previous research

This chapter summarizes previous work relevant for the analysis and discussion of the development of TMA markers in Mauritian Creole.

I firstly address the notions of tense, mood and aspect to clarify what is understood by these terms, and introduce relevant terminology. The thesis is structured around the specific forms of the markers rather than their assumed functions in order to avoid restricting the research to those cited before and pre-empting their functions before analysing them in detail. I therefore present an overview of the labels which have been associated with the different markers in the Mauritian literature. I also explicitly define these terms to make sense of the way they have been used by different linguists and establish whether these labels designate the same or different concepts. This will facilitate the analysis of the individual markers in Parts I and II.

The notion of grammaticalization is essential for interpreting the development of the markers over time. Section 2.4 clarifies my stance on language change and grammaticalization as well as the debated issue of Creole genesis, and presents relevant Creole-specific characteristics of grammatical change.

2.1 Tense, mood and aspect (TMA)

Since the markers of interest are considered to be TMA⁹ markers, I define what is understood by tense, mood and aspect in the following subsections. As we shall see throughout this section, it is a challenge to treat tense, mood and aspect in isolation. However, since one aim of this chapter is to

⁹ The abbreviations TMA and TAM can both be found in the literature. However I employ TMA for the simple reason that this is the order that the markers usually appear in if they co-occur in Mauritian Creole.

introduce relevant terminology, and certain terms are considered to fall under these categories, the headings of tense, mood and aspect will provide some structure to the section.

Bybee et al. (1994:3) assume that tense, mood and aspect are “cognitively significant semantic domains” but not structurally significant categories. On this understanding, TMA expression can be identified cross-linguistically on the basis of meaning rather than formal expression. The focus of this research therefore lies in tracking usage differences across semantic domains rather than looking for similar structural constructions to those identified in other languages. Advances in the typology of TMA marking have been paved by Bybee et al. (1994) and Dahl (1985), who both carried out extensive studies covering the expression of these categories in a wide range of languages (De Haan, 2010:446).

2.1.1 Tense

Tense is deictic, as it locates an entity with respect to a fixed point of view (De Haan, 2010:446).

Most typological research into tense uses Reichenbach’s (1947) terminology, which consists of:

- speech time (S) - the time at which the statement was uttered;
- event time (E) - the time at which the event described in the utterance takes place;
- reference time (R) - the time against which E is measured.

When S (speech time) and R (reference time) are identical this is known as absolute tense, but when they are different, it is called relative time. The three absolute tenses are past, present and future. Languages do not necessarily distinguish between all three possible absolute tenses; some languages have a past/non-past distinction (e.g. Mao Naga), others a future/non-future distinction (e.g. Kannada) and some are said to be tenseless (e.g. Mandarin) (De Haan, 2010:447).

As well as semantic criteria, there is a tendency to assume tense must have the formal criterion of being inflectional (De Haan, 2010:446; De Brabanter et al., 2014). This would entail a lack of tense in Creoles, which do not generally make use of inflection. It is disputed whether inflection can be

considered a criterion in the definition of tense (De Brabanter et al., 2014:3–4). In line with Bybee et al. (1994), I view meaning as primary over form, so do not believe the criterion of inflection is necessary in determining whether something constitutes tense. Nevertheless, by labelling a marker pre-emptively as ‘tense’, this may bias the analysis, so I prefer to use the term ‘expression’ rather than ‘tense’ with reference to Mauritian Creole.

2.1.1.1 Future expression

Using Reichenbach’s (1947) terminology, future tense is defined as utterances in which the speech time (S) occurs before the reference (R) and event (E) time. Plain future (e.g. English ‘will’) can be distinguished from a prospective future (English ‘going to’) with this model. A prospective future has the reference time before the event time too ($S, R - E$), whilst a plain future only has the speech time before the reference and event time ($S - R, E$). Prospectives can occur in all times. English ‘was going to’ would be past prospective and can be cancelled (i.e. “I was going to eat chocolate, but didn’t in the end”), unlike a plain future. See Figure 2.1 for a diagram showing plain future.



Figure 2.1: Future diagram taken from Syea (2013:110)

One understanding of the main use of futures is a “prediction on the part of the speaker that the situation in the proposition, which refers to an event taking place after the moment of speech, will hold” (Bybee et al., 1994:255). Whilst future expression very often involves prediction, it rarely solely includes prediction, as the speaker often makes other modal assertions about the future event.

An alternative view, which emphasizes the asymmetrical, modal nature of future expression, is that the future can refer to multiple possible worlds (Bochnak, 2019:3), as illustrated in Figure 2.2. This world of modal possibilities regarding future expression will come up again when discussing mood in section 2.1.2.

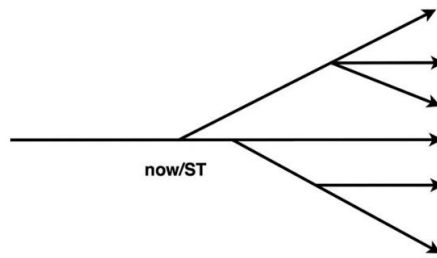


Figure 2.2: Asymmetrical future diagram (Bochnack, 2019:3)

Bybee et al.’s (1994) extensive cross-linguistic study shows that the majority of their sample languages with futures have additional uses, often based on source meaning (Bybee et al., 1994:254–70). They also note that it is common for languages to have more than one future morpheme (Bybee et al., 1994:243) and de Haan (2010:448) believes that “differences between these are attributable to differences in certainty”. It is therefore likely that Mauritian’s future markers will have additional uses, and that certainty will have a role to play.

Declerck (2010) distinguishes between *single-* and *dual-time reference*. Single-time reference refers to one reference point in the future, while dual-time reference also has ‘present relevance’, referring to both a point in the future as well as the present. Future expression is defined as having ‘present relevance’ when there is something in the present (e.g. an arrangement) which is relevant for the utterance about the future (i.e. ‘he is to be king’) (Declerck, 2010:274).

Like Mauritian, Cayenne Creole also has two future markers, *ka* and *ke* (Pfänder, 2000:144). Pfänder cites four assumptions about the two markers: near vs. remote future, projected present vs. future, restricted vs. unrestricted assertion or interchangeable stylistic variants. He notes that this is not just a question of terminology because even speakers contradict each other in their usage (Pfänder, 2000:144). Even more similarly, Haitian Creole can express future with *pral* (originally from Fr. *après aller* ‘to be going’), *ap* (originally a progressive marker from Fr. *après*) and *va* (from Fr. 3sg ‘go’). Hofher (2018) identifies no categorical semantic or syntactic differences between *pral* and *ap*, although she notes that being acceptable in the same contexts does not necessarily mean markers are equivalent (Hilpert, 2008).

Several concepts and observations in this section will be helpful to analyse Mauritian’s future markers. I adopt the notion of ‘present relevance’, detailed in Declerck (2010:274), and note it is common to have multiple future markers with overlapping uses, especially in French-based Creoles.

2.1.1.2 Past expression

A major difficulty with past expression lies in distinguishing terms such as past, perfect and perfective. In Reichenbach’s terminology, past expression refers to situations where the event time (E) and the reference time (R) both occur before the moment of speech (S) (see Figure 2.3).

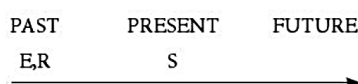


Figure 2.3: Past diagram taken from Syea (2013:109)

The terms perfect and perfective are commonly confused with each other and with past tense. This is because they occur in past situations but are often associated with aspect and not always kept strictly apart. Perfectives are different from perfects because they are bounded temporally (Bybee et al., 1994); they narrate sequences of events, which are reported independently of relevance to other situations (Givón, 2001:296). On the other hand, a perfect is generally accepted to be “a past action with current relevance” (Bybee et al., 1994:61) and cannot be used with adverbs of past time, such as ‘yesterday’ or ‘last year’. This notion of current relevance means it is not possible to use the perfect if the subject is no longer alive: *Einstein has lived in London. In Reichenbach’s terminology, the perfect can be represented differently from past tense because the reference time (R) is situated in the present at the same time as the speech time (S), and only the event time (E) happens in the past: $E - S, R$ (Becker, 2010; Winford, 1993:156).

Perfects are notoriously difficult to categorize because they “overlap the boundary between aspect and tense” and the matter is further complicated since they eventually develop into pasts (Fleischman, 1983:185). This development has already happened in German, for example, *hat gestern getan* is a past rather than the perfect equivalent in English *has done yesterday. This will

be addressed further in section 2.4.1.2. Winford (1993:146) discusses the different uses of perfect in detail, including continuous perfect, experiential perfect, resultative perfect and perfect of recent past¹⁰. The latter is also known as a ‘hot news perfect’ and can be considered an intermediate stage between perfect and perfective expression, since (bounded) past events are presented “for their own sake, and not in relation to speech time”, more like perfectives (Schwenter, 1994:1001). This notion of a ‘hot news perfect’ will be investigated in chapter 7.

Youssef (2003:88), along with Mair (2012:802) and Winford (1993) note a mismatch between semantic notions and grammatical use, making it possible for more than one marker to have the same broad meaning, but differ in usage. This will probably be the case for some of the markers in Mauritian Creole too and will be considered in the corpus analysis in Part I.

Givón (1982) elaborates on the functions of Creole TMA markers, assuming that \emptyset appears with past actions, alongside an overt marker which expresses “anterior, perfect, pluperfect”. In addition to this, he provides a pragmatic function in narratives alongside the semantic functions mentioned above. \emptyset is assumed to have a foregrounding function which presents the main events in their natural sequence of occurrence, whilst the overt marker provides background information and is common in embedded clauses (Givón, 1982:119). In the case of Mauritian Creole, there are two overt markers *TI* and *FINN*, so it will be examined in chapter 7 how well Givón’s assumptions can account for past expression in Mauritian Creole.

Out of context, perfects are very similar to pasts. Schwenter (1994:1000) explains that it is therefore necessary to take discourse function into account, since “a purely semantic description of the form without reference to its discourse function cannot account for the perfect’s contextual variation” (Schwenter, 1994:1000). In particular for Creoles, it is known that the context is pivotal to meaning. This is discussed in chapter 4 and considered throughout the analysis.

¹⁰ These perfect types are also known under different names. See Winford (1993:146) for more details.

2.1.1.3 Present expression

Reichenbach's terminology can be used to describe present expression: the event time, reference time and moment of speech all occur simultaneously.

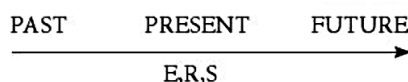


Figure 2.4: Present diagram taken from Syea (2013:106)

Nurse (2008) argues, however, that the present is not just a situation that happens at the moment of speech, but represents the time between the past and future which varies depending on situation and speaker (Nurse, 2008:115). For example, gnomic situations pertain to generic subjects and are assumed to hold for all time (Bybee et al., 1994:126) and vast presents (e.g. ‘we sell cars’ in response to ‘what do you do for a living?’) start in the past and continue in the present, through to the future.

Nurse (2008) assumes that the present always has an aspectual component (Nurse, 2008:115–16). Imperfective aspect (discussed in section 2.1.3.1.) is closely related to present expression since the present tense is rarely perfective because the moment of speech is not bounded¹¹ (Bybee, 1994:236). Since aspect is often closely related to tense, a clear-cut distinction between the two has been questioned by Binnick (1991:132).

In French, and many Romance languages, the simple present can be used in both progressive (Fr. *maintenant la fille mange une pomme* ‘now the girl eats an apple’) and non-progressive contexts (Fr. *la fille mange une pomme tous les jours* ‘the girl eats an apple every day’), even though a specific progressive construction exists (*être en train de* ‘to be in the middle of’) (Bertinetto & Squartini, 2016). We shall see to what extent Mauritian Creole follows this pattern regarding present expression, and how this changes over time.

These previous three sections on future, past and present expression have shown that it is difficult to keep tense separate from mood and aspect; the future is closely related to mood, the perfect overlaps

¹¹ Apart from in performative contexts such as ‘I quit’, which are perfective (Bybee, 1994). Boundedness will be discussed in section 2.1.3 on aspect.

the domains of tense and aspect, and present tense always has an aspectual component. The interaction between these categories can be complex. For example, in Latin there is a clear statistical tendency for perfects to appear in main clauses, and imperfects in subordinate ones, and for passives to occur in past, rather than present or future tenses (De Melo, 2021, p.c.). Roman grammarians also noticed the tendency for perfects to have a foreground and imperfects a background function (De Melo, 2021, p.c.). I will explore whether these categories interact in similar ways in Mauritian. The next two sections investigate the notions of mood and aspect and introduce terms relevant for the discussion of these categories.

2.1.2 *Mood*

Palmer (1986:2–4) notes that mood is much more difficult to define than tense, as there is much cross-linguistic variation regarding meaning and no single basic trait which applies to all cases. Nevertheless, he argues that modality is a typological category that can be compared cross-linguistically (Palmer, 1986:22). A simplistic difference between mood and modality is that mood is grammatical, whilst modality is notional or semantic (Palmer, 1986:7). Terminology in this area differs extensively, so it is important to explicitly define what is meant.

Mood can be divided into verbal mood (i.e. indicative vs. subjunctive) and sentence mood (i.e. declaratives, interrogatives, and imperatives), which are usually treated separately (Portner, 2018:1). Whilst verbal mood relates to a speaker's 'mental life' (whether the utterance is a belief, desire or dream, for example), sentence mood has a communicative function in real-life exchanges (Portner, 2018:5). In this thesis, I focus on verbal modality, which I define, following Fleischman (1982:13), as the "speaker's attitude towards the propositional content of the utterance".¹²

¹² Modality can also be defined in terms of 'reality status' rather than 'speaker attitude' (Narrog, 2017:76). However, I do not explore this definition of modality further.

In European languages, verbal mood is often associated with inflection, although it has scope over the whole sentence (Palmer, 1986:2). I dispute the traditional notion that mood pertains to verbal inflection since many languages express mood through modal verbs or particles separate from the verb (Palmer, 1986:21). Equally, it should be noted that verbal modality is not always marked grammatically; it can also be marked lexically, for example through the verb ‘hope’ (Palmer, 1986:5).

Modality can be divided into subcategories according to the semantics it expresses. Von Wright (1951) first proposed four modes: alethic, epistemic, deontic and existential, of which epistemic and deontic are still used today (Palmer, 1986:11). Epistemic modality refers to “matters of knowledge, belief – opinion rather than fact” (Lyons, 1977:681–82), whilst deontic modality is understood as “necessity or possibility of acts performed by morally responsible agents” (Lyons, 1977:823).

It is common in mainstream English linguistics to conclude that the future tense with *will* does not exist, but is instead a ‘mode’ or modal auxiliary (De Brabanter et al., 2014:4; Declerck, 2010:273). This is because English *will* is not inflectional, it is not the only way of signalling futurity and also has further generic, epistemic and habitual uses (De Brabanter et al., 2014:4). Lyons (1977:816) reminds us that future tense and modality are very closely related:

[...] what is conventionally used as a future tense [...] is rarely, if ever, used solely for making statements or predictions, or posing or asking factual questions, about the future. It is also used in a wider or narrower range of non-factive utterances, involving supposition, inference, wish, intention and desire.

In line with the possible worlds diagram in Figure 2.2, future tense can be considered close to being part of the modal system, as one cannot be certain about the future (De Haan, 2010:448). It can often be expressed via subjunctives in locative and temporal clauses and many futures have origins in modal auxiliaries, for example, Greek *tha*, which originates from *thelo: hina* ‘I want that’ (Palmer, 1986:218). Palmer (1986:216) states that the only times in English when *will* has pure future reference is with specific calendar reference or weather forecasts. Regardless of whether we consider

future expression to be tense or mood, it will be important to consider these modal notions in the analysis, which are clearly important when talking about the future.

As well as the future tense being closely associated with mood, past is also “interrelated with modality” since it is used in unreal conditions in many languages (Palmer, 1986:210). For instance, in the sentence ‘if he bought an apple’ (Palmer, 1986:211), the apple was never bought and the proposition is hypothetical, yet the verbal form is in the past. The past marker *TI* is used in Mauritian Creole in combination with the future to express conditional (Grant & Guillemin, 2012:85). The use of *TI* in counterfactuals will be examined in more detail in chapter 7.

With regard to Creoles, Winford explains that mood and modality are the most neglected areas (Winford, 2017:202) and typically, all types of modality are subsumed under ‘irrealis’. However, Winford stresses that this is clearly inaccurate and more research into this domain is needed (Winford, 2017:203).

Again, as for tense, there does not appear to be a clearly delimited category of modality which is completely separate from the other two categories.

2.1.3 *Aspect*

According to Comrie (1976:3), aspects are “different ways of viewing the internal temporal constituency of a situation”. Although widely accepted and cited, Comrie’s (1976) definition of aspect has been criticized for not taking the subjective nature of aspect into account (Kranich, 2010:24). For example, a speaker can decide whether to portray the same event as bounded ‘he behaved badly’, or ongoing ‘he was behaving badly’, so aspectual distinctions can be made by speakers subjectively. This again alludes to the difficulty of keeping tense, mood and aspect apart.

There are two major distinctions within aspect; viewpoint aspect (grammatical aspect) and situation aspect (sometimes known as Aktionsart, inherent or lexical aspect (Kranich, 2010:25)). I use Smith’s (1991:3) terms for these concepts, whereby viewpoint aspect refers to whether an utterance is

presented perfectly or imperfectly and situation aspect describes the inherent character of a verb; whether it is a state, activity, achievement or accomplishment. This terminology will be explained in the rest of this section.

2.1.3.1 Viewpoint aspect

Comrie (1976) proposes a diagram to explain (viewpoint) aspect. Aspect can be thought of as constituting the two broad categories of perfective and imperfective. Imperfective can be further divided into habitual and continuous, which in turn consists of progressive and non-progressive.

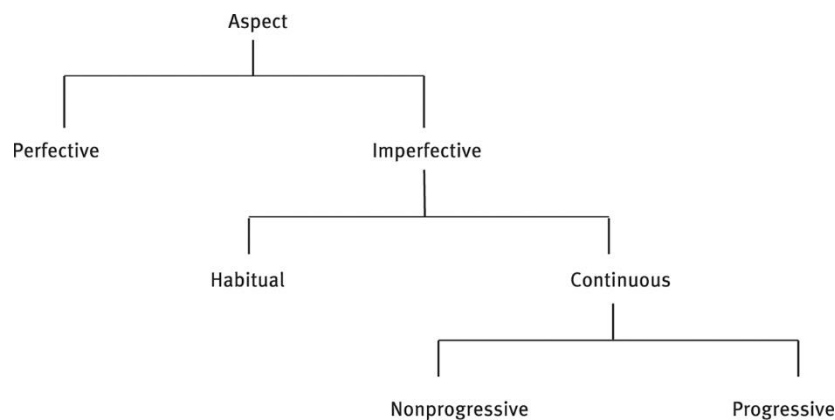


Figure 2.5: Comrie's (1976:25) diagram of aspectual distinctions

Although this diagram has been criticized for failing to accommodate all types of aspectual use in or across languages, it does capture statistical and cross-linguistic tendencies (Mair, 2012:809) and serves well as an introduction. Comrie (1976:16) defines imperfective as being concerned with the “internal structure of the situation”. Perfective, on the other hand, is widely cited as having certain characteristics, such as being of short duration, punctual, resultative, unmarked and involving a completed action (Comrie, 1976:16). However, there are issues considering any of these points individually and Comrie simply sees the perfective as a contrast to the imperfective, viewing the situation as a single whole rather than looking at its “internal temporal constituency” (Comrie, 1976:11). Becker (2010:85) uses Reichenbach’s terminology to express perfective aspect in formal

terms as $E \subseteq R$. This means that the event is a subset of the reference time, which can be interpreted as seeing the event as a whole, rather than its subparts.

Some linguists exclusively use perfective to refer to events in the past, because completeness is an essential part of the meaning and completed things can only be in the past (Nurse, 2008:135). However, recall the vast present (section 2.1.1.3.), which starts in the past and continues through the present and into the future (e.g. ‘we sell cars for a living’). Although the verb form is in the present, it can be considered perfective because there is no beginning, middle or end of the event and it is presented as a single act, without reference to its internal structure (Nurse, 2008:135). Note also, that the formal expression of perfective above does not specify when the S (speech time) occurs in relation to the event (E) and reference time (R).

Givón (2001:289) illustrates these concepts nicely with the metaphor of looking at an event through different lenses. Perfective aspect is when you view a situation from far away through a narrow lens and can see the whole event as a single entity, whilst imperfective aspect views the event from so close through a wide lens, that you can’t see the boundaries (Figure 2.6).

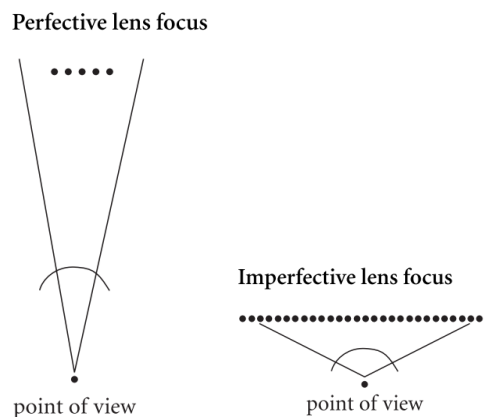


Figure 2.6: Givón's (2001:289) diagrams showing difference between perfective and imperfective aspect

In this vein, perfectives are often described as being ‘temporally bounded’ (Bybee et al., 1994:54; Givón, 2001:287), whereas imperfectives are temporally unrestricted. Smith (1991:6) explains that “aspectual choice allows the speaker to talk about situations in more than one way”, emphasizing the role of the speaker in choosing whether to present the whole situation, or just part of it. This

relates to the different discourse functions imperfectives and perfectives have in narratives. Whilst imperfectives provide background information and set the scene (e.g. ‘There was a man who was fond of dogs’), focussing on just part of a situation in progress, perfectives are used to foreground, or present the main events in the order they occur (e.g. ‘The dogs jumped up and barked’) (Herweg, 1991:979).

Moving down a level in Comrie’s diagram (Figure 2.5), we see that the imperfective comprises of continuous and habitual. Continuous is a more general term than progressive and is defined as encompassing stative predicates. However, it is disputed whether ‘continuous’ exists as a cross-linguistic concept (Bybee et al., 1994:174). The progressive is known to develop into the continuous (i.e. be used with statives), as well as the other way around (Bertinetto et al., 2000:538), so the term may be useful for describing a marker’s development. However, it is more commonly cited that imperfective comprises of progressive and habitual meaning (Ferreira, 2016:354; Sidnell, 2002:154).

The progressive involves viewing an action as ongoing at the reference time (Bybee et al., 1994:126). The use of the progressive can be much broader than the purely semantic meaning of progressive (Mair, 2012:9). For example, it can be used in constructions which extend over long periods of time in English (e.g. I’m writing a book this year) rather than being restricted to actions happening right in the moment. This is because in many languages, the progressive contrasts with present tense and the division of labour between these changes over time. This is described in detail for Romance languages in Bertinetto & Squartini (2016:948–49) and discussed in section 2.4.1.3.

The other component of imperfectivity is habitual. Habitual aspect is characteristic of an extended period of time, rather than being viewed as an incidental property of the moment (Comrie, 1976:28). It is rare for an overt form to exclusively express habitual aspect and there are no known paths of development which lead to a present habitual, only to a past, or a general habitual (Bybee et al., 1994:151–59).

According to Ferreira (2016:356), progressives and habituals are similar temporally and modally, but differ mereologically (i.e. in part/whole relations). That is, progressives refer to single events

(e.g. ‘John is smoking a cigarette’) while habituals refer to plural ones (e.g. ‘John smokes’ (cigarettes)). Ferreira explains that their temporal and modal similarity is why the same form is often able to express both progressive and habitual meanings (Ferreira, 2016:394).

2.1.3.2 *Situation aspect*

Whilst the categories described above may appear to be reasonably clear-cut, an issue noticed by many linguists is that not all verbs behave in the same way. For example, the sentence ‘she was pushing a toy’ entails that ‘she pushed a toy’. However, it is not possible to apply the same logic to ‘she was making a toy’ since this does not entail that ‘she made a toy’ (Todea, 2014:53).

This is known as the imperfective paradox and shows that the properties of lexical verbs can affect aspect. Observations such as the imperfective paradox led linguists to conclude that there must be more to aspect than viewpoint aspect. Smith refers to this as situation aspect and it is also commonly known as lexical aspect or Aktionsart (Kranich, 2010:25).

Vendler (1957, 1967) was one of the first to categorize verbs according to their lexical properties, making a four-way distinction between states, activities, accomplishments, and achievements. These can be differentiated on the basis of dynamicity (stative or not), telicity (whether there is a natural end-point) and durativity (whether the event occurs once or extends over a longer period), as can be seen in Figure 2.7.

Situation Aspect	Example	Static	Durative	Telic
State	Love, Have, Know	[+]	[+]	[-]
Activity	Run, Walk, Enjoy	[-]	[+]	[-]
Accomplishment	Build a bridge, Walk to school	[-]	[+]	[+]
Achievement	Die, Hit the target, Win the game	[-]	[-]	[+]

Figure 2.7: *Types of situation aspect (Smith 1991:19)*

Vendler (1957) considered aspect to be an inherent property of a word. However, it can be shown that this is not always the case, because the arguments a verb takes can change this. For example, ‘to write a letter’ has a natural end-point once the letter is written, thus telic. However, ‘to write letters’

can go on indefinitely, so is atelic (Todea, 2014:58). Therefore, the verb ‘write’ can be both telic and atelic. Although the four main categories identified by Vendler are still used today, other linguists have suggested further categories and subcategories. For example, states can be temporary or permanent, and permanent states can be further divided into inherent and acquired subtypes (Mittwoch, 1988). Another category of semelfactives is also sometimes incorporated as a fifth category for constructions which are dynamic, but atelic and non-durative, although these are sometimes classified under achievements (Croft, 2012:40).

Two issues with this approach are that sometimes more than one type corresponds to a single predicate (e.g. ‘she is polite’ is a state, but ‘she is being polite’ is an activity (Todea, 2014:65)) and Vendler’s three-way classification between dynamicity, telicity and durativity cannot account for further subtypes (Todea, 2014:64). A number of solutions have been proposed, but the one which resonates most strongly with the approach taken in this thesis is Croft’s (2012) usage-based model in which usage patterns and frequency can influence the mental representations of linguistic structures. For example, high frequency can act as a conventionalizing force for certain meanings and mean some become ‘default’ (Todea, 2014:66). This can account for cross-linguistic differences and diachronic changes as well as explaining how certain verbs within the same category may seem more acceptable than others.

There is also an interaction between situation and viewpoint aspect. For example an iterative verb like ‘knock’, which is ordinarily a one-off punctual event from the situation aspect (e.g. ‘I knocked’), becomes ongoing with progressive viewpoint aspect (e.g. ‘I was knocking’).

Mayberry (2011) noted tendencies to do with lexical aspect and grounding regarding the choice of present simple or progressive in the present tense in Spanish, mirroring findings to do with the distribution of perfective and imperfective marking in past tense. In narratives, generally progressives were used more frequently for backgrounding, as opposed to the simple present, which was used to foreground events. Similarly progressives were associated with activities, whilst the simple past occurred more often with achievements (Mayberry, 2011:475–78). Mauritian Creole examples from different time periods will be examined to see if they display similar tendencies.

There is a cross-linguistic tendency for aspect to be expressed closest to the verb (Bybee, 1985:196) and specifically regarding Creoles, Pfänder (2000) notes that aspect is a more dominant category than tense. Whilst all Creoles grammaticalize aspect, this is not necessarily the case for tense (Pfänder, 2000:18), implying that aspect is more crucial and more closely associated with the verb. This is reflected in the ordering of Mauritian's preverbal TMA markers (Syea, 2006:273) in which markers associated with aspect occur closest to the verb after tense and mood markers¹³.

2.2 Terminology in Creoles

Although Bickerton's approach to Creole languages is not accepted by most creolists, it is the traditional starting point. His Language Bioprogram Hypothesis (Bickerton, 1981:144; Winford, 2012:428), which is essentially an extreme version of a formalist approach to Universal Grammar based on innateness, has had a large impact on the field of Creole studies. Although it has been strongly criticized, it should be noted that it is *not incompatible* with other explanations of Creole emergence since substrate, lexifier and universal influences can all be mutually compatible (McMahon, 1999:280).

A relevant proposal is Bickerton's 'Prototypical Creole TMA system'. Bickerton (1981:58) claims that Creole TMA systems can be neatly divided into three parts:

- Tense: 'anterior' vs. 'non-anterior'
- Mood: 'irrealis' vs. 'realis'
- Aspect: 'non-punctual' (habitual) vs. 'punctual'

Bickerton (1981) introduced the above terms to the field, and Creole studies have since been built upon this tradition. However, Bickerton's Prototypical Creole TMA system is problematic on several accounts. Most importantly, the terminology is rather 'indeterminate' and different interpretations have led to inaccuracies and inconsistencies within Creole studies (Winford, 2012:429). Youssef

¹³ However, as has been evident throughout this section on tense, mood and aspect, there is not usually a clear-cut division between these categories and they can change over time. Therefore, we should not base too much on this observation.

(2003:81) also warns that using Bickerton's system runs "the risk of using terms in narrow and particular ways which obscure the field rather than clarify it".

Secondly, Bickerton's Prototypical TMA system assumed binary distinctions which are not borne out in the Creole data. Although it appears to be more typical of Atlantic Creoles, it is not valid for Mauritian and other Indian Ocean Creoles partly due to Mauritian's two future markers, which Bickerton labels 'irrealis' (Adone, 1994:45; Michaelis, 1993:96; Waite, 1986:147). Bickerton (1981:88) recognized this by labelling it 'Deviation D'. Waite (1986:154) concludes that Isle de France Creoles (Mauritian, Seychelles and Rodrigues) operate "under a distribution of semantic values which is clearly different from that proposed as the classic model". Finally, it assumes that Creoles are typologically different from languages with longer histories, which is no longer generally accepted (see DeGraff (2003, 2008) for information on Creole exceptionalism).

Like Pfänder (2000:57), I prefer to use general linguistic or typological terms rather than Bickerton's terminology for the following reasons:

- a) It makes comparison with non-Creoles easier;
- b) It does not assume that Creoles are typologically different;
- c) We can make use of insights in typological and grammaticalization research.

Despite its flaws, Bickerton's work has contributed significantly to the field by asking where Creole TMA markers come from, encouraging research into the typology of Creole grammatical systems and starting the debate about whether Creoles are 'exceptional' in comparison to other languages (Winford, 2012:428).

2.3 Labels attributed to Mauritian TMA markers

In this section I examine the various labels which have been used to describe Mauritian's TMA markers and explore the assumptions which go along with these. *POU* and *VA*, then *TI* and *FINN* are considered together since they are often contrasted in the literature and treated together in chapters 6 and 7. The following subsections provide an overview of the labels attributed to *FEK*, *PE* and \emptyset .

Although Mauritian’s TMA markers have been discussed and given labels by most linguists working on the language, there are several issues with their characterization. Firstly, many terms are too vague and therefore not specific enough to differentiate markers. For example, *perfective* could refer to either *TI* or *FINN*, and both *PE* and \emptyset occur in *present* contexts (i.e. one term can be applied to multiple markers). Secondly, the same label is used by different linguists with different meanings due to not defining terms adequately. Although not stated explicitly, Detges (2000) uses the label *definite* with a different meaning from other linguists. Thirdly, some linguists rely heavily on Bickerton’s terminology, rendering links with general linguistic terms opaque (Adone, 1994; Grant & Guillemin, 2012). Finally, some linguists borrow terminology directly from French grammar (e.g. *passé simple* (Baissac, 1880)) in a ‘one size fits all’ approach. Also, the fact some linguists write in French and others in English complicates matters further since translations are not always equivalent.

I will now discuss the labels which have been used in previous research by linguists working on Mauritian Creole. Table 2.1 gives an overview of these labels grouped according to time period.

	<i>VA</i>	<i>POU</i>	<i>TI</i>	<i>FINN</i>	<i>PE</i>	<i>F EK</i>	\emptyset
Baissac (1880:24-34) <i>OLD MAURITIAN</i>	<i>Futur simple</i>	<i>Futur simple & futur prochain</i> , can also translate “devoir”	<i>Passé simple (imparfait)</i>	<i>Passé absolu</i>	<i>Passé simultané</i> (was doing) or ‘at the moment’ in the present	<i>Passé récent</i>	Present indicative
Chaudenson (1981:208-209) <i>OLD MAURITIAN</i>	Aspect Originates from prestige form of verb ‘ <i>je vas</i> ’	Aspect From 17 th century French periphrasis ‘ <i>être pour</i> ’ with near future meaning	<i>Passé indéfini</i>	Aspect accompli	-	-	Present
Detges (2000:146) <i>OLD MAURITIAN</i>	[-near] [-definite] [-asserted]	[+near] [+definite] [+asserted]	-	Resultative	-	-	-
Corne (1970) <i>20th CENTURY</i>	<i>Futur</i> (« <i>il reste un doute</i> »)	<i>Futur</i> (« <i>cela ne fait aucun doute</i> »)	<i>Passé</i> (translated by <i>imparfait</i>)	<i>Accompli</i>	<i>Non-accompli</i>	-	-
Baker (1972:109-10) <i>20th CENTURY</i>	Aspect marker with which the future indefinite is expressed	Aspect marker with which the future definite is expressed	Past tense marker	Perfective	Progressive	-	-
Adone (1994:42) <i>20th CENTURY</i>	Mood Indefinite future	Mood Definite future	Anterior	Completion	Non-punctuality	Immediate completive actions	Habitualis
Detges (2000:146) <i>20th CENTURY</i>	[-near] [-definite] [-asserted]	[-near] [+definite] [+asserted]	-	Perfect	-	-	-
Veronique (2001) <i>20th CENTURY</i>	<i>marqueur de futur</i> «indéterminé»	<i>marqueur de forte probabilité et volition (si humain)</i>	<i>marqueur temporel passé absolu</i>	<i>marqueur de perfectivité</i>	<i>marqueur aspectual d’imperfectivité</i>	<i>marqueur aspectual (+accompli) (+passé récent)</i>	<i>marqueur non-passé</i>

Grant & Guillemain (2007) <i>MODERN</i>	Irrealis mood	Irrealis mood	Past or anterior tense	Completive aspect	Progressive aspect	Auxiliary-like element 'aspect marker' or verbal particle	-
Fon Sing (2009:127) <i>MODERN</i>	<i>Futur éventuel (=épistémique)</i>	<i>Futur certain (=volitif)</i>	Temporal marker of absolute past	Perfective	Progressive/durative	<i>Passé immédiat/accomplé récent</i>	
Ministry of Education (2011:91) <i>MODERN</i>	« <i>prospeksion</i> » Circumstances which do not depend on the speaker/agent	« <i>prospeksion</i> » Action speaker/agent has the intention of doing after the moment of speech	Before moment of speech, no longer true at moment of speech	Before moment of speech, still true at moment of speech	Simultaneity of action and moment of speech	Immediately before moment of speech	Habitual present
Syea (2013:116) <i>MODERN</i>	Indefinite, non-committal irrealis mood marker	Certain, irrealis mood marker	Past tense	Completive aspectuality (perfective)	Incompletive aspectuality (imperfective)	Adverbial expressing completion in preverbal position or aspect marker	Habitual present tense , happens at moment of speech
Henri & Kihm (2015:265) <i>MODERN</i>	Indefinite irrealis	Definite irrealis	Past tense	Perf(ect?)	Progressive	-	-
Virahsawmy (2017) <i>MODERN</i>	Modal marker - possibility	Future tense marker	Past tense marker	Perfective aspect	Progressive aspect	Only mentioned as adverbial	-

Table 2.1: Overview of assumptions in the literature regarding Mauritian's TMA markers

Notice that many linguists make assumptions about whether the markers constitute tense, mood or aspect (in bold), with varying opinions. For example, *POU* is described as tense by Virahsawmy (2017, personal communication (hereafter p.c.)), mood by Adone (1994) and aspect by Baker (1972). The tension between these categories was made clear in the previous section and is not considered particularly important for this work. However, Part II will discuss what the results of this thesis can contribute to this discussion. Although the Atlas of Pidgin and Creole Language Structures (APiCS) (Michaelis et al., 2013) does not label Mauritian's TMA markers one by one as in Table 2.1, their work will be discussed in the following sections as appropriate.

2.3.1 Labels for *POU* and *VA*

POU and *VA* are the two Mauritian TMA markers which are typically considered to refer to future situations. It is not typical for Creoles to have more than one future marker (in Bickerton's Prototypical Creole TMA system, there is just one 'irrealis' marker) and it appears that the two markers are competing within the same temporal domain. *POU* and *VA* are therefore usually contrasted with each other to show how they are different. The labels applied to them by various linguists are discussed below.

2.3.1.1 *Futur prochain vs. futur simple* (Baissac, 1880)

The earliest source is Baissac (1880), which is considered to be the first and most well-known grammar of Mauritian Creole. His work can provide an insight into the basic meanings of the markers through a French lens. However, we should not attach too much importance to his grammar as he is not a modern linguist. Baissac (1880) defines the terms used to refer to *POU* and *VA* with reference to French (although not explicitly), either by their form or function. As a function, the *futur simple* refers to the main future tense, and as a form, it is described as not being composed of multiple forms (i.e. no auxiliaries) (CNRTL, 2012). Both *POU* and *VA* are given as examples of *futur simple* (Baissac, 1880:24) so under the first understanding as a future tense, this implies that *POU* and *VA* have the same function. However, even if we understand *futur simple* to simply refer to a future which is not composed of more than one form, this is problematic because overt future expression in Mauritian Creole requires a separate pre-verbal TMA marker, so is necessarily *composé* ‘compound’ rather than *simple* ‘simple’ in French grammatical terminology.

Baissac additionally describes *POU* as a *futur prochain* ‘near future’ (Baissac, 1880:25). Categorizing *POU* as both *futur simple* and *futur prochain* is somewhat confusing, but probably alludes to the possibility of using *POU* in similar contexts as *VA* but also in near future contexts in Old Mauritian. Baissac also mentions that *POU* can be used to translate *devoir* ‘to have to’ (Baissac, 1880:34), which suggests it had a modal (deontic) meaning in its early usage.

This is clearly a case of a ‘one size fits all’ approach through applying French grammatical terminology directly to Mauritian Creole. By adopting the terminology that is traditionally used for the lexifier, certain aspects of Mauritian’s usage will have gone unnoticed and not been properly understood. Also, French grammatical terms such as *futur simple* do not make sense for Creole. Consequently, I do not consider the labels employed by Baissac (1880) to be transparent or useful with regard to Mauritian Creole and therefore do not use them in this thesis.

2.3.1.2 [+/-near] [+definite] [+asserted] vs. [-near] [-definite] [-asserted] (Detges, 2000)

Detges (2000) approaches the question of Mauritian’s future markers from a diachronic, cognitive approach. His analysis is illustrated in Figure 2.8 showing changes in three features over time. It is assumed that the markers follow the diagram from left to right, losing the features [near], [definite] and [asserted] as they progress.

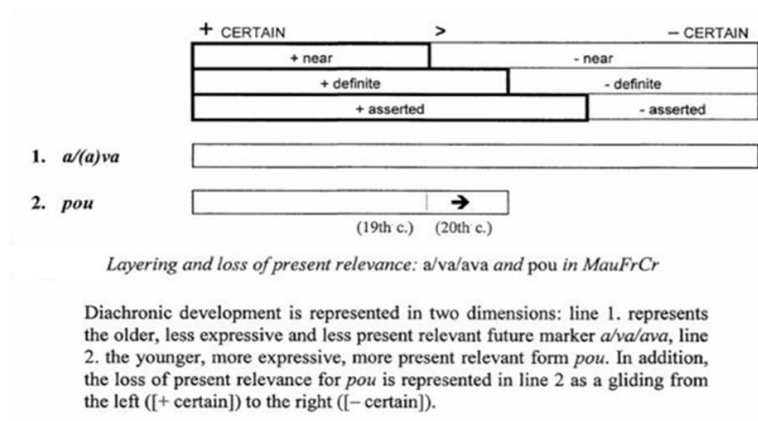


Figure 2.8: Detges' diagram showing layering and loss in POU and VA

In 20th century Mauritian, *POU* is considered to have the features [-near] [+definite] and [+asserted], whilst *VA* has lost all of these so is represented as [-near], [-definite] and [-asserted]. Since *VA* appeared first, it has progressed further along the diagram, whilst *POU* follows behind. This is in line with Bybee et al.'s (1994) assumptions about universal paths of development. Equally, Baker's (1993:93) claim that 20th century *POU* relates to 19th century *VA* is compatible with this approach.

One might assume that [-definite] corresponds to a situation which is not certain or definite. However, this does not appear to be the case. Detges (2000) does not define his terms, but cites Schlupp (1997:80–82), who, with reference to Cayenne Creole, defines them as:

[+/-proche]

« des procès futurs qui sont plus ou moins en continuité immédiate avec le moment de l'énonciation »¹⁴

¹⁴ “Future processes which continue more or less immediately after the moment of speech” (my translation).

[+/-défini]

« la localisation du procès futur peut être explicitée par des circonstances temporels comme ‘demain’ [+défini] ou ‘tout à l’heure’ [-défini] »¹⁵

[+/-asserté]

« des procès futurs du point de vue du sujet de l’énonciation [...] le sujet de l’énonciation peut prendre en charge son énoncé et poser le procès évoqué par le verbe comme certain, probable, incertain ou dépendant d’une condition »¹⁶

Instead, it appears that *POU* and *VA* are assumed to differ in the 20th century with regard to *definite time reference* (e.g. tomorrow [+definite] vs. soon [-definite]) and *subjectivity* (i.e. the speaker’s stance on the event). Assuming Detges adopts these definitions, [definite] does not have anything to do with the certainty of a situation. This emphasizes the second terminological issue, whereby one term is used with different meanings, highlighting the importance of clear definitions.

Despite some confusion with terminology, Detges’ (2000) approach of breaking down the meanings encompassed by future markers into the features [+/-near] [+/-definite] and [+/-asserted] forms the foundation of the approach taken in this thesis. In chapter 6, I analyse the development of *POU* and *VA* through a larger number of features which are either present or absent when they occur in the corpus texts, and track how these change over time (see chapter 4 for methodology).

2.3.1.3 *Definite vs. indefinite future* (Corne, 1970; Baker, 1972; Baker, 1993; Adone, 1994; Henri & Kihm, 2015)

The assumption that *POU* constitutes a *definite* future, while *VA* appears in *indefinite* future contexts is widely cited (Adone, 1994; Baker, 1972, 1993; Corne, 1970; Henri & Kihm, 2015) and will be discussed in detail in chapter 6. Despite a general consensus, (in)definite can be interpreted in different ways and/or encompass a number of different assumptions. As noted above, indefinite might refer to a non-specified time frame, as in Schlupp (1997) rather than uncertainty. However,

¹⁵ “The localization of the future process can be made explicit by temporal circumstances like ‘tomorrow’ [+definite] or ‘soon’[-definite]” (my translation).

¹⁶ “Future processes from the point of view of the subject of the utterance [...] the subject can take charge of his utterance and regard the process expressed by the verb as certain, probable, uncertain or dependant on a condition” (my translation).

from the examples cited in Baker (1972:109) and Adone (Adone, 1994:42), it appears to refer to situations which are uncertain and/or will not definitely take place.

In order to avoid the terminological confusion I experienced in trying to understand what linguists meant by an (in)definite future, I define the terminology I use explicitly in chapter 4 and try to avoid using terms which are used by others with a different meaning.

2.3.1.4 *Irrealis mood* (Grant & Guillemin, 2007; Syea, 2013; Henri & Kihm, 2015)

The term *irrealis* entered Creole studies through Bickerton's Prototypical Creole TAM system and was contrasted with 'non-punctual' and 'anterior' (Bickerton, 1981; Winford, 2017:194). It is supposed to encompass "all states and actions which have not actually occurred, whether these are expressed by future or conditional tenses or by modals" (Bickerton, 1975:42). This term is therefore much broader than the labels above which postulate a more specific temporal or modal domain. It certainly cannot be used to distinguish *POU* from *VA* and constitutes an instance of vagueness, which renders the label incapable of clarifying the division of labour between the markers.

2.3.1.5 *Futur certain (certain future)* (Fon Sing, 2009; Syea, 2013) vs. *futur éventuel (possible future)- epistemic* (Fon Sing, 2009; Virahsawmy, 2017)

A 'certain' future seems to be a variant of the more common 'definite' future, referring more explicitly to the likelihood of a situation occurring. This is therefore an instance of two labels being used to refer to the same concept. The notion of possibility in Fon Sing (2009) and Virahsawmy (2017, p.c.) adds a modal nuance to the assumed meaning for *VA* which differentiates it from *POU*.

2.3.1.6 *Future tense marker vs. modal marker (Virahsawmy, 2017, p.c.)*

As described above (section 2.1.1.1), future tense refers to utterances in which the speech time (S) occurs before the reference point (R) and event (E). By stating that *POU* is a future *tense* marker, this implies that it is not a *modal* or *aspectual* marker, unlike *VA*, which Virahsawmy (2017, p.c.) assumes to be modal. Many authors explicitly state whether they assume the markers are tense, mood and aspect (bold labels in Table 2.1). However, as was seen in section 2.1, these categories are not easy to keep apart. I therefore do not make any specific claims about whether Mauritian's markers constitute tense, mood or aspect; I assume instead that they overlap and change over time as the markers develop. The label *future expression* will be used in chapter 9 to group together any marker which refers to situations occurring after the moment of speech. It is not considered useful for the corpus analysis in chapter 6 as it is too broad.

2.3.2 *Labels for TI and FINN*

Like *POU* and *VA*, *TI* and *FINN* are often considered in tandem and contrasted with each other. They are not part of the Prototypical Creole TMA system, which only has one 'anterior' marker, although the development of a further marker within the past domain to express completion is common amongst Creoles (Winford, 2017:198).

2.3.2.1 *Passé simple (imparfait) vs. passé absolu (Baissac, 1880; Corne, 1970; Fon Sing, 2009)*

Baissac's label for *TI* as *passé simple (imparfait)* in Old Mauritian is somewhat confusing due to the apparent incompatibility of the functions of the *passé simple* and the *imparfait*, which contrast with each other in French. Again, it seems that Baissac may have simply borrowed the label from French grammatical terminology after noticing certain similarities with its use in Mauritian Creole. Although impossible in French, the double label for *TI* likely alludes to the possibility of expressing

both of these different functions in Creole. Corne (1970) also uses the label *imperfect* to describe 20th century Mauritian *TI* but does not explicitly state whether *TI* can be used with a *passé simple* function as well.

FINN, on the other hand, is described as a *passé absolu* ‘absolute past’ in Baissac (1880:31). This may refer to the notion of absolute, rather than relative tense (see section 2.1.1). However, it is not entirely clear whether this is what is meant, since *TI* is a clearer case of absolute tense than *FINN*. Indeed, Fon Sing (2009:118) uses this same term to refer to *TI* regarding Modern Mauritian and makes it clear that absolute tense is intended. This either means that *FINN* was more like modern day *TI* in Old Mauritian (which is plausible, although not intuitive), or that Baissac intended *passé absolu* in a different sense.

We see a number of issues with these labels. The most obvious is the ‘one size fits all’ approach from French, but the labels are also too vague and not defined at all, so it is impossible to know what Baissac really meant by using these labels.

2.3.2.2 *Passé indéfini vs. aspect accompli* (Chaudenson, 1981 ; Corne, 1970)

The CNRTL defines *passé indéfini* as a “temps de l’indicatif du verbe qui indique l’action comme passée, mais sans relation nécessaire à une époque déterminée”¹⁷ (CNRTL, 2012). This is perplexing, since it is stated that the *passé simple* is equivalent to a *passé défini*, suggesting that Chaudenson (1981) believed *TI* had the opposite function of that stated by Baissac. However, *passé indéfini* does correspond more closely to the notion of imperfect. Nevertheless, it is clear that this French grammatical terminology does not correspond well with the markers’ functions in Creole, and the use of definite/indefinite notions with very different meanings for future expression would be even more confusing for Mauritian. Therefore, these labels are not used in this thesis.

¹⁷ “Tense of the indicative of the verb, which indicates that the event has passed but does not necessarily have any relation to any specific time period” (my translation).

Whilst Baissac’s *passé absolu* appears to consider *FINN* in its relation to time, Chaudenson suggests its function is aspectual, labelling *FINN aspect accompli*. This can be defined as “aspect du procès qui a atteint sa limite finale”¹⁸ (CNRTL, 2012). Although Chaudenson concentrates on Old Mauritian, this assumption that *FINN* has an aspectual nature is shared by Corne (1970) for 20th Century Mauritian and many current researchers, who agree about this for the modern variety (Grant & Guillemin, 2012; Syea, 2013; Virahsawmy, 2017, p.c.).

As mentioned above, although it is interesting to note that these linguists label *FINN* as aspectual, the categorization into tense, mood or aspect is not the main focus in this thesis, although it will help shape the type of features which will be considered during the analysis.

2.3.2.3 *Before moment of speech, still true vs. no longer true at the moment of speech*
(Ministry of Education, 2011)

In the official grammar of Mauritian Creole (Ministry of Education & Human Resources, 2011a), the following examples for *TI* and *FINN* are given:

2) 2011

Yer, mo ti manz diri (be zordi, mo vo mie manz dipin)
Yesterday 1sg TI eat rice (but today I should eat bread)
‘Yesterday I ate rice (but today I should eat bread)’

3) 2011

Yer, mo’nn manz diri
Yesterday 1sg’FINN eat rice
‘Yesterday I ate rice’

As an explanation, it is stated that *FINN* expresses past events which are ‘still true’ at the moment of speech, whilst *TI* expresses events which are ‘no longer true’. Interpreting what is meant by ‘being true at the moment of speech’ is pivotal to understanding this definition. It does not immediately

¹⁸ “Aspect of the process which has reached its final point” (my translation).

make sense how a past event can cease to be true at the moment of speech. Dr Daniella Police-Michel of the University of Mauritius, who contributed to this grammar, replied to my email confirming that this refers to the speaker's current attitude towards the past event (Police-Michel, 2018, p.c.). Although I do not consider this definition clear, it appears that the distinction between *TI* and *FINN* in the official grammar is more modal rather than temporal or aspectual. This definition is not defined adequately and deemed more confusing than helpful.

2.3.2.4 *Past tense marker (Baker, 1972 ; Syea, 2013 ; Henri & Kihm, 2015 ; Virahsawmy, 2017)*

The label *past tense*, simply referring to events and reference times before the moment of speech (see section 2.1.1.2.) is most useful in contrast with another label, as it is too broad otherwise. In Baker (1972:106), *TI*, described as the *past tense* marker, contrasts with the other markers, which are all assumed to be aspectual.

Unlike the labels above, *past tense* makes no assumptions about what sort of past expression *TI* is assumed to cover. Due to the terminological difficulties outlined above, this label may seem to be a better (or at least safer) option. However, due to the fact that two other TMA markers (*FINN* and *FEK*) can also be used to express actions which took place before the moment of speech, it would be preferable to be more explicit about *TI*'s function to differentiate it from these other markers. The label *past expression* will be used in chapter 10 to include all markers which refer to past situations.

2.3.2.5 *Anterior (Adone, 1994; Grant & Guillemin, 2007)*

The label *anterior* in this sense stems from Bickerton's terminology to simply refer to the past. However, *anterior* is also used by some authors to refer to perfect expression (Bybee et al., 1994; Rosemeyer & Grossman, 2017). This means the label could apply to either *TI* or *FINN* depending

on its interpretation. Since this could lead to confusion, and *anterior* is not a general linguistic term, this label is not used.

2.3.2.6 *Completion/Completive aspect (Adone, 1994; Grant & Guillemin, 2007; Syea, 2013)*

Completives are used in two ways in the literature. According to Bybee et al. (1994:54) a completive can be defined as something which is done “thoroughly and to completion”, such as the verb ‘eat up’ in English. The object of the action is completely affected, consumed or destroyed by the action and the event is usually reported with emphasis or surprise (Bybee et al., 1994:57).

Another usage, which appears to be more common, is much more general and simply focusses on the end point of an action with the meaning that it has been completed (cf. Adone, 1994; Fon Sing, 2005). Fon Sing (2005:28) considers completive aspect to be a subtype of perfective aspect. Since this could be easily confused with perfects and perfectives (discussed below), it might be preferable to avoid this term. However, it is used extensively to describe the Mauritian marker *FINN*, and also appears in proposed grammaticalization paths. It will therefore be necessary to refer to it in this sense. When the term completive is used throughout this thesis, I assume this more general definition (see Fon Sing (2005:28) for more details).

2.3.2.7 *Perfect (Detges, 2000; Henri & Kihm, 2015) and perfective (Baker, 1972; Fon Sing, 2009; Virahsawmy, 2017)*

The perfect was discussed in some detail in section 2.1.1.2. Whilst difficult to establish its exact semantics, there is some consensus that perfects have dual-time reference through current relevance (Declerck, 2010:274). Henri & Kihm (2015:264) choose to label *FINN* as perfect rather than perfective, offering an example where *FINN* has an imperfective interpretation:

4) 2015

Mo'nn	vinn	isi	pandan	10	banane
1sg'FINN	come	here	for	10	year

'I've come here for 10 years' (and I'm still coming)

Henri & Kihm (2015) assume that the existence of *FINN* in imperfective contexts must mean it cannot be considered a perfective marker in any way. However, it is important to take a diachronic approach to make sense of certain phenomena. Perfect and perfectives are connected diachronically since perfects typically develop into perfectives over time (Bybee & Dahl, 1989:77). Furthermore, it is not expected that these changes occur suddenly, but appear gradually in different domains, meaning multiple stages can co-exist in what is known as layering (Hopper, 1991:22). Section 2.4.1. elaborates on the notion of gradual change in more detail.

Perfectivity was discussed in section 2.1.3 and defined as viewing the situation as a whole (Comrie, 1976:11). Drawing upon concepts in lexical aspect, perfectives are punctual rather than durative and telic rather than atelic. As mentioned above, it is likely that both perfect and perfective co-exist; the existence of one category does not entail the absence of the other.

The assumption that *FINN* appears in perfective contexts is significant because this means the authors presume it has progressed to the later stages in typical grammaticalization paths from completive to perfect to perfective, so no longer expresses current relevance (dual-time reference) (Declerck, 2010:274). This shows a progression in *FINN*'s development but does not mean that a perfect function is no longer possible. This assumption is fundamental for my approach whereby numerous features co-exist within the same text and time-period so it is compositional, rather than assuming *FINN* either *is* or *isn't* perfect for an entire period.

Interestingly, when discussing whether Mauritian marks present stative verbs and perfective dynamic verbs differently, APiCS gives *TI* rather than *FINN* as an example of perfective (Michaelis et al., 2013). Clearly, work on defining these terms and establishing the exact usages of these past markers is needed.

2.3.3 Labels for PE

PE is different from the above markers because it appears in past, present and future contexts and does not have an overt counterpart. Its main function is to add the aspectual notion of ‘ongoing’ to the verb it occurs with.

2.3.3.1 *Passé simultané in the past or ‘en ce moment’ (at the moment) in the present* (Baissac, 1880)

Baissac (1880:34) gives examples of how *après* (the source form of *PE*) could be used in past, present and future contexts in Old Mauritian. In the past it has a *passé simultané* (simultaneous past) meaning combined with *té*, and in the future, it is combined with *va*. In the present, Baissac (1880) has to resort to the English ‘I am eating’ to translate *mo après manze*, since the French verb form does not have a progressive form (*je mange en ce moment*). Baissac’s (1880) heavy reliance on French grammatical terminology is again evident and will not be used in this thesis. However, the meaning of the more descriptive ‘at the moment’ will contribute to the feature ‘right now’ in the analysis of *PE*.

2.3.3.2 *Non-accomplis (Corne, 1970)*

Corne (1970:14) contrasts the *non-accomplis* (non-accomplished) nature of *PE* with *FINN*’s *accomplis* (accomplished) status. Since this does not constitute general linguistic terminology and is not defined in adequate detail, this term will not be used in this thesis.

2.3.3.3 *Progressive* (Baker, 1972 ; Grant & Guillemin, 2007 ; Henri & Kihm, 2015 ;
Virahsawmy, 2017; Michaelis et al., 2013)

Progressive is the most common label for *PE*. APiCS classifies Mauritian Creole as having a progressive marker (*PE*) with no other uses (Michaelis et al., 2013). The meaning of *progressive* was discussed in some detail in section 2.1.3 and belongs to general linguistic terminology. It specifically refers to events which are ongoing at the reference time, but does not include states (Bybee et al., 1994:126), showing an interaction with situation aspect. Interestingly, the label *continuous*, which does include states, is not applied to *PE* in the Mauritian literature. It could be because the term *continuous* is less widely known. Therefore, it is unclear whether the linguists who use the term *progressive* for Mauritian Creole include states or not since it is not explicitly stated. In this thesis, it will be useful to distinguish these two stages, so *progressive* will be used for ongoing situations which are not expressed with stative predicates, whilst *continuous* will refer to these situations which also occur with stative predicates.

2.3.3.4 *Non-punctuality* (Adone, 1994)

The label *non-punctuality* stems from Bickerton's Prototypical Creole TMA System (Bickerton, 1975; Winford, 2017:206). It is a broader term than *progressive* as it is not restricted to dynamic verbs, but can refer to any situation which is not momentary in nature. Due to the fact that it overlaps with *completive* (defined above) and is not part of general linguistic terminology, this term will not be used in this thesis.

2.3.3.5 *Durative* (Fon Sing, 2009)

Durative has the same meaning as *non-punctuality*, but it is used more commonly in general linguistics. It is also the term used by Gougenheim (1971) to describe the French periphrasis *être après* which is an assumed source for *PE*. *Durative* is one of the three characteristics (stative,

durative and telic) used to distinguish situational aspect types (states, activities, achievements and accomplishments). As a sole label for *PE*, *durative* could be confusing because achievements are not *durative*, yet they can be used with *PE*. Throughout the thesis, *durative* is used in relation to situational aspect and as one of many features which contribute to the meaning of *PE*.

2.3.3.6 *Incomplete aspectuality (imperfective) (Syea, 2013)*

Like Corne (1970), Syea (2013:112) contrasts the *incomplete aspectuality* of *PE* (with *imperfective* in brackets) with the *completive aspectuality (perfective)* of *FINN*. It is assumed that Syea considers *incomplete aspectuality* and *imperfectivity* to be equivalent. The label as *imperfective* alludes to the diachronic development of progressive markers and suggests that Syea believes *PE* has moved beyond the limits of progressive marking to incorporate habitual expression and is therefore a general imperfective marker (to be discussed further in 2.4.1.3.). This is a hypothesis which will be tested on the corpus and elicited data for Mauritian Creole throughout the thesis. The term *imperfective* is preferred over *incomplete aspectuality*, as it is widely used in general linguistic terminology.

2.3.4 *Labels for Ø*

As mentioned in section 2.1.1 on tense, it is possible for the verb to be preceded by no overt TMA marking if the meaning is clear from the context. \emptyset -marking is common in Creoles, although its covert nature means it is difficult to study.

2.3.4.1 *Present* (Baissac, 1880; Chaudenson, 1981; Ministry of Education, 2011; Grant & Guillemin, 2012; Sycé, 2013)

Although Baissac (1880) does not explicitly refer to a zero marker, the basic verb form, not accompanied by any overt TMA marking, is what Baissac (1880:23) assumes to constitute present indicative (Baissac, 1880:36).

The zero marker (\emptyset) is commonly cited as expressing *present tense* to show that an event is happening at the moment of speech (Chaudenson, 1981; Sycé, 2013). Mauritian \emptyset behaves differently from in many Caribbean French Creoles, where it expresses past with dynamic verbs and present with stative ones. Instead, it is assumed that \emptyset refers to the present tense with both stative and dynamic verbs (Sycé, 2013:106).

Zero-marking is less commonly assumed to have a more flexible function and meaning dependent on the context, as Stein believes (2007:157). Stein's study showed that 75% of Old Mauritian verbs, in past, present and future contexts were not preceded by an overt marker, but that tense was determined by context. It is likely that TMA marking has become more frequent over time as Virahsawmy (2017, p.c.) claims to use the past marker *TI* systematically in his writing. We shall see whether this is also the case in the elicitation tasks in Part II.

Although the label *present expression* may turn out to be too restrictive for describing \emptyset 's domains, it will nonetheless be used in chapter 11 to cover any markers which can occur for situations which happen at the same time as the moment of speech.

2.3.4.2 *Habitual(is)* (Adone, 1994; Ministry of Education, 2011; Sycé, 2013)

Habitual expression (known as *habitualis* in Adone, 1994) is a subset of imperfective aspect, as discussed in section 2.1.3.1. This label is more informative and potentially more accurate than *present tense* as it is not restricted to present time and only encompasses a subset of present expression, which allows for its co-occurrence with *PE* in present situations. It is widely accepted

within general linguistic terminology so will be used in this thesis to refer to the subset of imperfective which is characteristic of an entire timeframe including the reference time, but does not necessarily have to be ongoing at the reference time (Bybee et al., 1994:125–27).

2.3.5 *Labels for FEK*

FEK is not considered to constitute a full TMA marker by all linguists due to its parallel adverbial status. In comparison to the other markers it is used very infrequently.

2.3.5.1 *Passé récent (Baissac, 1880)*

FEK is considered under the heading of *passé*, along with *TI* and *FINN* by Baissac (1880:26). It is distinguished from the other two with the label *récent* ‘recent’, rather than *simple* ‘simple’ (*TI*) or *absolu* ‘absolute’ (*FINN*). *Récent* suggests nearness to the present, so we might conclude from Baissac’s labels that *FEK* is assumed to occur closer to the present than the other two markers. Although *FINN* has a different label from *FEK* in Baissac (1880:31) (*passé absolu*, which was discussed in section 2.3.2.1. and considered unclear), *FINN* is often considered to be closer to the present than *TI* due to its current relevance, so this relative term could be confusing if it is unclear whether it refers to *FINN* or *FEK*. It seems that vagueness is the main issue with this label along with the possibility of one label referring to more than one marker.

2.3.5.2 *Immediate completive actions, passé immédiat/accomplis récent (Adone, 1994 ; Fon Sing, 2009)*

As opposed to the label *completion*, which Adone (1994:40) applies to *FINN*, *FEK* is considered to refer to *immediate completive actions*, emphasizing the similarity between the two markers, but also their difference in nearness to the present. Fon Sing (2009:127) too uses a similar marker to *FINN*

(*accompli*), but adds *récent* to show the immediacy of *FEK* in comparison. Whilst these labels succeed in showing how *FEK* is similar and differs from *FINN*, it might be preferable to define it in its own terms when we have a better understanding of *FEK* in Part II.

2.3.5.3 *Auxiliary-like element, aspect marker, verbal particle or adverbial (Grant & Guillemin, 2012; Syea, 2013)*

As mentioned above, the status of *FEK* as a TMA marker is less certain than the other main markers in Mauritian Creole. Some authors only consider it to be an adverbial, since it commonly appears sentence-finally as *FEK-la* meaning ‘just now’, as well as in preverbal position. Grant & Guillemin (2012:60,89) are reluctant to give it full TMA status, labelling it an ‘auxiliary-like element’, ‘aspect marker’ or ‘verbal particle’ and Syea (2013:115) is undecided whether it is simply an adverbial in preverbal position, or an aspect marker. Unlike the other TMA markers, it can be stressed and occurs much less frequently (Baker, 2009:45). However, Syea (2013:116) provides evidence that the adverbial usage is syntactically different from its use in preverbal position. I will reserve judgement until after the analysis. Due to very few attestations, *FEK* is not examined in the corpus analysis in Part I, but is taken into consideration in the elicitation tasks in Part II.

2.3.6 *Summary of assumptions about TMA markers*

The above review of assumptions regarding Mauritian Creole’s TMA markers and the labels which have been associated with them do not provide a consistent or coherent picture. The assumed uses and roles of Mauritian’s TMA markers vary substantially both over time and from linguist to linguist. Despite being mentioned by many linguists, the status and distribution of these markers is far from resolved. However, this overview of previous assumptions about Mauritian’s markers has been useful in highlighting issues with the definitions and explicitly stating how, or whether, these labels

will be used in this thesis. Having delimited the terms to be used in this thesis, this provides a more solid foundation on which to base the analysis. Definitions will be provided in chapter 4.

2.4 Diachronic approaches

In the final section of this chapter, the theoretical background of language change and grammaticalization are outlined in more detail. Moreover, I present my assumptions regarding Creole genesis and creolization, which are relevant for discussions in Part I.

2.4.1 Language change and theories of grammaticalization

Methods and models from historical linguistics formed the basis of early Creole studies. Schuchardt's (1882) work attempted to show that Pidgins and Creoles were so mixed that a single ancestor of the family tree model could not account for them (Mühlhäusler, 1997:224). Since Creole vocabulary is often derived from numerous sources, Mühlhäusler's (1997) subsequent work concludes that it is unfeasible to construct Creole family trees through lexical cognation. Research exploring the contribution of internal factors and universals to the development of grammar (Bickerton, 1981; Bruyn, 1996) also challenged the traditional view of majority superstrate influence with minimal contribution from the substrate in historical linguistics.

The extreme language contact situations which arose as a result of colonization cannot be ignored, but it is also important to consider to what extent language-internal changes may occur naturally regardless of these other languages. One should be careful about using the comparative method with Creoles, since the modern situation in the super- or substrate can be misleading. Taking a non-standard variety of the input language(s) at the time when the Creole first emerged is therefore the necessary point of reference (Mühlhäusler, 1997:225). In the case of Mauritian Creole, this means taking 17th century dialectal French, rather than the modern standard as the reference point for the lexifier language.

This brings us to the question of the relevance of the source form for a marker's subsequent development. This thesis is based on Bybee et al.'s (1994) typologically valid study of the evolution of grammar, which holds that "the meaning of the construction that enters grammaticization determines the path and resultant grammatical meanings" (Bybee et al., 1994:9). For this reason, I consider periphrastic constructions in use in 17th century dialectal French, possible substrate languages in Mauritius during colonization and internal developments in the Creole itself to establish a variety of factors which could have contributed to the source meaning of Mauritian's TMA markers and potentially influence its subsequent development.

The study of the evolution of grammatical forms has a long history, although the term grammaticalization is much newer and was first used by Meillet (1912:131) to mean: "l'attribution du caractère grammatical à un mot jadis autonome"¹⁹. I understand the term grammaticalization to mean "the development from lexical to grammatical forms, and from grammatical to even more grammatical forms" (Heine & Narrog, 2009:401).

More recently, grammaticalization has been applied to syntax (Heine & Narrog, 2009:402). However, there is little agreement as to what constitute 'genuine explanations' of syntactic change (Viti, 2015:8). Generativists appeal to universals, although this can be criticized as innateness is not falsifiable, functionalists talk of diachrony, and pragmatic factors have also been proposed, although they are difficult to measure and critics claim they are too vague (Viti, 2015:9). An alternative view, expressed by Kuryłowicz (1945) is that explanation is not necessary or even possible. He believes that we can describe language change, but cannot predict or explain why it happens (Viti, 2015:9). This view assumes that language is not systematic enough to establish patterns. However, large-scale cross-linguistic studies by Bybee et al. (1994) and Dahl (1985) show that this is not the case because typologically different languages have been shown to follow similar paths of development (Bybee et al., 1994:15).

¹⁹ Generally translated as: "the attribution of grammatical character to an erstwhile autonomous word".

These large-scale studies will be invaluable for comparison with Mauritian Creole's development and are powerful in their predictions. They tend to portray grammatical development as a series of linear stages which imply that once one (macro) stage is complete, it moves on to the next discrete stage. I endorse the view regarding gradience and gradualness as discussed in Traugott and Trousdale (2010), who consider most grammatical changes to "involve small micro-steps that are in fact discrete and therefore abrupt (in a tiny way)", even though the overall process appears to be gradual (Traugott & Trousdale, 2010:20). It is due to these small changes in different parts of a construction at different times, that gives the impression that the development of a construction as a whole is gradual (Traugott & Trousdale, 2010:21).

Such a perspective allows for both macro and micro approaches to language change. The approach taken in this thesis will zoom in on multiple ingredients, or 'features', which make up the overall meaning of a marker, as if under a microscope. In contrast, cross-linguistic research which formulates generalizations on the basis of many languages looks at grammatical change much more broadly, as if through a telescope. Both approaches are valid and useful, but it can sometimes be difficult to bring them together to form a coherent picture. This thesis attempts to examine to what extent the Mauritian data support the macro tendencies reported in the literature, whilst contributing more concretely to the description of micro-changes.

I next outline some of the grammaticalization paths which have been posited in the literature and appear to be relevant for Mauritian's TMA markers, namely future, perfect and progressive trajectories of development. The specific hypotheses formulated on the basis of this cross-linguistic research will be addressed in chapter 3.

2.4.1.1 The development of future expression

Bybee et al. (1994:279) detail a number of universal pathways of diachronic change for future expression depending on the lexical source. This is an example of a macro approach based on a large

typologically-valid sample. Four general semantic ages for future development, known as futages 1-4 are proposed:

Futage 1: agent-oriented uses of obligation, desire, ability

Futage 2: later agent-oriented uses of intention, root possibility and immediate future

Futage 3: simple future as only use

Futage 4: epistemic, speaker-oriented and subordinate uses

We shall see whether this trajectory of future development, along with Detges' assumptions outlined in section 2.3.1 apply to the Mauritian data in chapter 6.

Like many French varieties with two competing future forms, Acadian French, which is considered to be more conservative than other Canadian French varieties, differentiates between an inflectional (*je ferai*) and periphrastic future (*je vais faire*) (King & Nadasdi, 2003:324). King & Nadasdi (2003) take a variationist sociolinguistic approach investigating a number of factors, which are also considered relevant by Comeau (2015) and Roberts (2016) for future expression in French varieties:

- a) temporal distance;
- b) adverbial specification;
- c) certainty;
- d) presence of subordinate clause with *quand* 'when';
- e) influence of *si* 'if';
- f) grammatical person;
- g) polarity.

They found that whilst grammatical person and negation did not play a role, temporal distance, certainty and presence of *quand* were significant in predicting the future form (King & Nadasdi, 2003:336). Comeau (2015) examines the same phenomenon, drawing parallels between variationist approaches and grammaticalization theory. Both approaches share the assumption that more than one form can express a similar function (form-function asymmetry) and the concept of variables in sociolinguistics is captured by the idea of 'layering' in grammaticalization theory (Comeau, 2015; Hopper, 1991:22). One advantage of considering these two approaches together is that variationist methodologies can test principles of grammaticalization such as semantic retention (Cacoullos & Walker, 2009:325) and universal pathways (Poplack, 2011). Poplack (2011:222) questions the assumption of universal pathways on the basis of her variationist study into future development in

French, Portuguese and Spanish, as these closely related languages all have different constraints and usage frequencies regarding the choice of inflectional vs. periphrastic future.

It seems Poplack's (2011) understanding of universal pathways differs somewhat from Bybee et al.'s (1994). Unlike Poplack (2011), I do not believe that differences in constraints or frequencies negate cross-linguistic observations such as those proposed by Bybee et al. (1994). In fact, it is often assumed that different constraints or frequencies simply mean a form is more or less grammaticalized than another, but still following the same trajectory. This idea is summarized in work on the pace of grammaticalization, which has shown that French has a faster pace, so has progressed further down grammaticalization paths than other Romance languages (Carlier et al., 2012:288).

Fleischman (1982:83) argues that the periphrastic future in European French originally had two values; a temporal one (proximate), and an aspectual one (proximal posteriority or imminence), said to constitute an earlier stage of grammaticalization. Comeau (2015:362) concludes that Acadian varieties have this imminent characteristic and assuming imminence occurs earlier along the grammaticalization path, this corresponds with findings that Acadian is more conservative than other Canadian varieties.

Studies into other French varieties in this section have highlighted features, such as temporal distance and certainty, which may also be relevant for future expression in Mauritian Creole (King & Nadasdi, 2003:336). I note that the aspectual notion of 'imminence' is considered an earlier stage of development (Comeau, 2015:362) and will test the pathway of future development proposed by Bybee et al. (1994:14) against the data presented in chapter 6.

2.4.1.2 The development of perfect expression

The perfect has received considerable attention in previous research. If viewed synchronically, it is certainly true that its semantics are difficult to pin down. However, by viewing the situation diachronically, it has been found that "comparable clusters of perfect functions appear in many genetically and areally unrelated languages" (Schwenter, 1994:996). Youssef (2003:88) also notes

how diachronic evidence can help understand how perfect meanings which are diachronically closer relate to each other (e.g. hot news perfect and perfective) but not to others (other types of perfect and perfective), which are further removed diachronically.

Bybee et al. (1994:105) suggest that markers such as Mauritian's *FINN*, proceed through the following stages, known as perpages:

Perpage 1 - completives

Perpage 2 – young anteriors

Perpage 3 – old anteriors

Perpage 4 – perfectives

Perpage 5 – simple pasts

In Bybee et al.'s terminology, anterior has the same meaning as perfect. Note how a distinction is made between young and old anteriors. Young anteriors only have one use: i.e. expressing present relevance, but old anteriors acquire additional uses (Bybee et al., 1994:63). Schwenter (1996) posits a further stage between perfect and perfective, which he calls a 'hot-news perfect'. I will investigate this further in chapter 7.

The clearest source of Mauritian *FINN* is the French verb *finir*, 'to finish'. In Romance and Germanic languages, many perfects develop from the stative verbs 'have' and 'be'. However, 'finish' as a lexical source is "well represented in the development of completive constructions and, afterwards, anteriors ('perfects')" (Rosemeyer & Grossman, 2017:517). Bybee et al. (1994:69) note that "finish anteriors can have the same discourse-pragmatic functions as have/be anteriors in Indo-European languages".

Rosemeyer & Grossmann (2017) specifically look at the development of 'finish' sources into 'completives', then 'anteriors' on the basis of Spanish *acabar* 'to finish', providing a pragmatic account. In many cases, the overt expression of a verb is not needed after 'finish' as it is clear from the context. For example, "I finished the smoothie" does not require 'drinking' to occur directly after 'finish' since this can be easily implied. Only verbs which provide more, or unexpected, information

occur overtly. If the verb were ‘photographing’, as opposed to ‘drinking’, this would be unexpected and informative, and would therefore need to be overtly expressed.

Rosemeyer & Grossmann (2017) argue that in Spanish, *acabar* ‘to finish’ next goes through a stage of *overtification* whereby the main verb is overtly expressed, even in contexts where it can be inferred and does not provide more, or unexpected information. This diminishes ‘finish’ to an auxiliary rather than a main verb and “paves the way for further processes of semantic change and grammaticalization” (Rosemeyer & Grossman, 2017:528). An example of overtification is:

- a. When they finished building the bridge, they crossed it.
- b. When they finished the bridge, they crossed it.

Although ‘building’ can be inferred and does not provide any additional information, by making it overt, this contrasts the finished event of ‘building’ with the verb in the main clause ‘crossing’. Due to the temporal nature of the main verb, this contrast is temporal. Rather than providing informativity, it marks discourse progression (Rosemeyer & Grossman, 2017:528).

Chapter 7 will examine whether *FINN* can be said to follow a similar path of development and whether contexts which enable a temporal interpretation with *FINN* are attested in early Mauritian Creole.

2.4.1.3 *The development of progressive expression*

Progressives are known to commonly develop from locative constructions (Bybee et al., 1994; Heine & Kuteva, 2002; Smith, 2007) which either show location through a preposition, such as ‘be at/in/on somewhere/something’ or through a verb like ‘sit’ or ‘stand’. Modern German is a good example of the former: *ich bin am Arbeiten* ‘I am working’ (lit: I am on working).

The source of the English progressive is disputed (Smith, 2007:205), although one explanation is analogous to the German example with the preposition ‘on’ in Old English: *he was an hontyng* (lit. he was on hunting). Over time, the ‘on’ is assumed to have been shortened to *he was a-hunting* then

dropped completely in the modern progressive: *he was hunting* (Smith, 2007:206). Modern French also has a locative progressive expression *être en train de* ‘to be in the middle of’, although this is not relevant for the development of Mauritian Creole, since instead, a regional non-standard progressive expression was used at the time of colonization: *être après (à)* (Gougenheim, 1971). I therefore assume *après* to be a source of the Mauritian progressive and explore this in chapter 8.

Bybee et al. (1994:136) posit five aspects of progressive meaning:

- a) An agent
- b) Is located spatially
- c) In the midst of
- d) An activity
- e) At reference time

This sequence of meanings also shows its diachronic development, since it gradually loses these over time. Whilst at the beginning of its development, it is only possible for agents to occur in progressive constructions, soon this aspect of its meaning is lost as it also becomes possible in non-agentive contexts. Crucially, once the progressive is no longer used to describe activities happening in the moment and acquires additional meanings such as being used with statives and in habitual contexts, it might simply be considered a general imperfective rather than a progressive marker.

Zero marking is assumed to have developed alongside *PE* in the present domain. Since zero expression is not common in Romance languages, it is worth detailing how its function is assumed to arise and develop. A lack of overt TMA expression (\emptyset) is only meaningful in contrast with an overt marker (Bybee et al., 1994:235). As an overt marker increases in frequency, in contexts where the overt marker is not used, it is assumed that some meaning different from the overt marker is intended. This ‘leftover’ meaning is then attributed to \emptyset (Bybee et al., 1994:240). For example, when a progressive marker becomes frequent, anytime this marker is not used, it is assumed that a non-progressive (i.e. habitual and stative) meaning is intended, which becomes the meaning of \emptyset . This means that \emptyset ’s meaning is dependent on the meaning of any overt markers in the same temporal domain. Although I do not track \emptyset ’s historical development, Part II explores its usage in detail.

2.4.1.4 *Summary*

Like Winford (2012:437), I consider grammaticalization to be “a cover term for a variety of processes involved in the creation of functional categories”²⁰. Although not all linguists agree about the status of grammaticalization in linguistic theory, it is a “recognized fact of language” (Cacoullos & Walker, 2009:323) and extremely useful for examining how TMA markers develop over time.

The development paths outlined above are based on cross-linguistic research and thus expected to hold for Mauritian Creole. These will be tested in Part I. Although Creoles are assumed to develop like any other language after the initial contact situation, it is also worth exploring some theories which were developed specifically with Creoles in mind.

2.4.2 *Creole genesis and contact-induced change*

Since we are dealing with Creoles, the issue of language contact must also be taken into consideration. This section will briefly outline my assumptions regarding Creole genesis and creolization, which are relevant to arguments put forward in Part I. I then summarize assumptions regarding grammaticalization with particular reference to Creole languages.

2.4.2.1 *Creole genesis and creolization*

Even today, Creole genesis is strongly disputed (Velupillai, 2015:171). Many theories about the emergence of Creole languages have been posited but there is still no clear contender which can explain all aspects of their development. I will not go into the details of the various theories²¹, but simply outline the assumptions on which I base subsequent arguments. The gradualist model of

²⁰ “A syntactic category whose members are grammatical words (= function words), as opposed to lexical” (Matthews, 2007).

²¹ See Velupillai (2015:187) for an overview of the ‘appeal factors’ and ‘challenge factors’ of the various theories which have been put forward.

creolization (Arends, 1995; Selbach et al., 2009) seems to present a view of creolization which fits well with my approach to this thesis and my view of grammaticalization.

As the name suggests, the gradualist model of creolization assumes the gradual rather than abrupt emergence of a Creole. It is based on an earlier pidgin variety, which develops first into an extended pidgin before becoming a Creole, although there is ‘no clear-cut divide’ between these stages (Velupillai, 2015:184). The approach has a strong focus on socio-historical evidence and extralinguistic data from the early colonization period (Arends, 1995:xi). Unlike universal theories such as Bickerton’s Language Bioprogram Hypothesis and Creole Prototype, it assumes that both L1 and L2 speakers are agents in creating the language (Velupillai, 2015:187).

Arends stresses the importance of the languages present in the very early stages of language formation even if they are not dominant later on (Velupillai, 2015:184). In the case of Mauritian Creole, this means Malagasy and French should be relevant. My view of creolization and subsequent development of Mauritian Creole differs from Baker & Corne’s (1982) view in that they believe native speaking children were responsible for the emergence of Mauritian Creole, whilst I, in accordance with the gradualist model of creolization, believe that both children and adults contributed to its development.

Due to a constant influx of large numbers of foreign-born slaves up until the abolishment of the slave trade in 1835, and the changing ratio of local-born (L1 speaker) and foreign-born (L2 speaker) slaves (discussed in chapter 5), this means that substrate influence (mother tongues of dominant groups) and internal language changes (due to native speaker children expanding the variety) likely played a role at different times. Substrate influence may have had more of an impact on the developing Creole when numbers of certain foreign-born linguistic groups were dominant, whilst most language-internal developments would have likely taken place when foreign-born slave numbers diminished.

Creolization theory and figures about the linguistic situation in colonial Mauritius will become relevant in Part I (chapters 6-8). Information about Mauritius' socio-historical background which will facilitate the later analysis of influences on TMA marking is presented in chapter 5.

2.4.2.2 Development of TMA systems in Creoles

For Mauritian Creole, the time between French colonization of the island (1721) and the 1750s-1770s is considered to constitute the formative period of the language (Baker & Corne, 1982:117) and by 1773 Mauritian Creole was deemed to be a language in its own right and the target variety of new arrivals (Baker & Corne, 1982:249). However, it is only by the 1880s that the language is considered to be 'grammatically consistent' (Baker, 2009:47). Baker (2009:45) claims it took 157 years for Mauritian's TMA system to establish itself entirely from the start of French colonization.

Factors investigated which are assumed to affect this development include lexifier and/or substrate influence, cross-linguistically attested language-internal developments and Creole-specific universals. Usually the theoretical orientation of the linguist influences the focus. Some theories assume that all Creoles share features which distinguish them from non-Creoles (e.g. Bickerton, 1981), so establishing what these Creole universals are takes precedence over external factors. Some linguists assume Creoles to be a direct continuation of the lexifier language, believing that the lexifier is directly relevant for understanding the Creole's development (e.g. Chaudenson, 1981; DeGraff, 2008:320). Others take the substrate languages as most important for the development of a Creole's grammatical system (e.g. Lefebvre, 2003) and some linguists view Creoles typologically in relation to cross-linguistically attested developments seen in Creoles and non-Creoles alike (e.g. Michaelis, 2020).

Heine & Kuteva (2003:562) argue that internal and external language change, often assumed to be mutually exclusive in traditional approaches, can co-occur and reinforce each other in what can be referred to as 'contact-induced change'. I therefore believe that it is important to consider all internal

and external factors when investigating and assessing their relative contribution to a Creole's development. In Part I, I address the role of substrates, the lexifier and language-internal changes in the development of Mauritian's TMA system.

Haspelmath & Michaelis (2020) point out that whilst Creoles commonly show semantic change and functionalization in processes of grammaticalization like any other language, they do not show much coalescence (i.e. cliticization, agglutination etc.) compared with non-Creoles. However, this most likely has to do with their comparatively short histories, and Henri & Kihm (2015:269) show evidence that Mauritian's TMA markers behave as clitics with "phonologically conditioned contracted forms that attach to their hosts".

Bruyn (1996:29–31) notes three significant ways in which grammaticalization processes differ in Creoles compared to non-Creoles:

- a) Some changes appear to take place in a very short space of time in comparison to the gradual changes documented in non-Creoles;
- b) A Creole can be legitimately described as having functional gaps²²;
- c) The contribution of the substrate language(s) must be taken into account.

Bruyn (1996:40) stresses that we should not automatically assume internal developments without examining possible external influences. However, she admits it is not always possible to distinguish between language-internal developments and language-contact influence, as in many cases they reinforce each other and are inseparable (Bruyn, 1996:42). It should also be emphasized that grammaticalization processes akin to those in non-Creole languages are also common (generally later in a Creole's development) and do not constitute special cases (Bruyn, 1996:39). Bruyn

(1996:42) distinguishes three types of grammaticalization in Creoles:

- 1) *ordinary* (gradual and language-internal);
- 2) *instantaneous* (considerably more rapid than usual in languages with a longer history);
- 3) *apparent grammaticalization* (the process did not take place in the Creole itself).

²² Whilst 'communicative need' is not considered a valid reason for non-Creole grammaticalization, the catastrophic situation resulting in the need for slaves and slave-owners with no common language to communicate can lead to the loss of much of the lexifier morpho-syntax and result in functional gaps (Bruyn, 1996:30).

These types of grammaticalization are discussed in relation to Mauritian's TMA markers in Part I. Grammaticalization studies in non-Creoles can be insightful for those cases which do not constitute ordinary grammaticalization in the Creole. In particular, similar developments in the substrate languages can often explain why the Creole does not follow a development that might be expected language-internally (Bruyn, 1996:331).

Winford (2017:208) stresses, unlike Bickerton's initial proposals regarding Creole TMA systems, that the syntax of Creole tense, mood and aspect marking is quite complex and conforms closely to cross-linguistic tendencies. Regardless of whether developments in a Creole's TMA system are internally or externally motivated, they follow similar paths of development as those found in non-Creole languages.

2.5 Concluding remarks

It is clear that many grammatical terms and labels used without a second thought are much less clear-cut than often assumed. Even the broader terms of *tense*, *mood* and *aspect* cannot be clearly delimited from each other, and language-specific grammatical vocabulary often ends up complicating the picture rather than bringing clarity to this domain of investigation. Despite the lack of consensus and consistency, this chapter has at least clarified how the relevant terms will be used and applied to Mauritian Creole in this thesis.

It is important to emphasize that, following Bybee et al. (1994:5), I do not restrict grammaticalization to the "transition between lexical and grammatical status", assuming grammaticalization to be "a process leading from lexical to grammatical and from grammatical to more grammatical forms" (Heine & Kuteva, 2003:529). If the latter are excluded, many developments in French Creoles, where items entered the language as (partially) grammaticalized elements but continued to acquire more grammatical functions in the Creole, would not be considered.

The gradualist model of creolization fits in well with the functional and gradient approach to grammaticalization adopted in this thesis and emphasizes the importance of historical data from the early colonial period to better understand the emergence and development of Creoles.

In this chapter I have primarily attempted to bring some clarity to the terminology in the domain of tense, mood and aspect and highlighted aspects of grammaticalization, such as rapid and contact-induced changes, which are of particular relevance for the development of Creoles.

Chapter 3:

Research questions and hypotheses

3.1 Research questions

Having set out the general aims in the introduction, I now outline the specific research questions which guide this thesis. The research questions that pertain generally to all TMA markers are:

- 1) How have the functions of *POU*, *VA*, *TI*, *FINN* and *PE* changed over time, and how are \emptyset and *FEK* used today?
- 2) To what extent do source meaning, substrate, lexifier and internal language change play a role in their development?
- 3) Is the development of Mauritian's TMA markers comparable with tendencies and hypotheses put forward in cross-linguistic and typological research?
- 4) Are the terms tense, mood and aspect relevant for describing these markers?

These questions form the basis of the investigation in both Part I, which relies on the analysis of corpus texts, as well as throughout Part II which reports findings from five elicitation tasks carried out with native speakers online and at the University of Mauritius.

In addition to these overarching questions, more specific questions are explored in relation to particular markers:

- a) Can the definite/indefinite distinction account for differences between *POU* and *VA*?
 - i. If so, which elements make up 'indefinite'?
- b) Why did *TI* appear as a new past marker when *FINN* was already present?
- c) What is the division of labour between *TI* and *FINN*?
- d) Do *PE* and \emptyset have clearly delimited functions?
- e) Is *PE* obligatory in strictly progressive contexts?

Two markers which cannot be studied in depth during the corpus analysis are *FEK* and \emptyset . The elicitation tasks serve to answer the following questions about these markers:

- f) In which contexts is *FEK* acceptable?
- g) Is \emptyset also used in future and past contexts?

3.2 Hypotheses

The hypotheses are based on cross-linguistic developments reported in previous research and separated according to whether they refer to the development of markers expressing future, past or present. The overarching hypothesis regarding the elicitation tasks is that the elicited data will reflect the trends observed in the corpus analysis of the modern written texts.

3.2.1 *Future expression*

- 1) *POU* will increase in frequency and be the main all-purpose future marker by Modern Mauritian
- 2) Regarding *VA*:
 - a) In 20th century Mauritian, *VA* will become restricted to ‘indefinite’ contexts, which are expected to comprise the following features, based on Detges (2000), Baker (1972, 1993), Adone (1994) and Ministry of Education and Human Resources (2011a):
 - i) non-proximal
 - ii) lack of present relevance
 - iii) non-specific time/date
 - iv) lack of speaker control
 - v) lack of speaker certainty
 - vi) lack of agent intention
 - vii) low situation probability
 - viii) a situation which does not depend on the agent

- b) By Modern Mauritian, *VA* will only be used in writing as part of the “emerging literary culture” in Creole (Virahsawmy, 2017, p.c.)
- c) *VA* will still be rated as acceptable in the acceptability judgement task, even if rarely used in most tasks

Source determination means *POU* and *VA* will follow different trajectories. *POU* will develop according to Bybee et al.’s (1994:179) four semantic ages for future development:

- Futage 1: agent-oriented uses of obligation, desire, ability
- Futage 2: later agent-oriented uses of intention, root possibility and immediate future
- Futage 3: simple future as only use
- Futage 4: epistemic, speaker-oriented and subordinate uses

3.2.2 *Past expression*

- 1) *TI* will become more restricted over time and be used more in the written than spoken domain
- 2) *FINN* will increase in frequency as it moves from a perfect to a perfective marker and then become the general past marker
- 3) *FEK* will remain infrequent in the written domain and only occur in recent past contexts

FINN will go through Bybee et al.’s (1994:105) five semantic ages for perfect development:

- Perfage 1 - completives
- Perfage 2 – young anteriors
- Perfage 3 – old anteriors
- Perfage 4 – perfectives
- Perfage 5 – simple pasts

3.2.3 *Present expression*

- 1) *PE* will expand its usage from a progressive towards a general imperfective marker

2) In narratives, *PE* will be used more often in backgrounding contexts whilst \emptyset will have a foregrounding function

PE will gradually lose the following aspects of progressive meaning over time, as posited by Bybee et al. (1994:136):

- An agent
- Is located spatially
- In the midst of
- An activity
- At reference time

3.3 Conclusion

Throughout the analysis I keep the above research questions and hypotheses in mind, mentioning them where relevant, and summarize the findings at the end of each chapter. I return to the research questions in chapter 13 for a final discussion.

Chapter 4:

Methodology

This chapter provides a detailed overview of the methods used to investigate the research questions and hypotheses outlined in chapter 3. This thesis relies on the analysis of written historical corpus data, modern written elicitation tasks and spoken data collected during fieldwork to examine the development of Mauritian's TMA markers. By using both qualitative and quantitative methods, I draw on the strengths of both approaches.

4.1 Historical corpus analysis

Part I relies upon corpus analysis. Individual texts within Old, 20th Century and Modern Mauritian periods are analysed to examine TMA-usage. In certain cases, where the same story (and thus the same contexts) occurs more than once, stories are compared across time periods.

4.1.1 Sources of written texts

Corpora for Old (approx. 113,000 words), 20th Century (approx. 27,000 words) and Modern texts (approx. 69,000 words) were compiled, drawing on open access online sources, physical copies of literature sources and recommendations (Henri, 2017, p.c.). These comprise:

- Old Mauritian (1734-1888)²³:
 - Baker & Fon Sing (2007) (online)
- 20th Century Mauritian (1925-1972):
 - Baker & Fon Sing [1925] (online)

²³ Texts from Baker & Fon Sing (2007) which form part of my corpus are cited in square brackets (e.g. [1888]) and can be found in their publication or online: <http://concordancemmc.free.fr/>. Other texts are cited in curly brackets (e.g. {1939}) by the year they were written, not year of publication.

- De Sgrais {1939} (physical)
 - De Sgrais {1952} (physical)
 - Baker {1970} (physical)
 - Virahsawmy {1972} (online)
- Modern Mauritian (2003-2017):
 - Tizan (ar so 8 frer) {2003} (online)
 - Virahsawmy {2003-2007} (online)
 - Virahsawmy {2012} (online)
 - Virahsawmy {2017-2018} (online)
 - Lalit {2016-2017} (online)

Ideally, all texts from different periods would be similar lengths and styles to ensure generalizability. However, there are very few resources available for the 20th century period. The reason for this lies in the low status of Creole, since it is an oral language, traditionally absent from education and the written domain (see chapter 5). Most of the 20th century texts that are available are hard copies, so were not digitally searchable. This meant that much more time and effort was required to analyse the 20th century texts in comparison to other periods. Due to the limited data available, it was not possible to be too selective. This is known as the ‘bad data problem’ (Labov, 1994:10–11); historical linguists cannot control which texts survive and are available to study (Ayres-Bennett, 2018). However, as Chafe (1994:12) points out: “public and private, manipulated and natural data all provide important insights, and all have their limitations”, which is why a range of texts and elicitation data are used in this thesis.

Considering Creole was traditionally an oral language without a written standard (Rajah-Carrim, 2009:486), it is a wonder there is as much written data to analyse as there is. As Michaelis & Kriegel (2007:130) point out regarding Baker & Fon Sing’s (2007) texts which form the basis of the Old Mauritian corpus:

Even bearing in mind that the present collection of texts is due in part to historical accidents of recording and preservation, and also admitting that these texts can at best only represent a small fraction of the range of variation which probably existed in the 18th and 19th centuries, we must not underestimate the value of such historical linguistic data. Our theories will have to be checked against these treasures of Creole studies.

It is argued that consistency in the language could not have been reached until slaves no longer spoke an ancestral language as well as Creole. Since there is evidence that Malagasy was still spoken in Mauritius in substantial numbers in the 1830s, and Mauritian Creole is only assumed to be grammatically consistent by the 1880s (Baker, 2009:47), the frequency counts for Old Mauritian only start in 1850 when longer passages appear, and the Old Mauritian corpus analysis starts with texts from Baissac (1888).

The predominant text style is narrative, based on the oral folktale tradition present in early Creole societies and maintained through re-telling across generations. Oral folktales can be considered the mid-way point between speech and writing, since they are not spontaneous oral utterances but planned spoken discourse (Neumann-Holzschuh, 1989). Oral folktales often include dialogues, an oral characteristic. However, they are conceptually and functionally closer to written language (Neumann-Holzschuh, 1989:237).

Creole literature is based on these folktales, with the first texts written by literate members of 19th century Mauritius, who attempted to record these stories, or other utterances of Creole discourse, in written form. Although the old texts can be considered representations of speech, in the 20th century when spelling conventions for writing Creole were proposed, authors developed their own style. Later TMA marking may therefore be more systematic and differ from speech.

4.1.2 Limitations of written texts

One might wonder how reliable these old texts are if the early texts were not written by those primarily associated with the emergence of Creole. Baker & Fon Sing (2007) note regarding their online collection of texts:

*Contrairement à d'autres territoires, la grande majorité des textes ont été écrits par des locaux qui auraient acquis le créole dans leur enfance, que cette langue fut ou non celle qu'ils utilisaient pour s'adresser à leurs parents*²⁴

This implies Mauritian texts are more reliable than early Creole texts from elsewhere because the authors themselves had full command of the language, having acquired this lingua franca as a child, usually from a Creole nanny (Maurer, 2014:91; Salverda, 2010:214).

Whilst variation is present in all languages, it is particularly visible in Creole societies due to widespread bilingualism and lacking norms (Arends et al., 1994:53). Nevertheless, the absence of a written standard for the majority of Mauritian Creole's history (Rajah-Carrim, 2009:486) can in fact be construed as an advantage as this means the texts more accurately reflect the spoken language of the time and are not shaped by prescriptive formalism in Creole. However, it must be noted that all writers of this period would necessarily have been influenced by French (or English) written norms. Nevertheless, old texts can tell us more than we think, especially because they are likely to reflect quite accurately the times when TMA forms first appeared in the language. Further texts found only pre-date first attestations of TMA markers by a year or two, so it is likely that the first attestations in speech do not differ considerably from the first records (Baker, 2009). Unlike in languages with long written traditions, early records of Mauritian represent a variety which is much closer to speech.

Whilst the historical nature of this study means text analysis is the only possibility for studying the earlier varieties of the language, I also carry out two spoken tasks for comparison with the written elicitation tasks and modern corpus texts. For Modern Mauritian, the written and spoken language may differ to some extent. However, I do not believe this was the case for Old Mauritian texts, which represent a written approximation of how the language was spoken at that time.

²⁴ "Unlike in other territories, the vast majority of texts were written by locals who would have acquired Creole in their childhood; this language may or may not have been the one used to talk to their parents" (my translation).

4.1.3 *Theoretical frameworks*

4.1.3.1 *Canonical typology (Corbett, 2007)*

The text analysis is based loosely on Corbett's (2007) canonical typology approach. A canonical approach identifies criteria for prototypical instances and in Corbett's words, "defines a principled point in the theoretical space and calibrates outwards from it" (Corbett, 2007:8). It is particularly adept at dealing with "gradient phenomena in a principled way" (Corbett, 2007:9), so it can provide a novel way of exploring gradient language change.

As noted in the previous research (chapter 2), many concepts and categories cannot be captured in a single definition. Several linguists have commented that the perfect can be better understood in terms of meaning clusters rather than a single meaning (Binnick et al., 1991; Schwenter, 1994:996; Youssef, 2003:88). For this reason, a canonical approach which assumes meanings are composed of multiple varying elements is likely to capture the complex nature of a concept such as 'perfect' better than a single definition. Nevertheless, it is necessary to clearly define the 'features' used in this study, which follows in section 4.1.4.1.

A canonical approach helps make more sense of the wide range of contexts in which Mauritian's TMA markers occur by comparing them to fixed 'canonical' usages for each time period. Unfortunately, work to establish these 'canonical' usages in Creoles has not yet been done. Therefore, first of all, this thesis must determine what constitutes 'canonical' usage for each marker in different time periods, based on the most frequently occurring features across corpus examples, and subsequently examine how individual examples differ from the canon. Although canonical typology was originally conceived to address cross-linguistic phenomena synchronically (see Corbett, 2007), I use the approach in an innovative way, applying it diachronically to examine how the markers have evolved over time. Through acknowledging the gradient nature of the markers, this approach enables me to take a dynamic view of language and study the changing features which are characteristic of the markers at different stages of their development, providing a much finer-grained analysis.

4.1.3.2 Grammaticalization theory (Bybee et al., 1994)

Many approaches to grammaticalization exist, as mentioned in chapter 2. However, Bybee et al.'s (1994:5) functional, usage-based grammaticalization framework, based on a dynamic view of language, forms the basis of the analysis in this thesis. Although more up-to-date research exists, none compare in both depth and cross-linguistic validity to Bybee et al.'s (1994) comprehensive overview. For example, Heine & Kuteva (2002) deal with much larger numbers of languages, yet this breadth comes at the expense of extensive in-depth analysis. Similarly, other grammaticalization studies tend to either focus on specific grammatical constructions (e.g. Traugott, 2006) or specific languages (e.g. Comeau, 2015). Bybee et al.'s (1994) work, however, stands the test of time reporting the findings of their carefully designed study based on a typologically-valid sample, which spans anterior, perfective, progressive, imperfective, present, mood, modality and future developments, all of which are directly relevant for this thesis.

In line with their approach, I do not believe the grammar of a language is independent of language use. Crucially, I see language change as the result of the way people use it in communication, focussing on principles of human categorization as well as pragmatic principles. For Bybee et al. (1994:19), frequency also plays a crucial role in language change and can lead to phonetic reduction so will be considered throughout the analysis. A review of grammaticalization theory was addressed in chapter 2.

Bybee et al. (1994:9-22) set out several hypotheses characterizing their theory of grammaticalization (my emphasis):

- a) The meaning of the construction that enters grammaticization²⁵ determines the path and resultant grammatical meanings (*source determination*)
- b) Grammaticization occurs from more specific to more general and abstract, but not the other way around (*unidirectionality*)
- c) Source determination and unidirectionality predict there will be cross-linguistically similar paths
- d) Forms retain their earlier meaning
- e) Retention of meaning has consequences for synchronic analysis, comparative studies and internal reconstruction

²⁵ Bybee et al. (1996) use the term grammaticization with the same meaning as grammaticalization.

- f) Semantic and phonological reduction *occur in parallel*
- g) It is normal for more than one gram to be the exponent of a single gram-type
- h) The meaning of the grammatical category affects the inherent meaning of the lexical stem that it is associated with

I base my analysis on these assumptions and also test Bybee et al.'s (1994:279) semantic ages, which posit development paths for past and future forms (see chapter 3) against the historical data available for Mauritian Creole. One contribution of this thesis is to evaluate the extent to which grammaticalization theory can describe and explain how grammatical forms emerge and develop cross-linguistically. Creoles are good test cases for the grammaticalization of TMA markers because of the extensive grammatical developments which occur in a relatively short amount of time (McWhorter, 2018:396). Since these developments occur in the same way as in any other language, they can shed light on the theories posited to be cross-linguistically valid by testing these assumptions against data from a lesser-studied language.

4.1.4 *Data analysis of corpus texts*

4.1.4.1 *Definition of features*

I use 'feature' as a pre-theoretical term to refer to the individual building-block-like properties that are cited as characteristic of the TMA markers. Many of these were discussed in chapter 2 as 'labels' for Mauritian's TMA markers. The features are made up of a range of different types, such as time-related, aspectual and discourse features, depending on their temporal domain and descriptions in previous literature. Many of these features can co-occur in the same example, although some, for example 'completed action' and 'atelic', are mutually exclusive. The markers are subsequently analysed according to a fixed set of features across time periods, even though some have only been posited at a particular point in time. These features are assumed to be binary, since they are either present or absent in the examples analysed. The absence of a feature is informative as it confirms that a particular feature does not play a role at a given time.

I first set out the list of features examined for the different markers according to whether they occur in future, past or present contexts, then define each feature in turn below:

The future features include:

- time-related features (*near, imminence, present relevance*)
- speaker-oriented features (*control, expectation, certainty*)
- agent-oriented features (*control, intention*)
- situational features (*probability, commissive, depend on agent, prediction*)
- sentence features (*subordinate clause, imperative, grammatical person*)

For the purposes of analysing the data in this thesis, these features are defined as follows in Table 4.1. Where literature referring to Mauritian Creole mentions a particular feature, this is cited with a definition from this work. Where it is not mentioned or not adequately defined, a more general linguistics work is cited, and/or a definition from a linguistics dictionary (e.g. Matthews, 2007) is used:

Future feature	Cited in :	Usage in this thesis :
+ Near	Detges (2000)	Event occurring in the near future (today or next few days)
+ Imminence	Detges (2000)	Future event which is about to happen, on the verge of beginning
+ Present relevance	Declerck (2010) Schwenter (1994)	Future event which is relevant to moment of speech, or has <i>dual-time reference</i>
+ Speaker control	Baker (1993)	Speaker is able to control outcome of future event
+ Speaker expectation	Hyslop (2014)	Speaker expects future event to happen
+ Speaker certainty	Baker (1993), Detges (2000)	Speaker is sure the future event will happen
+ Agent control	Bybee et al. (1994)	Agent is able to control outcome of future event
+ Agent intention	Baker (1993), Fon Sing (2009)	Agent intends to carry out future action
+ Probability	Baker (1972, 1993), Adone (1994)	Future event which is likely to occur
+ Commissive	Detges (2000), Matthews (2007)	A type of speech act by which speakers commit themselves to doing something: typically a promise or threat
+ Situation depends on agent	Ministry of Education & Human Resources (2011)	The situation depends on the action of the agent
+ Subordinate clause	Givón (1976)	A clause which is a syntactic element within or of a larger clause
+ Imperative	Devos & Van der Wal (2014)	Construction whose primary role is in giving orders
+ First person	Detges (2000)	Utterance has a first person subject (mo/nou)

Table 4.1: Definition of future features

The past features consist of:

- time-related features (*recent past, current relevance*)
- discourse features (*direct speech, foregrounded action*)
- aspectual features (*completed action, telic, stative, durative, iterative*)
- perfect vs perfective features (*result, experiential, perfective*)
- sentence features (*subordinate clause, non-agentive*)

These are defined in Table 4.2:

Past feature	Cited in :	Usage in this thesis :
+ Recent past	Bybee et al. (1994)	Not in the distant past, closer to the present
+ Current relevance	Schwenter (1994)	Past event which is relevant to the moment of speech
+ Direct speech	Matthews (2007)	The direct quotation of something said, thought, etc.
+ Foregrounded event	Givón (1982)	In-sequence portion of main clauses of backbone-narrative
+ Completed action	Adone (1994), Grant & Guillemin (2007), Syea (2013)	Action is not ongoing, it is finished before moment of speech
+ Telic	Schwenter (1994), Matthews (2007)	Has a clear end-point
+ Stative	Matthews (2007)	Referring to a persisting state or situation
+ Durative	Bybee et al. (1994)	Views action as ongoing at reference time
+ Iterative	Bybee et al. (1994)	Event repeated on a particular occasion
+ Result	Detges (2000), Winford (1993)	Emphasis on resultant state of preceding event
+ Experiential	Winford (1993), Dahl & Hedin (2000)	One or more occurrences of an event-type is asserted to have taken place within a certain time period
+ Perfective	Baker (1972), Comrie (1976), Fon Sing (2009)	Views the situation as a single whole rather than looking at its “internal temporal constituency”
+ Subordinate clause	Givón (1976)	A clause which is a syntactic element within or of a larger clause
+ Non-agentive	Matthews (2007)	The subject does not have the semantic role of an agent

Table 4.2: Definition of past features

The term ‘current relevance’, rather than ‘present relevance’ is used to distinguish its past usage from when it occurs in future situations. However, both refer to relevance to the moment of speech.

Finally, we turn to the present features:

- time-related features (*right now*)
- aspectual features (*ongoing, habitual, imminence, inchoative, iterative, generic*)
- discourse features (*backgrounded*)
- occurrence features (*with locative element, with adjective, with stative predicate, with perception*)
- sentence features (*imperative, non-finite, non-agentive*)

Table 4.3 sets out the definitions of these features:

Present feature	Cited in :	Usage in this thesis :
+ Right now	Mair (2012)	Happening at the moment of speech
+ Ongoing	Mair (2012)	Continuing, incomplete actions/situations
+ Imminence	Detges (2000)	Future event which is about to happen, on the verge of beginning
+ Inchoative	Corne (1983), Akimova (1992)	Denoting the transition from the absence of a state or a process to the state or a process
+ Iterative	Bybee et al. (1994)	Event repeated on a particular occasion
+ Generic	Bybee et al. (1994)	Assumed to refer to hold for all time
+ Backgrounded	Givón (1982), Mayberry (2011)	Breaks narrative continuity, presents background material or digresses from main line of narrative
+ With locative element	Bybee et al. (1994)	Occurring with an element which denotes its location
+ With adjective	Matthews (2007)	Occurring with an element which modifies a noun
+ With stative predicate	Matthews (2007)	Occurrence with a form which refers to a persisting state or situation
+ With perception	Smith (1991)	Occurrence with a form expressing sensory perception (e.g. seeing, hearing, touching etc.)
+ Imperative	Devos & Van der Wal (2014)	Construction whose primary role is in giving orders
+ Non-finite	Matthews (2007)	A form which does not exhibit person or number features
+ Non-agentive	Matthews (2007)	The subject does not have the semantic role of an agent

Table 4.3: Definition of present features

Based on the definitions set out above, sentences in the relevant temporal domain are analysed according to whether they have (1) or do not have (0) these features (i.e. whether the features are present or absent). This approach will be explained in more detail in the section below.

4.1.4.2 Approach and methodology of analysis

Five texts were selected for the frequency counts in each time period. I did not include any early texts which contained considerably fewer than 2,000 words. Next, it was necessary to sample the texts and examples to analyse. Whilst the frequency counts relied on all texts outlined in section 4.1.1, the feature analysis was not feasible with such large numbers. Depending on the text size, either all the markers, or a proportionate number according to overall marker frequencies were sampled. For example, if *POU* occurred 90 times and *VA* occurred 10 times in a very long text, this ratio of 9:1 would be held constant if only 20 markers were to be selected and meant 18 examples would contain *POU* and 2 would contain *VA*. Hence, in a text containing 100 future markers (90 *POU* and 10 *VA*), I would sample every fifth *POU* and *VA* marker for analysis to enable better comparison between texts.

My preference was to sample proportionately from several sources for each time period so the corpus would be less biased to one writing style. This was not possible for Old Mauritian, where only Baissac’s work was analysed because I consider it to be the most extensive and stable source of Old Mauritian. Instead, a number of different folk tales were sampled from this work and analysed in depth. The markers to be analysed were identified by searching in Antconc (2019) with all the spelling variants outlined in Baker & Fon Sing (2007:221–305). Zero marking was not included in the corpus analysis.

After selecting examples of the relevant markers in future, past and present contexts, these were analysed according to the features outlined in section 4.1.4.1. If the example sentence had a particular feature, it was analysed as ‘1’ and if it was absent, it was analysed as ‘0’. See Figure 4.1 for a sample:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T							
	Sentence	Translation	marker	proximal	imminenc	present	re	specific	tir	speaker	cc	speaker	cc	agent	con	agent	inte	situation	c	commissi	situation	c	prediction	subordina	imperativi	1sg/1pl
4	Femmes a Pas tardé nouvelle la va fanne partou. Before long the neva			1	0	1	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0
5	Mo promette toi, Zéphirin, qui zamait I promise you, Zep va			0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6	Mo a dire toi, Miceline, mais faudrait t'I tell you, Micelir a			1	0	1	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	1
7	Na pas dire ca personne, li a batte-m Don't say that to a a			0	0	0	0	0	0	1	0	1	1	1	1	0	1	0	0	0	0	1	0	0	1	0
9	Femmes a Li largue ène guélé, manière femme c He lets out a screa pour I			1	1	1	0	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0
10	Comant dire mo pour acoué It's like I will give t: pour			1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1
11	Dimoune pour appelle moi poule ! People will call me pour			0	0	1	0	0	1	0	1	0	1	0	1	0	1	1	0	0	0	1	0	0	0	0
12	Faudrait promette-moi to pas pour d You must promise pour			0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0
16	1952 Sentence	Translation	marker	proximal	imminenc	present	re	specific	tir	speaker	cc	speaker	cc	agent	con	agent	inte	situation	c	commissi	situation	c	prediction	subordina	imperativi	1sg/1pl
17	Sire nous pou prend li We will certainly t: pou			1	0	1	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	1
18	Qui nous pou faire are bourique la ? What will we do w pou			1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	1
19	Tous lé dé pou perdi zot farzen et zo Both will lose thei pou			0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	0	1	1	0	0	0
20	Travail la pou passe dans la main ène The work will pass pou			0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0
21																										
22	Nous a partaze la monaie We will share the i a			0	0	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	1
23	Li a seni nous couval He will serve as ou a			0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
24	caquene so tour a monte la haut li each of us will taki a			0	0	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	0
25	Quiquefois nous pas va tardé trouve Maybe we won't t va			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26	Nous a faire ène manière gagne so h We will do one wa a			0	0	0	0	1	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	1
27	Après nous a travaille rouilier la Sava After, we will wori a			0	0	0	0	1	1	0	1	1	1	0	0	1	1	0	0	1	1	0	0	0	0	1
28	Autrement zaffaire la na pas va bien It won't work any va			0	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0

Figure 4.1: Sample analysis table in Excel for POU and VA in 20th Century Mauritian

Despite defining each feature in section 4.1.4.1, the analysis posed a number of difficulties, some of which are specific to Creoles. Many verbs in Mauritian Creole look similar in their form to French, but their lexical semantics differ substantially. For example, the verb ‘to see’ in Creole *trouve* looks very much like the French verb *trouver*, meaning ‘to find’. Similarly, the verb ‘to have’ is *gagne* or *ena* in Creole, derived from the French *gagner* ‘to obtain’ or *il y en a* ‘there is/are’. Although closely related in meaning, there are clear differences. i.e. ‘see’ is unintentional, but ‘find’ is intentional, and ‘have’ is a state, but ‘obtain’ is dynamic. This emphasizes the importance of not relying on French to guide the analysis, as an unfamiliar Creole word bearing resemblance to French could have very

different internal semantics. More broadly, even negation can fundamentally change the lexical semantics. For example, a sentence such as “I’ve eaten sushi” is clearly a completed event, but if you insert ‘never’, this event cannot be viewed as completed (De Saussure et al., 2016:23). This is discussed in more detail in chapter 7.

At the time of analysis, I had a good understanding of Old Mauritian. However, there were some sentences I could not parse. Native speakers could not help because the language has changed considerably both in terms of grammar and lexicon since the 1800s. Therefore, sentences which could not be analysed accurately were not included. Since early Mauritian Creole in particular relies on the context to express concepts which are often overt in languages with longer histories (Stein, 2007), I decided to firmly root the analysis in the context. This meant in cases where the abstract sentence meaning differed from its meaning in that specific context, the latter interpretation was chosen. Some features, such as ‘speaker certainty’, are by their nature subjective and difficult to determine. I therefore made (sometimes difficult) decisions about whether a feature was present or absent based on where this sentence fitted within the text as a whole and what I knew about the characters and the historical background. Due to the time-consuming nature of reading all texts in full in order to accurately situate each sentence within its context, the corpus analysis is not extensive and relies on small numbers of examples from a range of sources.

I realize this contextual approach leaves room for interpretation on my part and will inevitably involve some bias due to my background and training. However, I believe not being a native speaker of Creole is actually advantageous for the Old Mauritian analysis because it meant I was not influenced by a modern Mauritian interpretation as a native speaker might be. In cases from Modern or late 20th Century Mauritian which were difficult to judge, I got a second opinion from a native speaker (e.g. Parmessur, 2018, p.c.). I believe the alternative of analysing isolated sentences with their typical ‘out of context’ interpretations would not capture the reality of what the authors intended and would not do justice to the rich and diverse means of expression in Creole.

4.2 Elicitation

Five elicitation tasks are used to investigate current TMA marking from multiple angles. The main concept driving the choice of different tasks is ‘data triangulation’. This is employed “to maximize the effectiveness of a study” by using a variety of data collection techniques to investigate the same phenomenon (Costa et al., 2018). Since all methods of elicitation have disadvantages, the use of multiple approaches counteracts some of these limitations and enables me to draw on the strengths of both quantitative and qualitative methodology. As a result, any consistent findings across tasks are meaningful because they cannot be a consequence of the choice of a specific task. This strengthens the conclusions which can be drawn overall from the different approaches making the common findings more robust. The following sections present the tasks used in Part II and outline their advantages and disadvantages, before describing the method of data analysis.

4.2.1 Translation task

The translation task was completed online by 30 participants between 8th December 2017 and 22nd January 2018. It was devised with the aim of establishing which markers could be used in specific contexts.

The task was based on Dahl’s (2000) ‘Tense and Aspect in the languages of Europe’ Questionnaire and was administered online through the *onlinesurveys.ac.uk* platform. The task involved translating future, past and present English sentences, although the English verb was written in capital letters to avoid influencing the choice of marker and/or tense and aspect marking in Creole.

Below is an example of two sentences used to elicit future marking in intention and prediction contexts. The context should provide enough information for the meaning to be clear. Participants only translated the parts in bold.

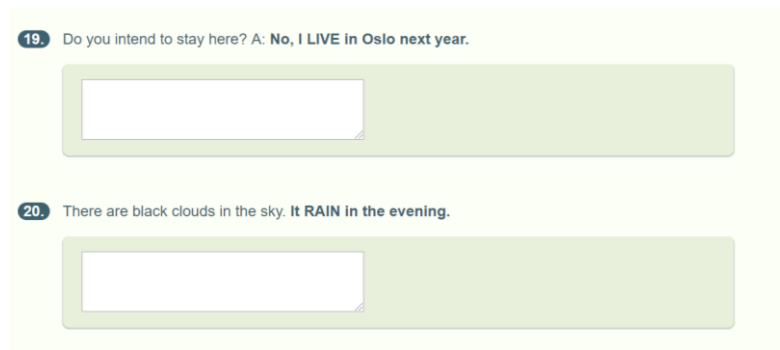


Figure 4.2: Screenshot of two sentences in the translation task

For the complete set of sentences used in this task, see Appendix II.1. The main advantage of using *onlinesurveys.ac.uk* is that it is recommended by the university because it is compliant with the university's data protection requirements. However, a major drawback is that you cannot randomize the order in which the questions are presented to participants. This was overcome by having three versions of the survey with different orders to avoid primacy, recency and fatigue effects. Nevertheless, this approach is still not as methodologically sound as randomizing the order of questions for each participant. The data was fully anonymous with only limited personal data collected about age, gender and languages spoken.

4.2.1.1 Advantages of translation task

This task has the advantage of being highly comparable since each participant translated the same sentences and had exactly the same input. The sentences were originally used in the EUROTYPE project (Dahl, 2000:309) to collect data about a large number of European languages, so have already proved useful for the large-scale elicitation of tense and aspect information. Unlike with other tasks, participants are free to translate the sentences with any vocabulary or structure they wish.

Regarding language choice, all instructions and contextual information were given in English. It was important to consider how other languages may affect the results. In particular, French should not be used due to similarity between French and Creole. Using English means participants should not be

influenced or primed by any use of Creole in the instructions and the avoidance of French should also reduce the possibility of French-like constructions being used in the Creole translations.

4.2.1.2 Disadvantages of translation task

With a small sample, translation cannot always uncover all possible variants or distinguish between systematic and idiosyncratic differences (Bybee et al., 1994:34). However, the more participants, the easier it is to identify such factors. The participant size of 30 should increase the likelihood of variation in responses.

Although the choice of administration language as English was seen as an advantage above, the fact that this language is unlikely to be used by most participants daily means it should not be taken for granted that all participants had the same or even enough knowledge of English to fully understand the task. However, the fact that the recruitment, consent and detailed instructions were in English should have dissuaded those whose English was not of the required standard from taking part.

A final limitation is that participants are only likely to give the most common/obvious translation, so it is not possible to investigate less frequent structures which are still grammatically possible. Whilst this cannot be overcome within this task, the use of other tasks (below), which directly address the acceptability of less common structures, can counteract this limitation.

4.2.1.3 Data analysis for translation task

The translations collected online per participant from *onlinesurveys.ac.uk* were transferred to an Excel document and categorized according to the marker that was used to translate the English context. These contexts were additionally coded for the features they contained to calculate which features the markers were associated with.

Due to the categorical nature of the response (marker used) and the multiple categorical sentence and participant variables (features of the sentence, participant age, gender, languages etc), a chi-square test of independence was used to test whether there was a correlation between these variables or whether they were independent of each other. The number of data points was 1,200 (40 sentences translated by 30 participants). The future, past and present marker results were dealt with separately and for the feature analysis, the degrees of freedom, chi-square value and p-values were reported along with the corrected significance threshold. The data analysis was carried out in R version 4.0.3 (R Core Team, 2020). Sample R scripts for the data analysis can be found in Appendix IV.

Due to the large number of significance tests carried out simultaneously (e.g. 23 tests for the 4 future markers), the normal p-value of $p > 0.05$ was modified with the Bonferroni correction by lowering the p-value to reduce the risk of making a Type 1 error and assuming significant differences by chance (Sall et al., 2007). For example, for the future feature analysis in the translation task, the corrected significance threshold ($p > 0.00054$) was calculated by dividing $p = 0.05$ by the 92 tests (23 features * 4 markers) which were carried out. A corrected significance level was applied and reported in all five tasks.

4.2.2 *Acceptability judgement task*

This task was carried out online by 48 participants between 5th August and 27th September 2019. The task was devised to test whether certain markers would be possible in certain contexts, especially if a marker had not been used in the translation task and if there was little evidence of it in the written corpora. Although each context was devised to test a specific feature, it is impossible to isolate these features, so in addition to this, all contexts were coded for all the features they contained. Each sentence to be rated had also been coded in advance as to whether the expected response would be high (i.e. acceptable) or low (i.e. unacceptable).

Acceptability judgement tests are based on traditional grammaticality judgement tests, used to gauge whether a certain construction is grammatical for native speakers of a certain language. Traditionally,

items are rated dichotomously as either ‘grammatical’ or ‘non-grammatical’. However, this does not allow for a more nuanced approach to grammaticality, whereby there are varying degrees of acceptability (Tremblay, 2005:131). Whilst grammaticality and acceptability are often treated as synonyms, grammaticality is understood as part of a person’s linguistic competence, whilst acceptability is to do with linguistic performance. Nevertheless, even the most rigorous grammaticality judgement tests are unable to perfectly access an individual’s linguistic competence due to performance effects and extra-linguistic factors (Tremblay, 2005).

In this acceptability judgement test, the entire survey was administered in Creole, including the instructions and ‘next’ buttons. Participants were given a context and asked to rate sentences on a 7-point likert scale from 1 *pa apropiye* ‘not appropriate’ to 7 *pli apropiye* ‘most appropriate’. Participants were told to rate sentences as ‘7’ if they would say it themselves, ‘1’ if no Creole speaker would utter the sentence and a number in between according to its appropriateness in the context if another Creole speaker might say it. After each set of sentences, there is a box to write any alternative sentences which are appropriate in that context. See example question in Figure 4.3:

Eksanp: To koz avek to kamarad lor to ser.
 Ki fraz pli apropiye dan sa kontex-la?

	pa apropriye 1	2	3	4	5	6	pli apropriye 7
Mo ser (f)inn al lapos yer dezer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mo ser ti al lapos yer dezer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mo ser fek al lapos yer dezer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mo ser al lapos yer dezer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eski ena enn lot fraz ki apropriye dan sa kontex-la?	<input type="text"/>						

Figure 4.3: Screenshot of the example question in the acceptability judgement task

Stimuli for the acceptability judgement task can be found in Appendix II.2. For this task, a different survey platform ‘SoSci Survey’ was used to enable randomization of both the order of questions and

items within each question. It complies with current data protection laws²⁶ and is much more powerful and user-friendly than *onlinesurveys.ac.uk*.

4.2.2.1 *Advantages of acceptability judgement tasks*

A major advantage of this method is that it is possible to directly test whether a certain marker is possible in a specific context even if there are no attestations of it in the written corpora, or if it was not used in the translation task. This enabled me to explore less-common patterns alongside common ones and see whether they were judged as more or less acceptable by native speakers.

Using a 7-point likert scale allows for a more nuanced view of grammaticality and recognizes that the same sentence may be appropriate for some but not necessarily used by all Creole speakers. This is in line with a gradual approach to grammaticalization (Traugott & Trousdale, 2010). The contexts and sentences themselves used common vocabulary so there was no possibility that sentences would be deemed less acceptable due to participants being distracted by factors such as unusual vocabulary which is irrelevant to TMA marking. An advantage of collecting data in this way is that it is possible to provide detailed contexts before participants are asked to judge the sentences. Unlike the translation task, Creole is used exclusively throughout the survey so no other languages should influence the participants' judgements and the contexts were presented randomly so that the results would not be affected by primacy, recency and fatigue-effects. The fact it was computer-mediated meant participants could not make changes retrospectively, limiting extra-grammatical factors.

4.2.2.2 *Disadvantages of acceptability judgement tasks*

Despite detailed contexts written in Creole for each set of sentences, subtler factors such as speaker attitude cannot always be conveyed successfully through writing and may also affect acceptability.

²⁶ Further details about SoSci Survey's data protection policy can be found here: <https://www.soscsurvey.de/en/data-protection>

Participants may be influenced by the sentence options given, although they might naturally use a different expression or marker to convey the same meaning. For this reason, an ‘other’ option was provided (*eski ena enn lot fraz ki apropriye dan sa kontext-la?* – ‘is there another sentence which is appropriate in this context?’), so participants were not just restricted to the options given. A final limitation is that participants are known to avoid the maximum and minimum scores on likert scales (Glen, 2020). Therefore a 7-point rather than a 5-point scale was used.

4.2.2.3 *Data analysis of acceptability judgement task*

The data collected from *soscisurvey.de* could be directly downloaded into a csv. format suitable for analysis in the statistics packages R and JMP Pro 14. There were 25 contexts containing between 2 and 6 sentences with different markers to be rated for acceptability in each context.

As with the translation task, each sentence was coded for the features it contained, so a correlation between these features and the acceptability of the markers could be tested. Although each sentence was devised with a particular context or feature in mind, the reality is much more complex because every context is made up of many features. Separate tables were created to address the future, past and present contexts and chi-square tests were carried out to examine how independent the feature variables were from the markers used. A separate analysis investigating the expected vs. actual acceptability of each sentence was also carried out.

4.2.3 *Cloze tests*

This task was carried out by participants who came to the University of Mauritius for an interview between 9th August and 6th September 2019.²⁷

²⁷ Participants were paid 250 Mauritian Rupees in total for completing this task, the semi-structured interview and re-telling a narrative.

This task involved completing and discussing a cloze test (or fill-in-the-blanks exercise). It was based on one of the stories from Tizan (Little John), which was used in the modern corpus analysis section. The spelling was updated to conform to standard orthography. The majority of the markers in this text were removed and replaced with blanks as can be seen in Figure 4.4.

Fill-in-the-blanks

Please choose from the following possibilities to fill in the blanks:
 pou, (f)inn, ti, (a)va, fek, pe, OR: no need to put anything in the blank.

Zistwar Tizan

Enn zour dan enn pei, ti ena enn ti garson ki ti apel Tizan. Toulezour, so mama ti avoy li lekol. Sa letan-la, pou al lekol, zanfan ti bizin mars enn long distans. Rezman, parfwa parfwa lor sime, ti ena enn ti laboutik.

Koumsamem ki souvan Tizan aste enn ti gato, partaz ar so bann kamarad letan zot al lekol. Enn zour, ek sa ti kas ki so mama donn li la, Tizan rant dan laboutik, li aste de gato kanet. Enn lespri vinn dan so latef. Li dir koumsa: "Zordi, mo manz enn sel gato kanet. Lot la, mo gard li, mo plant li tanto ler mo rant lakaz."

Aprè enn ti-mama, li trouv enn ti pie koumans zèrme. Tizan kontan! Kan pie gran, li koumans donn zoli zoli fier. Anfin, sezon rapor aproz. Ki zot krwar pie la raporte? Wi, gato kanet mem. Tou dimoun pase get li koumadir mirak.

Enn tanto aprè so lekol, Tizan anler lor so pie, tann enn lavwa depi anba. Li bes latet, pran

Figure 4.4: Sample cloze test

As the participant filled in the blanks, I asked questions about the choice of markers and probed whether other markers would also be possible in certain blanks. This enabled a direct comparison with the original text and since it is almost 20 years since this test was published in 2003, significant differences might suggest developments in TMA usage since the early 2000s.

4.2.3.1 Advantages of Cloze tests

This task presents authentic sentences from a text written by a native Creole speaker, enabling direct comparison with the original text to see whether the same marker is used as the original author or whether another marker is also possible in this context. Unlike with the online tasks, the full discourse context is available to the participant. The task is easy to construct and score, and it is possible to collect a large number of items for a relatively short text. I discussed the task with the

participants as they were completing it in order to collect rich, qualitative data about TMA marking as well as quantitatively analysable results from the cloze test itself.

4.2.3.2 Disadvantages of Cloze tests

As only the TMA markers were missing from the text, participants may have guessed the purpose of the task. For this reason, this is the last task which the participants completed in the interview, so possible knowledge of the purpose of the task could not influence the markers used in the interview and narrative tasks.

4.2.3.3 Data analysis of Cloze tests

Although the task was carried out by hand, participants were asked to read each paragraph aloud and there was a discussion about the reasons for choosing certain markers. This was recorded on a Sony ICD-PX370 Mono Digital Voice Recorder. The discussion was planned to be in English to avoid similarities with French, but for some participants this was not possible. For those who were not comfortable with English, French or Creole was used to ask questions. Many participants responded in Creole to a question posed in English.

There were 35 gaps filled in by 19 participants, totalling 665 data points. The percentage of identical markers as in the original text was calculated for each participant and each gap. Each sentence with a gap was analysed for features and chi-square tests were run to examine which markers were used with which features in this task.

4.2.4 Semi-structured interviews

The interviews were conducted with participants who came to the University of Mauritius between 9th August and 6th September 2019.

The interview involved answering a series of questions in Creole which targeted different markers. For this task, a native speaker helper was involved in the interview so the conversation would flow more naturally, and participants would feel more comfortable than with me, an obvious outsider to the community, both ethnically and linguistically.

Topics discussed covered domains in which Creole is usually used and included differences in life in the past and present, community events (festivals and religious ceremonies) and free time activities, as suggested in Sippola (2018:17).

4.2.4.1 Advantages of Semi-structured interviews

With a native speaker leading the interview questions, this had the benefit of lessening complications of having an ‘outsider’ researcher asking questions. Since Creole speakers are generally also fluent in French or English, it is natural for Creole speakers to automatically switch to one of these languages with a non-native speaker, or if they do speak Creole, use a variety which is closer to French (Sippola, 2018:11). It helps that I am not a native French speaker, because Creole speakers might feel pressure to speak “proper French” rather than Creole in that case. With native Creole speakers leading the interview, participants should not feel intimidated or modify their speech to accommodate a non-native, but have a more natural conversation with an ‘insider’ from their community. Sippola (2018:16) notes that the more people present in the interview setting, the more informal and natural the interview feels. The main advantage of a semi-structured interview over elicitation is that participants are not restricted in any way as to the formulation of what they want to express. In comparison to a more structured interview style, a semi-structured interview provides more flexibility should the participant want to talk about some areas in more detail, yet revolves around a minimum number of questions which are the same across participants and thus comparable.

4.2.4.2 *Disadvantages of Semi-structured interviews*

Participants may be influenced by the markers used in the questions, and, as opposed to every-day speech, an interview is a more formal and a less natural scenario for speaking Creole. Use of a native speaker, often known to participants, to lead the interview counteracted this to some extent, although it is unlikely to resemble a completely natural and relaxed setting.

4.2.4.3 *Data analysis of Semi-structured interviews*

Interviews were recorded on a Sony ICD-PX370 Mono Digital Voice Recorder and added to the programme SayMore 3.1.5 (SIL, 2019) which organizes all the interviews and audio files associated with it. Its auto-segmentation tool was used to split up the interviews into bite-sized chunks, then exported to ELAN 5.7 (The Language Archive, 2019). Here, participant and interviewer tiers were added and segmentations manually corrected. I transcribed the interviews in ELAN 5.7 according to the new official standard orthography, then exported them as an Interlinear text file. A native speaker who had studied Mauritian Creole at university filled in any gaps and corrected the transcriptions before the analysis process started.

12 questions from the interviews were selected (3 present, 4 past and 4 future). The responses and TMA markers used by all participants were noted in an Excel file. The contexts of the questions were analysed for their features, and chi-square tests were run to check which features were most associated with which markers.

4.2.5 *Re-telling a narrative*

This task was carried out by participants who came to the University of Mauritius between 9th August and 6th September 2019 for an interview.

Participants watched a video. Half of them were asked to say what was happening while they were watching it (to elicit present marking) and half re-told the story after it had finished (to elicit past

marking). The video that the participants watched is the “Pear Story”, created by Chafe (1980) to examine how a simple story would vary in different languages (Erbaugh, 2001). The video is freely available on Erbaugh’s website and was designed to be used in future research if cited appropriately. Therefore the use of this video presented no copyright issues for the present study.

4.2.5.1 Advantages of Re-telling a Narrative

The use of the Pear Story to elicit speech is more focussed than letting participants talk freely. It enables more systematic comparison between participants since they responded to the same stimulus, presumably resulting in similar sentences to describe the video in Creole. As with the interview, participants once again had complete freedom to formulate sentences as they wished. The only stimuli needed is the video and a single oral prompt (not including a TMA marker) asking the participant to begin. The fact that the Pear Story is widely known and created by a linguist for the purpose of investigating narratives means this video is ideal as stimulus for this study, especially because many of the corpus texts were also narratives.

4.2.5.2 Disadvantages of Re-telling a Narrative

Re-telling a story after it has finished relies on memory more than describing the story as it unfolds. A story-board with pictures was available in case participants had trouble re-calling it at all (see Appendix II.5). This was only necessary for two participants.

4.2.5.3 Data analysis of Re-telling a Narrative

As with the interviews, the re-telling was recorded on a Sony ICD-PX370 Mono Digital Voice Recorder, added to the programme SayMore 3.1.5 (SIL, 2019) and transcribed in ELAN 5.7 (The Language Archive, 2019). In order to calculate frequencies, the transcripts were analysed in NVivo

12 (QSR International, 2020) and all markers, including \emptyset , were coded. The re-call and during conditions were analysed separately.

The narrative was divided into 16 scenes, although not all participants described all the scenes, especially in the re-call condition. The utterances which corresponded to each scene were recorded in an Excel document along with the marker and verb used, as can be seen in Figure 4.5.

Scene	Participant	Condition	Example	Marker	Verb
1 P2.2	1 P2.2	During	Enn misie pe k ₂ pe		kas
1 P4.2	1 P4.2	During	kas sa frwi-la lc	0	kas
1 P8.2	1 P8.2	During	Enn misie pe k ₂ pe		kas
1 P11.2	1 P11.2	During	enn misie ki pe pe		kase
1 P15.2	1 P15.2	During	enn fermie pe lpe		kas
1 P17.2	1 P17.2	During	enn dimounn ppe		kas
1 P19.2	1 P19.2	During	enn misie ou eipe		kas
1 P1.2	1 P1.2	Recall	enn dimounn k	0	fer
1 P1.2	1 P1.2	Recall	li pe rekolte so pe		rekolte
1 P3.2	1 P3.2	Recall	ena enn misie lpe		kas
1 P5.2	1 P5.2	Recall	donk li ti pe mcti pe		mont
1 P5.2	1 P5.2	Recall	kas pwar,	0	kas
1 P5.2	1 P5.2	Recall	li'nn ramase nn		ramas
1 P5.2	1 P5.2	Recall	... li pe met dar pe		met
1 P7.2	1 P7.2	Recall	ki ti pe kas pwati pe		kas
1 P9.2	1 P9.2	Recall	enn misie pe lope		na
1 P9.2	1 P9.2	Recall	pe kas bann frpe		kas
1 P10.2	1 P10.2	Recall	ti pe keuir enn ti pe		keuir
1 P12.2	1 P12.2	Recall	ti pe kas pwar l ti pe		kas
1 P14.2	1 P14.2	Recall	pe kas pe		kas

Scene	Participant	Condition	Example	Marker	Verb	
2 P2.2	2 P2.2	During	dimounn-pe		met	
2 P2.2	2 P2.2	During	li pe met s pe		met	
2 P4.2	2 P4.2	During	enn agriku ti pe		met	
2 P4.2	2 P4.2	During	li pe met lpe		met	
2 P8.2	2 P8.2	During	li pe met cpe		met	
2 P11.2	2 P11.2	During	li pe met cpe		met	
2 P13.2	2 P13.2	During	li pe mete pe		mete	
2 P1.2	2 P1.2	Recall	li pe zet li pe		zet	
2 P3.2	2 P3.2	Recall	Ti ranpli s ti		ranpli	
2 P5.2	2 P5.2	Recall	li pe mete pe		met	
2 P9.2	2 P9.2	Recall	li'nn met l nn		met	
2 P14.2	2 P14.2	Recall	Se fer lare	0	fer	
2 P16.2	2 P16.2	Recall	li pe ranpl pe		ranpli	
2 P18.2	2 P18.2	Recall	li'nn ranpl nn		ranpli	

Figure 4.5: Screenshot of Excel document recording narrative responses according to scene

Each response was analysed according to its features, and chi-square tests were run to explore the features which were most associated with each marker, as in the previous tasks.

4.3 Conclusion

This chapter has provided details of the corpus and elicitation methodology, justifying the approaches taken in this thesis. I first set out the sources of the texts (including their limitations) and explained the theoretical background and methodology for the corpus analysis. I then outlined the advantages, disadvantages and data analysis methodology for all five elicitation tasks, explaining how data triangulation is valuable to counteract the limitations of individual tasks.

Chapter 5:

The socio-historical background

This chapter presents socio-historical details from the early days of French colonization to Mauritian independence and beyond which are relevant for understanding how Mauritian Creole developed. Census data provide a useful source of information about ethnic background and languages spoken and are referred to where applicable. The information presented here will be referred to in Part I when analysing whether Mauritian's TMA markers have been influenced by other languages.

5.1 Motivation

Making any hard conclusions about the languages present during the emergence of a Creole and determining which of them had an influence is no easy task and is not always given the attention it deserves. I am under no illusion that such an endeavour could prove that certain languages were responsible for the development of Mauritian's TMA markers. However, I believe that ignoring the possible influence of the many native languages which were present in Mauritius during colonization is an oversight which simplifies the situation and gives too much importance to the role of French. We know from L2 acquisition studies that one's native tongue is not something that can just be 'forgotten' and usually emerges in the form of interference when speaking another language (Becker & Veenstra, 2003:299). In addition, substrates often contribute their function rather than their form to Creoles (Lefebvre, 2003; Siegel, 2015), so it is not always easy to assess their contribution. Only by studying the origins of the initial population and possible languages which were present during the early contact period can we understand the reality and the complexity of the situation. Baker (1982) has made a large contribution to understanding the demographics of Mauritius in its early days and many of his findings will be outlined below forming the basis of this chapter.

In addition, census data provide an invaluable resource into population changes over time, so it is possible to compare whether further developments in the language may also correspond to changes in the population and dominant languages on the island.

5.2 The early colonization period

Before the French came to Mauritius, it was a Dutch colony. However, they left the island around 1710 as conditions were not favourable to settlement (Seetah, 2020). By the 1720s, the *Compagnie des Indes Orientales* ‘The French East India Company’ occupied the island due to its two natural harbours (Baker & Fon Sing, 2007:307), and sent two ships from France in 1721. Unfortunately, the voyage took much longer than expected and arrived in Mauritius with only half the passengers who had originally embarked. Most of the survivors had left Mauritius by 1725. The population of Mauritius remained impermanent until Lenoir was appointed chief of the *Compagnie* in 1726 and planned its settlement (Baker & Fon Sing, 2007:307–8). He brought young unmarried women from France to marry the remaining soldiers, have families and encourage them to stay long-term, as well as large numbers of slaves and skilled workers.

5.2.1 The first slaves, their origins and languages

In 1726 there were only 30 slaves on the island, all of Malagasy origin, but by 1734 Lenoir had introduced another 1450. These first slaves came from Gorée (Senegal) and Juda (now part of Benin) in West Africa and Southern India, as well as continued arrivals from Madagascar (see Table 5.1) (Baker & Fon Sing, 2007:308).

Origin	Language (families)	No. of slaves	Percentage
Gorée (Senegal)	Niger-Congo	517	38.96%
Juda (Benin)	Niger-Congo	178	13.41%
Southern India	Indo-Aryan/ Dravidian?	269	20.27%
Madagascar	Malagasy	363	27.35%
Total:		1327	100%

Table 5.1: Origins and numbers of slaves brought to Mauritius by Lenoir between 1727 and 1734 (Baker & Fon Sing, 2007:308). Language and percentage columns were added by me.

It is not easy to establish exactly which languages were present during the emergence and early development of Mauritian Creole because, whilst early records can provide some information about where the slaves came from, this only provides a rough indication of the languages these people would have spoken upon arrival. Table 5.1 shows that slaves speaking Niger-Congo languages of West Africa were numerically dominant in the early settlement period, despite the first slaves being from Madagascar.

Baker (1982) studied the early settlement of Mauritius extensively to dispute the claim by Chaudenson (1974:446) that Mauritian Creole is derived from Réunion Creole. This claim was unexpected because the two varieties are not mutually intelligible, and people had assumed Mauritian emerged independently in Mauritius in the 1700s. The finding that the settler population had come from France, not Réunion and that visitor numbers from Réunion were always too small to have had any significant impact, show that Mauritian Creole can only have originated in Mauritius (Baker & Corne, 1982:258). Baker's (1982) graphic representation of incoming slave arrivals and their origins in Figure 5.1 demonstrates the dominance of Malagasy and Niger-Congo speakers among the first slaves.

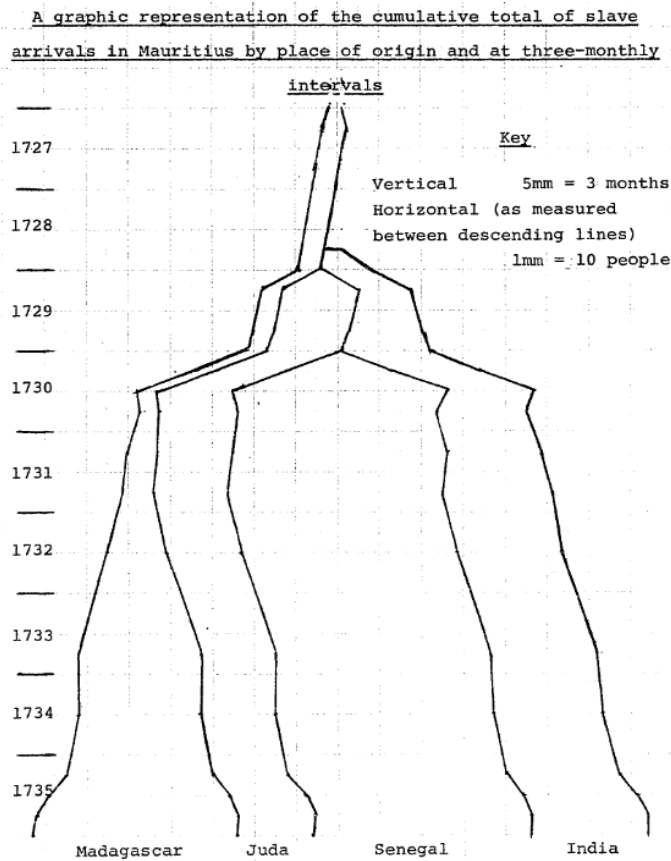


Figure 5.1: Graphic taken from Baker (1982) showing slave arrivals between 1727 and 1735

As the slave trade intensified, the origins of the slaves arriving in Mauritius diversified and numbers increased dramatically. A trade agreement was made with the Portuguese in Mozambique in 1733 which introduced large numbers of East African Bantu speakers (Baker & Corne, 1982:179). Table 5.2 provides a less complete picture of the situation by 1740 than Table 5.1 because some of these slaves were taken on to Réunion from Mauritius. However, it is known that all the West Africans remained in Mauritius (Baker & Fon Sing, 2007:310).

Origin	Language (families)	No of slaves	Percentage
Madagascar	Malagasy	1176	48.41%
Mozambique	Bantu	671	27.62%
West Africa	Niger-Congo	300	12.35%
India	Indo-Aryan/ Dravidian	180	7.41%
Unknown		102	4.20%
Total:		2429	

Table 5.2: Sources and numbers of slaves taken to Mauritius and Réunion between 1736 and 1740 (Baker & Fon Sing, 2007:310). Language and percentage columns were added by me.

We know that Malagasy was certainly present in Mauritius as it was the only indigenous language of Madagascar. However, the linguistic situations of Western and Eastern Africa and India, where other groups of slaves came from, is much more complex. Without any more specific information about the origin within India, it is difficult to know which of the (hundreds of) languages of India might have been brought to Mauritius. Equally, over 40 indigenous Bantu languages are spoken in Mozambique, many of which are spoken by just a few hundred thousand people (SIL International, 2019:195), so it would be difficult to determine which of these languages would have been most likely spoken by the slaves from Mozambique. However, this high level of linguistic diversity in the country of origin means it is likely that slaves from East Africa who ended up in Mauritius would not have spoken a common language. However, all of the languages of Mozambique are Bantu languages, more specifically ‘narrow Bantu’, which consists of 500 languages spoken in the sub-Saharan region from western Cameroon to southern Somalia (Nurse et al., 2016:62). These Bantu languages display many similarities and are often grouped together. Bantu can be described according to statistical tendencies based on representative samples (Nurse, 2008; Nurse et al., 2016:62). Therefore, it is common to refer to Bantu languages as a whole, as I will be obliged to do in discussions in chapters 6-8.

Regarding potential sources of Mauritian’s non-French features, Grant & Baker (2007:201) consider the following languages:

- French (Romance)
- Wolof (Niger-Congo)
- Mandinka (Niger-Congo)
- Fongbe (Niger-Congo)
- Hindustani (Indic)
- Makhuwa (Bantu)
- Tamil (Dravidian)
- Malagasy (Austronesian)

Some of the earliest slaves are known to have come from the Kingdom of Juda in West Africa, now located in present-day Benin (Baker & Fon Sing, 2007:308). Fongbe is taken as the dominant language spoken in Juda, present-day Benin, yet as Grant & Baker (2007:201) note, it is unlikely that the dominant ethnic group would have been sold as slaves. Nevertheless, they consider this

language to be representative of Gbe languages in general which are common in the area (Simons & Fennig, 2017:378). Instead, I argue that another language, which, to my knowledge, has never been considered within the context of the emergence of Mauritian Creole may have had a role to play.

Yoruba is a Niger-Congo language, spoken by the Yoruba people, who used to rule the Oyo Empire which included part of present-day Benin. In fact, the name Juda is derived from the Yoruba *Xwéda*, named after the Whidah-bird (Law, 2017:2). However, after the Kingdom of Dahoney (controlled by the Fon) took over Juda in 1727, they gained considerable power, although there was continued fighting between the Kingdom of Dahoney (Fon) and the Oyo Empire (Yoruba).

The Oyo Empire began to weaken in the mid-1700s and it is considered that Yoruba people made up an increasing proportion of slaves as a result of the disorder that accompanied the decline of the Oyo Empire (Eltis, 2005). Typically, Yoruba-speaking areas can be found to the East and centre of present-day Benin (Parrinder, 1947:123) and it is known that slaves were often taken from inland and brought to the slave posts on the coast (Eltis, 2005:27). Eltis (2005:29) estimates that Yoruba people constituted between 42%-58% of the slaves shipped from the Bight of Benin between 1750-1800 (of which most ships ended up in the Americas). It seems likely that some Yoruba speakers were on the ships destined for Mauritius and I believe there is enough evidence to consider Yoruba influence on early Creole.

This section shows the difficulty of pin-pointing exactly which languages were involved in the early peopling of Mauritius due to incomplete historical records and complex linguistic situations in many of the areas which constitute potential sources of Mauritian slaves.

5.2.2 *Languages present at the time of the emergence of Mauritian Creole*

The ‘crucial period’ for the emergence of Mauritian Creole is considered to be the 1770s (Baker & Corne, 1982:249). Considering the origins of the slaves belonging to the *Compagnie* just before this

time, the dominant group on the island seems to be those from West Africa (speaking Niger-Congo languages). Baker & Corne (1982:204) clarify that the use of the term *Guinée* in Mauritius refers to the *Golfe de Guinée* (typically from the Ivory Coast to the Democratic Republic of the Congo) in the first half of the 18th century, but refers to any West African slaves in the second half of the 18th century. Table 5.3 shows the origins of the slaves belonging to the *Compagnie* in 1761.

Origin	Language (family)	No of slaves	%
Guinée (West Africa)	Niger-Congo	372	42.37%
Mozambique	Bantu	131	14.92%
Malgaches	Malagasy	210	23.92%
Americain	?	1	0.11%
Macaos	Chinese?	2	0.23%
Creols	?	62	7.06%
Indiens	Indo-Aryan/Dravidian	99	11.28%
Mamille	?	1	0.11%
		878	100%

Table 5.3: Origins of slaves belonging to the *Compagnie* in 1761

This is not the full picture as it only includes those slaves belonging to the *Compagnie*. There was a clear preference for the *Compagnie* to bring slaves from West Africa rather than from Madagascar between 1740-1761 (Baker & Corne, 1982:180). Slaves from West Africa cost twice as much as a slave from Madagascar because they were considered to be more robust and hard-working than the others (Baker & Corne, 1982:179). 1767 is reported to be the last year when slaves from West Africa reached the island (Baker, 1982:41) and slave numbers from East Africa increased. Figures for the proportions of arrivals from Mozambique and Madagascar show that between 1773 and 1794 arrivals from Mozambique outnumbered those from Malagasy 9:1 and by 1810 these proportions had levelled out to four Mozambicans for every Malagasy arrival (Corne, 1983:66). Due to the large amount of new arrivals from East Africa during the time when the vernacular amongst the slaves was stabilizing into a Creole, Corne (1983) assumes that Bantu languages had a significant influence on early Mauritian Creole.

By 1774 there were more locally born slaves than French speakers and the variety the slaves spoke was referred to as a 'language' for the first time (Baker & Corne, 1982:248). Texts from this time also provide evidence that the Creole had become more stable (Corne, 1983:66). Corne (1983) assumes that 1810 marks the last arrivals of foreign-born slaves to Mauritius. However, there is evidence that illegal slave trading continued from Madagascar, East Africa and the Seychelles up to 1827 (Allen, 2001; Hansard, 1826).

5.3 British colonization and Indian immigration

In August 1810, the British tried to take over Mauritius but failed. When they returned four months later with 10,000 troops, the French capitulated, transfer of power was peaceful and terms for citizens were generous. Surprisingly, there was no push for English, and French even continued to be used for official documents until London's Colonial Office requested documents be sent in English from 1832 (Baker & Fon Sing, 2007:317).

When slavery was abolished on 1st February 1835, massive numbers of indentured workers were brought from North-East India due to the shortage of plantation workers. This is known as the 'Great Experiment'. In 1835 the population of Mauritius was 100,000, yet the next 35 years saw the arrival of 365,000 Indian workers, of which the majority stayed after their contracts ended. Of the estimated 5000 British people living in Mauritius around 1860, the majority had left by 1900 (Baker & Fon Sing, 2007:318–21). The British continued to rule the island until Mauritius gained independence in 1968 (Baker & Fon Sing, 2007:327).

Figure 5.2 presents a very simplified timeline of population changes:



*Figure 5.2: Simplified timeline of developments in Mauritius' history
(sources: Baker & Corne, 1982; Baker & Fon Sing, 2007)*

As mentioned in chapter 4, it is not until the 1880s that Mauritian Creole is considered to be grammatically consistent, when slaves no longer spoke their ancestral languages (Baker, 2009:47). In the 1830s, missionaries who had come to Mauritius from Madagascar continually asked permission to preach in Malagasy but were refused. This wouldn't have been the case if there wasn't a substantial number of active Malagasy speakers in Mauritius at the time (Baker, 2009:49). This shows how ancestral languages such as Malagasy were spoken alongside Creole for decades and likely influenced Mauritian Creole as it emerged and acquired grammatical consistency.

Early population statistics were made available through the Colonial Blue books of the British Empire, where information about the demographics of the colonies was recorded and sent back to London (Christopher, 1992:58). The census before the abolishment of slavery in 1830 divided the population into European, free-coloured and slave categories. Unlike in the early days when the slaves' origins were noted, they are considered one homogenous, presumably Creole-speaking group, making up 71% of the population.

1830 – pre-abolition	No.	%
European	8592	8.86%
Free-coloured	18877	19.47%
Slave	69476	71.67%
Total:	96945	

Table 5.4: Population census figures for 1830

However, the distinction between the European and free-coloured population became so blurred that they were grouped together in the 1837 census and were not considered separately thereafter. In 1837, the ex-slaves were called ‘Apprentices’ and the beginning of the ‘Great Experiment’ can be seen in the introduction of large numbers of indentured labourers, primarily from India. The European + free-coloured population could be distinguished from the other categories as being Roman Catholic and French-speaking (Christopher, 1992:58).

1837 – post-abolition	No.	%
European + free-coloured	31672	33.03%
Apprentices	52616	54.87%
Indian	11601	12.10%
Total:	95889	

Table 5.5: Population census figures for 1837

In later censuses, this group is labelled ‘General Population’²⁸. Since people in this group had many different origins, grouping them together would be unhelpful for the classification of ethnicity. However, this group was known for being French-speaking so provides a useful grouping regarding linguistic preference. The Apprentices would have been the main Creole speakers and the Indian labourers would have spoken one of the many Indo-Aryan or Dravidian languages of India as first-generation immigrants to the island.

Figure 5.3 shows the census data figures over time according to ethnic group. The ‘Great Experiment’ clearly had a major impact on the make-up of the population (Miles, 2000:217). In 1867, large-scale Indian immigration decreased and the population proportions have remained fairly stable since 1871. Throughout the 20th century, there was a small but steady increase in the number of Chinese immigrants.

²⁸ It should be noted that category criteria changed over time and are not strictly comparable (StatsMauritius, 2020).

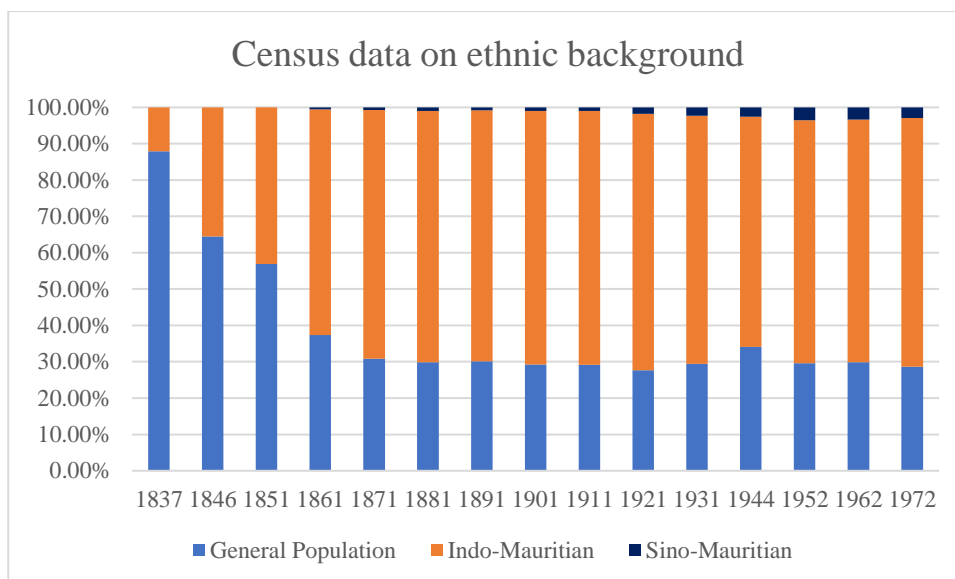


Figure 5.3: Census data on ethnic background from 1837 to 1972

Regarding linguistic proportions, this information becomes less informative over time as the Indo-Mauritian population gradually adopted Creole and abandoned their languages of origin. There is no ethnic data after the 1972 censuses. However, more usefully, future censuses record language data.

5.4 Language situation at and beyond Mauritian independence

In 1968, Mauritius became independent (Houbert, 1981:75) and English was a clear choice of official language. It was favoured due to being neutral and not linked to any ethnic group on the island (Salverda, 2010:210). Being a world language also helped to maintain its status (Miles, 2000:216). However, English has never been widely spoken in Mauritius.

Instead, French was much more prevalent at this time, having always been the prestigious language of the oral domain, even during British rule. Although the French language was initially closely associated with the Franco-Mauritian ethnic group, the language soon lost this strong connotation, due to widespread use in Mauritian media and a realization through “tourists, expatriates and French television” that the Franco-Mauritians do not speak like those from France (Salverda, 2010:211). Although Creole was the mother tongue of most descendants of slaves and spoken in increasing

numbers by other ethnic groups at independence, it was stigmatized and inferior to French, English and any other written languages (Sauzier-Uchida, 2009:104). At the time of independence, no descendants of slaves would have spoken any ancestral languages, but Mauritians of Indian origin still maintained formal (e.g. Hindi) and less formal (e.g. Bhojpuri) varieties of their ancestral languages in the home to some extent (Sauzier-Uchida, 2009:103). Creole was

From 1952, censuses recorded the language of the forefathers and the language(s) usually spoken at home. There is a clear tendency for the use of Creole at home to increase, while all other languages decrease:

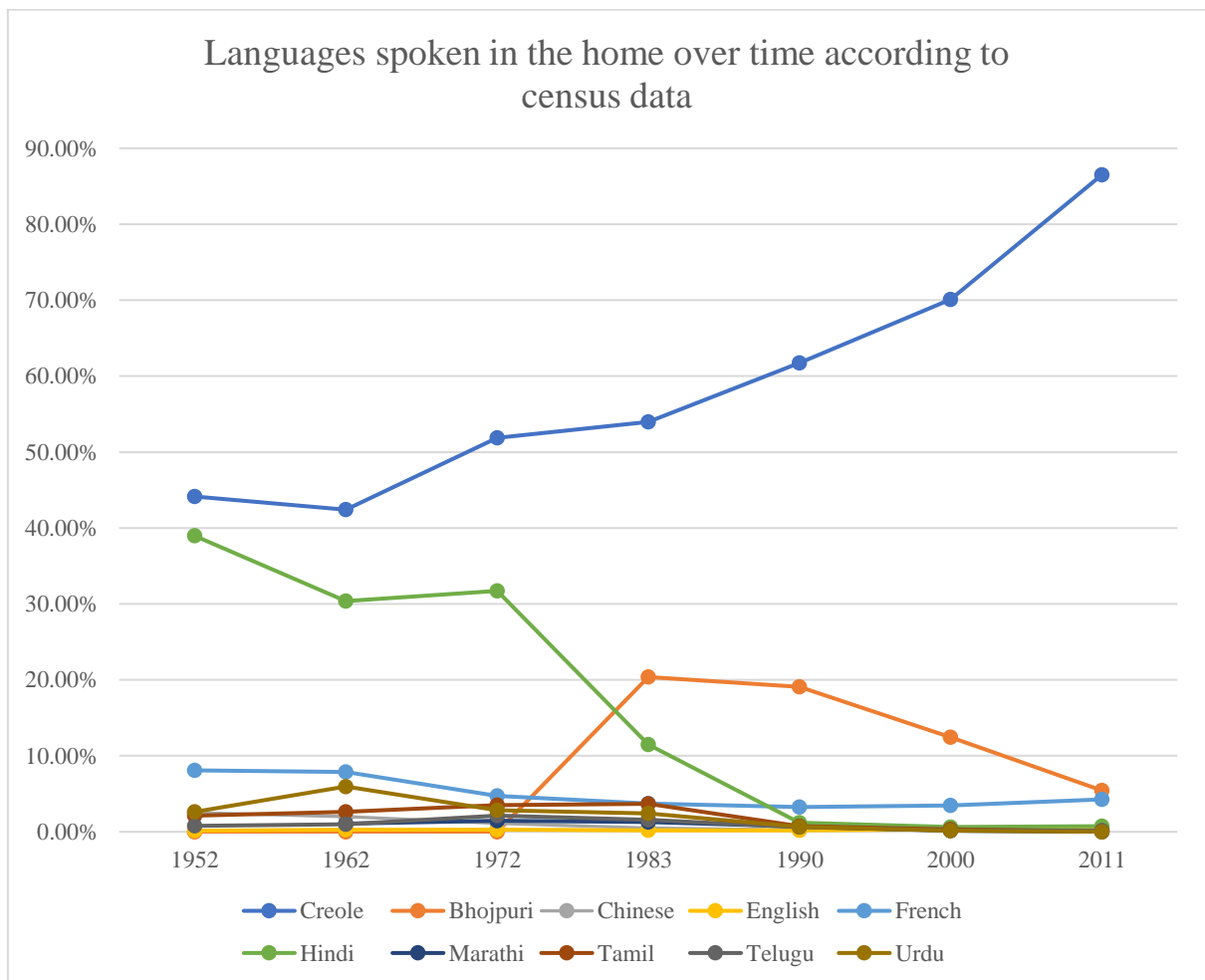


Figure 5.4: Graph showing languages spoken in the home according to census data from 1952 to 2011

Language labels confuse matters for Hindi, which sees a dramatic decline in 1983. This has more to do with the fact that Bhojpuri (a dialect of Hindi) had not been available on previous censuses, so was grouped under the Hindi label. Bhojpuri's sudden increase in 1983 is therefore deceptive and

like all other minority languages continues to decline after 1983. Nevertheless, by 2011 it has more speakers than any other minority language of the island, despite the small numbers. Although Hindi (dialects) could have had an influence on the development of Creole in the 1950s, it is clear that by 2011 none of these languages were present in any significant numbers.

See Figure 5.5 for a clearer picture of the distribution of Mauritius' minority languages, whose speakers never made up more than 6% of the population:

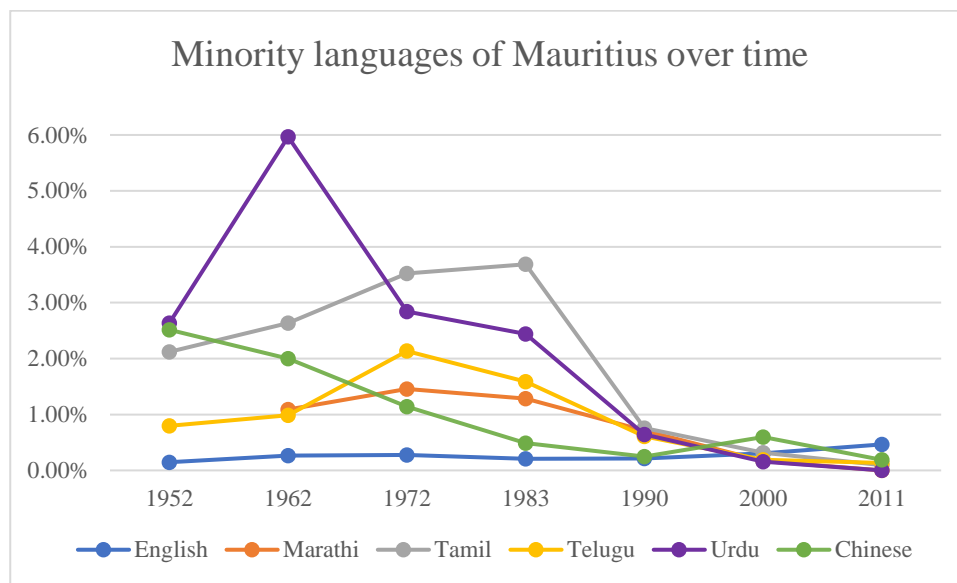


Figure 5.5: Census data for languages spoken in the home for minority languages from 1952 – 2011

Between the 2000 and 2011 censuses, numbers of Marathi speakers decreased from 1888 to 490 speakers. It is anticipated that by the next census, some of these minority languages will have disappeared completely from Mauritius' linguistic landscape. It will be interesting to see whether English and French, which saw minimal increases in the past censuses, will continue this upwards trend, despite the general decrease in usage for any language other than Creole.

Today, most Mauritians speak Creole, acquire French and English through the school system and come into contact with ancestral languages in their community or at school as an optional subject (Aumeerally, 2005). Almost all Mauritians are literate in French and English, yet only a minority have been taught to read and write in Creole (Rajah-Carrim, 2009), although this is now changing due to Creole being offered as a subject from primary age and being encouraged more actively by

the government (Florigny, 2012). The lack of Creole in education and its low prestige can explain to some extent the lack of written materials available for the 20th century period.

5.5 Summary

The socio-historical data presented in this chapter serve as a point of reference during the corpus analysis when investigating whether changes in TMA marking correspond to population changes which resulted in varying dominant languages over time. The fact that the first slaves were Malagasy speakers and there is evidence that this language was still spoken in Mauritius in the 1830s (Baker, 2009:49) suggests this language deserves more attention than it has been paid. Also, the Yoruba language has not yet been discussed in the Mauritian context, and the evidence suggests that Yoruba speakers were likely on the early slave ships from Juda and/or Guinée. Therefore, these lesser-discussed languages, along with other relevant socio-historical observations made in this chapter will be considered throughout the analysis.

Part I

Corpus analysis: Development of the markers

Part I: Introduction

The following three chapters investigate the markers *POU* & *VA* (chapter 6), *TI* & *FINN* (chapter 7) and *PE* (chapter 8) from a historical perspective. Firstly, early attestations are discussed alongside a brief historical overview before considering possible influences on their development, including substrate, lexifier, internal language change and second language strategies. The role of source meaning on the early and subsequent development of the markers is also investigated.

Next, I turn to the corpus analysis, which firstly offers an overview of frequency changes in a sample of texts over time. Then, text extracts are analysed in the three periods: Old Mauritian (pre-1900) texts, which include a number of Baissac's [1880] folktales, 20th Century Mauritian texts comprising stories, folktales and plays from Soulsobontemps [1925] to Virahsawmy {1972} and Modern Mauritian texts, which include further text types (a reference work and political newsletters) post 2000 up until 2018. I use these periods for convenience for ease of reference according to the century they were written in, although this might be revised after the analysis. At the end of the analysis in each time period, I present the results in terms of which features can be considered most canonical for each marker in that time period.

The final section of each chapter takes a diachronic view, summarizing the main developments and how these can be interpreted through a grammaticalization framework. I investigate how the micro-changes investigated throughout each chapter relate to macro tendencies mentioned in chapter 2 and hypotheses set out in chapter 3.

Examples which are not part of the analysis follow the numbering system employed up until now. However, those which have been specifically chosen for the text analysis in each chapter are referred to by their unique reference code. This labels the text that the example is from (*A-J*), the marker (*P* for *POU* or *V* for *VA* etc.) and the example number in that text.

In the following tables, I present the overall frequencies for all the markers in the different time periods.

<i>Old Mauritian</i>	[1850] - M.CARABA		[1855a] – LOLLIOT		[1965] – PITOT		[1867] - DESCROIZELLES		[1888] - BAISSAC	
Text type	Narrative		Prose/poetry		Lyrics and poems		Creative text		Narrative	
Text size	1,813		7,280		1,954		8,907		34,786	
Markers	53	2.92%	239	3.28%	38	1.94%	243	2.73%	1075	3.09%
<i>ti/té</i>	25	47.17%	180	75.31%	18	47.37%	84	34.57%	310	28.84%
<i>fine/finn</i>	3	5.66%	12	5.02%	11	28.95%	86	35.39%	295	27.44%
<i>feque/fek</i>	0	0.00%	1	0.42%	0	0.00%	1	0.41%	5	0.47%
<i>pour/pou</i>	0	0.00%	0	0.00%	2	5.26%	4	1.65%	104	9.67%
<i>va/a/ava</i>	21	39.62%	45	18.83%	6	15.79%	68	27.98%	298	27.72%
<i>ape/pe</i>	4	7.55%	1	0.42%	1	2.63%	0	0.00%	63	5.86%

Table i.0.1: Frequencies for all markers in selected Old Mauritian texts

The Old Mauritian texts vary in size. The smallest included in this sample are around 2,000 words and the largest is Baissac [1888] with nearly 35,000 words. There is a mixture of narratives and creative writing, such as poetry. Overall, the proportion of TMA markers in each text is consistently around 2-3%, and the most common markers are *TI* and *VA*. By the end of the 1800s, *TI* becomes slightly less frequent and *FINN* increases in frequency, *POU* increases from 0% to nearly 10%, *PE* depends on the text, and *FEK* is rare.

<i>20th Century Mauritian</i>	[1925] - SOULSOBONTEMPS		{1939} – DE SEGRAIS		{1952} – DE SEGRAIS		{1967-71} - BAKER		{1972} - VIRAHSAWMY	
Text type	Narrative		Narrative		Narrative		Narrative		Play	
Text size	4,534		4,629		4,307		5,022		8,404	
Markers	190	4.19%	191	4.13%	161	3.74%	329	6.55%	347	4.13%
<i>ti/té</i>	113	59.47%	82	42.93%	70	43.48%	58	17.63%	50	14.41%
<i>fine/finn</i>	50	26.32%	55	28.80%	47	29.19%	169	51.37%	154	44.38%
<i>feque/fek</i>	0	0.00%	1	0.52%	1	0.62%	1	0.30%	1	0.29%
<i>pour/pou</i>	15	7.89%	21	10.99%	21	13.04%	43	13.07%	65	18.73%
<i>va/a/ava</i>	12	6.32%	28	14.66%	13	8.07%	5	1.52%	5	1.44%
<i>ape/pe</i>	0	0.00%	4	2.09%	9	5.59%	53	16.11%	72	20.75%

Table i.0.2: Frequencies for all markers in selected 20th Century Mauritian texts

The longer 20th century texts are proportionately sampled (see chapter 4) to be more comparable in length, and all but one text is a narrative. We see an increase in the proportion of TMA markers in each text, which now constitutes around 4% of all words. *TI* decreases in frequency considerably as *FINN* becomes more common, *POU* increases steadily, whilst *VA* becomes rare in the later texts, *FEK* remains rare and *PE* increases to 20%.

<i>Modern Mauritian</i>	{2003} - TIZAN		{2003-2007} - VIRAHSAWMY		{2011} - LORTOGRAF		{2012} - EZOP		{2016-2017} - LALIT	
Text type	Narrative		Narrative		Reference article		Narrative		News articles	
Text size	7,174		10,047		15,911		21,298		10,399	
Markers	274	3.82%	62	6.24%	393	2.47%	1876	8.81%	361	3.47%
<i>ti/té</i>	98	35.77%	436	69.54%	53	13.49%	1698	90.51%	73	20.22%
<i>fine/finn</i>	76	27.74%	84	13.40%	228	58.02%	53	2.83%	151	41.83%
<i>feque/fek</i>	1	0.36%	1	0.16%	0	0.00%	0	0.00%	1	0.28%
<i>pour/pou</i>	31	11.31%	38	6.06%	60	15.27%	60	3.20%	50	13.85%
<i>va/a/ava</i>	12	4.38%	3	0.48%	0	0.00%	3	0.16%	0	0.00%
<i>ape/pe</i>	56	20.44%	65	10.37%	52	13.23%	62	3.30%	86	23.82%

Table i.0.3: Frequencies for all markers in selected Modern Mauritian texts

Again, the longest texts were proportionately sampled, but we see stark differences in the proportions of TMA marking depending on the text, ranging from 2.47% to almost 9%. There are also different text types, including a reference article on official Mauritian spelling and news articles, which were not available in the 20th century. *TI* and *FINN* frequencies are highly variable depending on the text, *FEK* is still rare, *VA* remains low or non-existent and *POU* and *PE* are used consistently.

These changes in frequency and how they relate to changes in meaning and function will be addressed in the following three chapters.

Chapter 6:

Analysis of the development of *POU* and *VA*

In this chapter, I present my analysis of *POU/VA*-usage in the three time periods. As detailed in the Part I introduction, I start by examining early attestations and influences, explore canonical usage in each time period, then finish by summarizing these developments and how they relate to macro tendencies in the literature.

6.1 Early instances of *POU* and *VA*

The first written attestation of a future marker is from [1777] in the *Affaire du Chevalier de la Poëze* found in the Mauritian Archives (Baker & Fon Sing, 2007:4). It details an incident with a Malagasy slave who was hit by a white man in the street after reacting aggressively to insults and questions about his private life. The slave, called Joseph, responds to the judge in a mixture of French and Creole and is said to have threatened the person who questioned him (Vaughan, 1998:209–10), saying:

5) [1777]

toi va paye moi ça
2sg VA pay 1sg that
'you'll pay for that'

The form of *VA*²⁹ is assumed to have developed from the French verb of movement 'aller'. *POU* is attested much later. It appears that *VA* was the only possible overt form for expressing futurity in the

²⁹ *A*, *va* and *ava* are described as 'positional variants' in Baker (1972:109). However his explanation that "/a/ has optional positional variants in both /ava/ and /va/ either of which may occur immediately before a verb beginning with /a-/" is clearly wrong and is disproved by the only example of *va* in his texts which immediately precedes the verb *dormi* 'to sleep'. It can be said, however, that no instance of *a* in the entire corpora of historical and modern texts precedes a word beginning with *a*. Although the exact distribution has not been established, this issue is orthogonal to the aims of this thesis and variants are treated as functionally equivalent.

early stages of Mauritian Creole. Unlike VA however, *POU*³⁰ has many functions in Creole and has always been multi-functional. As in French, it functions as a preposition and complementizer (Lang & Neumann-Holzschuh, 1999:205), and semantically, *POU* can be interpreted as purpose 6) and/or predestination 7) in its early attestations:

6) [1865]

mo	na pas	bisoïn	dictionnaire	pour	montrer	vous
1sg	NEG	need	dictionary	POU	show	2pl
l'esprit	nous	causé	-là [1865]			
spirit	1pl POSS	speaking	DEF			

'I don't need a dictionary in order to show to you the meaning of our words'

7) [1855i]

...m'sié Bonhomme	pour	faire	voir	qui
...Mr Bonhomme	POU	make	see	COMP
comment	nous	tous	va	contents
how	1pl	all	VA	happy

*'Mr Bonhomme, to make us see how we'll all be happy' OR:
'Mr Bonhomme is (there) to make us see how we'll all be happy'*

7) is ambiguous. Unlike in 6), the placement of *POU* between the subject and verb allows the meaning of 'predestination' to come through, although this situation prevents a pure future interpretation. Similar constructions constitute prime contexts for the development of future expression. The following example is often cited as the first instance of *POU* as a future marker [1818] (Baker, 1993:88; Syea, 2006:275). However, this is extremely unlikely due to its past narrative context. The story starts with a slave telling people to listen as he situates the narrative temporally, with *té* from French *été/était* indicating past tense, and spatially by naming the location as Grand-Rivière. He then gives some background about what he was doing:

³⁰ *POU* is first spelt *pour*. It began to be spelt *pou* and *pu* in the 20th century, probably due to the loss of the final [r] in its spoken form (Parmessur, 2018, p.c.). These variants are the result of different spelling systems.

8) [1818]

L'her solé lévé, mo pour alle prend mon poste au pavé
the hour sun rise, 1sg POU go take 1sg.POSS post on the route
'when the sun rose, I was destined/on my way/it was my purpose to stand guard on the route'

Given the above context, there is no way *POU* can have a plain future meaning. It is, however, in the correct structural position between the subject and verb to be a TMA marker. Past tense is not explicitly marked, since this was established with *té* in the previous sentence. This is why, out of context, this example has been interpreted as a future by some linguists. Instead, the *POU* in this sentence retains its source meaning of 'purpose' or 'predestination', but due to its structural position and forward-looking meaning, it can be considered the first stage of future development. The notion of posteriority can already be seen in this early prospective usage of *POU*, despite it being anchored in the past, since the action of going to stand guard happened after the sunrise.

It has also been cited that *POU* is a future marker in the following example from [1850] (Hazaël-Massieux, 1993:62), constituting one of the first ambiguous instances of *POU*-marking:

9) [1850]

Enne zour, sa vié bonome la,
INDEF day, DEM old man DEF,
li gagne gran malade, POUR mor même
3sg get big ill, POU die even
'one day, that old man, he gets very ill and is to/ is about to/ is going to/ will even die'

This is ambiguous between the source meaning and future. It cannot be denied that the orientation towards the future is stronger than in 8) [1818], yet its source meaning of predestination seems to be the dominant notion. It is also compatible with the aspectual notion of 'imminence' (Fleischman, 1982:18), which can be seen in the following example as well:

10) [1888]

Lheire Pauline senti li pour accoucé, li appelle saze femme
the hour Pauline feel 3sg POU give birth, 3sg call midwife
pour ide li
to help 3sg.OBJ
'when Pauline felt that she was about to give birth, she called the midwife to help her'

The clause with *POU* gives background information, providing an aspectual perspective to the situation rather than simply expressing future. In addition to the TMA marker, it is likely that the temporal adverb *lheure* ‘the hour’ and lexical aspect of the verbs also contribute to this meaning. There are a number of similar instances in late 19th century texts which can be translated as ‘about to’ and which I label ‘imminence’. This ties in with previous research into Acadian French, where future constructions can express imminence. Imminence is considered to occur earlier along the grammaticalization path of future marking (Comeau, 2015:362), like these early examples. Nevertheless, labelling something as tense or aspect is often a matter of interpretation, so should be done with caution.

The first unambiguous instance of future *POU* does not occur until Pitot [1865]. *POU* is still employed seldom in comparison to *VA* at this time.

6.1.1 *Lexifier, language-internal and substrate influences on future marking*

Creole languages are interesting because their development is characterized by converging influences from different sources, including, but not limited to, the many languages from the early colonization period, as explained in chapter 5. French, as the lexifier, is often assumed to play a large role in the Creole’s development, but language-internal processes which occur cross-linguistically and the role of substrates should also be examined. This section builds on the socio-historical background (chapter 5) to explore potential influences on the development of *POU* and *VA*.

6.1.1.1 *Influences on VA*

The most obvious cases of external influences manifest themselves formally in the shape and sound of a word. Although it is almost impossible to prove that certain languages influenced the development of Mauritian, it is nonetheless important to consider the multitude of possible influences which could have affected the language when it first emerged, as well as throughout its

development. In the case of *VA*, most assume straight-forwardly that it comes directly from French. After all, the same form exists in French, and more importantly it existed in 18th century French. Interestingly ‘*vas*’, rather than ‘*vais*’ was the first person prestige form before the 18th century (Chaudenson, 1981:209) so /*va*/ would have been even more frequent in early Mauritius than in modern day French. Nevertheless, French was not the only language spoken in Mauritius at the time, and it was a foreign language for most people. For those who did not speak French, it is likely that their mother tongues at least encouraged the use of certain forms over others.

Since the Malagasy language was definitely present during the emergence of Mauritian Creole, we can start by comparing how futures are expressed in Malagasy and Mauritian. The Malagasy future is either formed by inflecting the verb with *h* or combining *ho* with the past form as a compound future (Nave, 2010; Parker, 1883:26). Neither the Malagasy verbal forms, nor its future strategies bear any resemblance to Mauritian Creole, so it is unlikely that Malagasy played a large role in the development of Mauritian future expression other than the possibility of Malagasies attributing the function of *h* in their mother tongue to *VA*.

Niger-Congo and Bantu languages were also present in large numbers. Considering Yoruba and Fongbe as examples of Niger-Congo languages spoken in West Africa, the possibility of influence looks more promising. Unlike the highly-agglutinating nature of Bantu languages (Nurse, 2008:286) or inflectional morphology of Malagasy (Parker, 1883), Yoruba and Fongbe are highly isolating languages and allow bare verbs with no overt expression of tense, mood or aspect, just as in Mauritian Creole. Nevertheless, second language acquisition (SLA) strategies have also been proposed as likely explanations for the isolating typological profile of Creole languages (Becker & Veenstra, 2003).

Regarding the form of *VA*, it can be observed that many Bantu (Nurse, 2008:87) and Niger-Congo (Nurse et al., 2016:33) languages have future forms derived from ‘*a*’, for example *a*, *la*, *ka*. Whilst this is a tenuous proposition, it does not seem unreasonable to assume native speakers of these languages would favour *VA* over other future-marking possibilities, due to formal and functional similarities with their native tongue.

Concerning language-internal developments, constructions which develop from verbs of movement prior to future expression generally go through an ambiguous stage whereby they can mean the agent is travelling towards the action to complete it, or that the action will happen in the future (Detges, 2000:138). For example ‘he is going to sing in a concert’ can mean he is on his way to sing in a concert, or simply refer to the future. Interestingly, Dahl (2000:312) sees the preparation and planning for the trip as more important than the movement itself. However, VA was likely borrowed directly from an already grammaticalized future form, so may not have gone through any intermediate stage of physical movement towards the action in Mauritian.

Ordinary grammaticalization (Bruyn, 1996:42), assumed to be gradual and language-internal in the Creole itself, can be ruled out since VA’s first attestation is in 1777, yet Mauritius was settled from 1730 (Baker & Fon Sing, 2007:308). A few decades is rather short to go through all typical stages of future development. However, both *instantaneous* and *apparent grammaticalization* could have occurred. VA may have developed (extremely quickly) from a verb of movement in the Creole (*‘instantaneous’*) or it may have already entered the Creole from French/substrates as a future marker (*‘apparent’*). Since VA does not exist as a verb of movement in Creole (the verb ‘to go’ is *ale*), the latter seems more likely. However, due to lacking attestations of VA in early texts [1734]-[1777], nothing is certain and it is best not to make assumptions without convincing evidence.

6.1.1.2 *Influences on POU*

The expression *être pour* with ‘near future’ meaning is attested in regional 17th and 18th century French (Gougenheim, 1971:114), and it was first cited by Chaudenson (1981:193) that the future use of *POU* in Old Mauritian is a continuation of this partially grammaticalized expression in regional French. Since then, many others have assumed the same (e.g. Bruyn, 2009:400; Detges, 2000:155; Fon Sing, 2009:17). However, one should proceed with caution. An aim of Chaudenson’s (1981:193) work is to show French-based Creoles are direct continuations of French. He therefore relies on

evidence from regional 17th/18th century French to show these expressions developed straight into the Creole.

Gougenheim (1971:114–15) elaborates on the use of *être pour* in French. It originated in the 15th century, probably from Italian and developed several nuances alongside ‘near future’, such as ‘to be able to’, and with negation ‘to have to’. However, it was already diminishing by the 18th century (Gougenheim, 1971:119). Baker & Corne (1982:117) consider 1721 (French colonization) until around 1750 to 1770 to be the formative years for Mauritian Creole, yet there are no attestations of *POU* as a TMA marker with future meaning until the mid-19th century.

The lack of early texts is a confounding factor. Even so, if the supposed source expression *être pour* was used in Mauritius to some extent during the early stages of Mauritian Creole’s formation and contributed to *POU*’s development, why did *POU* only start to appear with future meaning over a century later? Additionally, slaves were assumed to have even less contact with native French after first contact because as slave numbers increased, Creole became the target language for new slaves (by 1773) and only domestic slaves would have had regular contact with the slave-owners and their families (Baker & Corne, 1982:249; Maurer, 2014:91).

Nevertheless, *POU* does appear once in 1818 in a past context with a posterior meaning and it is important to note that *POU* could simply be unattested in the texts at our disposal. Despite this, the existence of entire texts (around 7,000 words) from the mid-1800s with frequent, consistent *VA* marking, but no *POU* marking, and the fact that texts of this time are assumed to be representative of the spoken language due to lacking written norms (Rajah-Carrim, 2009:486), strongly suggests that *POU* is a later development and was not a future-marking possibility in early Creole.

Although the (potentially limited) presence of *être pour* in 18th/19th century Mauritius likely influenced and favoured the development of *POU* for certain speakers, it is also entirely plausible that *POU* could be an instance of *ordinary grammaticalization*, which occurred gradually and language-internally, developing from the source meaning of purpose/predestination which can be found in the other prepositional and complementizer uses of *POU*.

Whilst I recognize that French *être pour* cannot be disregarded, since both its form and function correspond well, I wish to highlight alternative plausible influences and contributions to *POU*'s early development. The many African languages which were present in Mauritius in the 19th century should also be considered. In fact, most Bantu languages encode several degrees of future reference (Nurse, 2008:88), so the emergence of *POU* could well have been a result of these speakers looking for an additional form to express a future nuance which they did not believe could be expressed with *VA*. The different usages of future markers in some Bantu languages (e.g. Ruri) can be described as differences in certainty and likelihood, whilst others are based on distance from the present (Nurse, 2008:92). This will be kept in mind throughout the analysis as we examine in which ways *POU* and *VA*-usages differ across time periods.

6.2 Text analysis

6.2.1 Old Mauritian analysis

6.2.1.1 Frequencies of future markers in Old Mauritian

Instances of *POU* and *VA* were counted in five Old Mauritian texts between [1850] and [1888]. The first unambiguous instance of future marking appears in [1865], but ambiguous or aspectual uses of *POU* can be found from [1818]. Overall, *POU* tends to increase whilst *VA* decreases in this small sample of Old Mauritian texts. Unlike the frequency tables in the Part I introduction, which showed proportions in relation to all markers, the tables in this chapter solely focus on *POU* and *VA* and their relative frequency to each other.

	[1850] - 'M.CARABA'		[1855a] – LOLLIOT		[1865] – PITOT		[1867] - DESCROIZELLES		[1888] - BAISSAC	
Text type	Narrative		Prose/poetry		Lyrics and poems		Creative text		Narrative	
Text size	1,813		7,280		1,954		8,907		34,786	
Future markers	21	1.16% of text	45	0.62% of text	8	0.41% of text	72	0.81%	402	1.16% of text
POUR/POU	0	0.00%	0	0.00%	2	25.00%	4	5.56%	104	25.87%
VA	21	100.00%	45	100.00%	6	75.00%	68	94.44%	252	62.69%
A	0	0.00%	0	0.00%	0	0.00%	0	0.00%	46	11.44%
VA/A	21	100.00%	45	100.00%	6	75.00%	68	94.44%	298	74.13%
Ambig./Aspectual	1	-	0	-	2	-	3	-	10	-

Table 6.1: Frequencies of future markers in five Old Mauritian texts

In [1865], two future occurrences and two ambiguous cases were identified, resulting in a total of 25% of future marking being expressed by *POU*. However, due to the low token frequency, these percentages are not overly informative. *POU* is used in just 5.56% of future marking in [1867], where future markers are more frequent. In Baissac [1888], the largest collection of texts of Old Mauritian, *POU* is used in 25.87% of future instances. There appears to be a correlation between the frequency of the markers and their meanings, which will be further explored in subsequent sections.

I had already calculated frequencies for the above texts before accessing the articles in *Études Créoles* (1993), in which Hazaël-Massieux and Baker also provide figures for future marking in some Old Mauritian texts. One point which Hazaël-Massieux (1993) and Baker (1993) do not discuss is the fact that calculating frequencies for the number of future markers is not as objective as

portrayed. As with much linguistic analysis, it is not simply a matter of counting occurrences, but hinges on decisions taken by the linguist, which are influenced by their assumptions and background. For this reason, no ambiguous or aspectual instances of *POU* marking are included in my analysis. Hazaël-Massieux's figures are compared with mine in Table 6.2:

BAISSAC [1888]	HAZAËL- MASSIEUX (1993)		MY ANALYSIS	
Future markers	401	1.15% of text	402	1.16% of text
POUR/POU	118	29.43%	104	25.87%
VA	235	58.60%	252	62.69%
A	48	11.97%	46	11.44%
VA/A	283	70.57%	298	74.13%
Ambig./Aspectual	-	-	10	-

Table 6.2: Comparison of my analysis with Hazaël-Massieux (1993)

Although the total number of future markers is superficially similar, *POU* differs by 14 and *VA* by 17 occurrences. The difference between the occurrences of *POU* can be mostly accounted for by including ambiguous or aspectual uses. However, the difference between *VA* occurrences is less easily explained. Hazaël-Massieux may not have included impersonal constructions which weren't preceded by an overt subject, however including these would result in an even larger discrepancy between proportions. It is unclear to me why Hazaël-Massieux did not include the 17 further occurrences of *VA* and where he identified two extra examples of future *a*.

6.2.1.2 Comparison of *M. Caraba* [1850] and [1880]

Before analysing two Old Mauritian texts in more detail, I note a significant difference regarding future expression in 'M. Caraba' [1850], compared with a version of the same story in Baissac [1880] under the name 'Z'histoire Ene Catte Qui Te Ena Botes'³¹. The texts can be read side-by-side in Baker & Fon Sing (2007:35). It is striking that while *VA* is used throughout in [1850] (besides one ambiguous *POU*), *VA* is replaced by *POU* in a number of these contexts in Baissac's [1880] version. This point is also made in Hazaël-Massieux (1993:64). Compare:

³¹ Literally: 'The story of a cat who had some boots' (my translation).

11) [1850] vs [1880]

- a. **mon piti, arla mo VA mor [1850]**
b. *Mo pitits, avlà mo POUR mort [1880]*³²

12) [1850] vs [1880]

- a. **quan vou voulé coute moi, zourdi même vou VA vini rice [1850]**
b. *Quand (vous) vlé acoute moi, azourdi même vous POUR vine rice [1880]*
c. *quand vou vlé acoute moi, vous A vine rice [1880]*³³

It is immediately apparent, disregarding orthographical differences, that the words are almost identical except the replacement of *VA* with *POU* in the later [1880] text. However, 12c) shows that even in the later text, *VA* can still be used in this context. Nevertheless, Baissac (1880) appears to have modernized this story, providing qualitative evidence for the figures in Table 6.1, showing increased *POU*-usage throughout the Old Mauritian period. The fact these stories constitute identical contexts from different time periods provides evidence for this development towards increased *POU*-usage as it cannot be argued that the [1880] text simply exhibits more contexts which favour *POU*.

6.2.1.3 Old Mauritian texts

This section presents examples of *POU* in two of Baissac's folktales. They are analysed in terms of the features they have, as explained in the methodology (chapter 4)³⁴. I refer to the first story in Baissac's (1888) collection of Mauritian folktales as Baissac A. Baissac was a Franco-Mauritian born in Port Louis in 1831. He notes that this story is one of the most widespread and popular Mauritian folktales (Baissac, 1888:14). I concentrate on *POU* in Old Mauritian since *VA* is the

³² "My children, this is it, I'm going to die" (my translation).

³³ "If you want to listen to me, today even, you will get rich" (my translation).

³⁴ Whilst I consider presence and absence of a feature to essentially be the same feature, I tend to refer to features of *va* in the negative (e.g. 'lack of present relevance'), since this is how it is formulated in the literature.

dominant/generic future marker. A full summary for each story can be found in Appendix I so that the reader can fully understand the context of the examples which are discussed below.

The instances of *POU* which occur in Baissac A are recorded below:

AP8	Mais	mo	crois	pas	qui	vous	pour	goûte	moi	ça	voyaze	là !
1888	But	1sg	believe	NEG	REL	2pl	POU	taste	1sg.OBJ	DEM	time	DEF
	<i>'But I don't believe you'll get to taste me this time'</i>											
AP10	Napas	tourtie	qui	vous	pour	manze	dans	vous	diné			
1888	NEG	tortoise	REL	2pl	POU	eat	in	2plPOSS	dinner			
	<i>'It isn't tortoise that you'll be eating for your dinner'</i>											

Of the eleven occurrences of future marking in this story, only two (18.18%) were marked by *POU*.

Compared to the overall data for all Baissac's stories ($POU=26.42\%$), this is a similar proportion, but cannot be taken at face value considering the short text length. Nevertheless, we take this text as a starting point to compare with subsequent ones, bearing in mind that any figures are unlikely to be representative in absolute terms. *VA* is clearly the dominant future marker. We might wonder why *POU* was chosen in these two contexts. Previous research suggests *POU* occurs in 'proximal' contexts (Baissac, 1880:25; Chaudenson, 1981:209) with 'present relevance' (Detges, 2000:144) and refer to a definite time (Detges' [+definite]).

AP8 translates as 'But I don't think you'll get to taste me this time' after assuring the king that he is aware that he'll be eaten if he fails to prevent the hare making the water dirty. AP10 means 'It isn't tortoise that you'll be eating for your dinner'. These are both 'proximal' because, although we don't know the time of utterance in AP8, the hare comes every night, so the event will be completed before the end of the day, and in AP10, dinner is explicitly mentioned. They also both have 'present relevance'. In AP8, the assertion that he doesn't believe the king will eat him belongs to the present and in AP10 there is an arrangement in the present about the conditions of the tortoise's job. Both refer to a 'specific date/time'; in AP8 "this time" is also marked grammatically for definiteness and although not a time per se in AP10, 'dinner' does refer to a definite time when the king will eat.

Table 6.3 shows whether the features outlined in the methodology (section 4.1.4.1) are present (1) or absent (0) in the *POU* examples in Baissac A. Percentages show what proportion of these examples have the feature. Summary percentages for *VA* are given for comparison.

Sentence number	A8	A10	<i>POU</i> total	<i>VA</i> total
Marker	<i>POU</i>	<i>POU</i>	2 (18%)	9 (82%)
proximal	1	1	100%	18%
imminence	0	0	0%	0%
present relevance	1	1	100%	36%
specific time/date	1	1	100%	27%
speaker control	0	0	0%	27%
speaker expectation	1	1	100%	55%
speaker certainty	1	1	100%	55%
agent control	1	1	100%	73%
agent intention	0	0	0%	27%
situation probability	0	1	50%	55%
commissive	0	0	0%	36%
situation depends on agent	1	1	100%	73%
prediction	1	1	100%	45%
subordinate	0	0	0%	0%
imperative	0	0	0%	0%
first person	0	0	0%	18%

Table 6.3: Analysis of features and percentages of occurrences for *POU* in Baissac A with *VA* percentages for comparison.

Disregarding the features which were not present for both *POU* sentences (i.e. not 100%), we can ask ourselves whether those occurring in both examples might be relevant for understanding *POU*-usage. For example, both *POU* sentences refer to near future events, but only 18% of the *VA* sentences do. The features present in the highest number of *POU* and lowest number of *VA* sentences are ‘proximal’, ‘present relevance’ and ‘specific date/time’. These features correlate with those mentioned in the literature, all of which are time-related features (red). It will be investigated whether ‘speaker control’ and ‘speaker certainty’ also play a role in the following, longer text from Baissac [1888]. From this initial text, assumptions in the literature appear to apply to the two instances of *POU* in this text.

The second story is called *Zistoire Tranquille Av Brigand* – ‘The story of Tranquille and Brigand’. It is another folktale adaptation and has a strong moral about anything in excess being a flaw (Baissac, 1888:260). I refer to this story as Baissac B.

This story contains 32 future markers, of which seven are instances of future *POU*. There are examples of *POU* markers which can be interpreted as aspectual markers denoting ‘imminence’:

BP2 Ene zour coment li pour alle laçasse dans éne laute paye
 1888 INDEF day as 3sg POU go hunting in INDEF other country
'One day as he was about to go off hunting in another country...'

These examples are very similar to 9) (an old man about to die) and 10) (Pauline about to give birth) cited at the beginning of this chapter. Most begin with a temporal expression such as *ene zour* 'one day' (BP2) or *lheure* 'the hour/when' (10) and provide background information rather than being the main proposition of the utterance. As subordinate adverbial clauses, they depend on the matrix clause for their temporal anchor. Although such usages persist until the end of the Old Mauritian period, it is important to be cautious, since some examples can be interpreted as either future tense or imminent aspect. See BP27:

BP27 Ça moment là mo pour lève en lair éne coup
 1888 DEM moment DET 1sg POU go up in air INDEF sudden
'The moment when I will/I'm about to fly up into the air suddenly...'

It is often a matter of interpretation and not clear-cut. However, this shows how different degrees of grammaticalized forms can exist side by side in layering. Multifunctionality has already been identified as typical of *POU*-usage, and interpretation in terms of both tense and aspect at this stage indicates a possible change in progress. Let us look at the future *POU* examples from this text:

BP3 mo pour alle éne laute paye mo vlé donne çaquéne so louvraze
 1888 1sg POU go INDEF other country 1sg want give each 3sg.POSS task
'I am going to another country; I want to give you each your tasks'

BP5 ziment oussi pour gagne pitit
 1888 mare too POU get little one
'The horse will give birth too'

BP10 to napas pour manque narien asthére
 1888 2sg NEG POU lack nothing now
'You won't lack anything from now on'

BP12 quiquefois talheire là même li pour tombé
 1888 maybe soon there even 3sg POU fall
'maybe it (his bad streak) will go away soon!'

BP32 zamais Brigand pour faire zaute encore lamisère
 1888 never Brigand POUR make 3pl again unhappy
'Brigand will never bother anyone again'

Below is a summary of the features that the future markers have:

marker	<i>POU</i>	<i>POU</i>	VA	VA
number of occurrences	no:	7 (23%)	no:	23 (77%)
proximal	6	86%	10	43%
imminence	2	29%	0	0%
present relevance	7	100%	11	48%
specific date/time	2	29%	0	0%
speaker control	3	43%	9	39%
speaker expectation	7	100%	18	78%
speaker certainty	6	86%	17	74%
agent control	4	57%	16	70%
agent intention	3	43%	11	48%
situation probability	6	86%	13	57%
commissive	0	0%	0	0%
situation depends on agent	6	86%	18	78%
prediction	6	86%	17	74%
subordinate	1	14%	1	4%
imperative	0	0%	1	4%
first person	2	29%	8	35%

Table 6.4: Percentages of occurrences for *POU* and VA according to features in Baissac B

‘Present relevance’ appears to be a highly relevant feature as both instances of *POU* in Baissac A also had this feature. Unlike Baissac A, however, ‘specific date/time’ only occurs in two of the seven examples. All *POU* examples except BP32 are ‘proximal’. ‘Proximal’ therefore seems to be highly relevant for *POU*, but is not exceptionless. Like in Baissac A, ‘speaker expectation’ appears to be common with *POU*, although it is also frequent with VA-usage. Features to do with definite future ‘speaker certainty’ and ‘situation probability’ are already present in many of these Old Mauritian examples, perhaps priming its definite future interpretation in 20th Century Mauritian. To conclude, the features ‘proximal’, ‘present relevance’ and ‘speaker expectation’ are relevant in both Baissac stories, but ‘specific date/time’ plays a marginal role in Baissac B.

6.2.1.4 Conclusion for Old Mauritian

Old Mauritian future expression can be summarized as having one dominant form VA and an emerging form *POU* which goes through two intermediate pre-future stages. The first stage retains much of the original source meaning of purpose (such as [1818]) and develops prospective meaning, and the second stage is aspectually imminent, meaning ‘about to’ (examples in [1850, 1888 etc.]).

These stages do not replace each other but co-exist and compete with each other, referred to as layering (Bybee et al., 1994:21).

The feature of first person subjects was considered to examine whether they were more common in the early stages of *POU*, however, in both Baissac A and Baissac B first person expression with *POU* is rather low (22% and 29%), and in fact lower than for *VA*. As Traugott (1995:33) notes, however, subjectification is common in later stages of development, so this will be reconsidered below.

Taking all the future markers examined in this section, the features can be ranked according to which best account for the use of *POU* or *VA* in these texts to establish canonical *POU*- and *VA*-usage for this time period. I take just those features which clearly account for more than 50% of cases in the above texts and report the number of exceptions:

Feature for <i>POU</i> <i>n</i> = 11	Percentage accounts for <i>POU</i> -usage	Exceptions
present relevance	100%	0
speaker certainty	91%	1
high situation probability	82%	2
proximal	73%	3

Table 6.5: Features which best account for Old Mauritian *POU* examples

Feature for <i>VA</i> <i>n</i> = 32	Percentage accounts for <i>VA</i> -usage	Exceptions
no present relevance	91%	3
non-proximal	62%	12
lack of speaker control	62%	12

Table 6.6: Features which best account for Old Mauritian *VA* examples

Despite low numbers, every instance of *POU* had ‘present relevance’ – or dual-time reference, taking Derclercq’s (2010) terminology, because they had some bearing on the moment of speech as well as referring to a future event. A lack of ‘present relevance’ in 91% of *VA* examples shows this feature is closely related to *POU*-usage. As well as this feature, almost all *POU* marking involved ‘speaker certainty’. This reflects Detges’ (2000:137) assumption that a newer future marker is often used to confer credibility to the situation. The speaker’s certainty could mean the situation is more likely to

occur if they have control over the situation. The situations themselves were judged as likely to occur in all but two instances of *POU* and the ‘proximal’ feature was a relatively good predictor of *POU*.

Based on the above texts, canonical use of *POU* in Old Mauritian is assumed to be (> means ‘more canonical than’):

Criterion 1: present relevance > lack of present relevance

Criterion 2: speaker certainty > lack of speaker certainty

Criterion 3: high situation probability > low situation probability

Criterion 4: proximal > non-proximal

Features for *VA* are much harder to isolate because *VA* is the dominant marker, used in the majority of future contexts. ‘Lack of present relevance’ has already been mentioned, but another time-related feature, ‘non-proximal’ was also relevant in many *VA* examples along with ‘lack of speaker control’. With 12 exceptions for both, however, they can hardly be considered diagnostic of *VA*-usage. In the texts examined in this section, the emerging future marker *POU* consistently appears in ‘proximal’ contexts with ‘present relevance’, which are very likely to occur, whilst *VA* continues to be used in most contexts as the general marker.

The findings from these Old Mauritian texts support the first hypothesis that *POU* in this period has ‘present relevance’ and can appear with the aspectual meaning ‘about to’. However, I have only analysed future marking in a small number of examples. More examples should be tested to support these hypotheses, but even so, we cannot assume they are generalizable, as we would require many different genres, sources and authors to really understand what Old Mauritian was like.

6.2.2 20th Century Mauritian analysis

6.2.2.1 Background

There is general consensus in the literature that the distinction between *POU* and *VA* depends on whether the context constitutes a definite or indefinite future³⁵ (Adone, 1994:40; Baker, 1972:109, among others). In the first half of the 20th century, *VA* lost its dominant status as frequencies between the two future markers equalled out. After the 1950s, *POU*³⁶ became the main marker as *VA* became more restricted. Baker (1972:109) claims that *a* (*VA* variant) is an aspectual marker denoting ‘indefinite’ future and *pu* an aspectual marker denoting ‘definite’ future. I turn my attention almost exclusively to *VA* from the mid-20th century onwards when *POU* is dominant, in an attempt to establish what constitutes an ‘indefinite’ future with *VA*.

In general, there has been little justification or in-depth analysis of this distinction, despite being widely cited. Moreover, the concept of an ‘indefinite’ future does not appear to be defined adequately (or at all in most articles). An intuitive understanding of ‘indefinite’ could be ‘uncertain’. However, extensive co-occurrence of lexical items denoting uncertainty such as *not sure* and the ‘definite’ marker *POU* suggest it is more complex than this. Take, for example, the following:

13) Virahsawmy {1972}

zot	pa	sir	kouma	evennman	pou	develope
3pl	NEG	sure	how	event	POU	develop

‘They’re not sure how the event will develop’

Although the context is clearly uncertain, the so-called ‘definite’ future marker *POU* is used. Detges (2000) does not overtly define ‘(in)definite’, but cites Schlupp (1997) who refers to time reference such as *tomorrow* for ‘definite’ and *later* as ‘indefinite’. This is quite a different concept from (un)certainly, as ‘indefinite’ usually seems to be understood. Nevertheless, example 13) would be considered ‘indefinite’ by this definition, since no overt time reference is made.

³⁵ Apart from one article by Hazaël-Massieux (1993) questioning its validity.

³⁶ For 20th Century Mauritian, the spelling of *POU* is sometimes written as *pou* or *pu* in the texts examined. *Pour* becomes increasingly infrequent. Capitalized *POU* refers to any form.

In the 1993 edition of the journal *Études Créoles*, Hazaël-Massieux (1993) expresses some doubts about the assumption and Baker (1993) strongly argues that VA is used in ‘indefinite’ future contexts, providing examples and further explanation about what he means by ‘indefinite’. Hazaël-Massieux (1993) analyses a number of texts from the 1850s until the 1990s and suggests that by the 1990s VA is marginal and hardly used. When it does seem to have a separate semantic function, Hazaël-Massieux (1993:70) notes it is often in texts written by intellectuals, who may try to preserve an older form of the language as literary heritage or “patrimoine littéraire ancien”.³⁷

Baker (1993:92–93) is compelled to defend the (in)definite distinction, explaining that the use of *a* in the text ‘Tohtoh Buk e Kohper Renar’³⁸ shows the speaker did not intend to carry out the actions, implying that the lack of intention triggers an ‘indefinite’ future. In the story, the fox tricks the goat into getting into a pool of water he cannot get back out of. The fox then explains what they will do:

14) Baker (1972)

Mo	a	gayh	miray-	la [...]		
1sg	VA	get on	wall	DEF		
<i>‘I’ll get onto the wall’</i>						
mo	a	lev	twa	osi	lao	
1sg	INDEF	pull	2sg	also	up	
<i>‘I’ll pull you up too’</i>						

Whilst it is true that the fox does not intend to pull the goat up, he does intend to get out himself. Baker (1993:93) admits this, but does not provide any alternative explanation for why the ‘indefinite’ marker, and not *POU*, is used in this context. It could be that the use of VA is intentional to make the statement more convincing by marking both utterances in the same way to keep up the pretence. Following this, Baker (1993:93) claims that even in earlier texts such as [1925], the ‘indefinite’ future is used in situations where it is not in the speaker's power/control to ensure the action is completed. This certainly holds for parts of the story where VA is used, however, in the following

³⁷ Literally “old literary heritage” (my translation).

³⁸ The name of the story translates as: “Uncle Goat and Friend Fox”. I refer to this text simply as: The fox and the goat.

example, neither ‘lack of control’ nor ‘intention’ can explain VA-usage, since the agent has full control over getting his boat fixed and there is nothing to suggest he does not intend to do it:

15) [1925]

L'heire	pour	tourner	li	va	guetté	qui	manière	bisoïn
The hour	to	return	3sg	VA	look	what	way	need
bouce	trous	dans	pénice					
seal	holes	in	boat					

‘When it is time to return, he’ll see how he can seal the holes in his boat’

Based on these and numerous other counterintuitive uses of VA, the situation appears to be infinitely more complex than suggested by the definite/indefinite distinction. To explore the contexts in which the markers are used more systematically, I break down the concept of ‘indefinite’ into features and establish criteria for a canonical ‘indefinite’ future, following Corbett (2007).

As set out in chapter 3, I hypothesize that an ‘indefinite’ future with VA will consist of:

- non-proximal
- lack of present relevance
- non-specific time/date
- lack of speaker control
- lack of speaker certainty
- lack of agent intention
- low situation probability
- a situation which does not depend on the agent³⁹

These will be explored in the 20th century texts in the following sections, after considering the relative frequencies of *POU* and VA in 20th century Mauritian.

6.2.2.2 *Frequencies of future markers in 20th Century Mauritian*

Below is an overview of the frequencies of future markers in a selection of texts throughout the 20th century.

³⁹ Since I refer to features in tables in the positive form, but expected ‘indefinite’ features are in the negative, these features should be absent (0) in typical VA-usage.

	[1925] - SOULSO-BONTEMPS		{1939} – DE SEGRAIS		{1952} – DE SEGRAIS		{1967-71} - BAKER		{1972} - VIRAHSAWMY	
Text size	4,534		4,629		4,307		5,022		8,404	
Future markers	27	0.60% of text	49	1.06% of text	34	0.79% of text	48	0.96% of text	70	0.83% of text
POUR/POU	15	55.56%	21	42.86%	21	61.76%	43	89.58%	65	92.86%
VA	12	44.44%	13	26.53%	5	14.71%	1	2.08%	5	7.14%
A	0	0.00%	15	30.61%	8	23.53%	4	8.33%	0	0.00%
VA/A	12	44.44%	28	57.14%	13	38.24%	5	10.42%	5	7.14%
Ambiguous	1	-	0	-	0	-	0	-	0	-

Table 6.7: Frequencies of future markers in five 20th Century Mauritian texts

In contrast to the Old Mauritian frequencies, notice that *POU* is almost as, or more, frequent than *VA* in the texts analysed before {1952} and clearly the dominant marker by 1970s. Also note that ambiguous or aspectual uses of *POU* are almost non-existent, with just one instance in [1925].

6.2.2.3 20th century texts

The first 20th century text to be examined is written by Soulsobontemps. This is the pen name of a Franco-Mauritian born in 1893 (Baker & Fon Sing, 2007:58). *Bonnefemme Magon* is another folktale, re-telling the story of two young lovers.

This story has one instance of an aspectual *POU* marker:

D4 **Voilà** **l'heire** **li** **pour** **aller,** **bonne femme** **appelle** **li**
1925 Here hour 3sg POU go, woman call 3sg
 ‘When he was about to go, the woman called him...’

Again, the clause which has an aspectual use of *POU* includes a temporal adverb and is dependent on the matrix clause. This appears to be common to aspectual *POU* examples in the texts analysed. Features relevant for aspectual *POU* in older texts and also present in this example are: ‘proximal’, ‘imminence’, ‘present relevance’, ‘specific time’ and ‘speaker expectation’.⁴⁰

The main aim of this section is to determine whether the ‘indefinite’ features set out above can explain the occurrence of *VA* in 20th century texts. In order to concentrate on these features, most of

⁴⁰ Note that this example could also be interpreted as obligation ‘when he had to go...’, which is relevant for Modern Mauritian and discussed in section 6.3.

the tables in this section only show the ‘indefinite’ features. On the basis of the features absent for VA in 20th century texts, I then establish a canonical ‘indefinite’, taking Corbett’s (2007) canonical typology approach as a model. Table 6.8 shows which ‘indefinite’ features are present (1) or absent (0) for each example. Of the eight expected ‘indefinite’ features posited above, the examples which adhere to this are coloured green, whilst unexpected ones are coloured orange.

sentence marker	DV1	DV2	DV5	DV6	DV9	D10	DV11	DV12	DV15	DV21	DV22	DV28	no.	%
proximal	0	0	0	0	0	0	0	0	0	0	0	1	1	8%
present relevance	0	0	0	0	0	0	0	0	0	1	0	1	2	17%
specific time/date	0	0	0	0	0	0	0	0	0	0	1	0	1	8%
speaker control	0	0	0	0	1	0	0	0	0	0	0	0	1	8%
speaker certainty	1	0	0	0	0	0	0	0	0	0	0	0	1	8%
agent intention	0	0	0	0	1	1	1	1	1	0	0	0	5	42%
situation probability	1	1	1	1	0	0	0	0	1	1	1	1	8	67%
situation depends on agent	1	0	1	1	1	1	1	1	1	1	1	1	11	92%

Table 6.8: Expected ‘indefinite’ features for VA examples

For comparison with *POU*, Table 6.9 shows the percentages for both markers for all features:

marker	<i>POU</i>	<i>VA</i>
number of occurrences	16	12
proximal	69%	8%
imminence	6%	0%
present relevance	75%	17%
specific date/time	19%	8%
speaker control	44%	8%
speaker expectation	81%	100%
speaker certainty	38%	8%
agent control	63%	67%
agent intention	44%	42%
situation probability	56%	67%
commissive	25%	0%
situation depends on agent	88%	92%
prediction	75%	75%
subordinate	6%	17%
imperative	0%	8%
first person	38%	33%

Table 6.9: Percentages of occurrences for *POU* and *VA* in *Soulsobontemps* [1925]

The time-related (red) features for this story are still somewhat relevant for the use of *POU* whilst remaining low for *VA*. Interestingly, none of the expected ‘indefinite’ features are 0% in the text, showing that no single feature applies to all *VA* examples. This also emphasizes the necessity of regarding ‘indefinite’ as a complex notion, made up of multiple time-, speaker-, agent- and situational features. We can dismiss ‘situation which does not depend on agent’ as a relevant factor for determining *VA*-usage as the situation in all but one example does depend on the agent. Disregarding this feature, DV28 has the least number of the expected ‘indefinite’ features, whilst DV2, DV5, DV6, DV10, DV11 and DV12 show all but one of them. Let us examine these examples in more detail.

DV5 and DV6 illustrate the ‘indefinite’ usage well:

DV5 **Bon Dié** **va** **pini** **zote**
 [1925] God VA punish 3pl
 ‘God will punish them’

DV6 **Bon Dié** **va** **béni** **toi**
 [1925] God VA bless 2sg.OBJ
 ‘God will bless you’

Bonnefemme Magon is the speaker and utters these sentences as Iderce comes to her rescue after she is attacked by some youths because they think she is a witch. She assures him that “God will punish them” (DV5) and “God will bless you” (DV6). Obviously, the speaker has no control over this, although she expects it to happen, yet is not certain. Whilst Bonnefemme Magon assumes the agent (God) has control, she cannot be sure whether this is his intention. ‘Situation probability’ is hard to judge, but considering the cultural and religious context, it can be assumed that the characters, narrator and listeners in this story would consider the situation likely.

DV28 appears to be least like what we would expect for ‘indefinite’:

DV28 **Marie** **Zane** **tà l'heire** **va** **prend** **ave** **moi**
 1925 Marie Jeanne soon VA take with 1sg.OBJ
 ‘Marie-Jeanne will soon be angry with me...’

This is the very last instance of future marking in the story; the speaker is the narrator explaining that it has gone dark and he should get back to work otherwise Marie-Jeanne will be angry with him.

It is common for Creole stories to end with the narrator coming back to the present moment in their role of storyteller. It has the features ‘proximal’ (*tà l'heire* ‘later/soon’) ‘present relevance’ (the situation will happen as a result of not getting back to work now) and the situation has a high probability of happening. Due to these factors one might expect *POU* marking, although it does have four other indefinite features. It seems that the adverb *tà l'heire* ‘later’ carries more meaning than simply expressing proximity. It introduces an ‘indefinite’ timeframe, and allows for hypothetical utterances, which is an ideal context for *VA*. From these examples *VA* examples have at least four of the seven expected ‘indefinite’ features. The features ‘non-proximal’, ‘non-specific time/date’, ‘lack of speaker control’ and ‘lack of speaker certainty’ can account for most *VA* instances.

I now examine two stories from Xavier Le Juge de Segrais’ collection of folktales. The first is called *Femmes are ène secret* ‘Women with a secret’ from his initial twenty stories published in 1939, and the second is called *Voleirs are Bourique*: ‘Theives and a donkey’, from the twenty further stories published in 1952. He is also Franco-Mauritian, born in Mauritius in 1871 (Lionnet, 2014; Oodunt, 2008).

The following *VA* example from De Segrais {1939} did not seem intuitive:

EV5 **Mo** **promette** **toi** **Zéphirin,** **qui** **zamaïs** **personne** **va** **conne** **ça**
 1939 1sg promise 2sg.OBJ Zephirin COMP never no one VA know DEM
‘I promise you Zephirin, that no one will ever know that’

A context with ‘never’ seems like a ‘definite’ situation, yet the ‘indefinite’ marker is used. However, the fact that the whole village ended up knowing about the secret following this utterance could imply that it was never meant sincerely. Additionally, it is important to consider lexical aspect and other elements of the sentence. The combination of the vagueness of *VA* along with the performative verb ‘promise’, and the negative polarity of ‘never’ and ‘no one’ all contribute to the overall context and interpretation of this utterance. Let us compare the indefinite features that this sentence has with the other instances of future marking in this text:

Sentence	EP2	EP3	EP4	EP8		EV1	EV5	EV6	EV7	
marker	<i>POU</i>	<i>POU</i>	<i>POU</i>	<i>POU</i>	%	<i>VA</i>	<i>VA</i>	<i>VA</i>	<i>VA</i>	%
proximal	1	1	0	0	50%	1	0	1	0	50%
present relevance	1	0	1	0	50%	1	0	1	0	50%
specific time/date	0	0	0	0	0%	0	0	0	0	0%
speaker control	1	0	0	0	25%	0	1	1	0	50%
speaker certainty	1	0	0	0	25%	1	0	1	0	50%
agent intention	0	0	0	1	25%	0	0	1	1	50%
situation probability	1	0	1	0	50%	1	0	1	1	75%

Table 6.10: Features of future markers in *De Segrain* {1939}

Despite the linguistic definite marking with ‘never’, the context for this example (EV5) actually has more expected ‘indefinite’ features than any others. It is not ‘proximal’, does not have ‘present relevance’, no ‘specific time/date’ is mentioned, we know from the story that the speaker is uncertain that no one will ever know about the secret, and the situation is improbable as well. The speaker, however, does have full control over her actions. At the other extreme, EV6 has none of the expected ‘indefinite’ features except lack of specific date/time:

EV6 **Mo** **a** **dire** **toi** **Miceline,** **mais** **faudrait** **to** **garde** **so** **secret**
1939 1sg VA say 2sg.OBJ Miceline, but necessary 2sg keep 3sg.POSS secret
‘I’ll tell you, Miceline, but you’ll have to keep it a secret’

VA is unexpected as it has more of the features one would expect for *POU* than any of the actual *POU* examples. However, the presence of a modal *faudrait* ‘necessary’ sets up a context of requirement to show that the speaker’s decision to tell her friend is conditional upon her not telling anyone. Therefore the speaker does not wish to commit to telling her friend, so uses *VA*.

There do not appear to be strong tendencies for either *POU* or *VA* markers (unexpected ‘orange’ features abound), unlike in *Soulsobontemps* [1925], where *VA* was rarely used in ‘proximal’ contexts and had many of the expected ‘indefinite’ features. Although the small number of instances could potentially explain this, it seems that these features alone are not enough to fully understand *VA*’s usage, and factors such as adverbs and lexical aspect should be considered to fully understand the context.

The features of *VA* seem more stable and tendencies more clearly visible in *De Segrain*’ second text {1952}:

sentence	EV11	EV12	EV13	EV14	EV15	EV16	EV17		
marker	VA	VA	VA	VA	VA	VA	VA	no:	%
proximal	0	0	0	0	0	0	0	0	0%
present relevance	0	0	0	0	0	0	0	0	0%
specific time/date	0	0	0	0	0	0	0	0	0%
speaker control	1	1	1	0	1	1	0	5	71%
speaker certainty	0	0	0	0	0	0	1	1	14%
agent intention	1	0	1	0	1	1	0	4	57%
situation probability	0	0	0	0	0	0	1	1	14%

Table 6.11: Features of VA markers in De Segrain {1952}

Unlike in De Segrain {1939}, these instances of VA are never used in ‘proximal’ contexts or with ‘present relevance’ and the number of instances with ‘speaker certainty’ or ‘situation probability’ is very low, as expected from an ‘indefinite’ future. EV14 has all of these expected ‘indefinite’ features:

E14 **Quiquefois** **nous** **pas** **va** **tardé** **trouve** **ène** **charète** **pou** **meme** **prix**
1952 Maybe 1pl NEG VA be long find INDEF cart for same price
‘Maybe it won’t take us long to find a cart for the same price’

E14 contains negation, which may affect the features. The other negative example in this text is E17, which has a different set of features from the positive ones. Negation is explored more in chapter 7. All VA instances in {1952} have at least five of the seven expected ‘indefinite’ features, showing a clear difference from future marking in {1939}. Hazaël-Massieux (1993:67) claimed that De Segrain’s writing is not representative of the time, but more closely resembles an older style. Firstly, the features and frequencies for {1939} and {1952} differ considerably from each other, so we are not dealing with one variety of writing, but language which is evolving. Secondly, future marking in neither {1939} nor {1952} resembles the Old Mauritian texts. Even if his style may ‘sound’ old-fashioned, his use of future markers is not.

I now turn to Virahsawmy’s play *Li*, published in 1972, to examine VA-usage. Virahsawmy is an Indo-Mauritian writer, linguist, politician and intellectual born in 1942 and wrote this play while he was in prison. It was banned by the Mauritian government in 1976 until it won a Radio France International competition in 1981 (Kiltir.com, 2006). The play is set in a political prison and tackles the issue of freedom through the differing views of the police officers.

In the entire play, there are five instances of VA, which make up just 7.15% of the future markers.

FV1	Non,	les	li,	sa	moi	mo	va	fer		
1972	NEG	leave	3sg	DEM	1sg.OBJ	1sg	VA	do		
		<i>'No, leave it, I'll do that'</i>								
FV2	Enn	zour	si	nou	rezouenn	mo	va	explik		
1972	INDEF	day	if	1pl	meet,	1sg	VA	explain		
		toi	ki	bizin	fer	pou	arrive	dan	lavi	
		2sg.OBJ	what	must	do	for	arrive	in	life	
		<i>'One day, if we meet again, I'll tell you what you have to do to get somewhere in life'</i>								
FV3	Enn	zour	mo	va	dir	toi				
1972	INDEF	day	1sg	VA	tell	2sg.OBJ				
		<i>'One day I'll tell you'</i>								
FV4	Kikfoi	mo	va	ouver	enn	ti	laferm			
1972	Maybe	1sg	VA	open	INDEF	little	farm			
		<i>'Maybe I'll open a little farm'</i>								
FV5	To	kapav	ale.	Mo	va	al	donn	li	so	dite
1972	2sg	can	go.	1sg	VA	go	give	3sg	3sgPOSS	tea
		<i>'You can go. I'll go and give him his tea'</i>								

Just from these examples, it can be seen that FV2, FV3 and FV4 have clear ‘non-specific time’ reference (*enn zour* ‘one day’) or adverbs denoting uncertainty (*kikfoi* ‘maybe’). Let us examine the features in more detail:

sentence	FV1	FV2	FV3	FV4	FV5		
marker	va	va	va	va	va	no:	%
proximal	0	0	0	0	0	0	0%
present relevance	0	0	0	0	0	0	0%
specific time/date	0	0	0	0	0	0	0%
speaker control	1	1	1	1	1	5	100%
speaker certainty	1	0	0	0	1	2	40%
agent intention	1	1	1	1	1	5	100%
situation probability	0	0	0	0	1	1	20%

Table 6.12: Features of VA in Virahsawmy {1972}

Like in {1952}, VA-usage is now not at all associated with the time-related features. ‘Lack of intention’ and ‘lack of speaker control’, which would be expected to play a role, do not seem to, although ‘speaker certainty’ and ‘situation probability’ are relevant in the majority of these examples. FV5 is somewhat puzzling as it has none of the *non*-time-related features often associated with an ‘indefinite’ future, but instead appears to constitute a situation in which the speaker has full control and the agent intends to carry out the action.

Not all examples can be readily explained by these features alone. The whole context must be analysed and this highlights the importance of taking a canonical approach to understand prototypical usage, in addition to considering factors such as lexical aspect.

6.2.2.4 Comparison of “The fox and the goat”

Finally, I compare two texts which tell the same story. The story of *the fox and the goat* appears in both De Segrain {1939} and Baker {1970}⁴¹. These versions are not as similar as the Old Mauritian texts about M.Caraba [1850/1880], but contain the same elements. Below are some basic details:

Author/transcriber:	Xavier Le Juge De Segrain	Philip Baker
Information about storytellers	Although written down by Le Juge de Segrain, his stories are based on oral narrations from his cook and servant, the latter of which was said to be particularly eloquent, despite being illiterate (Lionnet, 2014:93).	Recording of Creole man aged 24 years old. First language was Creole, but also spoke French and a little English. He had a clerical role on a sugar estate in the south of Mauritius at the time (Baker, 1972:212).
Length	537 words	587 words
Style	Record of an oral folktale.	Transcription of an oral folktale recorded in 1970.

Table 6.13: Information about the stories for comparison

Returning briefly to frequencies, these texts reflect the tendencies noted in 6.2.2.2. that the first half of the 20th century has an almost 50/50 split, whilst by 1970s, there is already a strong preference for *POU*, as can be seen in Table 6.14.

	<i>De Segrain {1939} – The goat and the fox</i>		<i>Baker {1970} – The goat and the fox</i>	
Number of future markers	9		16	
<i>POUR/POU</i>	4	44%	13	81%
<i>VA</i>	3	33%	0	0%
<i>A</i>	2	22%	3	19%
<i>VA/A</i>	5	56%	3	19%

Table 6.14: Frequencies of future markers in De Segrain {1939} and Baker {1970}

⁴¹ These stories can be found in: Le Juge de Segrain (1976:4) and Baker (1972:211).

The two versions focus on different parts of the story and future contexts do not often overlap. For ease of reference, examples from De Segrais are prefixed by CS, and examples from Baker by CB. Although zero marking (\emptyset) is not investigated here, it is used in De Segrais in this story to express future. Let us compare the part of the story which is somewhat disputed and was discussed briefly in section 6.2.2.1.

CB4	POU	La	mo	pu	moht	lor	to	lake	
1970		There	1sg	POU	climb	on	2sgPOSS	tail	
		<i>'Then I'll climb onto your tail'</i>							
CB5	POU	Mo	pu	sot	lor	to	ledo		
1970		1sg	POU	jump	on	2sgPOSS	back		
		<i>'I'll jump onto your back'</i>							
CB6	VA	Mo	a	gayh	miray-la				
1970		1sg	VA	get on	wall-DEF				
		<i>'I'll get onto the wall'</i>							
CB7	VA	Apré	mo	a	tyom	pu	twa		
1970		After	1sg	VA	hold on	for	2sg		
		<i>'After I'll hold onto you'</i>							
CB8	VA	Mo	a	lev	twa	osi	lao		
1970		1sg	VA	pull	2sg	also	up		
		<i>'I'll pull you up too'</i>							
CS9	\emptyset	promier	d'abord,	mo	\emptyset	monte	lors	to	lédos
1939		first	firstly	1sg	\emptyset	climb	on	2sgPOSS	back
		<i>'Firstly, I'll climb onto your back'</i>							
CS10	n/a	sécond,	lors	to	cornes				
1939		secondly	on	2sgPOSS	horn				
		<i>'Secondly, onto your horns'</i>							
CS11	\emptyset	dernier	mo	\emptyset	saute	dehors	lors	laterre	
1939		lastly	1sg	\emptyset	jump	out	on	ground	
		<i>'Lastly, I'll jump out onto the ground'</i>							
CS12	\emptyset	après	moi	\emptyset	donne	toi	la main	sourti	
1939		after	1sg.OBJ	\emptyset	give	2sg.OBJ	hand	<i>get out</i>	
		<i>'After, I'll give you a hand to get out'</i>							

The sequence of events is very similar in both accounts. Whilst CS9-12 is a straight-forward narrative expressed with \emptyset , CB4-8 alternate between *POU* then *VA*. Overall, the same lexical items are used, but not always in the same combinations. For example, both versions use the verbs *monte* 'to climb' and *saute* 'to jump', yet in Baker {1970}, the fox climbs on the goat's tail before jumping onto its

back whilst in De Segrais {1939} it climbs onto the goat’s back before jumping onto the ground. Oral folktales can be considered mid-way between spontaneous spoken and planned written language (Ludwig, 1989:235) and are transmitted from generation to generation orally, which can partially explain the above phenomenon.

The indefinite features which occur can be seen in Table 6.15.

sentence number	CB5	CB6	CB7	CB8
marker	POU	A	A	A
proximal	1	1	1	1
present relevance	0	0	0	0
specific time/date	0	0	0	0
speaker control	1	1	1	1
speaker certainty	1	1	0	0
agent intention	1	1	0	0
situation probability	1	1	0	0

Table 6.15: Feature analysis for examples CB5-CB8

The initial *la* ‘then’ in CB4 is significant because it introduces a temporal anchoring which can be interpreted as ‘from this moment onwards’. In CB7, *apre* ‘after’ appears, showing posteriority, which could explain the use of *VA* rather than *POU*, as it shows that it is a step further into the future than the initial utterances following *la*.

However, CB6 is problematic. *Apre* doesn’t appear until after the first occurrence of *VA* and also, the features for CB5 and CB6 are identical, yet most of these features are unexpected with *VA*. If ‘speaker expectation’, ‘speaker certainty’, ‘agent intention’ or ‘situation probability’ were driving the choice of marker, one would expect CB6 to be *POU* and the change to occur in CB7. It seems that the choice of *VA* is premature.

My contact said it would not sound right with *POU* instead of *VA* (Parmessur, 2018, p.c.). We assume the speaker is confident and certain about what he says, but it could be that the use of *a* indicates some uncertainty about being able to get onto the wall. Similarly in De Segrais {1939}, the point at which the fox says something he does not intend to do does not result in a change in marker. In this story, \emptyset is used throughout. However, in CS12, the objective/emphatic pronoun *moi*, rather than *mo* is used; it could be that this pronoun is being used by the fox to distance himself from what he says.

I conclude that, contrary to Baker (1993:93) ‘lack of agent intention’ cannot explain the choice of future marker in these texts. The only possible concession seems to be the speaker’s certainty regarding his ability to get onto the wall from the goat’s back. Perhaps the use of *VA* betrays his lack of confidence about reaching the wall or a conscious decision to disguise his deceit.

6.2.2.5 Conclusion for 20th Century Mauritian

We now concentrate on *VA* with the aim of formulating what can be considered a canonical ‘indefinite’ future. Taking all of the examples for the 20th Century Mauritian texts, few tendencies arise. However, by grouping the texts into pre-1950 and post-1950 examples, more can be said about the data. This cut-off point straddles De Segrais’ two publications {1939} and {1952}. It may be odd to assume a distinction between texts by the same author. However, there are clear differences in *VA*-usage between these texts, which also reflect differences in frequency. The 1939 texts had a larger proportion of *VA* marking (57%), and its usage was much less restricted, whilst *VA* was used in 38% of the 1952 examples (almost 20% difference) and appears in more specific contexts.

Below are the percentages for features which can account for *VA*-usage in the pre- and post-1950 texts, which we might consider canonical features for each time period:

Feature for pre-1950 <i>VA</i>	Percentage accounts for <i>VA</i> -usage	Exceptions
non-specific time/date	94%	1
no speaker certainty	78%	4
no speaker control	78%	4
non-proximal	72%	5
no present relevance	67%	6

Table 6.16: Features which best account for pre-1950 Mauritian *VA* examples

Feature for post-1950 VA	Percentage accounts for VA-usage	Exceptions
no present relevance	100%	0
non-specific time/date	100%	0
low situation probability	80%	3
non-proximal	80%	3
no speaker certainty	73%	4

Table 6.17: Features which best account for post-1950 Mauritian VA

Post-1950, VA is much more restricted in its usage; it never occurs with ‘present relevance’ or with mention of a ‘specific time or date’. Notice, also, the increased role of ‘low situation probability’ and ‘lack of speaker certainty’, features which reflect the widespread assumptions in the literature that VA is used as an ‘indefinite’ future. Throughout the 20th century analysis, I have focussed on seven expected ‘indefinite’ features. As can be seen above, five of these could account for VA to quite a high degree. Table 6.18 summarizes all seven ‘indefinite’ features:

Indefinite feature	pre-1950	post-1950
non-proximal	72%	80%
lack of present relevance	67%	100%
non-specific date/time	94%	100%
lack of speaker control	78%	13%
lack of speaker certainty	78%	73%
lack of agent intention	50%	33%
low situation probability	28%	80%

Table 6.18: Summary of all ‘indefinite’ features in pre- and post-1950 texts

Contrary to Baker’s (1993:93) claim about ‘lack of agent intention’, this feature accounts for 50% of VA-usage in pre-1950 texts and just 33% in post-1950 texts. ‘Lack of speaker control’ also changes significantly across time periods; it accounts for VA in 78% of instances in pre-1950 texts, but just 13% in post-1950 texts. ‘Low situation probability’ shows the opposite trend; pre-1950 it accounts for just 28% of VA instances, while after 1950s this increases to 80%. The intuitive understanding of ‘indefinite’ as ‘uncertain’ then, appears only to be relevant to post-1950 data.

A further factor, not deemed relevant or presented for the ‘indefinite’ analysis is first person subjects. Whilst only 44% of VA subjects are first person in pre-1950 texts, this figure rises to 80% post-1950.

This feature was originally chosen regarding *POU* following Detges' (2000:137) assumption that subjects are common in the early stages of grammaticalization to confer credibility to one's utterances. However, the fact that there is a considerable increase in first person subjects in the second half of the 20th century could be to do with *VA*'s restriction to contexts which are modal and subjective in nature.

Since the features associated with *VA*-usage differ considerably over time, rather than talking of a canonical 'indefinite' future, it would make more sense to simply talk instead of canonical pre-1950 *VA*-usage and post-1950 *VA*-usage. To conclude, we can take the features in Table 6.16 and Table 6.17 as canonical features for these time periods and see whether these features continue to be used with *VA* in modern texts. As Corbett (2007) notes himself, real examples may or may not resemble the canon. In fact canonical instances are rare (Corbett, 2007:9).

Pre-1950 canonical *VA*-usage includes the following features, ranked according to how well they account for its usage:

- Criterion 1: non-specific time/date > specific time/date
- Criterion 2: no speaker certainty > speaker certainty
- Criterion 3: no speaker control > speaker control
- Criterion 4: non-proximal > proximal
- Criterion 5: no present relevance > present relevance

For post-1950 texts, the features ranked in order of how well they account for *VA* are:

- Criterion 1: no present relevance > present relevance
- Criterion 2: non-specific time/date > specific time/date
- Criterion 3: low situation probability > high situation probability
- Criterion 4: non-proximal > proximal
- Criterion 5: no speaker certainty > speaker certainty

The hypothesis regarding eight potential 'indefinite' features partially holds. 'Situation does not depend on agent' was disregarded immediately, however the remaining features apart from 'lack of agent control' were relevant for a majority of the examples either in pre- or post-1950 texts. Those set out above as criteria for an 'indefinite' future account for most 20th century *VA* examples.

6.2.3 Modern Mauritian analysis

6.2.3.1 Background

Hazaël-Massieux (1993:70) suggested that the continued use of VA could be somewhat artificial, used for *patrimoine littéraire ancien*, yet no recent publications mentioning future marking suggest that VA is in decline or indeed rare nowadays. In personal communication with Virahsawmy (2017, p.c.) he explained that he consciously uses past TMA markers systematically in his writing to show the “emerging literature culture” in Creole. This suggests that some written Creole may not reflect the spoken language nowadays and could result in VA still being used with the canonical features identified for post-1950 texts. Alternatively, it may have developed a new set of features. Whilst it is problematic to include Virahsawmy’s work, we are not left with much choice, since it is a major source of limited Creole texts. This section therefore keeps this in mind, and explores whether modern writers and speakers may be maintaining an older use of VA.

6.2.3.2 Frequencies of future markers in Modern Mauritian

The first question about VA-usage nowadays is whether it is still used. We saw that frequencies were already extremely low by 1970. Below are the frequencies for several modern texts. Since *POU* is by far the most common and dominant future marker, time restrictions make it unfeasible to identify all occurrences of future *POU* since modern corpus data of 100,000 words simply contain too many instances. Therefore in these cases, instances of future *POU* were identified in smaller samples of 10,000 words to enable proportions to be calculated.

	{2003} - TIZAN		{2003-2007} - VIRAHSAWMY		{2011} - LORTOGRAF		{2012} - EZOP		{2016-2017} - LALIT		{2017-2018} - VIRAHSAWMY	
Text size	7,174		10,047		15,911		21,298		10,399		3,875	
Future markers	43	0.60%	41	0.41%	60	0.38%	62	0.29%	50	0.48%	23	0.59%
POUR/POU	31	72.09%	38	92.68%	60	100.00%	60	96.77%	50	100.00%	22	95.65%
VA	7	16.28%	3	7.32%	0	0.00%	2	3.23%	0	0.00%	1	4.35%
A	5	11.63%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
VA/A	12	27.91%	3	7.32%	0	0.00%	2	3.23%	0	0.00%	1	4.35%

Table 6.19: Frequencies of future markers in six Modern Mauritian texts

No ambiguous or aspectual uses were identified, and when asked how to say ‘about to’ in Creole, my contact said this would be expressed with the progressive marker *pe* and adverbial *mem la*: ‘*mo pe al Lond mem la*’ - ‘I’m about to go to London’ (Parmessur, 2018, p.c.). The layering of aspectual *POU* identified in Old Mauritian and [1925] no longer seems to exist.

The situation in Modern Mauritian differs quite substantially from text to text. Texts from Old and 20th Century Mauritian consisted of almost exclusively Creole versions of well-known fables (notably la Fontaine, Phaedrus and Aesop). To be consistent with earlier text styles, Virahsawmy’s (2012) re-telling of Aesop’s fables and the well-known Mauritian story of Tizan and his brothers (Abaim, 2003) are analysed. The recent expansion of Creole into other domains has also been exploited to explore whether future marking differs in other text styles. I take the reference guide to Mauritian spelling, published by the Ministry of Education & Human Resources (2011b), original writing by Virahsawmy (2020) rather than well-known stories, and newsletters from the political party Lalit (2020), as text samples to explore different writing styles.

It was surprising that texts of substantial length (100,000 words; the corpus of Lalit newsletters) included no *VA* marking whatsoever, especially under the assumption that *VA* marks an ‘indefinite’ future. This would imply there are no instances of uncertain or ‘indefinite’ futures in these texts. Firstly, I investigate *VA* in the two Modern texts with highest frequencies and compare them to texts from the 20th century to examine whether its usage has changed.

6.2.3.3 *Modern Mauritian texts*

Tizan ar so 8 frer ‘Little John and his 8 brothers’ was published by Abaim in 2003. Abaim is a cultural organization for disadvantaged people, originally set up for the well-being of the blind in Mauritius. In the preface, we are told that the stories go back to the times of colonization when Pa Lindor, a well-known story-teller, would tell folk tales to his fellow slaves (Abaim, 2003).

There are eight *VA* markers in this story:

GV1	Enn	lot	fwa	mo'	a	dir	li	bonzur	
2003	INDEF	other	time	1sg	VA	say	3sg	hello	
	<i>'I'll say hello to him another time'</i>								
GV2	Bondye	va	donn	twa	benediksyon				
2003	God	VA	give	2sg	blessing				
	<i>'God will give you his blessing'</i>								
GV3	Ler-la	to'	a	kone	mwa	ki	vremem	mo	ete
2003	Hour-DEF	2sg	VA	know	1sg	who	really	1sg	COP
	<i>'Then you will know who I really am'</i>								
GV4	Bondye	tultan	va	protez	twa				
2003	God	all time	VA	protect	2sg				
	<i>'God will always protect you'</i>								
GV5	Taler	mo	va	parl	to	mama			
2003	Soon	1sg	VA	speak	2sgPOSS	mother			
	<i>'Soon I'll talk to your mum'</i>								
GV6	li	va	parl	to	papa				
2003	3sg	VA	speak	2sgPOSS	father				
	<i>'She'll talk to your dad'</i>								
GV7	Ler	to	rant	to	lakaz	tanto	to'	a	kone
2003	Hour	2sg	return	2sgPOSS	house	evening	2sg	VA	know
	<i>'When you get home this evening you will know'</i>								
GV8	Tanto	to	a	kone	to	siro	zanana!		
2003	Evening	2sg	VA	know	2sgPOSS	sweet	pineapple		
	<i>'This evening you will know all about it'</i>								

The speaker is the same throughout these examples; it is an attempt by an old lady to entice/threaten Tizan so that he comes down from the tree, she can catch him and take him home with her. The use of *parl* rather than *koz* 'speak' may suggest French influence. However there are no other indications of French influence and vocabulary choice is not immediately relevant to my research questions, since I focus on TMA marking.

sentence	GV1	GV2	GV3	GV4	GV5	GV6	GV7	GV8		
marker	VA	VA	VA	VA	VA	VA	VA	VA	no:	%
proximal	0	0	0	0	1	0	1	1	3	38%
present relevance	0	0	0	0	0	0	0	0	0	0%
specific time/date	0	0	0	0	0	0	1	1	2	25%
speaker control	1	0	0	0	1	0	0	0	2	25%
speaker certainty	0	0	0	0	0	0	0	0	0	0%
agent intention	0	0	0	0	0	0	0	0	0	0%
situation probability	0	0	1	0	0	0	0	0	1	13%

Table 6.20: Features of VA markers in Tizan (2003)

All of the canonical ‘indefinite’ features, except ‘proximal’ are below 25%, making this text even more canonical than the 20th century texts. It could be the case that the authors are using an older form of VA reminiscent of this narrative style, which they mention goes back to times of slavery. The proportion of VA markers (27%) is actually higher than in Baker {1967-71} (VA= 10.42%) and Virahsawmy {1972}(VA= 7.14%), which may suggest that the authors are over-compensating. One might conclude from this that its usage is a continuation of 20th century VA, used just in the most canonical ‘indefinite’ instances.

The next text explores VA markers in Virahsawmy’s modern writing: *Original Prose* {2003-2007}, and *New works* {2017-2018}. Virahsawmy’s original writing from 2003-2007 contains 11 VA markers.

sentence	HV1	HV2	HV3	HV4	HV5	HV6	HV7	HV8	HV9	HV10	HV11		
marker	va	va	va	va	va	va	va	va	va	va	va	no	%
proximal	1	0	0	0	1	0	0	0	0	0	0	2	18%
present relevance	1	0	0	0	0	0	0	0	0	0	0	1	9%
specific time/date	0	0	0	1	0	0	0	0	0	0	0	1	9%
speaker control	1	0	1	1	1	1	1	1	1	0	1	9	82%
speaker certainty	0	1	0	1	0	0	0	0	0	0	0	2	18%
agent intention	1	1	1	1	1	1	1	1	1	1	1	11	100%
situation probability	1	1	0	1	1	1	0	0	0	0	0	5	45%

Table 6.21: Features of VA in Virahsawmy (2003-2007)

Compared with *Tizan*, this usage appears to be less canonical. However we notice similar features compared to Virahsawmy’s writing in 1972. The features of ‘speaker certainty’ and ‘situation

probability’, however, have swapped since 1972. In 1972, ‘speaker certainty’ was 40% and today it is 18%, whilst ‘situation probability’ was 20% and is today 45%.

Similarities regarding the features in Virahsawmy’s 1972 play and these 2000 texts suggest that he may be trying to maintain an older usage of VA, although his modern usage is also different from the VA in *Tizan*. Perhaps the narrative context may be driving Virahsawmy’s maintenance of VA. His recent writing in 2018 includes one instance of VA in a political and informative rather than purely narrative context. He writes an article entitled *Yer, zordi, dime* ‘Yesterday, today, tomorrow’ in which he talks about his lifetime’s work to promote the Creole language. He ends with a poem, in which VA is used. Whilst a poem is still a literary style, it comes from an article based on facts and hopes for the future rather than the recounting of a narrative.

J1	Mem	si	nou,	nou	pa	gagn	sans,	nou	zanfan	va	profite
2018	Even	if	1pl	1pl	NEG	get	chance,	1plPOSS	children	VA	profit

"Even if we don't get a chance ourselves, our children will benefit"

This example is more canonical than his earlier modern writing, since it has all of the canonical features except ‘lack of present relevance’; Virahsawmy has one eye on the present moment when he talks about how their children will benefit in the future, i.e. as a result of the work they put in now. He could be maintaining an older usage here; if VA does not appear in the modern elicitation tasks this would support this assumption. It is worth noting in general that even for the same author, VA-usage is somewhat variable from one period until the next.

6.2.3.4 *Other text styles in Modern Mauritian*

As a final part of the Modern analysis, we turn to the Ministry of Education and Human Resources’ grammar (2011a) and Lalit’s (2020) newsletters. The grammar provides an overview of VA-usage, then provides the following example:

16) 2011

Tanto, (pa trakase / si to 'le)	mo	ava	manz	diri
This evening, (don't worry/ if you want)	1sg	VA	eat	rice

"Don't worry! Tonight I'll eat rice if you want."

This is one of the few publications which uses the variant *ava*. The authors use *ava* and *pou* throughout their grammar, most commonly to name a concept: *nou ava apel sa X* 'we will call that X'. In one particular instance, first *ava*, then *pou* is used in identical contexts. First the concept is explained, followed by "we *ava* call this X". Next, another concept is defined, followed by "which we *pou* call Y". It would be difficult to capture this difference with the posited canonical features, as the contexts are the same.

Finally, we turn to Lalit, a pro-Creole political party which publishes newsletters in Creole. It should be noted that this is rather unusual, since French is the dominant language of the media in Mauritius (Baker & Kriegel, 2013:251) and used for almost all non-private oral communication. By using Creole, the party is making a statement. On their website, they have an English-Creole dictionary, which has as its second entry:

a (v)
 Variation(s): *ava, va*
 to denote an indefinite future, *nu a zwenn pli tar = we'll meet again some other time, I'll get you back one day*

Figure 6.1: Dictionary entry on Lalit's (2018) website

It was therefore expected that a variant of VA would be employed in the newsletters in similar contexts to those identified in other modern texts. However, in 100,000 words of their newsletters, not a single instance of VA was identified and *POU* was used consistently, even in rather 'indefinite' contexts. Regarding Brexit, Lalit wrote:

17) 2016

Zot	pa	pe	kapav	predir	lefe	ki	sa	sanzman	pu
3pl	NEG	PROG	able	predict	effect	that	DEM	change	POU

ena	lor	profitabilite	zot	biznes
have	on	profitability	3pl.POSS	business

"They cannot predict the effect this change will have on the profitability of their business"

In 17) *POU* marking has all the canonical features of *VA*-usage apart from ‘lack of present relevance’ (also like Virahsawmy’s JP1 *VA* example). Remember, however, that we are dealing with an example of *POU*. This suggests that Lalit does not distinguish between an ‘indefinite’ and ‘definite’ future, but instead uses *POU* for all instances of future expression.

6.2.3.5 Conclusion for Modern Mauritian

Since *POU* is now widespread and difficult to analyse in terms of features, it might make sense to assume *POU* is unmarked for features, yet *VA* still requires specification in terms of indefinite features. In the two main texts analysed in this section, *VA* examples have the same features as post-1950 *VA*-usage (Table 6.17), but they are ranked in a different order, as can be seen in Table 6.22. To conclude this section, I present the canonical criteria for *VA*-usage in Modern Mauritian:

Feature for modern <i>VA</i>	Percentage accounts for <i>VA</i> -usage	Exceptions
no present relevance	95%	1
no speaker certainty	89%	2
non-specific time/date	84%	3
non-proximal	74%	5
low situation probability	68%	6

Table 6.22: Features which best account for Modern *VA* examples

The canonical features for *VA* in Modern Mauritian are:

- Criterion 1: no present relevance > present relevance
- Criterion 2: no speaker certainty > speaker certainty
- Criterion 3: non-specific time/date > specific time/date
- Criterion 4: non-proximal > proximal
- Criterion 5: low situation probability > high situation probability

6.3 Diachronic developments

VA's formal development started with *va*, which was reduced to *a* in the 20th century, and acquired a further variant towards the end of the 20th century and into the Modern Mauritian period: *ava*. *Ava* is somewhat unexpected, since forms are assumed to reduce in phonological material as they grammaticalize, rather than gain extra material. This form appears to be preferred by younger speakers in Modern Mauritian (see chapter 9); it could be that this is an internal phonological change which developed for ease of perception, to readdress the balance following its extreme reduction to *a* for ease of articulation. Alternatively language contact with French may have played a role. *POU* started as *pour*; the same form as the French preposition. This form was reduced to *pou* in the 20th century, and has a spelling variant of *pu*.

Table 6.23 summarizes percentages of examples with VA which showed each of the features in the different time periods. As concluded in section 6.2.2, splitting the data into pre- and post-1950 examples provided a better overview of the results, and is maintained here:

time period	Old Mauritian	Pre-1950	Post-1950	Modern Mauritian
marker	VA	VA	VA	VA
proximal	38%	28%	20%	26%
imminence	0%	0%	0%	0%
present relevance	47%	33%	0%	5%
specific date/time	9%	6%	0%	16%
speaker control	38%	22%	87%	58%
speaker expectation	75%	94%	73%	53%
speaker certainty	72%	22%	27%	11%
agent control	75%	61%	80%	79%
agent intention	44%	50%	67%	58%
situation probability	59%	72%	20%	32%
commissive	13%	6%	0%	26%
situation depends on agent	81%	72%	80%	74%
prediction	69%	67%	73%	63%
subordinate	3%	17%	0%	5%
imperative	3%	11%	0%	0%
first person	31%	44%	80%	58%

Table 6.23: Percentages of VA examples which show each of the features in the different time periods (red = less than 30%, orange = 30-70%, yellow = over 70%)

Only VA has been tracked over time, since *POU* is so frequent by Modern Mauritian that it occurs across the board. It can be seen that VA has become less associated with certain features over time. For example, almost half the examples in Old Mauritian had 'present relevance', yet this decreased

dramatically post-1950. There is also a clear downwards trend regarding ‘speaker certainty’, as 75% of VA-usage in Old Mauritian referred to events that the speaker was certain about, as opposed to only 11% of VA examples in Modern Mauritian. Some features have remained stable, such as VA’s low occurrence with ‘specific date/time’, high occurrence with ‘agent control’ and medium occurrence with ‘agent intention’. Others, still, are much more variable, such as ‘situation probability’.

First person subjects were not as common with *POU* in Old Mauritian as expected, but were frequently used with VA in post-1950 texts. This ties in with Traugott’s (1995:33) assumption that “diachronic developments often involve changes towards subjectivity”. However, usage differed considerably depending on the author in Modern Mauritian, averaging at 58%. This feature will be examined further in Part II.

The features were based on assumptions in the previous research, so it was not clear how important each of the features would be relative to each other. Following the analysis, we can see that certain features are more useful for describing Mauritian’s future markers than others. It has already been mentioned that ‘situation depends on agent’ cannot help distinguish *POU* and VA. ‘Imminence’ is not at all relevant for VA, and occurred in a handful of examples with *POU*. It could be that ‘imminence’ is just implied through context and not necessarily a central part of *POU*’s meaning.

When participants who took part in the elicitation tasks were asked about differences between the markers, some said *POU* and VA are interchangeable, whilst others said they differ in terms of varying factors, such as sociolinguistic variables, certainty, a lack of firm decision or modal differences. The situation for *POU* and VA in Modern Mauritian is reminiscent of *ka* and *ke* in Cayenne Creole, where even native speakers contradict each other about the functions (Pfänder, 2000:144), showing it is not just a matter of terminology.

It can be concluded from the large frequency differences and responses from participants that VA in Modern Mauritian is particularly dependent on individual speakers as to whether they use VA at all, and if they do, what value they attribute to it. This could allude to extensive variation in usage, although it is likely that a certain lack of awareness on the part of participants is also responsible for

By the 70s, *POU* was clearly the dominant future marker, constituting around 90% of all future marking (see Table 6.7). Due to time restrictions it was not possible to categorize all *POU* instances for the same features, but an extract shows that *POU* continues to expand its usage to ‘non-proximal’, ‘non-present relevant’ contexts. Detges’ (2000:146) diagram, whilst a useful overview, fails to capture some important characteristics of the nature of change of the two future markers. As mentioned above, the loss of features could be shown in a more gradient manner to reflect reality.

Also, the diagram does not portray the increasingly restrictive use of *VA* over time. In fact, the change from + features to – features may even imply that a marker gains more freedom over time, which may be true at the beginning of the 20th century, but is certainly not the case towards the end of the 20th century. As has been shown through this analysis, Detges’ (2000) three features are simply not enough to capture the development of Mauritian’s future markers. A larger number of features along with lexical aspect and other contextual factors are necessary to better understand future development.

Finally, we can consider how closely *POU* and *VA* have developed compared to the proposed ‘futages’ by Bybee et al. (1994:279):

Futage 1: agent-oriented uses of obligation, desire, ability

Futage 2: later agent-oriented uses of intention, root possibility and immediate future

Futage 3: simple future as only use

Futage 4: epistemic, speaker-oriented and subordinate uses

If we assume futage 1 refers to source meaning (since obligation, desire and ability are common future sources), this could refer to the ‘intermediate’ stages for *POU* in Old Mauritian, which were ambiguous with the source meaning of purpose or predestination, or had the feature ‘imminence’ in the analysis. However, it is not clear this is the case as they have rather different meanings. Futage 2 refers to the stage in Old Mauritian with a strong tendency to express the features ‘present relevance’ and ‘proximal’. Gradually over the 20th century, *POU* became more generalized and by the end of the 20th century it can be described as the dominant future marker. Dahl (2000:313) notes

that temporal elements become stronger throughout their development so by futage 3, *POU* can be considered a ‘simple future’ and has remained at this stage.

There is no evidence of *VA*’s earliest usage in Mauritian so we joined its development in futage 3, when it was already the dominant future marker in Old Mauritian. From this point, *VA* has become more restricted in its usage and now certainly has epistemic, speaker-oriented uses (futage 4).

Apart from futage 1, these semantic ages appear to account well for the general development of both of Mauritian’s future markers, which is unexpected considering source determination predicts they will follow different trajectories. Detges (2000) and Baker (1993) also assume *POU* and *VA* to be following the same developments. However, we have only followed part of their development and it could be that *VA*’s early usage and *POU*’s later developments differ extensively. We will return to this issue for other markers in subsequent chapters.

Finally, delimited stages do not show the gradualness and gradience involved in the grammaticalization process. Another aspect of *POU*’s development which cannot be captured in traditional, linear grammaticalization paths is the fact the one source can develop several different grammatical meanings. Due to the focus on TMA marking, *POU*’s other functions and meanings have been somewhat ignored. As well as developments documented in this chapter, *POU* continues to be used as a preposition and complementizer, both of which started life in the same source as the TMA marker. In order to provide a more complete picture of *POU*’s development, the concept of polygrammaticalization may be more suitable to understand the reality that “a single form is the source of multiple grammaticalization chains” (Craig, 1991:455; Lai, 2001). This concept will be discussed further in the next chapter in relation to *FINN*.

Chapter 7:

Analysis of the development of *TI* and *FINN*

This chapter provides a detailed overview and analysis of past TMA markers *TI* and *FINN* on the basis of written corpora, following the same structure as chapter 6.

7.1 Early instances of *TI* and *FINN*

I firstly provide a historical overview of how *TI* and *FINN* have developed since their first attestations and explore their usages as TMA markers in early Old Mauritian examples (pre-1880s). They are examined together because their frequencies over time indicate that they may be in complementary distribution, possibly like the Romance perfect/preterite opposition. Potential influences on their development are considered, and it is argued that substrate and lexifier assumptions put forward by Corne (1983) and Fon Sing (2005) ignore the role of internal language change. Previous research has mentioned languages such as Wolof, Fon and Bambara as potential West African substrate languages. I focus more on languages I believe have been downplayed or overlooked in previous research whilst keeping an open mind. *FINN* is first attested much before the 1770s, when Mauritian Creole is presumed to have emerged as a stable variety (Baker & Corne, 1982), whilst *TI*'s first attestation coincides with its emergence.

7.1.1 Early development of and influences on *FINN*

7.1.1.1 First attestation of *FINN*

FINN is first attested in its full form *fini* 'finish', assumed to come from French *finir de* 'finish V-ing', in the earliest existing written record of Mauritian Creole. It is a legal record from 1734, thirteen

years after the French first set foot on the island. Court proceedings were recorded in French, even if the language used to give evidence deviated from French significantly (Baker & Fon Sing, 2007:3). However, occasionally the scribe directly quoted Creole, as in this instance. The sentence starts in French: *Il auroit aperçu un noir qui estoit blessé et qui lui auroit dit* ('He saw a slave who was injured and who said to him'), then continues in Creole, directly quoting the slave's speech:

18) [1734]

moy	<u>fini</u>	mouri
1sg	finish/FINN	die
?'I've died'		

This usage is somewhat curious since neither the lexical meaning 'finish' nor a more grammaticalized past meaning make sense in this context. It is obviously impossible for the slave to utter these words if he is dead. Baker (2003:129) believes there is no doubt this TMA marker comes from the French periphrastic construction *finir de*, however if its grammaticalization followed directly from French, this seemingly inexplicable usage in 18) is unexpected. Whilst something like 'I'm dead' could be meant figuratively to mean 'I'm in trouble', and was common for Roman slaves to utter when they were beaten (Gale & Scourfield, 2018), it is unlikely that this would be the only direct speech that was reported in a court record. Also, all four of the first attestations occur with the verb 'to die', yet the following three cannot be interpreted figuratively. Whilst this does not mean 18) is not used figuratively here, it cannot be considered the default interpretation. In search of an explanation, the socio-historical situation at the time might help shed more light on the situation.

7.1.1.2 Substrate influence on FINN

In the years shortly before this text was written, there were just 30 slaves living on the island, all of Malagasy origin (Baker & Fon Sing, 2007:308). The Malagasy language is therefore a good starting point to examine substrate influence on early Mauritian Creole. Malagasy has an auxiliary *efa* which means 'finished, completed, accomplished' (De La Beaujardière, 2020). As well as modern sources

for substrate languages, it is important to consult older resources which would be more representative of the variety spoken at the time of colonization. Parker (1883) is an early grammar which states that *efa* can “be used before any tense of any voice, and conveys the idea of more or less ‘completeness’”, so we know that this form existed in 19th century Malagasy. The entry for *efa* in the *Dictionnaire malgache-francais* (Abinal, 1888) provides more details, describing its variable meaning according to the tense of the verb. Although the inherent meaning of *efa* would suggest a completive meaning, this is not always the case:

Tense of sentence with <i>efa</i>	Meaning	Examples
Past	A time which has been completely elapsed	<i>Efa namely ahy izy</i> – he hit me <i>Efa ela no nahatongavany</i> – he arrived a long time ago
Present	Action is in the middle of a process or the subject is right in the state expressed by the word	<i>Efa manoratra ny taratasy izy</i> - he is writing a letter <i>Efa madio izy</i> - he is clean now <i>Efa olon-dehibe izy</i> - he is big now
Future	The action is at the point of being done or undergone	<i>Efa ho faty izy</i> – he is about to die <i>Efa hovonoin-ko faty izy</i> - he is going to be put to death

Table 7.1: Summary of dictionary entry under *efa* in Abinal (1888), translated into English from French

It cannot be used as a lexical verb, although a further entry in the online dictionary also categorizes *efa* as an adverb meaning Fr. *déjà* (‘already’) (De La Beaujardière, 2020).

In 18), the verb itself is unmarked, which does not necessarily imply present tense expression. However, the use of *efa* before the verb ‘to die’ in Malagasy would mean ‘I am dying’ rather than ‘I have died’, immediately fitting the context of 18) better. I propose that the first Malagasy slaves identified the French form *fini* as having a similar meaning to *efa*, so used *fini* as a pre-verbal element with the meanings associated with *efa* in the various contexts outlined in Table 7.1. This could explain why *fini* has a grammatical function from its first instance rather than developing slowly from the full verb to a TMA marker, as would be expected from cross-linguistic observations of similar markers (Bybee et al., 1994). Early Creoles commonly took the lexical form from the lexifier

(in this case French *fini*), but used it according to the functions of the equivalent item in the substrate (Malagasy *efa*), known as functional transfer (Siegel, 2015:169)⁴².

One caveat to this explanation is that by the end of 1734 when this utterance was recorded, the number of slaves in Mauritius had increased and details about the origin of this court record state that this particular slave was from Guinée (West Africa) (Baker & Fon Sing, 2007:3), so his first language would not have been Malagasy, but a Niger-Congo language. Following his first utterance about dying, this slave uses the word *sakabar* meaning ‘strangled’ or ‘silenced’. Chaudenson (1981) and Baker (1982:631) attribute the first part of this word to the Malagasy negative marker *tsy* or dialectal *tsa*, and the second part to *kabar*, an originally Arabic word meaning ‘news, discussion, rumour’, also found in Malagasy (as well as Bantu, Niger-Congo and Hindustani).

Chaudenson (1981:77) notes it is “intéressant de noter que cette expression est en usage hors de la communauté servile malgache”⁴³, implying Malagasy usage was picked up and used by slaves of other origins. Since the first Mauritian linguistic code was essentially created by the Malagasy slaves, the West African slave who uttered the words in 18) would likely have acquired this Malagasy-influenced variety when he arrived in Mauritius and could have plausibly used *fini* with a function reminiscent of Malagasy *efa*.⁴⁴

Corne (1983) mentions the possible influence of *efa* in his article on substrate influence, but simply concludes that a “Malagasy role in the development of the use of *fin* cannot be rejected out of hand”. This could be because later examples of *FINN* with unmarked active verbs do not reflect this Malagasy meaning of ‘now’ or being in the middle of a process (see Table 7.1). Again, the socio-historical situation can help us understand the situation better. Corne (1983:71) claims that this first instance of *FINN* in 18) “undoubtedly represents pre-Creole” and that during the “crucial period for

⁴² See Lefebvre (2003:33) for an example from Fongbe in Haitian Creole.

⁴³ “It is interesting to note that this expression is in usage outside of the Malagasy slave community”

⁴⁴ See Baker & Corne (1982:247–49) for a detailed explanation of the socio-historical situation in Mauritius and reasons why new slaves would want to acquire the already established linguistic code.

the emergence of Mauritian Creole” in the 1770s, Bantu languages had a significant influence on *FINN*’s development. By this time there were more locally born slaves than French speakers, East African Bantu speakers outnumbered Malagasies 9:1 and the Creole had become a stable variety (Corne, 1983:66).

The evidence for Bantu influence that Corne (1983) relies on constitutes what he labels ‘processives’, which are constructions in which *FINN* occurs with ‘non-durative statives’. *FINN*’s meaning in these contexts is ‘has become STATE’ (Corne, 1983:67–68). This terminology is confusing, since statives are usually durative by definition. However, from the cited examples, Corne (1983) seems to refer to ‘non-permanent’ states. The label ‘processive’ does not appear elsewhere in the literature, so I instead use ‘inchoative’ to refer to these constructions, which incorporates the concept of ‘beginning’ or ‘becoming’ and is in line with general linguistic terminology. Corne (1983) attributes this use of *FINN* to Bantu’s inchoative verb stems, since it does not follow naturally from the French source *finir de* (Corne, 1983:69).

However, this seems short-sighted because Bantu input is not the only explanation for the existence of such constructions. According to Bybee et al. (1994:75) it is typologically common for markers originating from a source meaning ‘finish’ - which both French *finir de* and Malagasy *efa* do - to develop an inchoative meaning when combined with a state. Note also, that *efa*’s ‘present’ meaning of being in the middle of a process or state is also compatible with such constructions. While some influence of Bantu inchoative stems is likely, this should not be viewed as the primary contributing factor. Since it is common for an inchoative meaning to develop on its own, it is impossible to say to what extent Bantu had an influence. However, since such constructions are attested early in Mauritian’s development, it is likely the large numbers of Bantu speakers at the end of 1700s (Corne, 1983:66) encouraged *FINN* to acquire this meaning, perhaps earlier than it might have on its own.

7.1.1.3 Further developments of FINN

Examining early written occurrences after 1734, *FINN* primarily occurred in non-agentive contexts with achievement verbs or stative adjectives. Around 1822, it expanded to include all aspectual classes⁴⁵. Table 7.2 offers a summary⁴⁶.

Early <i>FINN</i>	Example	Translation	Complement	Function	Aspectual class	Agentive
1784	votre femme fini mort	your wife has died/is dead	verb/adjective	TMA	Achievement/state	Non-agentive
1805	Quand mô fini mort	when I've died/am dead	verb/adjective	TMA/state of adjective	Achievement/state	Non-agentive
1816	quand pauvre fini mort	when us pour souls died/are dead	verb	TMA	Achievement/state	Non-agentive
1816	tout fini avec nous	everything was finished with us	none	Full verb	None	Non-agentive
1818	li fini sézi !	she became stupefied	adjective	Inchoative	State	Non-agentive
1818	To fini pri, papa !	you've been caught	verb/adjective	TMA/inchoative	State	Non-agentive
1818	Quand fini mesuré	when you've measured/finished measuring	verb	TMA/full verb	Accomplishment	Agentive
1822	Le Roi malgache qui fini aller làhaut montagne	the Malagasy king who went up the mountain	verb	TMA	Accomplishment	Non-agentive
1822	bon-tems fini	good times are over	none	Full verb	None	Non-agentive
1822	Quand soleil fini tourné dans la plaine	when the sun has returned/finished returning	verb	TMA/full verb	Accomplishment	Non-agentive
1822	pour fini son çagrin	to end his misery	none	Full verb	None	Agentive
1822	nous tous fini ranzé	we have all tidied/finished tidying	verb	TMA/full verb	Activity	Agentive
1822	li fini pris	he was caught	verb	TMA	State	Non-agentive
1822	Di-brit fini	the noise ceased	none	Full verb	None	Non-agentive
1822	zaut' fini fair' mariaze	they got married/finished getting married	verb	TMA/full verb	Accomplishment	Agentive
1822	Dié fini bien dompté	God has trained/finished training (us) well	verb	TMA/full verb	Activity	Agentive

Table 7.2: Summary of first instances of *FINN* and their contexts

An example of *FINN* without a verbal predicate and incompatible with the lexical meaning ‘finish’ is an 1828 religious text with the predicate *vivant* ‘alive’:

19) [1828]

Qui vat faire avec dimonde quand zaute finie vivant encore?

What VA do with people when 3pl FINN alive again

‘What will happen to the people when they are alive/have come back from the dead/are living again?’

Understood as an inchoative, the meaning would literally be ‘when they have become alive’ or more naturally, ‘when they have come back from the dead’. However, a meaning based on *efa*, whereby *FINN* would imply being right in the state of ‘living’ would also make sense here. An extension of the meaning of *FINN* based on substrate influence, which clearly goes beyond the range of uses of French *finir*, would constitute a second type of functional transfer, which Siegel (2015:171) refers to as *refunctionalism*.

⁴⁵ These are based on Vendler’s (1957) four aspectual classes.

⁴⁶ Translations are my own.

A similar later example with an adjectival complement can be less readily interpreted in terms of *efa*'s influence; it does not make sense to say the fishing net 'is in the process of being full':

20) [1885]

kan **li** **fine** **plein,** **zot** **hisse** **li** **à ter**
 when 3sg FINN full, 3pl haul 3sg ground
 'when it is/has become full, they haul it (the fishing net) onto the ground'

This example can also be interpreted inchoatively. Considering the first example of *FINN* in 18) only makes sense by assuming the function of *efa*, but this is no longer the case in later examples (e.g. 20), we might assume *FINN*'s usage is influenced by converging factors throughout its development. Corne (1983:72) believes the form and use of *FINN* is due to many "interlocking and overlapping influences", including similarity between Malagasy *efa* and Bantu 'processives', innate tendencies, and the form of French *finir* having different functions, but "closely proximate meanings". The fact Malagasy influence is stronger in earlier examples, but *FINN* more closely resembles Bantu patterns later correlates well with the initial dominance of Malagasy slaves in the early colonization period and later influx of slaves from East Africa, speaking Bantu languages. Figure 7.1 repeats the timeline of population changes in chapter 5 for convenience. However, internal language change should also be considered.

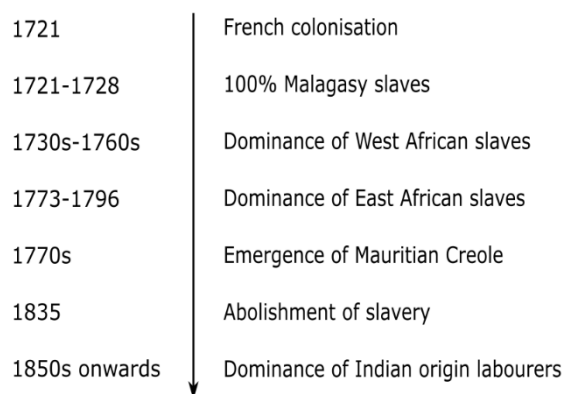


Figure 7.1: Timeline of developments in Mauritius' history (sources: Baker & Corne, 1983; Baker & Fon Sing, 2007)

Interestingly, the four earliest examples of *FINN* all appear with the lexical item ‘die’⁴⁷, an unaccusative achievement verb which predicates the state of being ‘dead’. The following examples also predicate states with the meaning of ‘become STATE’, just like those in 19) and 20).

21) [1818]

Li n’a pas conné qui li va fair encor; li fini sézi!
 3sg NEG know REL 3sg VA do still 3sg FINN stupefied
 ‘She didn’t know what else to do. She was stupefied’

22) [1818]

mo dir’ li: To fini pri, papa!
 1sg say 3sg 2sg FINN take address form
 ‘I said to him: you’ve been caught!’

In 21), the narrator finds an escaped female slave, who does not know what to do when she sees him and becomes ‘stupefied’. In 22) the narrator sees a male slave fishing on a rock and says: “You’ve been caught”. In all these early examples the subject is not an agent, but has an undergoer function, and *FINN* is used to predicate a change of state. These examples are incompatible with a full verb interpretation meaning ‘finish’, as has been the case with all the examples so far, since an agent would be required to bring an action to completion. It is also striking that *FINN* cannot be interpreted as a simple past marker, although a past interpretation with present relevance, along the lines of *present perfect* is possible. Most early examples can be understood as inchoatives following the Bantu model or have usages which fit the range of functions exhibited by Malagasy *efa*, although *fini* as a full verb and past marker do exist at this time too. It is relevant that *FINN*’s early use is restricted to specific verb-types and constructions because grammaticalization theories predict that these limited contexts gradually expand as perfect forms grammaticalize to become more generalized (Bertinetto & Squartini, 2016; Fleischman, 1983:195).

⁴⁷ In subsequent examples, the word for ‘die’ has stabilized as *mort*, rather than *mouri*. Although *mort* is the past participle form in French, it is taken as the neutral verbal form in Mauritian Creole, and /mor/ is still used today as the verb meaning ‘to die’.

We now turn our attention to contexts where *fini* can only be interpreted as a full verb. The earliest attestation is from 1816:

23) [1816]

nous té croire quand pauvre fini mort tout fini avec nous
1pl TI believe when poor FINN die everything finish with 1pl
'We believed that when one of us poor souls died, that was it for us'

This example contains two instances of *fini*. The first (again with the lexical item 'die') is clearly a marker, but the second can only be understood as a full verb meaning 'finish'. This seems to be an instance of polygrammaticalization, whereby "a single form is the source of multiple grammaticalization chains" (Craig, 1991:455; Lai, 2001). This is discussed further in section 7.3.

In the example below, it is ambiguous whether *fini* is a full verb or a marker:

24) [1822]

Quand soleil fini tourné dans la plaine, Moi va vini
When sun FINN/finish return in grasslands 1sg VA come
'When the sun has gone back into the grasslands/when the sun finishes returning to the grasslands/at the end of the day, I'll come'

If *fini* has a TMA marker function in this example, it would mean that the event of the sun returning to the grasslands has been completed, essentially meaning 'the end of the day'. Despite this ambiguity, it has a clear temporal interpretation. This is reminiscent of Rosemeyer & Grossman's (2017) pragmatic account (see chapter 2), which tracks the grammaticalization of constructions from 'finish' sources. A temporal interpretation of 'finish' enables further grammaticalization into a temporal marker showing completion.

7.1.1.4 Summary

To summarize *FINN*'s early development, up until 1820 the use of *FINN* almost exclusively occurred in non-agentive contexts (with unaccusative verbs or adjectives interpreted inchoatively (see Table 7.2) and could often be interpreted through the lens of Malagasy *efa* or an inchoative state. Over

time, *FINN*'s usage expanded to include transitive activities, accomplishments and achievements by the mid-1800s. I do not agree with Baker (2003), who leaves no room for doubt that *fini* comes directly from French *finir de* and from the available data, it seems unlikely that *fini* was firstly only used as a full verb conveying perfective and completive aspect, as Fon Sing (2005) believes. The fact there is just one instance of *fini* as a full verb in the first ten earliest attestations of *FINN* before 1820 does not support the assumption that the TMA marker developed directly from the full verb. It is unsurprising that *FINN* as an auxiliary or TMA marker is more common than the full verb, and it could be that *fini* as a full verb is simply lacking from the corpus. However, since Baker and Fon Sing worked with the same corpus as I did, their claims do not seem to be supported by the available data. Corne's (1983) assumption that *FINN*'s inchoative meaning can be mainly attributed to Bantu also seems to be unfounded⁴⁸ considering that this is a cross-linguistically attested path of development with 'finish' sources (Bybee et al., 1994:75) and that *efa*'s meaning is also compatible with most early examples.

FINN's early development could easily be a case of Bruyn's *ordinary grammaticalization* following initial language contact, since it is common for 'finish' sources to develop an inchoative meaning. However, a case of *apparent grammaticalization*, whereby the grammaticalization process did not take place in the Creole itself, but came from a/some substrate language(s) with this already grammaticalized meaning cannot be ruled out either. I believe previous research has ignored the role of internal language change and that *FINN* would have likely developed in this direction regardless of substrate languages. Nevertheless, it seems extremely plausible that the presence of languages which already had more grammaticalized functions reinforced and potentially sped up this development.

⁴⁸ However, a later publication of Corne's (1984) does acknowledge Malagasy as 'important'.

7.1.2 Early development of and influences on *TI*

7.1.2.1 First attestations of *TI*

The first attestation of *TI* is in a legal document from 1779, notably later than the first instance of *fini*, which was 1734⁴⁹.

25) [1779]

Pardonne moy, Monsieur moy n'apa été battu ça Blanc là
Excuse 1sg Sir, 1sg NEG TI beat DEM white DET
'Excuse me sir, I didn't hit that white man'

Its form in this first instance is *été*, and it is generally assumed that the past marker developed from either the French past participle *été* /ete/, or the imperfect form *était* /ete/ (Grant & Guillemin, 2012; Syea, 2013). In this first example it is a TMA marker, used to describe a completed event in the past. We cannot completely rule out an imperfective meaning, such as “I wasn’t hitting that white man”. However, the fact that this slave was being questioned in court about a completed event which happened some time before suggests a perfective meaning is more likely.

Interestingly, the next occurrence of *TI* is the shortened form *te*, but this does not alter its function:

26) [1816]

Avant vous te vini, nous n'a pas connai n'a rien
Before 2pl TI come, 1pl NEG know nothing
'Before you arrived, we didn't know anything!'

According to the Old Mauritian corpus texts, *ete* and *te* co-occurred up until the 1830s, with *te* becoming more frequent over time. Baker & Fon Sing (2007:13) claim that *ete* was used following a consonant sound, and *te* following a vowel sound. However, examples 25) and 27) dispute this. In 1839, the first instance of the form *ti* is attested and all three forms of this marker (*ete*, *te* and *ti*) co-existed until 1850, after which time *ete* was no longer used.

⁴⁹ However, there were only 5 sources between 1734 and 1779, due to very few early records. Therefore, these dates are unlikely to be reflective of first appearances.

Although the first attestation appears to be perfective, most early examples of Old Mauritian *TI* generally express imperfective, incomplete events. For example:

27) [1818]

Lon-tems zaut' té là !
 Long time 3pl TI there
 'They were there for a long time'

Example 28) shows both imperfective and perfective uses of *TI* in the same sentence:

28) [1835]

Moi té content sirtout quand moi té voir qui vous été
 1sg TI happy especially when 1sg TI see REL 3pl TI
amisé tranquiles zour bonne-année
 amuse calm day new-year
 'I was happy, especially when I saw that you were having a nice time at New Year'

The first instance of *TI* in this example is imperfective because it is durative and atelic, describing the state of being happy. The second instance, however, is perfective in this case; the act of seeing someone is a one-off completed event which happened punctually at a point during which the final (imperfective) event with *TI* was in progress.

7.1.2.2 Lexifier influence and internal developments of *TI*

At first glance it may be unexpected for *TI* to be used with such contrasting functions. However, it makes sense when we recall the French origin of *TI* is pronounced /ete/, which may have been ascribed to either *était*, the French imperfect form, or *été*, the French past participle of 'to be'.⁵⁰ Previous research usually chooses one of these as the source of *TI* (e.g. Syea, 2013:109), or implies that it is impossible to tell which is the source (e.g. Grant & Guillemin, 2012:54). I propose instead

⁵⁰ Although there were small pronunciation differences between *était* (/ete/) and *été* (/ete/) in 17th century Mauritian French (Thurot, 1901:305), it is unlikely that non-native French speakers would have perceived this difference.

that both *était* and *été* serve as sources for *TI*, as they were perceived as the same form by non-native French speakers. This is much more elegant than choosing one over the other, or not distinguishing between the two, because it fits the Creole data well and has explanatory power. Since /ete/ would have been heard in both perfective and imperfective contexts, this explains why *TI* is used in both contexts in Mauritian and is thus neutral in its aspectual value. It is only by assuming that both forms could be the source of *TI* that one can explain such variable usage.

A further consideration in *TI*'s development is that it is first attested at a point just after the time considered to be 'crucial' for the emergence of Mauritian Creole. The variety used before 1774 is considered less stable and used mainly by those who had other native languages (Baker & Corne, 1982). As detailed in chapter 2, I believe that the restricted variety was functionally inadequate so needed to be expanded for wider communication purposes. This expansion happened gradually through use by both L1 and L2 speakers and led to a more stable system known as the Creole⁵¹.

The TMA systems of Creoles tend to be characterized by a uniform set of markers, which Bickerton (1981) labels the 'Creole TAM Prototype', consisting of 'anterior', 'non-punctual' and 'irrealis' markers. Although *FINN* already existed, this tendency in Creoles may have led to the emergence of *TI* in order to take on the 'anterior' function, because *FINN* could not fulfil this function with its nuances of progressive and perfect from Malagasy *efa*, and inchoative from Bantu. Although impossible to prove, a universal Creole TAM Prototype could be turned to in order to better understand why *TI* emerged when it did with an anterior function found in most Creoles.

7.1.2.3 *Substrate influence on TI and other considerations*

Since *FINN*'s early development shows possible influence from substrate languages, let us examine whether these languages may also be relevant for *TI*. Almost all languages have a way of signalling

⁵¹ Chapter 2 explains creolization theories in more depth. See Baker & Corne (1982) for a detailed history of Mauritian Creole based on socio-historical evidence.

past expression, so it is difficult to say exactly which languages influenced its development unless there is formal similarity. Substrates often contribute their function rather than form to a Creole (Lefebvre, 2003; Siegel, 2015), so it is not always easy to assess their contribution.

A characteristic of Malagasy which could have influenced *TI*'s development is the vowel system. Since Malagasy only has four vowels (Parker, 1883:5), this supports the hypothesis outlined above that non-native French speakers didn't perceive a difference between /ɛ/ and /e/, which led to the neutralization of aspect in Mauritian's past marker *TI*. There are no obvious parallels between Malagasy past marking (*n*- inflection before the verb) and that of early Mauritian. Formal transfer would be unexpected, since substrate languages rarely transfer morphological forms to Creoles (Siegel, 2015:168), but the apparent lack of functional transfer could be attributed to the fact that *TI* is first attested at a time when Malagasy slaves were no longer dominant (Corne, 1983).

The next wave of slaves from West Africa brought Niger-Congo languages to Mauritius. A number of West African languages (Wolof, Mandinka, Fongbe) are considered in Grant & Baker (2007:201). I only mention characteristics and/or languages not mentioned there. As mentioned in chapter 6, Niger Congo languages tend to have isolating, analytic morphological typology, unlike Bantu languages (Nurse, 2008:286) and allow bare verbs with no overt expression of tense, mood or aspect. Another revealing parallel is that verbs which are not overtly marked can refer to different times depending on the context, often accompanied by overt temporal adverbs to indicate time (Crowther, 1852; Lefebvre & Brousseau, 2002; Nurse et al., 2016:26).

Yoruba has not been considered in the context of Mauritian Creole, although it is known to have been spoken in the Kingdom of Juda (Law, 2017) and Yoruba people were likely on some of the ships destined for Mauritius.⁵² Returning to the possibility of relying on context for tense information, in Yoruba *mo* 'o can be translated as either 'I go', 'I went' or even 'I will go'. Such zero marking is a characteristic of Creole languages (Winford, 2017:198) and is generally explained

⁵² Evidence for Yoruba influence was discussed in chapter 5.

in terms of a universal Creole prototype (Bickerton, 1981:58) or substrate influence (Siegel, 2015). It is outside the scope of this chapter to assess their respective contributions.

Another striking observation about Yoruba is that when past is indicated overtly, the form *ti* can be used. This is attested in old resources (*mo ti rí 'o* - 'I have seen thee') (Crowther, 1852:21) as well as modern ones (*mo ti wá* - 'I have come') (Nurse et al., 2016:269) and is identical to Mauritian's past marker, although it is described as 'perfect' rather than 'past'⁵³. A complication in assuming Yoruba influence is that Mauritian's past form was initially *ete/te* and the form *ti* did not appear until 1839, yet there were no new arrivals from West Africa after 1767 (Baker, 1982:41). If Yoruba did influence the form of Mauritian's past marker, the question is why it took so long before *ti* was established when West Africans were present in Mauritius from the 1730s. Nevertheless, the identity of form is too striking to ignore.

A different explanation for *ti*'s development is phonological change, as there are examples of changes from [e] to [i] commonly occurring during this period, such as *quelquefois* to *quiquefois* 'sometimes' and *lekèr* to *likèr* 'heart' (Baker, 2003; Baker & Syea, 1991:164). This could be internal language change or may also have been influenced by the mother tongues of the influx of indentured labourers.

7.1.2.4 Summary

French seems to play a larger role in *TI*'s development than *FINN*'s, contributing to the initial form *ete* and its combined perfective and imperfective functions. As with *FINN*, instead of a single influential factor, there are multiple possible converging sources and explanations, incorporating substrate, lexifier and language-internal influences. The Creole prototype might explain why the 'anterior' marker *TI* evolved even though a past marker *FINN* already existed, the lexifier sources of

⁵³ Remarkably, the form of Yoruba's 1st person subject pronoun *mo* is also identical to Mauritian's from 1805.

était and *été* provide a convincing explanation as to why *TI* can occur with both perfective and imperfective functions, substrate influence and the Creole prototype meant TMA markers did not need to be expressed overtly and input from Yoruba may have encouraged the original forms *ete/te* to develop into *ti* analogous to other sound changes occurring in the language at the time.

7.2 Text analysis

In this section, past marker examples are analysed in terms of their discourse function and a pre-determined set of features based on previous research (see chapter 4). As in chapter 6 on *POU* and *VA*, a canonical typology approach provides a novel way of breaking down the semantic components of the markers and establishes the features which constitute canonical instances of *TI*- and *FINN*-usage. On this basis, criteria for canonical past expression are proposed.

Examples are taken from several texts for each time period (summaries in Appendix I) and analysed in turn. Each section begins with an overview of frequencies of past markers in five texts from each period. The examples are analysed qualitatively and the features considered most representative of each marker are then proposed as criteria for canonical *TI/FINN*-usage.

7.2.1 *Old Mauritian analysis*

7.2.1.1 *Frequencies in a sample of Old Mauritian texts*

Below are the frequencies for *TI* and *FINN* in five Old Mauritian texts. Earlier texts are not included due to their small sample sizes. It is important to note that overt marking is not the only way of expressing past in Mauritian. The zero marker is often used in past contexts in Old Mauritian and is considered qualitatively in the following section. However, only the frequencies of overt past markers (*TI/FINN*) are included in the frequency table,. As a result, the figures in Table 7.3 should not be viewed as absolute, but as relative to each other. The percentage next to the number of markers shows the percentage of words in the text that are markers. This remains relatively stable around 2% in Old Mauritian.

	[1850] - 'M.CARABA'		[1855a] – LOLLIOT		[1865] – PITOT		[1867] - DESCROIZELLES		[1888] - BAISSAC	
Text type	Narrative		Prose/poetry		Lyrics and poems		Creative text		Narrative	
Text size	1,813		7,280		1,954		8,907		34,786	
Markers	28	1.54%	192	2.64%	29	1.48%	170	1.91%	605	1.74%
Ti/té	25	89.29%	180	93.75%	18	62.07%	84	49.41%	310	51.24%
Fine/finn	3	10.71%	12	6.25%	11	37.93%	86	50.59%	295	48.76%

Table 7.3: Frequencies of past markers in five Old Mauritian texts

As with the future marker frequencies, the same texts are used, including a variety of text type (poetry, prose, narrative), although the majority of the material consists of narratives. Even over a few decades, the frequencies of *TI* and *FINN* have changed considerably. In the 1850s *TI* was clearly the dominant marker, used around 90% of the time. A few decades later, however, and *TI* and *FINN* are used almost equally. For the Old Mauritian analysis, two folktales are analysed: *Zistoire Iève Av Tourtie Dans Bord Bassin Léroi* (A) and *Zistoire Tranquille Av Brigand* (B) (Baissac, 1888)

7.2.1.2 Analysis of *TI* and *FINN* in two Old Mauritian texts

Unlike for the analysis of future expression in these texts, it is essential to consider zero marking (\emptyset) alongside examples with overt past markers *TI* or *FINN*. This is because \emptyset has a clear past function in Old Mauritian which appears to be in complementary distribution with the overt markers and is in fact the most common strategy for marking past expression throughout this period.

Givón (1982) describes the discourse functions of the prototypical Creole TMA markers and his description for the zero marker (\emptyset) fits the Old Mauritian data well. In many Creoles, zero-marked dynamic verbs refer to past expression whilst zero-marked stative verbs are interpreted as present tense (Winford, 2017:196). This cannot be said for the texts analysed here⁵⁴. However, the discourse function that Givón (1982:119) assigns to the prototypical zero marker is accurate. \emptyset is used for the “backbone of the action narrative” and presents foregrounded in-sequence events. In addition to zero

⁵⁴ Although zero-marked stative and dynamic verbs may have behaved differently when the Creole first emerged.

marking, most Creoles have an overt anterior marker to present background information which marks out-of-sequence events and serves as a digression from the main storyline (Givón, 1982:120).

When *TI* emerged around 1770, it had to compete with *fini* to express the background in narratives, due to *fini*'s existence before Mauritian Creole became a stable variety. I will examine how the division of labour is split up later. Turning to the texts, the first four sentences of Baissac A [1888] set the scene and give background information about the story. They are marked with *TI*, as would be expected from Givón's description of a prototypical anterior marker. This backgrounding function can be seen in AT1-AT4:

AT1	Longtemps	longtemps	dans	peyi	Maurice	ti	éna	éne	léroi	
1888	Long time	long time	in	country	Mauritius	TI	have	INDEF	king	
	<i>'A long time ago in Mauritius, there was a king'</i>									
AT2	qui	ti	gagne	éné	grand	bassin				
1888	REL	TI	have	INDEF	big	pool				
	<i>'who had a big pool'</i>									
AT3	làdans	meme	li	té	baingne	so	lécorps	tous	lé	bomatins
1888	inside	even	3sg	TI	bathe	POSS	body	every	DEF	morning
	<i>'He bathed himself in the pool every morning'</i>									
AT4	à cause	docteur	ti	commande	li					
1888	because	doctor	TI	order	him					
	<i>'because the doctor had ordered him to'</i>									

We can observe the two different functions of *TI* in the above examples. In AT1 to AT3, *TI* is clearly imperfective, describing situations in the past which are durative and incomplete. Conversely, AT4 describes a completed event, which had already happened before the time of the narrative. Unlike the previous examples with *TI*, this fourth example can be described as perfective as it is a punctual event, which temporally precedes other events, is completed and seen as a whole. As mentioned in section 7.1.2, this may appear to be unexpected. However, it makes sense if we assume the functions of the French forms *était* (imperfect) and *été* (past participle) were both adopted into Creole *TI*.

The next part of the story moves to the main storyline, and as expected from Givón's description, there is consistent zero marking for the series of in-sequence events which follow:

A05	Avlà	éne	zour	li	Ø	arrive	dans	bord	bassin
1888	Now	INDEF	day	3sg	Ø	arrive	in	edge	pool
	<i>'Now one day, he got to the edge of the pool'</i>								
A06	dileau	Ø	sale,	napas	Ø	capave	baigné		
1888	water	Ø	dirty,	NEG	Ø	able	bathe		
	<i>'the water was dirty, he wasn't able to bathe'</i>								
A07	Léroi	Ø	appelle	gardien,	Ø	bourre	li		
1888	King	Ø	call	guardian	Ø	scold	3sg		
	<i>'the king called the guardian and scolded him'</i>								

The narrative continues like this with consistent zero marking⁵⁵, until an aside is introduced in the form of a relative clause in AF14:

A011	Bonzour,	bonzour	gardien !	Comment	mo	Ø	content	Ø	trouve	vous !
1888	Hello	hello	guardian!	How	1sg	Ø	happy	Ø	see	2pl
	<i>'Why hello there guardian. How happy I am to see you!'</i>									
A012	longtemps	ça	même	mo	Ø	rôdé				
1888	long time	DEM	even	1sg	Ø	search				
	<i>'I've been looking for you for a long time'</i>									
A013	à cause	mo	Ø	iéna	bon bon	quiqueçose	pour	donne	vous	
1888	because	1sg	Ø	have	really good	something	to	give	2pl	
	<i>'because I have something really good to give you'</i>									
AF14	Goûte	ça	dimiel	mo	famiie	<u>fine</u>	envôye	moi	Trois Zilots !	
1888	Taste	DEM	honey	1sg	family	FINN	send	1sg	Trois Ilots	
	<i>'Taste this honey my family sent me from Trois Ilots!'</i>									

FINN is used for the first time in this narrative in AF14 to introduce extra information about the honey which is out-of-sequence and refers to a time before the narrative took place. The end of this part of the story resumes zero marking to portray the series of in-sequence events which happened after the guardian had drunk the honey.

⁵⁵ Although, this time it is direct speech and the zero marker is interpreted as present rather than past expression. The distinction between stative and dynamic verbs clearly does not apply.

Although the difference between zero and overt marking is quite clear from the above examples, the distinction between *TI* and *FINN* is subtler and requires more in-depth analysis. Table 7.4 shows which features were present in the 19 examples of *TI* and 18 *FINN* examples in the two Baissac texts.

Example	<i>TI</i> n=19		<i>FINN</i> n=18	
recent past	2	10.53%	14	77.78%
direct speech	4	21.05%	7	38.89%
completed action	5	26.32%	18	100.00%
foregrounded	0	0.00%	0	0.00%
current relevance	6	31.58%	18	100.00%
result	4	21.05%	12	66.67%
experiential	1	5.26%	0	0.00%
perfective	4	21.05%	15	83.33%
telic	3	15.79%	13	72.22%
stative	13	68.42%	0	0.00%
durative	16	84.21%	8	44.44%
iterative	2	10.53%	3	16.67%

Table 7.4: Percentages of occurrences for *TI* and *FINN* according to features in Baissac [1888]

The absence of the feature ‘foregrounded’ shows that the overt markers are only used for background, out-of-sequence events, confirming the tendencies observed in the examples above regarding the distribution of overt and zero markers. Whilst this distinction can be explained in terms of discourse functions, *TI* and *FINN* cannot be distinguished in this way. There are several further linguistic features which are relevant for determining whether *TI* or *FINN* is used in these texts.

From this small sample, it appears that *FINN* was often used in ‘recent past’ contexts, whilst *TI* expressed events or states which took place further in the past. All of the Old Mauritian instances of *FINN* denoted ‘completed actions’ with ‘current relevance’, whilst the percentage for *TI* examples was much lower. *FINN* was also more likely to express ‘perfective’ events which were ‘telic’; notably there were no states which occurred with *FINN*. In contrast to this, a large proportion of *TI* examples were ‘stative’ and ‘durative’.

The data for *TI* is somewhat complicated by the fact that it can express both perfective and imperfective situations, so the figures are less absolute than for *FINN*. In its perfective usage, *TI* can express completed events, so these examples share more features with *FINN* than with the more

typical imperfective *TI*-usage. This is unusual, since it is common for imperfective and perfective aspect to be expressed via different forms (e.g. Romance imperfect/preterite dichotomy and Slavic perfective/imperfective verbal affixes). I attribute this to the two French sources, explained above.

Taking examples from the second Baissac text, we can see how the figures in Table 7.4 showing differences between *TI* and *FINN* translate into concrete examples. The first example of *TI* in this story displays typical imperfective usage, denoting background information about a state:

BT2	Zaute	papa	té	bien	content	laçasse
1888	POSS.3pl	father	TI	a lot	like	hunting
<i>'Their father really liked hunting'</i>						

However, in this story too, *TI* is used perfectly in contexts which clearly denote completed, telic, non-durative events. Its location within the narrative makes sense, however. Although *TI* describes what happened in the story, it occurs at the end so is out-of-sequence, providing an overview from the tortoise's perspective, rather than a blow-by-blow account of the main events as they happened.

BT10	Brigand	ti	touye	moi	ti	manze	moi
1888	Brigand	TI	kill	1sg.OBJ	TI	eat	1sg.OBJ
<i>'Brigand killed me and ate me'</i>							

A particularly interesting example of *FINN* sheds light on its development with adjectives:

BF5	Mo	grand	frère	qui	fine	vine	misère
1888	POSS.1sg	big	brother	REL	FINN	come	poor
<i>'My big brother, who has become poor'</i>							

As mentioned in the section 7.1.1, adjectives preceded by *FINN* are interpreted as inchoative or 'becoming'. However, in the above example, another lexical item *vine* 'come/become' is inserted to express this concept. This strongly implies that an inchoative interpretation is not generally conveyed by *FINN* if a verb is needed to make this explicit, and that inchoative *FINN*-usage is no longer common by Baissac's time [1888].

The Old Mauritian corpora show that the earliest attestation of *FINN* preceding *vinn* to express inchoativity occurs in 1855:

29) [1855]

Zènes	fill'	à present	Comment	zot	<u>fin'</u>	<u>vin'</u>	bêtes !
Young	girl	at the moment	how	3pl	FINN	come	stupid!

'Young girls today – how stupid they've become!'

Although there are no data available about the origins of ex-slaves at this time, this information would be largely irrelevant, since very few foreign-born slaves arrived in Mauritius after 1810 (Corne, 1983:66) and ancestral languages of the slaves would no longer have been spoken once children grew up with Mauritian Creole as their first language, established as the lingua franca and the most practical language of the island. Population changes were exemplified in Figure 7.1 and chapter 5. Although the slaves made up a large proportion of the population pre-abolition, the fact that the majority of people in Mauritius had Indian mother tongues by mid-1800s could be a factor in the loss of the Bantu interpretation of adjectives with *FINN*, along with language-internal change.

A final point to consider is the choice of marker in experiential constructions. As set out in the methodology, experientials are a type of perfect and describe experiences that people have had in their lives until the moment of speech (Bertinetto & Squartini, 2016:946). They include questions such as 'Have you ever been to Brazil?', which are easily identified by the adverb 'ever' in English. They may also make a statement about an experience, such as 'I've eaten lobster once before'.

Such constructions in Old Mauritian interestingly seem to occur with *TI* rather than *FINN*. The earliest attestation of an experiential construction is:

30) [1828]

Dire	moi	si	vous	jamais	<u>été</u>	cassée	sa	Commandement
Say	1sg.OBJ	if	2pl	ever	TI	break	DEM	commandment
qui	Bon Dieû	<u>été</u>	donné	nous				
REL	God	TI	give	1pl				

'Tell me whether you've ever broken the commandments that God gave us'

Like in English, the adverb *jamais* '(n)ever' (later written *zamaïs* and *zame*) is used to express this experiential meaning. This is not an isolated example, since further examples from 1855 and 1888 also occur with *TI* and *zamaïs*. I will track the development of experiential constructions throughout the 20th century and modern sections to see how it changes over time.

7.2.1.3 Canonical approach to Old Mauritian

The features identified as relevant for *TI*- and *FINN*-usage in the Old Mauritian texts are ranked in the tables below to show which features can best account for their usage in these texts. All *TI* and *FINN* examples were backgrounded events and all examples of *FINN* shared four features. Although features for *TI* were less absolute, there are some strong tendencies:

Features for <i>TI</i> <i>n=19</i>	Percentage accounts for <i>TI</i> -usage	Exceptions
backgrounded	100%	0
non-experiential	94.74%	1
non-recent past	89.47%	2
durative	84.21%	3
atelic	84.21%	3

Table 7.5: Features which best account for Old Mauritian *TI* examples

Features for <i>FINN</i> <i>n=18</i>	Percentage accounts for <i>FINN</i> -usage	Exceptions
backgrounded	100%	0
current relevance	100%	0
non-experiential	100%	0
completed action	100%	0
perfective	83.33%	3

Table 7.6: Features which best account for Old Mauritian *FINN* examples

On the basis of these figures, I propose the following criteria for canonical *TI*-usage in Old Mauritian

(> means ‘more canonical than’):

Criterion 1: backgrounded > foregrounded

Criterion 2: non-experiential > experiential

Criterion 3: non-recent past > recent past

Criterion 4: durative > non-durative

Criterion 5: atelic > telic

And for *FINN*:

Criterion 1: backgrounded > foregrounded

Criterion 2: current relevance > no current relevance

Criterion 3: non-experiential > experiential

Criterion 4: completed action > non-completed action

Criterion 5: perfective > non-perfective

The above analysis has provided an overview of *TI* and *FINN* in two Old Mauritian texts, first examining the differences in discourse functions between zero and overt marking and qualitatively analysing the differences in features between *TI* and *FINN*. These examples formed the basis of a canonical approach and were proposed as criteria for canonical *TI/FINN*-usage in Old Mauritian. However, as with *POUVA*, it is acknowledged that the small number of examples cannot be generalized to Old Mauritian as a whole. Next, we turn our attention to how these markers are used in 20th century texts.

7.2.2 20th Century Mauritian analysis

The main text style in 20th Century Mauritian continues to be narrative, with Virahsawmy's (1972) play constituting an exception, composed almost entirely of direct speech. Soulsobontemps [1925], De Segrais' {1939} folktales and Virahsawmy's {1972} play form the basis of the analysis.

7.2.2.1 Frequencies in a sample of 20th Century Mauritian texts

Below are the relative frequencies for the overt past markers *TI* and *FINN*:

	[1925] - SOULSOBONTEMPS		{1939} – DE SEGRAIS		{1952} – DE SEGRAIS		{1967-71} - BAKER		{1972} - VIRAHSAWMY	
Text type	Narrative		Narrative		Narrative		Narrative		Play	
Text size	4,534		4,629		4,307		5,022		8,404	
Markers	163	3.60%	137	2.96%	117	2.72%	227	4.52%	204	2.43%
Ti/té	113	69.33%	82	59.85%	70	59.83%	58	25.55%	50	24.51%
Fine/finn	50	30.67%	55	40.15%	47	40.17%	169	74.45%	154	75.49%

Table 7.7: Frequencies of past markers *TI* and *FINN* in five 20th Century Mauritian texts

As with the Old Mauritian data, this does not include zero marking. Whilst the Old Mauritian frequencies showed an increase of *FINN*, used as frequently as *TI* by the 1800s, *TI* holds its ground during the first half of the 20th century, but *FINN* is used much more frequently by the 1970s.

7.2.2.2 Analysis of *TI* and *FINN* in 20th century Mauritian texts

Soulsobontemps [1925] tells the story of Iderce, who goes looking for treasure so the father of the girl he loves will let him marry her. As with the Old Mauritian texts, there is a general tendency for backgrounded discourse to be overtly marked, and foregrounded sequences of events to be zero marked. Take for example the scene in which Iderce sees the old lady Bonne Femme Magon on the floor, surrounded by children who are being aggressive because they think she's a witch. He takes her home and looks after her. When Iderce describes the scene as he sees it, the markers *FINN* and

TI are used. The children shout *li fine soûe* ‘she’s drunk’, which is an example of *FINN* being used to describe a state.

CF06	Bonne femme	Magon	<u>fine</u>	renversée	or	la route,	zenfants	entoure	li
1925	Mrs	Magon	FINN	knock over	on	road	children	surround	3sg
	<i>‘Bonne Femme Magon was knocked over onto the ground, children surrounded her’</i>								
CF07	Li	<u>fine</u>	soûe !	à nous	fou	li	dans	la mer !	
1925	3sg	FINN	drunk	let's	throw	3sg	in	sea	
	<i>‘She’s drunk! Let’s throw her into the sea!’</i>								
CT08	Pôve	bonne femme	là	<u>ti</u>	gagne	eine	tourdissement		
1925	poor	woman	DEF	TI	get	INDEF	dizziness		
	<i>‘The poor woman fainted’</i>								

The actions of Iderce himself, however, receive no overt marking, constituting a series of foregrounded in-sequence events. CF13 with *FINN* describes the endpoint of the sequence of actions, not an event:

C009	li	amène	li	dans	so	pôve	vié	la caze
1925	3sg	bring	3sg	in	POSS.3sg	poor	old	house
	<i>‘He brought her to her poor old house’</i>							
C010	li	acété	ein pé	rhum				
1925	3sg	buy	a little	rum				
	<i>‘he bought a bit of rum’</i>							
C011	li	frotte	li					
1925	3sg	rub	3sg					
	<i>‘he rubbed her (with it)’</i>							
C012	li	faire	li	boire	morceau			
1925	3sg	make	3sg	drink	piece			
	<i>‘he made her drink a bit’</i>							
CF13	zisqu’à	li	fine	révini				
1925	until	3sg	FINN	come back				
	<i>‘until she gained consciousness’</i>							

Negation has implications for the notion of completeness and perfectivity. In CF15, Bonne Femme Magon tells a story about a captain hiding his treasure on an island and her being the only person alive to know about it. She concludes by saying:

CF15	Zamais	mo	fine	dire	personne	ça	zaffaire	là
1925	never	1sg	FINN	say	no one	DEM	matter	DEF
<i>'I've never told anyone about this'</i>								

It has been proposed that negation renders a telic event atelic (De Saussure et al., 2016:21), which we can see clearly with the example “Sam didn’t come to the cinema” as Sam didn’t come to the cinema for its entire duration. It is therefore not considered a punctual, telic event, but a state⁵⁶. This has implications for the analysis since this contradicts the lexical semantics of the predicate alone. However, with a similar sentence "Peter didn't pay his taxes", it isn't the case that he was in a state of not paying his taxes for a long time, but that he forgot/refused to pay them at the time when he should have, so it can still be considered perfective. This is an instance of pragmatic accommodation and is highly context-dependent (De Saussure et al., 2016:23).

As noted in Akimova (1992:48), negation includes the meaning of ‘contrary to expectation’. Taking the example “Sam didn’t come to the cinema” again, which was firstly interpreted as a state, it can be understood that Sam should have come to the cinema at a certain time, but didn’t, which would instead have a perfective meaning. In the methodology, it was stated that the analysis would be based firmly on the contextual meaning and not on abstract lexical semantics, so negative propositions are analysed according to the context on a case-by-case basis to establish whether or not the negation makes the proposition atelic. In the case of CF15, even though “to tell someone about something” would be considered a perfective, completed, telic event, the sentential negator *zamais* ‘never’ describes the state of never mentioning the treasure to anyone in her life and is analysed as atelic.

Below are the raw results of the analysis of *TI* and *FINN* in Soulsobontemps [1925]. Each example in the sample was analysed for the features in the headings of the table. I also include the percentage of examples which share this feature.

⁵⁶ However, this is not unanimously accepted; Csirmaz (2008) argues that negated event descriptions do not pattern with states.

Feature	<i>TI</i> n=11	%	<i>FINN</i> n=6	%
recent past	0	0.00%	2	33.33%
direct speech	1	9.09%	3	50.00%
completed action	5	45.45%	4	66.67%
foregrounded	1	9.09%	0	0.00%
current relevance	0	0.00%	5	83.33%
result	1	9.09%	2	33.33%
experiential	0	0.00%	1	16.67%
perfective	6	54.55%	4	66.67%
telic	6	54.55%	4	66.67%
stative	5	45.45%	2	33.33%
durative	5	45.45%	2	33.33%
iterative	1	9.09%	1	16.67%

Table 7.8: Raw results of features for *TI* and *FINN* in *Soulsobontemps* [1925]

The distinction between *TI* and *FINN* is less prominent than in the Old Mauritian period. ‘Current relevance’ remains a relatively useful factor in distinguishing the two. However, ‘recent past’ and ‘completed action’ are not such reliable predictors. *FINN* is used less often in ‘stative’, ‘durative’ contexts, but around half the examples with *TI* occur in ‘perfective’, ‘telic’, ‘completed’ contexts. It appears that *TI* and *FINN* cannot be readily distinguished on the basis of the features analysed and presented in Table 7.8.

We now turn to De Sgrais {1939}. This story starts with a warning not to tell anyone if you have a secret because once a woman hears about it, everyone will end up knowing. The narrative begins with background information about one of the main characters, and is marked with *TI*:

DST1 Misié Zéphyrin ti oulé conné si pas so femme capave garde ène secret
1939 Mr Zephyrin TI want know whether POSS.3sg wife able keep INDEF secret
‘Mr Zephyrin wanted to know whether his wife was able to keep a secret’

It is unsurprising that this example has an overt marker, as it is not a foregrounded event depicting a main event, but instead sets the scene for the husband pretending to lay an egg, his wife telling her friend, and by the next day, everyone knowing about it.

The moment just after the husband pretends to lay an egg, he exclaims:

DSF2	Ah!	li	fine	sourti !
1939	Ah!	3sg	FINN	go out
	<i>'Ah! It's come out!'</i>			
DSF3	Mo	fine	soulagé !	
1939	1sg	FINN	relieved	
	<i>'I'm relieved'</i>			

Both of these exclamations are marked with *FINN*. The first is characterized by its ‘current relevance’ and obvious ‘result’⁵⁷ of having the egg as a consequence of the past event of laying it, while DSF3 occurs with an adjective. As seen towards the end of the Old Mauritian period, *FINN* no longer has an inchoative meaning with an adjective, but simply implies the state.

The use of *FINN* in the two examples above differs considerably, with the only features uniting them being ‘current relevance’ and ‘durativity’. Whilst DSF2 denotes a ‘recent past’, ‘completed’, ‘telic’ event with a clear ‘result’ constituting perfective usage, DSF3 is none of these things, since it describes a ‘durative’ ‘state’. DSF3 is interpreted as Mr Zepherin being in the state of relief. If an inchoative meaning had been intended, I presume this would have been made explicit through the lexical item *vinn* ‘to (be)come’.

Whilst there are no instances of *FINN* accompanied by *vinn* and an adjective in De Segrais {1939/1952}, several examples of this from other 20th century texts exist. An earlier example from Soulsobontemps combined with *TI* to denote pluperfect is:

CTF23	li	<u>té</u>	<u>fine</u>	<u>vine</u>	misère	misère
1925	3sg	TI	FINN	(be)come	poor	poor
	<i>'She had become very poor'</i>					

Another later example from Virahsawmy {1972} suggests that this construction continues to be used throughout the 20th century:

⁵⁷ Although the concept of a ‘result in the present’ is often mentioned in relation to perfect-usage, throughout this analysis, the feature ‘result’ is always a subset a ‘current relevance’ and can account for fewer examples, so is not considered in detail.

EF21	RAWANA:	Kifer	li	<u>finn</u>	<u>vinn</u>	sitan	inportan?
1972	RAWANA:	Why	3sg	FINN	(be)come	so	important

'Why has he become so important?'

The division of labour according to discourse functions appears to hold as it did in Soulsobontemps [1925] and Old Mauritian; the following zero-marked events, which follow directly from DSF3 above, denote a series of in-sequence events, which can be considered 'foregrounded' and 'perfective':

DS04	Li	Ø	passe	la main	en bas	couvertire
1939	3sg	Ø	put	hand	under	cover

'He put his hand under the covers'

DS05	li	Ø	tire	ène	gros	dizef
1939	3sg	Ø	pull	INDEF	big	egg

'He pulled out a big egg'

DS06	Zélia	Ø	prend	li	Ø	alle	guette	li	en bas	lalampe
1939	Zelia	Ø	take	3sg	Ø	go	look	3sg	under	lamp

'Zelia took it and went to have a look at it under the lamp'

The final part of this section on 20th century Mauritian will focus on Virahsawmy's {1972} play, which he wrote as a political prisoner. This is the first non-narrative text to be examined, and whilst the frequencies of *TI* and *FINN* are considerably different in this text (*TI* is used in 24.39% of past marking, and *FINN* in 75.12%), the narrative texts in Baker (1972) (not analysed here) show an almost identical distribution, so this change cannot solely be attributed to text style. *FINN* continues to imply states, as can be seen in this first example:

EF01	MIKE:	Serzan,	<u>finn</u>	midi.	Mo	bizin	ale.
1972	MIKE:	Sergeant	FINN	midday	1sg	have to	go

"Sergeant, it's 12 o'clock. I've got to go"

One salient difference in this text style, is that 100% of the examples constitute 'direct speech', so we cannot assess the use of zero marking for foregrounded narrative events as easily. *FINN* occurs much more frequently than *TI*, which might mean that *FINN* has taken on some of *TI*'s features. We can compare the two markers in the table below:

Example	<i>TI</i> n=6	%	<i>FINN</i> n=14	%
recent past	0	0.00%	5	35.71%
direct speech	6	100.00%	14	100.00%
completed action	4	66.67%	9	64.29%
foregrounded	0	0.00%	0	0.00%
current relevance	0	0.00%	12	85.71%
result	0	0.00%	2	14.29%
experiential	0	0.00%	0	0.00%
perfective	4	66.67%	7	50.00%
telic	3	50.00%	9	64.29%
stative	2	33.33%	3	21.43%
durative	2	33.33%	4	28.57%
iterative	0	0.00%	3	21.43%

Table 7.9: Raw results for Virahsawmy (1972)

The only feature which most *FINN* examples have, but none of the *TI* ones do, is ‘current relevance’ and although *FINN* does not appear so often in ‘recent past’ contexts as in earlier texts, there is still a distinction because *TI* never expresses ‘recent past’, so *FINN* would be the expected marker in ‘recent past’ contexts. For all other features, there are no large differences between *TI* and *FINN* usage. In Old Mauritian, the difference was more clear-cut because *TI* favoured ‘stative’ contexts and *FINN* was predominantly used in ‘completed’, ‘telic’, ‘recent’ contexts with ‘current relevance’. As noted above, whilst ‘current relevance’ is still a reliable indicator of *FINN* (and lack thereof with *TI*), it seems to have lost some of these other features, whilst *TI* is being used more consistently to express ‘perfective’ events. Example EF01 above is a stative example of *FINN* and ET04 shows ‘perfective’ use of *TI*:

ET04 RAWANA: Mo ti al get li avan to vini
1972 RAWANA: 1sg TI go look at 3sg before 2sg come
‘I went to have a look at him before you came’

The features analysed here are too broad to capture the differences between these markers in 20th century Mauritian. For example, although both can be used in stative contexts, only *TI* can be used with permanent states, and although both can be used in perfective contexts, *FINN* is characterized by the additional feature of ‘current relevance’.

Returning to the development of experiential constructions, we see some interesting developments over the 20th century. In De Segrais {1939}, the Old Mauritian pattern with *TI* and *zamaiz* persists:

DST9	Est-ce qui	<u>zamaiz</u>	to	<u>ti</u>	tende	zhommes	ponde	dizef!
1939	Question	ever	2sg	TI	hear	man	lay	egg

'Have you ever heard of men laying eggs!'

But in the same story, there is a change to *FINN*:

DSF10	Non,	<u>zamaiz</u>	mo	<u>fine</u>	tende	ça
1939	No,	never	1sg	FINN	hear	DEM

'I was in a rush to ask you a question'

This poses the question whether the *TI* in the Old Mauritian examples might have been used without a perfect-like experiential meaning, more like 'Did you ever break the commandments (at a previous point in your life?). Whilst this is possible, it is unlikely in the earliest Old Mauritian examples because *TI* was the general past marker so would have been the default for any type of past, whilst *FINN* was still rare. However, this could be the case towards the end of the 19th century when *FINN* is used more consistently in perfect-like contexts.

Experientials do not occur frequently, but another example can be seen in Virahsawmy {1972}:

31) {1972}

To	finn	deja	get	enn	rav.	So	latet	blan
2sg	FINN	already	see	INDEF	turnip.	3sg.POSS	head	white
hin,	me	so	la queue!					
INTJ	but	3sg.POSS	tail!					

'You've seen a turnip before. Its head may be white, but it's tail [certainly isn't]!'

Here we see a complete change from *TI* + *zame* to *FINN* + *deza*. The 20th century shows a range of different ways of expressing experiential meaning. We shall return to the experiential in the Modern Mauritian section to see which constructions persist into the modern variety.

To conclude this section on 20th century Mauritian, I present the average for the three 20th century texts and conclude that ‘current relevance’ is the only feature analysed here which consistently differentiates *TI* from *FINN*:

20 th Century Average	Average for <i>TI</i>	Average for <i>FINN</i>
recent past	0.00%	53.13%
direct speech	35.48%	68.75%
completed action	41.94%	68.75%
foregrounded event	6.45%	3.13%
current relevance	3.23%	90.63%
result	3.23%	21.88%
experiential	3.23%	9.38%
perfective	45.16%	65.63%
telic	41.94%	65.63%
stative	45.16%	18.75%
durative	51.61%	31.25%
iterative	9.68%	15.63%
subordinate clause	16.13%	34.38%
non-agentive	70.97%	68.75%

Table 7.10: Averages for 20th Century Mauritian texts

7.2.2.3 Canonical approach to 20th Century Mauritian

Viewing the results in terms of canonicity, the following features can best account for *TI* and *FINN* in 20th Century Mauritian:

Features for <i>TI</i> <i>n=31</i>	Percentage accounts for <i>TI</i> -usage	Exceptions
non-recent past	100%	0
no current relevance	96.77%	2
non-experiential	96.77%	2
no result	96.77%	2
backgrounded	93.55%	4

Table 7.11: Features which best account for Old Mauritian *TI* examples

Features for <i>FINN</i> <i>n</i> =32	Percentage accounts for <i>FINN</i> -usage	Exceptions
backgrounded	96.87%	1
current relevance	90.63%	3
non-experiential	90.63%	3
non-stative	84.37%	5
non-iterative	84.37%	5

Table 7.12: Features which best account for Old Mauritian *FINN* examples

20th Century Mauritian canonical *TI* is assumed to be characterized by the following criteria (> means ‘more canonical than’):

- Criterion 1: non-recent past > recent past
- Criterion 2: no current relevance > current relevance
- Criterion 3: non-experiential > experiential
- Criterion 4: no result > result
- Criterion 5: backgrounded > foregrounded

And *FINN* has the following canonical characteristics:

- Criterion 1: backgrounded > foregrounded
- Criterion 2: current relevance > no current relevance
- Criterion 3: non-experiential > experiential
- Criterion 4: non-stative > stative
- Criterion 5: non-iterative > iterative

The distinction between *TI* and *FINN* for 20th Century Mauritian is less clear than for Old Mauritian. The canonical criteria for the markers denote a different group of features, highlighting the continued importance of ‘non-recent past’ for *TI* and ‘current relevance’ for *FINN*. This approach encourages us to consider the absence of a feature, which is helpful for understanding the *TI* examples, and shows that most *FINN* examples appear in ‘non-stative’ contexts, although ‘perfectivity’ is no longer as relevant.

7.2.3 Modern Mauritian analysis

7.2.3.1 Frequencies in a sample of Modern Mauritian texts

Below are the frequencies for the markers in five Modern Mauritian texts. Whilst the 20th century frequencies showed a gradual decline in the use of *TI*, proportions differ extensively in this period.

	2003 - TIZAN		2003-2007 - VIRAHSAWMY		2011 - LORTOGRAF		2012 - EZOP		2016-2017 - LALIT	
Text type	Narrative		Narrative		Reference article		Narrative		News articles	
Text size	7,174		10,047		15,911		21,298		10,399	
Markers	172	2.40%	520	5.18%	281	1.77%	1751	8.22%	224	2.15%
Ti/té	97	56.40%	436	83.85%	53	18.86%	1698	96.97%	73	32.59%
Fine/finn	75	43.60%	84	16.15%	228	81.14%	53	3.03%	151	67.41%

Table 7.13: Frequencies of past markers in five Modern Mauritian texts

The author and text styles likely have a large influence on past marker usage. Virahsawmy is a source of much written data because he makes his work freely available and it is rare for written Creole to be used publicly. In the 20th century, his {1972} play was used, and for this period, both a sample of his short stories {2003-2007} and translations of Aesop’s fables {Ezop, 2012} constitute sample texts. In personal communication, Virahsawmy (2017, p.c.) stated: “In my literary prose works, original and translated, I use the past tense markers in a systematic way showing a difference between folk/oral culture and the new emerging literary culture.” This is particularly evident from Table 7.13, where the number of markers is significantly higher in these texts and make up 5-8% of the word count, as opposed to the usual 1-3%.

TI is used much more frequently by Virahsawmy than by others. Although this may make us question the inclusion of Virahsawmy’s texts, it is worth remarking that Stein (2007) also comments on the increase of overt marking in modern texts, noting that this could be due to French influence or differences between written and spoken varieties⁵⁸. Also, on a Romance model of past development, assuming that the zero marker takes on a form similar to the simple past as seems to be the case from earlier Mauritian data, one would expect this form to reduce in frequency over time and be used in

⁵⁸ For this reason, I solely focus on written texts in Part I, but also consider spoken language in Part II.

more restricted contexts.⁵⁹ There is also a divide according to text style; relative to *FINN*, *TI* is used in only 18% and 32% of past contexts in the reference and news article texts, yet is the majority form in the narrative styles.

7.2.3.2 Analysis of *TI* and *FINN* in Modern Mauritian texts

In this section, a narrative text Tizan {2003} and some news articles from a political newsletter, Lalit (2020) are analysed. Little Jean or ‘Tizan’ continues the narrative style familiar from Old and 20th Century Mauritian, telling the story of a little boy who plants a sweet, which grows into a tree. He is caught by an old witch, and eventually manages to escape.

The frequencies of *TI* and *FINN* are relatively equal with *TI* being the slightly more frequent form. The opening line is similar to most other narratives in this style. This is followed by some background information to set the scene, marked with *TI*:

FT01	Enn	zur	dan	enn	pei,	ti	ena	enn	ti	garson
2003	INDEF	day	in	INDEF	country	TI	have	INDEF	DIM	boy
	<i>‘Once upon a time in a country, there was a little boy’</i>									
FT02	Tulezur,	so	mama	ti	avoy	li	lekol			
2003	Every day	POSS	mum	TI	send	3sg	school			
	<i>‘Everyday his mother sent him to school’</i>									
FT03	parfwa	parfwa	lor	sime,	ti	ena	enn	ti	labutik	
2003	sometimes	sometimes	on	way	TI	have	INDEF	DIM	shop	
	<i>‘Sometimes on the way, there was a little shop’</i>									

Again we see the typical division of labour between zero and overt marking according to discourse function, where the action of going into the shop and buying some marble sweets receives no overt

⁵⁹ For an overview of diachronic developments of past forms in Romance, see chapter 2 of this thesis or Bertinetto & Squartini (2016), Fleischman (1983) or Harris (1982).

marker, but the relative clause before, providing out-of-sequence information about the money, is marked with *TI*:

FT05	Enn	zur,	ek	sa	ti	kas	ki	so	mama	ti	donn	li	la
2003	INDEF	day	with	DEM	DIM	money	REL	POSS.3sg	mum	TI	give	3sg	DEF
	<i>'One day, with the money that his mum had given him'</i>												
F006	Tizan	rant	dan	labutik,	li	aste	de	gato	kanet				
2003	Tizan	go in	in	shop	3sg	buy	two	sweet	marble				
	<i>'Tizan went into the shop and bought two marble sweets'</i>												

Although the discourse functions have remained stable since Old Mauritian, there are some significant differences in the form and function of *FINN*. In Modern Mauritian, *FINN* has two phonetically reduced allophones *inn* and *nn*. *Nn* usually cliticizes to the preceding word, as can be seen in FF10. It can only occur if the preceding word ends in a vowel, such as *li* below:

FF10	Zame	li'	nn	truv	sa	kalite	dimunn	la	par	isi
2003	Never	3sg	FINN	see	DEM	type	person	DEF	around	here
	<i>'He's never seen anyone like that around here before'</i>									

Observe the lack of 'recent past' contexts for *FINN* in this text and diminishing importance of 'current relevance', in Table 7.14:

Feature	<i>TI</i> n=11		<i>FINN</i> n=7	
recent past	0	0.00%	0	0.00%
direct speech	1	9.09%	4	57.14%
completed action	1	9.09%	6	85.71%
foregrounded	1	9.09%	0	0.00%
current relevance	0	0.00%	3	42.86%
result	0	0.00%	3	42.86%
experiential	0	0.00%	1	14.29%
perfective	2	18.18%	4	57.14%
telic	3	27.27%	5	71.43%
stative	4	36.36%	1	14.29%
durative	7	63.64%	2	28.57%
iterative	6	54.55%	1	14.29%

Table 7.14: Features in Tizan {2003}

The feature 'completed action', however, still appears to play a role and is one of the few features which can differentiate *TI* from *FINN* in this text. *FINN* continues to be used with adjectives, yet the following example poses the question whether *FINN* could be interpreted inchoatively:

FF07 **Kan** **pye** **finn** **gran,** **li** **kumans** **donn** **zoli** **zoli** **fler**
 2003 When tree FINN big 3sg start give pretty pretty flower
'When the tree was/got big, it started to produce very pretty flowers'

Unlike many of the other texts, there are unfortunately no instances of *finn vinn* + adjective in this text sample for comparison. However, it could simply be interpreted as a past state, rather than an inchoative one. Other examples with adjectives in other Tizan stories, suggest that a past state would be a natural interpretation of *FINN* + adjective. In FF18, the context implies a state rather than a process. As the clock struck 6, the children were ready at that moment, not in the process of getting ready. A further example, FF19, also appears more naturally to imply the state rather than suggest an inchoative situation.

FF18 **Laklos** **sizer** **sone.** **Tu** **zanfan** **finn** **pare** **pu** **ale**
 2003 Bell six o'clock ring. All children FINN ready to go
'The clock struck six o'clock. The children were all ready to go'

FF19 **Tu** **zanfan** **finn** **dakor**
 2003 All children FINN agree
'All the children were in agreement/agreed'

Since past does not have to be overtly marked, these states with *FINN* can be interpreted as past states without an inchoative meaning, so are consistent with the assumption that *FINN* no longer has an inchoative meaning.

The last modern text constitutes a different text type; news articles. In this text style, there is no zero marked past expression, and therefore no distinction between overt and zero marking. This means what appeared to be a style adopted by Virahsawmy for literary works may be more widespread than assumed. A significant difference, however, is that *FINN* is much more frequent than *TI* in this text.

HT01 sets the scene and HF02 provides an example of *finn vinn* with a noun interpreted inchoatively:

HT01 **14** **fami** **ti** **zwenn** **dan** **Zardin** **Konpayni** **10:00** **gramatin**
 2016 14 family TI join in Garden Company 10 o'clock morning
'14 families met up in the Company Garden at 10 o'clock in the morning'

HF02 Anfet, sa **finn** vinn enn aksyon Muvman Lakaz ek Abitan Richelieu
 2016 In fact DEM FINN come INDEF action Movement Housing and Inhabitants Richelieu
'In fact, it became part of the Richelieu Housing and Inhabitants Movement'

There are several instances of *FINN* used with an adjective which are understood as implying the state, such as HF09:

HF09 Buku zafer finn puri ar dilo lapli dan so lakaz
 2016 Lots things FINN mouldy with water rain in POSS.3sg house
'Lots of things are mouldy due to the rain water in her house'

This interpretation is supported by an additional instance of *finn vinn* + adjective in this text too:

HF11 Me li finn vinn danzere
 2016 But 3sg FINN come dangerous
'But it's become dangerous'

One recent development in the use of *fini* is its combination with *FINN* to mean 'already'. In Virahsawmy's 1972 play, there were already occurrences of *finn fini*, whereby *fini* could be interpreted as a full verb, or with the meaning 'already'. By Modern Mauritian, it is used in contexts where the full verb 'finish' no longer makes sense. An example of *finn fini* being used to mean 'already' in this text can be seen below:

HF08 So dal inn fini dekløke, e gro gro but kontiyn tonbe
 2016 POSS.3sg roof tiles FINN finish dislocate and big big piece continue fall
'The roof tiles have already become detached and big pieces keep falling'

The combination of *FINN* with *fini* to express 'already' shows concretely how the function of *FINN* has lost its 'recent past' feature, since a 'recent past' meaning would be incompatible with the notion of 'already', which is more firmly rooted in the past. 'Already' is considered an 'aspectual adverb' (Michaelis, 1992:328) because it can combine with different tenses, unlike the similar adverb 'previously', which can only combine with past or perfect expression. Michaelis (1992:488) posits three functions of 'already', namely that it signals priority⁶⁰ of process, priority of expected

⁶⁰ Priority means posteriority here. These functions are described in detail in Michaelis (1992:488).

eventuation point and/or priority of further accretion, which can cooccur. HF08 shows that the roof tiles became detached prior to the process of pieces falling, and that this happened earlier than expected.

Since Mauritian Creole already has an adverb meaning ‘already’ *deza*, it could be that this usage of *fini* represents a slightly different meaning, which does not necessarily encompass the functions of ‘already’ as understood in English.⁶¹ The development of *fini* as a full verb showing a prior temporal relation between two clauses (Rosemeyer & Grossman, 2017:528) is particularly compatible with the semantics of ‘already’, which does the same thing. *Fini* appears to have acquired this secondary ‘aspectual particle’ usage, which is semantically bleached from its full verb meaning ‘finish’.

The *TI* examples either describe events which occurred before the time of the main article event or ones that didn’t happen at all. HT01 describes the event of 14 families having a meeting, which led to the creation of the housing movement. The last few examples below describe the dangerous situation of concrete falling from the ceiling, then in HF16, *TI* denotes an unreal, counterfactual situation. In contrast, *FINN* concentrates on the actual events that happened. A quick search of the corpora shows that *FINN* is never used with *si* ‘if’, implying that only *TI* can occur in counterfactual contexts. Ferreira (2016:354) makes an interesting point about aspect in counterfactual contexts: “Imperfectives are often also used in counterfactuals, however, they don’t have an imperfective meaning in these contexts, but perfective.” As *TI* but not *FINN* is used in counterfactuals and has a higher affinity to imperfective situations, we can assume that Ferreira’s statement applies to *TI* and, along with negative situations, constitutes an additional context in which *TI* can have a perfective interpretation. The use of *TI* in counterfactuals is investigated more thoroughly in the acceptability judgements by native speakers in chapter 10.

HF14	enn	gro	but	beton	inn	sap	depi	plafon
2016	INDEF	big	piece	concrete	FINN	escape	from	ceiling
<i>‘A big piece of concrete came away from the ceiling’</i>								

⁶¹ It is therefore important to recognize that using the English label ‘already’ could be problematic and mean false assumptions are made about *fini* by analogy with English ‘already’.

HF15	finn	tom	dan	enn	ber		
2016	FINN	fall	inn	INDEF	cot		
	<i>'and fell in a cot'</i>						
HT16	Erezman,	ti	baba	pa	ti	dan	ber
2016	Luckily	DIM	baby	NEG	TI	in	cot
	<i>'Luckily the little baby hadn't been in the cot'</i>						

A further consideration regarding *FINN* in Modern Mauritian is the possible acquisition of a 'hot news' function in certain contexts. As explained in chapter 2, hot news perfects don't have 'current relevance' and present information being conveyed to others for the first time (Schwenter, 1994). Diachronically, hot news perfects are said to occur at a point before a perfect form is used in exclusively past/perfective contexts (Schwenter, 1994:1005). In examples HF14 and 15 above, the events are reported for the first time and denote completed, perfective actions in the past. Whilst HF15 can be said to have 'current relevance' due to the following sentence which specifies that the baby was not in the cot, this is not the case for HT14, which could be an instance of a hot news perfect. News articles are a good source for investigating hot news perfects but cannot be easily compared to narratives, which are less apt for this usage.

Due to the small number of *TI* examples in this text, the percentages cannot be given much weight, but as with previous texts, we can compare which features are used most often with *TI* and *FINN*:

Example	<i>TI</i> n=4	%	<i>FINN</i> n=12	%
recent past	0	0.00%	0	0.00%
direct speech	0	0.00%	0	0.00%
completed action	2	50.00%	9	75.00%
foregrounded	2	50.00%	1	8.33%
current relevance	2	50.00%	9	75.00%
result	0	0.00%	4	33.33%
experiential	0	0.00%	0	0.00%
perfective	3	75.00%	5	41.67%
telic	2	50.00%	5	41.67%
stative	1	25.00%	3	25.00%
durative	2	50.00%	7	58.33%
iterative	0	0.00%	1	8.33%

Table 7.15: Features in Lalit (2017)

‘Completed action’ and ‘current relevance’ still apply to most *FINN* examples in this text and where a result is expressed, this occurs with *FINN*, but little can be said about the other features, since they do not differ much from *TI*.

I conclude this section with the averages for all the Modern Mauritian texts:

Modern Averages	Average for <i>TI</i>	Average for <i>FINN</i>
recent past	0.00%	4.35%
direct speech	7.14%	34.78%
completed action	28.57%	78.26%
foregrounded event	25.00%	4.35%
current relevance	14.29%	60.87%
result	3.57%	30.43%
experiential	0.00%	4.35%
perfective	42.86%	56.52%
telic	39.29%	60.87%
stative	28.57%	17.39%
durative	57.14%	39.13%
iterative	28.57%	8.70%
subordinate clause	14.29%	17.39%
non-agentive	57.14%	60.87%

*Table 7.16: Averages for Modern *TI* and *FINN**

Throughout the Modern Mauritian texts, *FINN* is consistently used in ‘non-recent past’ contexts unlike in the 20th century, when over half of the *FINN* examples were ‘recent past’. ‘Completed action’ remains an important feature and it was noted that zero marking is not present in all Modern texts, meaning that the consistent discourse distinction between overt and zero marking since Old Mauritian is no longer absolute. 25% of all modern *TI* examples appeared in foregrounded contexts.

7.2.3.3 Canonical approach to Modern Mauritian

Within a canonical perspective, those features which can best account for past expression in Modern Mauritian are displayed in Table 7.17 and Table 7.18:

Features for <i>TI</i> <i>n</i> =28	Percentage accounts for <i>TI</i> -usage	Exceptions
non-recent past	100%	0
non-experiential	96.77%	2
not direct speech	96.77%	2
no result	96.77%	2
no current relevance	93.55%	4

Table 7.17: Features which best account for Modern Mauritian *TI* examples

Features for <i>FINN</i> <i>n</i> =23	Percentage accounts for <i>FINN</i> -usage	Exceptions
non-recent past	95.65%	1
backgrounded	95.65%	1
non-experiential	95.65%	1
non-iterative	91.30%	2
non-stative	82.61%	4

Table 7.18: Features which best account for Modern Mauritian *FINN* examples

I propose the following criteria for canonical *TI*-usage in Modern Mauritian (> means ‘more canonical than’):

- Criterion 1: non-recent past > recent past
- Criterion 2: non-experiential > experiential
- Criterion 3: not direct speech > direct speech
- Criterion 4: no result > result
- Criterion 5: no current relevance > current relevance

Criteria for canonical *FINN* in Modern Mauritian are:

- Criterion 1: non-recent past > recent past
- Criterion 2: backgrounded > foregrounded
- Criterion 3: non-experiential > experiential
- Criterion 4: non-iterative > iterative
- Criterion 5: non-stative > stative

The first criterion for both *TI*- and *FINN*-usage is ‘non-recent past’, raising the question of how ‘recent past’ is expressed in Modern Mauritian if neither form takes on this function. It could simply

be that the examples in the texts examined did not consist of many ‘recent past’ contexts or that this is expressed via other means. Most Modern Mauritian canonical features denote the absence of a feature, showing that the features proposed for the analysis of past development do not appear to be relevant in these modern texts. It also shows that canonical *TI-* and *FINN*-usage has changed considerably over time, even if the individual features do not appear to be overly insightful. The canonical approach certainly emphasizes the gradient nature of these markers, and would be most useful analysed in parallel with similar grammatical morphemes in other languages to examine whether the features proposed for *FINN*, for example, also apply to perfect expression in other languages. The elicitation data in Part II can shed more light on the current situation than the limited, highly variable nature of the modern texts examined here.

7.3 Diachronic developments

In this final section I provide a brief overview of the developments of *TI* and *FINN* as seen in the texts examined for Old, 20th Century and Modern Mauritian and compare this to cross-linguistic tendencies put forward in the literature.

7.3.1 Summary of diachronic developments

The Old Mauritian texts showed a clear distinction between zero and overt marking regarding discourse function. *TI* and *FINN* were shown to be overt in background, out-of-sequence events, whilst zero marking presented the foregrounded main events of the narrative. It was noted that *TI* could be used in both perfective and imperfective contexts, which I attributed to the two sources *était* and *été*.

FINN could be categorized in terms of the features ‘recent past’, ‘completed event’, ‘current relevance’, ‘perfective’ and ‘telic’, whilst *TI* displayed very few examples with these features and much higher tendencies to appear in ‘stative’, ‘durative’ contexts. No *FINN* examples appeared in ‘stative’ contexts and inchoative meaning was expressed through the construction *finn vinn* + adjective.

By the 1880 texts, the earlier ambiguity between full verb and TMA marker is resolved through a differentiation in form so that *fini* is the full verb but a reduced form [fin] occurs as a TMA marker with many spelling variants (*fine/finne/finn/fin/fin’/etc.*). Throughout Baissac’s collection of folk stories, there are just 20 instances of *fini* as a full verb, but it is used as a marker 330 times. Although the surface form can be straight-forwardly attributed to French, only substrate influence can explain why the first attestation of *FINN* already had a grammatical function.

Having examined the range of functions *FINN* can express in Old Mauritian, French’s contribution appears to be mainly phonological. Substrate influence provides a much more convincing

explanation for *FINN*'s early usage rather than assuming French *finir de* serves as a model. However, internal language change must also be considered. Figure 7.2 again shows the timeline of relevant population changes in Mauritius' history, alongside several linguistic developments:

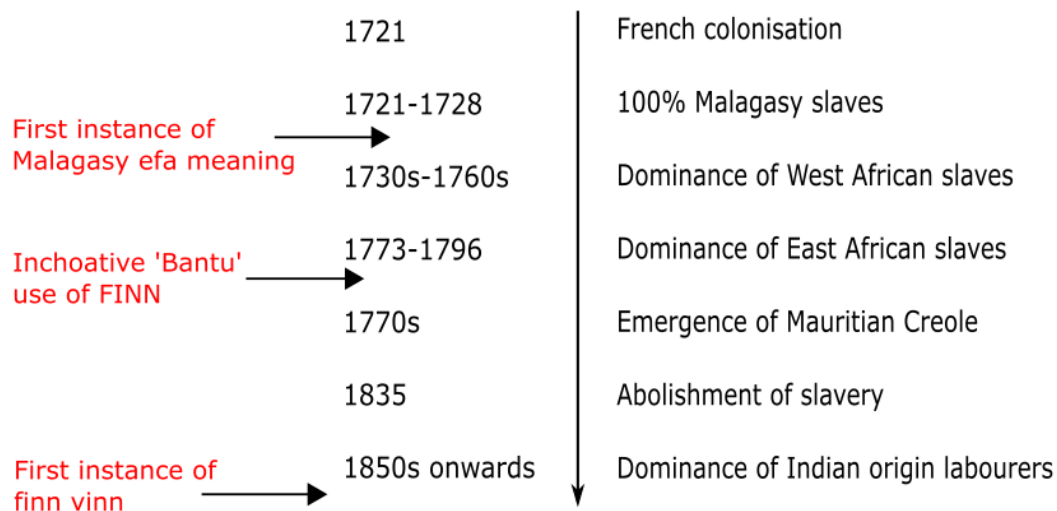


Figure 7.2: Timeline of population and linguistic developments

In 20th Century Mauritian, the distinction between zero and overt marking was still observed in narrative texts, but it was difficult to assess in Virahsawmy's {1972} play, which consisted almost entirely of direct speech. The features identified as relevant in Old Mauritian could no longer reliably distinguish *TI* from *FINN* in 20th century texts: 'recent past' occurred in around 50% of *FINN* examples and the proportion with 'completed action' no longer differed considerably from *TI*. 'Current relevance' remained high, although it has decreased since Old Mauritian. The features used to analyse the texts seem to be too broad to capture the differences between 20th century *TI* and *FINN*. However, more fine-grained distinctions can account for some of the differences. Whilst both markers are used in stative contexts, only *TI* appears with permanent states, and although they both appear in perfective contexts, *FINN* has the additional feature of 'current relevance'.

By Modern Mauritian, there are certainly changes in features associated with the markers. However, there is little consistency between the different modern texts analysed.

Some of these changes can be captured in the following table which provides average percentages for each time period:

Feature	TI			FINN		
	Old	20 th	Modern	Old	20 th	Modern
recent past	10.53%	0.00%	0.00%	77.78%	53.13%	4.35%
direct speech	21.05%	35.48%	7.14%	38.89%	68.75%	34.78%
completed action	26.32%	41.94%	28.57%	100.00%	68.75%	78.26%
foregrounded	0.00%	6.45%	25.00%	5.56%	3.13%	4.35%
current relevance	31.58%	3.23%	14.29%	100.00%	90.63%	60.87%
result	21.05%	3.23%	3.57%	66.67%	21.88%	30.43%
experiential	5.26%	3.23%	0.00%	0.00%	9.38%	4.35%
perfective	21.05%	45.16%	42.86%	83.33%	65.63%	56.52%
telic	15.79%	41.94%	39.29%	72.22%	65.63%	60.87%
stative	68.42%	45.16%	28.57%	0.00%	18.75%	17.39%
durative	84.21%	51.61%	57.14%	44.44%	31.25%	39.13%
iterative	10.53%	9.68%	28.57%	16.67%	15.63%	8.70%
subordinate clause	31.58%	16.13%	14.29%	50.00%	34.38%	17.39%
non-agentive	73.68%	70.97%	57.14%	50.00%	68.75%	60.87%

Table 7.19: Table to show averages for TI and FINN for all features in all time periods (red = over 70%, orange = 30-70%, yellow = under 30%)

In isolation, there is little to distinguish the two markers after the Old Mauritian period. However, when viewed together, certain tendencies within and across time periods emerge. A striking change over time is that ‘recent past’ is no longer relevant for *FINN* although it was a significant feature in Old Mauritian. Combined with its use in fewer ‘current relevance’ contexts, this could imply that *FINN* has acquired a hot news function in certain contexts as discussed in section 7.2.3.2.

Several other features show a tendency to lose their importance over time. This is the case for ‘current relevance’, ‘perfective’ and ‘telic’ with *FINN*. There are fewer strong tendencies for *TI*. However, a decrease in importance since Old Mauritian can be seen for ‘stative’ and ‘durative’ and an increase for ‘perfective’ and ‘telic’. It is possible that ‘iterative’ is not a basic feature of the markers themselves, but simply a result of how it is interpreted in certain contexts. This will become clearer in the following chapter on progressive development.

One consideration regarding the different stages of development is that Old Mauritian more closely represented the spoken variety, but by Modern Mauritian, written and spoken Mauritian differ

somewhat. This could explain why the developments do not always follow on from each other. In particular, emerging trends between Old and 20th Century Mauritian for *TI* do not seem to continue into the modern period. Chapter 10 examines this possibility in more detail and will investigate whether similar results as for the Modern Mauritian texts are reported in the elicitation tasks.

7.3.1.1 Formal development of *TI* and *FINN*

Before examining functional developments, let us firstly summarize the changes in the concrete forms of the markers, which can be seen in Figure 7.3. *FINN* first emerged as *fini* as a TMA marker and coexisted with the full verb with the same form until 1839 when the form *finn* was introduced in its function as a TMA marker. The phonologically reduced forms *inn* and *nn* are not attested until the Modern Mauritian period. All forms exist in the current variety. The first instance of *TI* had the form *ete*, which was soon shortened to *te*. Only *ti* survived until the present day. Dates refer to first attestations.

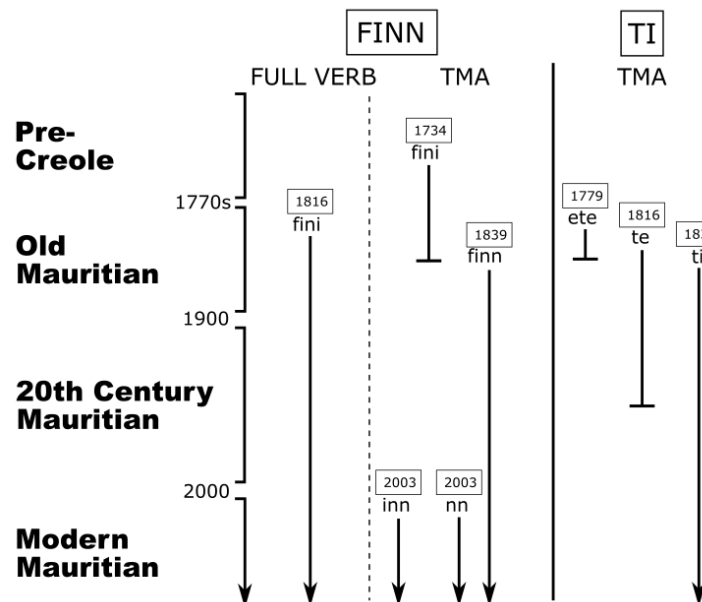


Figure 7.3: Schematic diagram to show changes in form of *TI* and *FINN* over time

7.3.1.2 *Functional development of TI and FINN*

According to typical grammaticalization paths for past expression, such as Fleischman (1983) and Bybee et al. (1994) (see chapter 2), one would expect *FINN* to become more perfective over time, known as perfect-perfective drift. However, already in Old Mauritian, *FINN* was mainly used in perfective contexts, rather than developing this function over time. This is likely a consequence of the many substrate languages influencing *FINN*'s early development. By the 20th century, *FINN* occurred regularly with stative adjectives, reducing the overall proportion of perfective examples, which continued until the modern period. *TI* is also used more frequently in perfective contexts over time, so although perfectivity could distinguish *TI* and *FINN* quite reliably in Old Mauritian, this is not the case by Modern Mauritian.

The developments identified in the analysis highlight the fact that the data does not always neatly fit previously proposed grammaticalization paths. Although we see a general tendency towards a loss of 'recent past' and 'current relevance' in Modern Mauritian *FINN*, fitting the idea of a more general past marker, it is not obvious that this marker has gone through the stages proposed by Bybee et al. (1994:105), especially in its early development when there were many converging influences at play.

Perfage 1 – completives

Perfage 2 – young anteriors⁶²

Perfage 3 – old anteriors

Perfage 4 – perfectives

Perfage 5 – simple pasts

There has been much research into the development of past expression in Romance, in particular the interaction between simplex and complex pasts over time. See, for example, the stages of development proposed by Fleischman (1983):

⁶² 'anterior' is used as a synonym for 'perfect' here. 'Young anteriors' exclusively have a perfect usage, 'old anteriors' have additional usages.

Evolution of Romance past systems

Stage	Simplex form	Complex form	Currently attested in:
I	All past functions	Only present states resulting from past situations	Sicilian, Calabrian
II	Most past situations (including recent past or a time period still in progress)	Beginnings of perfect function but limited to situations of a particular aspectual profile	Galician, Portuguese, American Spanish
III	Preterit	Perfect (i.e. past actions with PR)	English (a), Castilian, Spanish, vars. of Oc, Oïl, Catalan
IV	Restricted to formal registers, eventually eliminated	All past situations (preterit and perfect functions)	Std. French, N. Italian, std. Romanian (b), Catalan (c)

Figure 7.4: Evolution of Romance past systems (Fleischman, 1983:195)

Recalling the very early examples of *FINN*, stage 1 of Fleischman's complex form seems to apply rather well. Examples such as *li fini mort* 'she is dead' and *li fini sézi* 'she was stupefied' can certainly be interpreted as present states resulting from past situations. The general idea that one of the forms develops from a perfect to a general past marker also resembles Bybee et al. (1994) and fits the data for *FINN*. However, it is not clear how the dichotomy between simplex and complex forms could relate to Mauritian's development. Ignoring the fact that the formal distinction is irrelevant for Creole (all past expression is complex, i.e. analytic rather than synthetic), it is important to remember that zero marking constitutes a further means of expressing past, meaning that Mauritian has three main possibilities for marking past.

Previous research has certainly helped shed light on possible directions that the markers may take, but the situation is much more complex than these simplified linear grammaticalization paths/stages suggest, developed from a macro perspective to account for cross-linguistic developments or whole language families (i.e. Romance). I propose that the concept of polygrammaticalization could be more helpful in describing and predicting the developments that *FINN* has undergone. As was the case in the previous chapter for *POU*, a single morpheme can be the source of multiple grammaticalization chains, resulting in synchronous polysemy (Craig, 1991:455). Diagrammatic proposals for each marker's development can be found in chapter 13.

Bybee et al. (1994:9) claim that different sources determine the paths a marker takes. It could be argued that *TI*'s development from both perfective (*été*) and imperfective (*était*) sources can explain its use in both contexts to this day, and a combination of the 'finish' source and influences from substrates (Malagasy and Bantu) jointly impact the subsequent development of *FINN*.

This chapter has provided an in-depth overview of the markers *TI* and *FINN* on the basis of written data in three time periods. I have argued that in the case of *FINN*, previous research has over-emphasized the influence of input languages (French source *finir de*, and Bantu inchoative verb stems), without considering the role of internal language change. Regarding *TI*'s development, I proposed that both *été* and *était* should be considered sources, providing a parsimonious explanation for *TI*'s occurrence in both perfective and imperfective contexts. The analysis was undertaken from a canonical typology approach, which enabled the 'gradient phenomenon' of *FINN*- and *TI*-usage to be analysed in a principled way and examined which specific features were relevant at different stages of the markers' development. This approach would be most insightful in conjunction with parallel studies of similar markers in different languages. Finally, this chapter has shown that the typical grammaticalization paths proposed for the development of past markers cannot accurately represent the complex nature and divergent influences which constitute their development. I suggested that the more nuanced concept of polygrammaticalization, which allows for multiple grammaticalization chains, might better explain subsequent polysemy in the modern variety.

Chapter 8:

Analysis of the development of *PE*

In this chapter, I present my analysis of *PE*-usage⁶³ in the three time periods. *PE* differs from the previous markers as it cuts across the category of tense, occurring in past, present and future contexts to specify the viewpoint aspect of the utterance, and does not have an overt counterpart. I follow the same structure as in previous chapters.

8.1 Early instances of *PE*

PE is generally considered to have developed from the French periphrastic expression ‘*être après à*’ (Grant & Guillemin, 2012:54; Lefebvre, 1998:126) to express durative aspect. The first written attestations of *après* used as a TMA marker occur in a collection of songs, written in Creole by F. Chrestien in 1822. Chrestien was an administrator and interpreter for Mauritian ‘patois’ in Court, who was proud of his country and talks fondly of the importance of the patois for expressing one’s feelings (Baker & Fon Sing, 2007:15). The tune for each song is noted before the lyrics and is based on the songs of the French song-writer Pierre Jean de Béranger (Carpooran, 2018). What appears to be the first example of *après* as a TMA marker, however, is ambiguous:

32) [1822]

En-verté	ça	mauvais	quiqu'çoze	
In truth	DEM	bad	thing	
Quand	di-monde	après	fair'	l'amour
when	people	<i>PE</i>	do	love

'Actually, it's a bad thing when people fall in love'

⁶³ *PE* is used to refer to any form derived from *après* (*après, apré, apre, ape, pe* etc.)

Out of context, it might seem as though the translation should be ‘make love’ rather than ‘fall in love’. However, the rest of the song does not suggest that this is likely and a modern Creole version of this song (Carpooran, 2018) translates it as ‘fall in love’. Interestingly there is no overt TMA marking in the translation (*kan dimounn Ø tom amoure*, ‘when people fall in love’) calling into question the assumption that *après* is being used as a durative TMA marker in this context.

Après has two main other uses in early Creole. An earlier use, which co-exists with its use as a TMA marker, is a temporal adverb simply meaning ‘afterwards’, as it is used in modern French. A further development is its use as a verb to mean ‘to chase’. Both of these usages are exemplified below from early texts:

33) [1818]

après	li	couri
after	3sg	run
<i>‘After she ran’</i>		

34) [1865]

Çà	gros	missié	proç'	magasin	
DEM	big	Mr.	near	shop	
Qui	après	fam'	dans	tout	cimin
REL	chase	women	in	all	roads
<i>‘That big man near the shop who chases women in all directions’</i>					

However, these two possible uses do not make sense in the context of 32). This is because ‘after’ is incompatible with ‘when’, and another verb ‘chase’ in addition to *fair* ‘do’ is confusing. Despite the fact that a TMA interpretation is the most grammatically plausible, this particular usage is unusual because it seems to have a generic, or gnomic meaning, whereby the situation pertains to a generic subject and holds for all time rather than a progressive or durative one. This is particularly unexpected, as gnomic interpretations typically appear much later in the development of progressives (Bybee et al., 1994:126). However, translating it as ‘be in love’ rather than ‘fall in love’ might fit this context better.

There are two more instances of *après* from this same song collection; the first instance is a temporal adverb, but the second shows typical progressive usage:

35) [1822]

Ein'	zour	après	midi	Moi	trouvé	mam'zelle	Zane
INDEF	day	after	midday	1sg	see	miss	Jane
Après	çarié	maïs					
<i>PE</i>	carry	maize					

'One day after lunch, I saw Miss Jane carrying rice'

Interestingly, the modern Creole translation changes maize to rice, presumably because maize was the staple rather than rice at the time, or because it rhymes better, but apart from the spelling, the modern version otherwise remains the same⁶⁴. Here there is no doubt that *après* refers to a progressive action happening at the moment when the author sees Miss Jane. I therefore consider this example to be the first attestation of *PE* as an instance of progressive TMA marking. Unlike in 32) there is no hint of a generic meaning. In fact, no further examples in Old Mauritian exhibit a generic meaning at all so it is unclear whether the first example can be considered a legitimate use of *PE* as a TMA marker.

One striking feature of the verbs with which *PE* occurs is their situation type. This refers to the inherent aspect of the verb itself (Givón, 2001:287), which is sometimes referred to as Aktionsart. Situation type contrasts with viewpoint aspect, which refers to perfective/imperfective aspectuality. All early Creole examples up to 1880 can either be considered activities or accomplishments according to Vendler's (1957) classification, which ties in with the findings for the Spanish progressive whereby activities were more likely to be expressed with progressive rather than simple present marking (Mayberry, 2011:67). Mayberry highlights the interaction between situation type and grounding in narratives (back-/fore-ground) and Dowty (1977) claims that achievements rarely occur with progressives, which Kranich (2010:238) explains is due to their lack of duration making them difficult to view imperfectively. There were no achievement verbs in the early *PE* examples;

⁶⁴ "Enn zour, dan lapremidi, Mo trouv Mamzel Zann, Ape sarye diri!" (Carpooran, 2018).

the main text analysis will consider whether achievements remain absent and how they interact with grounding in the Old, 20th Century and Modern Mauritian data.

8.1.1 *Lexifier, language-internal and substrate influences on PE*

Most scholars working on French-based Creoles assume that the use of *PE* as a TMA marker developed from the French periphrasis ‘*être après à*’ (Grant & Guillemin, 2012:54; Lefebvre, 1998:126) to “express durative aspect” (Gougenheim, 1971:56), just as in other French varieties, such as Réunion and Quebec French (Neumann-Holzschuh & Schneider, 2000:379). The expression first appeared in French in the second half of the 16th century and although it was recognized by grammarians of the time, it was considered part of the vulgar language that “should never be used in good writing” (Gougenheim, 1971:57, my translation) and has never been part of standard French.

In 1689, Andry de Bois-Regard wrote that the expression was in general usage and that an alternative was also possible, whereby the infinitive follows directly without the preposition ‘à’. 18th century grammarians did not accept this, but ironically, only this expression without a preposition survived. In 20th century French, the expression is considered “old and provincial” and has been replaced by ‘*être en train de*’ (Gougenheim, 1971:60). Since the expression ‘*être après*’ was likely still in general usage at the time of French colonization of Mauritius, it seems plausible that the first slaves would have heard this expression from French speakers on the island and adopted it into Creole.

Gougenheim (1971) does not provide any information about how its durative meaning came about. The source *après* ‘after’ can have a temporal as well as a locative (spatial) interpretation with a meaning like ‘behind’ (CNRTL, 2012). I assume, along with McCafferty (2004:129) and Traugott & Heine (1991) that the concrete, locative construction came first and acquired a more abstract temporal meaning by metaphorical extension, although both meanings are attested in French from the 1100s (CNRTL, 2012).

The locative meaning of *après* ‘after’ is significant because most progressive forms develop from locative sources, either from verbal auxiliaries or prepositions (Bybee et al., 1994:129). Locative

constructions position an agent physically in the middle of an action and this locative element remains even in highly grammaticalized progressive constructions. Bybee et al. (1994:133) note that the progressive can be an acceptable response to a location question. Such a question was found in an early *PE* example:

36) [1839]

Son	zendarme	où	li ?			
3sg.POSS	policeman	where	3sg			
Après	donne	la liquère	tout	zènes	filles	la Rivière Grampant
PE	give	alcohol	all	young	girls	Riviere Grampant

'Where is his policeman? Giving alcohol to all the young girls in Riviere Grampant'

Responding with a progressive construction rather than a location gives more information, as it places an agent in the middle of an action in addition to proving a concrete location.

Whilst the locative aspect of *après* is typical, the preposition itself is an unusual candidate for progressive expression because it is semantically ambiguous between prospective (goalward movement) and anterior (have behind you) interpretations (McCafferty, 2004:129–30). A progressive interpretation, however, is not so easily derived from these two meanings. Nevertheless, the other uses of *après* in Mauritian Creole reflect these meanings as the preposition and temporal adverb have an anterior meaning (e.g. after lunch) but its use as a verb ‘to chase’ is prospective (e.g. she went after her). In Irish English, the expression *be after V-ing* has been used with both future and past meanings in its history (McCafferty, 2004:115).

Apart from in other French-based Creoles (Haitian, other Indian Ocean Creoles etc.), ‘after’ does not appear to be a common source of a progressive marker. It does not appear as a source for continuous expression in the *World Lexicon of Grammaticalization* (Heine & Kuteva, 2002), nor is it mentioned in the chapter on ‘Progressive, imperfective, present and related senses’ in Bybee et al. (1994). However, as mentioned above, locatives are a well-attested source for progressives cross-linguistically, so it is highly likely that the locative sense of ‘after’ is the starting point for its development into a progressive TMA marker.

Heine & Kuteva (2002) mention this locative meaning of *après* explicitly regarding French-based Creoles as illustrative of a general process whereby “grammatical aspect functions are conceptualized and expressed in terms of locative concepts” (Heine & Kuteva, 2002:202). I hypothesize that *PE* will occur more frequently with overtly realized locative elements in early usage, but gradually move away from this tendency in older stages of development. In any case, locative is just one part of the source meaning of ‘after’ in Mauritian as it is frequently used in temporal contexts to indicate anteriority and has a prospective meaning in the verb ‘to chase’. There must therefore be more to *PE*’s emergence than can be derived from the source meaning and attested developments in other languages.

In addition to French and cross-linguistically attested language-internal changes, it is important to consider other possible influences on the development of *PE* from the other languages present in French colonial Mauritius. Again, we can turn to Malagasy as the language of the first slaves who arrived on the island. *Efa* was identified in chapter 7 as potentially influencing the usage of early *FINN*. Its versatile usage in Malagasy past, future and present contexts means that it might have played a part in *PE*’s development too. In conjunction with a present tense verb, *efa* denotes an incomplete present meaning: “is doing, has begun to do and is still doing” (Parker, 1883:27; De La Beaujardière, 2020), suggesting that slaves who spoke Malagasy, or a Malagasy-influenced variety of Mauritian may have also used *après* with a similar function as *efa* in present contexts. *Efa* is also similar to *PE* in the fact that it provides an aspectual viewpoint to the situation across all tenses.

Progressive and imperfective marking was also considered in a selection of West and East African Niger-Congo and Bantu languages thought likely to have been present in early Mauritius. See Table 8.1 for a summary:

Language	Form	Progressive?	Contrasts	Reference
Malagasy	<i>efa</i>	Progressive (when occurs with present tense verb)	?	(De La Beaujardière, 2020; Parker, 1883:27)
Fongbe, <i>Niger-Congo</i>	<i>dò...wè</i> (locative periphrasis)	Progressive + habitual (not statives)	?	(Lefebvre & Brousseau, 2002:95)
Fula, <i>Niger-Congo</i>	<i>dôn</i> (auxiliary)	Progressive	Overt perfective	(Nurse et al., 2016)
Yoruba, <i>Niger-Congo</i>	<i>n-</i> (present tense prefixed participle)	Progressive	Unmarked perfective	(Nurse et al., 2016)
Narrow Bantu	'be' + locative	Progressive	?	(Nurse, 2008:138)

Table 8.1: Summary of potential substrate languages and their progressive strategies

There are certain similarities which can be seen when compared to early Creole usage of *après*. Malagasy's *efa* is compatible with *PE*'s function as a TMA marker, although it has quite a different form. The same can be said for Yoruba's *n* participle and Fula's auxiliary progressive form *dôn*. Fongbe's imperfective expression, which includes both habitual and progressive meaning seems to be further grammaticalized than in early Creole, when habitual meaning was not possible. However, the impossibility of combining with statives is common to both Fongbe and early Creole. Since Bantu languages commonly have locative expressions to express progressive meaning, it could be that Bantu speakers in Mauritius primarily understood *après* as a locative on a par with progressive expressions in their mother tongues and extended *après* to be used as a verb 'to chase' by analogy. For Malagasy, Fula and Yoruba speakers, early Creole *après* may have been equated with the functions of *efa*, *dôn* and *n* respectively and Bantu speakers may have noted or even encouraged the use of *après* in a locative sense and used it as a progressive accordingly. Rather than simply assuming the French expression was the driving force behind *PE*'s development, it certainly seems justified to give serious consideration to the possible influence of the many other languages present in 1700s Mauritius as well as internal language changes which have been observed cross-linguistically. These will be discussed at the end of this chapter.

8.2 Text analysis

8.2.1 Old Mauritian analysis

In comparison with other markers, *PE* occurs very infrequently in Old Mauritian and does not have an overt counterpart. For this reason, six of Baissac's [1888] folktales are examined for Old Mauritian rather than just focussing on a very small number of instances.

8.2.1.1 Frequencies of progressive markers in Old Mauritian

Instances of *PE* were counted in five Old Mauritian texts between [1850] and [1888] and are presented with the relative frequencies of other markers for comparison.

	[1850] - 'M.CARABA'		[1855a] - LOLLIOT		[1865] - PITOT		[1867] - DESCROIZELLES		[1888] - BAISSAC	
Text type	Narrative		Prose/poetry		Lyrics and poems		Creative text		Narrative	
Text size	1,813		7,280		1,954		8,907		34,786	
Total tokens of TMA markers	53	2.92%	239	3.28%	38	1.94%	243	2.73%	1075	3.09%
TI	25	47.17%	180	75.31%	18	47.37%	84	34.57%	310	28.84%
FINN	3	5.66%	12	5.02%	11	28.95%	86	35.39%	295	27.44%
FEK	0	0.00%	1	0.42%	0	0.00%	1	0.41%	5	0.47%
POU	0	0.00%	0	0.00%	2	5.26%	4	1.65%	104	9.67%
VA	21	39.62%	45	18.83%	6	15.79%	68	27.98%	298	27.72%
PE	4	7.55%	1	0.42%	1	2.63%	0	0.00%	63	5.86%

Table 8.2: Frequencies of all markers compared to *PE* in a selection of Old Mauritian texts

Since there is no progressive counterpart to *PE* for comparison, the percentages in Table 8.2 show the relative frequency of *PE* to all the other markers. As in previous chapters, no combinations with other markers are included in the frequency table. The table shows that *PE* was used infrequently in this period and did not increase much by the end of the 1800s.

8.2.1.2 Analysis of *PE* in Old Mauritian texts

The six stories which are analysed for Old Mauritian all come from Baissac's [1888] folktales: *Zistoire Ptit Zean Laquée Beif*, *Zistoire Namcoticouti*, *Zistoire Dizeif*, *Balié av Sagaïe*, *Tranquille*

av *Brigand*, *Zistoire Sabour* and *Zistoire Septe Cousins av Septe Cousines* (summaries in Appendix D). The number of markers analysed in these six stories amounts to approximately half of the instances of *PE* in the whole collection of folktales.

Unlike in the previous chapters and in the frequency table above, where marker combinations (e.g. *TI + POU* to express conditional) were not included, *PE* is discussed in different temporal domains in this chapter, since it is not restricted to the present. This is partly because it adds an aspectual dimension to the situation meaning in all tenses and partly due to low token frequencies of non-past progressive forms in Old Mauritian.

In present expression, zero marking is also an option to contrast with *PE*. Although I do not track the development of zero-marking over time, it is useful to compare contexts in which *PE* is used as opposed to zero and explore domains in which the division of labour has changed.

It is unsurprising that *PE* should occur in past contexts in narrative texts like Baissac [1888] to provide background information. Sometimes *PE* is combined overtly with *TI*, other times *TI* occurs alone in the main clause and sometimes past reference is deduced from context, as there is no overt tense marker. See examples AP21, AP6 and AP10 below:

AP21 **té** **après** **lire**
 1888 TI PE read
 'was reading'

AP6 **Coment** **zaute** **dé** **Ø après** **causé** **là,**
 1888 As 3pl two Ø PE talk there
 ptit **lérat** **té** **enbas** **çaise**
 small rat TI under chair
 'as the two of them were talking there, the little rat was underneath the chair'

AP10 **Bomatin** **là** **coment** **zaute** **Ø après** **manzé,** **facteir** **Ø amène** **lette**
 1888 Morning DEF as 3pl Ø PE eat, postman Ø bring letter
 'That morning, as they were eating, the postman brought a letter'

As can be seen from these examples, *PE*'s function is to provide background information about the scene where the main narrative is happening. This was the case for all past examples in the sample.

I wanted to check that the inclusion of past *PE* examples wasn't skewing the results, so I re-calculated the percentages omitting the past ones (with or without an overt past marker) in order to see whether the tense made any difference:

<i>OLD PE</i> (no past)	n=18	%
past	0	0%
right now	7	38.9%
ongoing	18	100%
with locative	8	44.4%
with adj.	0	0%
with stative	0	0%
with percept.	7	38.9%
habitual	0	0%
generic	0	0%
imminence	0	0%
inchoative	0	0%
background	10	55.6%
iterative	3	16.7%
non-agentive	1	5.6%
imperative	0	0%
non-finite	3	16.7%

Table 8.4: Percentage of *PE* examples which occur with each feature, excluding past examples

The main differences are the smaller proportion of backgrounded constructions, which is typical of progressives in the past, and the higher number of 'right now' examples, as would be expected for present expression. The other tendencies seem to broadly remain regardless of whether we focus on just the present examples, or include the past ones too. I decided to continue to consider *PE* expression across tense with an awareness that fewer past examples will likely mean 'background' plays less of a role and 'right-now' is more frequent.

'Background' refers to the discourse function for separating the contextual extra information from the in-sequence main events of the narrative, as was investigated for past expression in the previous chapter. 74.2% of all the *PE* examples presented background information. In fact, almost all of those examples which weren't direct speech had a backgrounding function.

Although situation type is not considered a feature as such, it was taken into consideration across time periods. For these Old Mauritian examples, just over 80% of the verbs were activities according to Vendler's (1957) classification and just under 20% were accomplishments. There were no achievements or statives. Mayberry's (2011:474) observations for Spanish, that background

accomplishments tended to be progressive, applied to the Old Mauritian accomplishments, where five out of six of the these verbs with *PE* provided a backgrounding function to the narrative.

Almost 30% of all the examples (and nearly 40% of the background examples) appeared in a construction involving a verb of perception, such as ‘see’ or ‘hear’ with an object, which was the subject of the next clause containing *PE*. There were two types:

AP4	li	trouve	forzeron	qui	après	allime
1888	3sg	see	blacksmith	REL	PE	light
	so	difé	av	lapaille	mouillé	
	3sp.POSS	fire	with	wet	straw	
	<i>‘he sees a blacksmith who is lighting his fire with wet straw’</i>					
AP31	li	tende	doumounde	après	ploré	làdans
1888	3sg	hear	people	PE	cry	inside
	<i>‘he heard people crying inside’</i>					

In these constructions, the subject of the second clause is in the middle of a process. However, the two examples differ as AP4 has an overt relative pronoun *qui* ‘who’, whilst *après ploré* ‘crying’ in AP31 appears to be non-finite. AP4 is a typical non-restrictive relative clause, but AP31 is more difficult to analyse due to the peculiarities of Creole TMA marking. From the translation, we might presume that we are dealing with a small clause (Aarts, 1992; Citko, 2011). However, the definition of lacking overt expression of tense is problematic in Creoles, since this would mean AP4 would also fall under this definition of a small clause. An alternative analysis could be that AP31 is simply a reduced relative clause without an overt relativiser, which means the two examples above are more similar than they appear on the surface.

It was hypothesized that *PE* will occur more often with overt locative elements in Old Mauritian than in Modern Mauritian as it becomes further removed from the source meaning. 35.5% of the Old Mauritian examples appeared with a locative element. Occurrence with adjectives and stative predicates is also tracked over time as an indicator of increased grammaticalization; none of the Old Mauritian examples occurred with adjectives or stative predicates.

The features ‘imminence’ and ‘inchoative’ investigate whether *PE* can be used in forward-looking, future contexts as we saw in the previous chapters on future and past expression, albeit later in their development. The examples here do not display these features. ‘Habitual’ and ‘generic’ uses of *PE* would also constitute later developments and are attested in later stages of progressive development cross-linguistically. As expected, these uses do not appear in Old Mauritian, but will be monitored across the 20th century and Modern Mauritian examples.

The final features of interest for the development of progressives are ‘non-agentives’, which are expected to become more frequent over time, as *PE* expands its usage to include verbs whose subjects cannot be considered the agent of a volitional act. Since typical early progressives develop from locatives, which physically place people in the middle of a situation, it is unsurprising that non-agentives are not common at the beginning of its development. Non-agentives constitute 12.9% of the Old Mauritian examples which were analysed here.

Deo (2015:21) distinguishes between two main types of imperfective expression, which can be separated into structural vs phenomenal types. Typically, structural questions enquire about characteristics of the world in general such as “What problems do developing nations face?”, whilst phenomenal questions are interested in characteristics of the world at a particular time, such as “What problems are developing nations facing in 2020?”. Notice how in English, the simple present is used in the first case, but progressive aspect in the second. Some languages rely on context to make this distinction, whilst others have an overt progressive marker to take on this function. This distinction can describe the division of labour between \emptyset and *PE* in Old Mauritian, as *PE* covers characteristics of the world at a given time (phenomenal), whilst no overt marker is used for general enquiries about the world (structural).

8.2.1.3 Canonical approach to Old Mauritian *PE*

Old Mauritian *PE* can be described as a typical progressive which has not yet grammaticalized to include more uses. Since many of the features were analysed to track changes over time which have

not yet materialized, the features do not have any exceptions. It is a well-behaved progressive marker which appears in both backgrounded durative contexts as well as focalized contexts where an agent is in the middle of an action right then.

In terms of canonicity, the top five features which are most canonical of the Old Mauritian *PE* examples are:

- ongoing > not ongoing (exceptions = 0)
- no stative predicate > stative predicate (exceptions = 0)
- not with adjective > with adjective (exceptions = 0)
- not generic > generic (exceptions = 0)
- not imminent > imminent (exceptions = 0)

8.2.2 20th Century Mauritian analysis

The 20th century analysis focusses on texts from De Segrais {1939} and {1952}, Baker's Fox and the Goat story {1970} and Virahsawmy's {1972} play.

8.2.2.1 Frequencies of progressive markers in 20th Century Mauritian

Below is an overview of the frequencies of *PE* marking along with the other markers in a selection of texts throughout the 20th century.

	[1925] - SOULSOBONTEMPS		{1939} - DE SEGRAIS		{1952} - DE SEGRAIS		{1967-71} - BAKER		{1972} - VIRAHSAWMY	
Text type	Narrative		Narrative		Narrative		Narrative		Play	
Text size	4,534		4,629		4,307		5,022		8,404	
Total tokens of TMA markers	190	4.19%	191	4.13%	161	3.74%	329	6.55%	347	4.13%
TI	113	59.47%	82	42.93%	70	43.48%	58	17.63%	50	14.41%
FINN	50	26.32%	55	28.80%	47	29.19%	169	51.37%	154	44.38%
FEK	0	0.00%	1	0.52%	1	0.62%	1	0.30%	1	0.29%
POU	15	7.89%	21	10.99%	21	13.04%	43	13.07%	65	18.73%
VA	12	6.32%	28	14.66%	13	8.07%	5	1.52%	5	1.44%
PE	0	0.00%	4	2.09%	9	5.59%	53	16.11%	72	20.75%

Table 8.5: Frequencies of all markers compared to *PE* in five Old Mauritian texts

In comparison with the Old Mauritian examples, we can see that *PE* occurs increasingly frequently throughout the century. There was no progressive marking at all in Soulsobontemps [1925]⁶⁶ but by {1972}, it represented 20% of all TMA markers.

8.2.2.2 Analysis of *PE* in 20th Century texts

I first examine some examples from Xavier Le Juge de Segrais' collection of folktales. As with the Old Mauritian examples in Baissac [1888], all the examples from De Segrais can be considered 'ongoing', as would be expected for a progressive marker. Although the style is the same as in

⁶⁶ It is not clear why there were no instances of *PE* in Soulsobontemps [1925], since the text type is the same as the Old Mauritian examples. However, this should not be considered suspicious, because the text is short and even in Baissac [1888], many of the stories of a similar length did not contain any *PE*-marking.

Baissac [1888], there are fewer uses of *PE* in the past. Consequently, there are fewer examples of backgrounding and more examples which form part of a dialogue. For example:

BP1	alors	vous	apé	faire	ène	pitit	marcé	dans	fraicheir
1939	so	2pl	PE	do	INDEF	small	walk	in	freshness
<i>'so you're having a little walk in the fresh air'</i>									

Notice that the form of *PE* has changed from *après* to *apé*, most likely mirroring a change in pronunciation from Baissac's time. BP3 is an example of a past usage of *PE* with a background function:

BP3	Laute	là	qui	ti	divant	so	laporte	apé	aspère	marchand	dilait
1939	3pl	DEF	REL	TI	in front	3sg.POSS	door	PE	wait	seller	Milk
<i>'The others who were in front of his door waiting for the milkman'</i>											

There was little of note that came out of the analysis of De Segrais {1939} and {1952}. The features for these texts showed few differences from the Old Mauritian examples apart from a smaller number of past examples and backgrounding.

There are again fewer past, backgrounded examples in Baker {1970}, reflecting the fact that the story is mainly told through dialogue. The main development that can be observed in Baker {1970}, is the possible use of *PE* with an adjective in an inchoative context.

Recall the discussion from the previous chapter about the development of *FINN*. In that case, *FINN* was assumed to have lost its inchoative meaning towards the end of the Old Mauritian period, due to the observation that it appeared with *vinn* 'come/become' to express this meaning. In Baker {1970}, we see the first attestation of *PE* expressing inchoative:

CP8	mo	pe	fatige	marse
1970	1sg	PE	tired	walk
<i>'I'm getting tired of walking'</i>				

It is ambiguous whether *fatige* 'tire/tired' is a verb or adjective in CP8. Adjectives are prime contexts for states to be interpreted inchoatively, yet no previous examples of *PE* with an adjective have been

attested, so it is best to be cautious. Although 20th century texts are not abundant, a 1952 text shows *PE* in conjunction with *commence* ‘start’ to express an inchoative meaning:

BP12	ène	pítit	coup	de	la patte	lahaut
1952	INDEF	little	kick	of	paw	on
	so	laqué	qui	après	commence	raidie
	3sg.POSS	tail	REL	PE	start	stiffen

‘A little kick with the paw on his tail which was getting stiff/starting to stiffen’

The assumption that an inchoative meaning with *PE* on its own was only possible from after 1952 is too strong a conclusion to draw from this one example⁶⁷. What this example does show is that inchoative was not a common interpretation of *PE* at this point in time. This is supported by the lack of clear inchoative examples and the existence of *commence* ‘start’ in example BP12. In line with a canonical approach, I do not assume that the presence of the feature ‘inchoative’ in Baker {1970} entails an inchoative interpretation for *PE* in this time period. Rather, I believe such changes occur slowly as they spread from speaker to speaker gradually. Naturally, this results in fluctuations in the features which occur in the sample of texts and a lot of variation.

The first example of *PE* used in an inchoative sense in 1970 shows that the form is starting to take on a prospective meaning, which looks forwards as well as just focussing on those events which are happening right at the reference time. It is anticipated that inchoative meanings with *PE* will become more frequent over time. CP8 also appears to be the first instance in the corpus of *PE* occurring with an adjective, although we will return to this issue when discussing adjectives in more depth in the section on Modern Mauritian.

Finally, I examine the instances of *PE* in Virahsawmy’s play *Li*, published in 1972. This text shows an expansion of the contexts *PE* appears in. Not only are there more examples of inchoative usage, but we also see *PE* being used with stative verbs and in habitual contexts. DP19 is an example of a possible bridging context for inchoative meaning to occur with a verb. The example comes right at

⁶⁷ The assumption about the existence of *vinn* ‘become’ entailing a lack of inchoative meaning with *FINN* will be revised and examined in more detail in the elicitation tasks in Part II.

the end of the play when the characters realize that they could get into trouble as the prisoner was killed on their watch. The chief officer says:

DP19	RAWANA:	Nou	tou	pe	perdi	latet
1972	RAWANA:	1pl	all	PE	lose	head
<i>'We're all going crazy/starting to lose our heads'</i>						

Rather than simply describing the situation as it is in the moment, this example can be construed as forward-looking, depicting a change of state leading to confusion/not being able to think straight following the shock of realizing the prisoner is dead. From here, I would expect inchoative usage to continue into the modern variety and even expand into 'imminence' which takes this prospective aspect a step further.

There are also three habitual examples in this text. One of these is:

DP10	Sa	mons	la,	li	pe	
1972	DEM	monster	DEF	3sg	PE	
	nouri	to	neve	depi	troi	moi
	feed	2sg.POSS	nephew	since	three	month
<i>'That monster, he's been feeding your nephew for three months'</i>						
<i>(lit: he is feeding your nephew)</i>						

There are no grammaticalization paths that lead to a present habitual, although there are cross-linguistically attested developments which lead to past, or general habitual expression. It is rare for a form to only express habitual meaning (Bybee et al., 1994:151–53). Mauritian Creole conforms to these previous observations, both through the typically habitual zero marker, and the expansion of *PE* to include habitual meaning by being compatible with both past and present contexts.

The first attestation of *PE* used with a stative element also occurs in this text:

DP12	Ou	kapav	koz	inpe	for,
1972	2pl	able	speak	a little	loud,
	pa	pe	bien	tann	ou...
	NEG	PE	well	hear	2pl
<i>'You could speak a bit louder, I can't hear you well'</i>					
<i>(lit: I am not hearing you well)</i>					

PE's occurrence with a stative verb of perception is another clear development from a purely progressive meaning. Once a progressive marker can appear with stative predicates, it moves beyond the strictly progressive domain and is labelled by some linguists as continuous⁶⁸ (Bybee et al., 1994:126; Mair, 2012:807). However, although this expansion to include statives seems intuitive, Bybee et al. (1994:127) were not able to find a “crosslinguistic gram-type ‘continuous’” in their typologically-diverse study and developments in the opposite direction (i.e. continuous to progressive) have also been attested (Mair, 2012:807). Mair (2012:807) notes that progressives are more likely to be grammaticalized than continuous aspect. Nevertheless, the label ‘continuous’, defined as incorporating stative predicates into the traditional notion of progressive, is useful for describing this stage of development for *PE*.

Mair (2012:812) points out: “sometimes, use of progressives for stative verbs indicates a diachronically transitional stage (in which the progressive is moving toward a generalized continuous aspect or even an imperfective in Comrie’s scheme).” Throughout the analysis of the modern texts and elicited written and spoken data, I will examine whether *PE* might be developing into a more generalized, imperfective marker. As discussed in chapter 2, imperfective is the counterpart to perfective. They are both viewpoint aspect notions to do with the “internal temporal constituency of a situation” (Comrie, 1976:3). Comrie’s scheme suggests that imperfective consists of habitual and continuous:

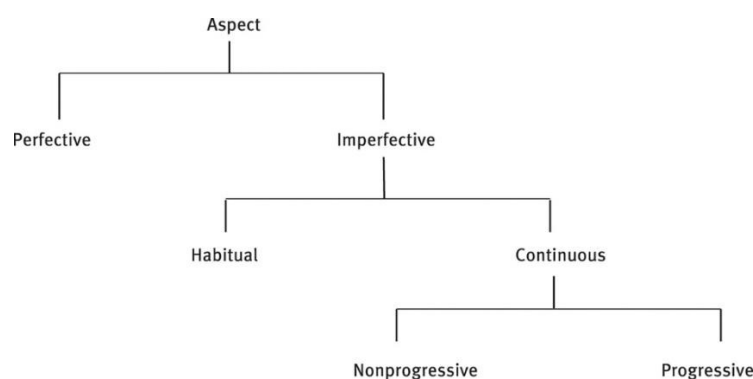


Figure 8.1: Reduplication of Comrie's aspect scheme

⁶⁸ This is not to be confused with continuative, whereby the agent deliberately keeps the action going (Bybee et al., 1994:127).

Although there are many problems with this diagram (see Mair, 2012:808), Comrie’s scheme captures some of the broad, cross-linguistically valid assumptions about aspect and is useful for exemplifying the fact that imperfective encompasses all of the terms below it and that Mauritian Creole’s *PE* started by expressing just progressive meaning, but expanded to a continuous meaning (including statives) and has also been shown to occur in habitual contexts. Despite what might be assumed from the diagram, the expansion of *PE* into some habitual contexts does not automatically mean that it is now an imperfective marker. Whether, or to what extent, *PE* can be considered an imperfective marker will be discussed in section 8.3 below and in chapter 11.

The other feature which appears for the first time in this text is a generic meaning. The very first example in this chapter (32) appeared to have a generic meaning, which applies to generic subjects and holds for all time (Bybee et al., 1994:126), but this was unexpected in 1822 since it did not fit the cross-linguistically attested paths of development. Its occurrence now, however, is in line with expected developments:

DP11	Enn	sinp	latet	brile	pe	kapav	amenn	dezakor
1972	INDEF	single	head	burn	PE	able	bring	discord
	<i>‘A single hot-head is able to bring about chaos’</i>							

Here, there is no specific timeframe nor subject to which the example pertains; it is expected that any hot-headed person can bring about chaos, and this assumption is assumed to hold for all time. It could also be that the progressive used in a generic sense conveys some pragmatic meaning of annoyance, such as the English “my brother is always barging into my room”. Again, we see *PE* being used in an increasingly wider context, which, although still relevant at the moment of speech and ‘ongoing’, extends much beyond any uses seen until now.

Below are the summary features for all of the 20th Century Mauritian examples.

20 th Century PE	n=47	%
past	10	21.3%
right now	24	51.1%
ongoing	47	100%
with locative	8	17%
with adj.	1	2.1%
with stative	2	4.3%
with percept.	7	14.9%
generic	1	2.1%
habitual	3	6.4%
imminence	0	0%
background	3	6.4%
inchoative	14	29.8%
iterative	4	8.5%
non-agentive	14	29.8%
imperative	0	0%
non-finite	7	14.9%

Table 8.6: Percentage of PE examples which occur with each feature for all 20th century texts

As a final point on the overall situation for the 20th Century Mauritian examples, we see a diversification of the situation types which appear with *PE*.

Situation type	Number	Percentage
activity	31	65.96%
accomplishment	12	25.53%
stative	2	4.26%
achievement	2	4.26%

Table 8.7: Number of examples belonging to each situation type and their percentages

As mentioned above, *PE* occurs with statives for the first time in 20th century Mauritian. Recall also Dowty's (1977) claim about the incompatibility of achievements with progressives, mentioned in the previous section. Since achievements are punctual, there is a mismatch with the imperfectivity of the progressive. Nevertheless, Kranich (2010:38) points out that a sentence like 'Sally is winning' does not seem ungrammatical and indeed, we see two examples of achievement verbs with *PE* in the 20th Century Mauritian corpus: *gagne* 'to get' and *arive* 'to happen':

DP7	Tou	lanmerdman	ki	nou	pe	gagne,
1972	All	hassle	REL	1pl	PE	get,
	se	akoz	li			
	COP	because of	3sg.OBJ			
	<i>'All the hassle we're getting, it's because of him'</i>					

DP15	Mo	degoute	ar	seki	pe	arive
1972	1sg	disgust	with	what	PE	happen
<i>'I'm disgusted by what is happening'</i>						

Both of these verbs are non-durative, yet strangely, they seem compatible with an ongoing, durative interpretation with *PE*. Smith (2007) refers to these as ‘derived accomplishments’ and Kranich (2010:38) argues that the progressive essentially excludes the final (non-durative) endpoint of the achievement verbs, so they are the same as accomplishments. It seems that *PE* is able to change the inherent aspect of achievement verbs by focussing on the middle of the process rather than on the non-durative endpoint. This emphasizes the fact that we cannot discuss *PE* in isolation and solely focus on the typical lexical meaning of the verb it appears with. Instead, it is necessary to examine *PE* in the wider context of the whole sentence to understand how it affects the meaning.

8.2.2.3 Canonical approach to 20th Century Mauritian *PE*

PE-marking in the beginning of the 20th century does not contain any different features from Old Mauritian and it is not until the 70s that the first instance of *PE* being used inchoatively is attested. In the 1972 text, the features show an expansion to include stative, habitual and generic contexts.

We might consider the Old Mauritian features to represent a canonical progressive, from which 20th Century *PE* is starting to move away. These are the top five features which account for *PE*-usage in the 20th century texts:

- ongoing > not ongoing (exceptions = 0)
- not imminent > imminent (exceptions = 0)
- not with an adjective > with an adjective (exceptions = 1)
- no stative predicate > stative predicate (exceptions = 2)
- not habitual > habitual (exceptions = 3)

Whilst *PE* still hasn't deviated too far from a canonical progressive, some of the features which played no role in Old Mauritian are starting to be exceptions, although *PE* is not yet used in ‘imminent’, forward-looking contexts.

8.2.3 Modern Mauritian

8.2.3.1 Frequencies of PE in Modern Mauritian

Table 8.8 shows the frequencies of *PE* in five modern texts.

	{2003} - TIZAN		{2003-2007} - VIRAHSAWMY		{2011} - LORTOGRAF		{2012} - EZOP		{2016-2017} - LALIT	
Text type	Narrative		Narrative		Reference article		Narrative		News articles	
Text size	7,174		10,047		15,911		21,298		10,399	
Total tokens of TMA markers	274	3.82%	627	6.24%	393	2.47%	1876	8.81%	361	3.47%
Ti/té	98	35.77%	436	69.54%	53	13.49%	1698	90.51%	73	20.22%
Fine/finn	76	27.74%	84	13.40%	228	58.02%	53	2.83%	151	41.83%
Feque/fek	1	0.36%	1	0.16%	0	0.00%	0	0.00%	1	0.28%
Pour/pou	31	11.31%	38	6.06%	60	15.27%	60	3.20%	50	13.85%
Va/a/ava	12	4.38%	3	0.48%	0	0.00%	3	0.16%	0	0.00%
Ape/pe	56	20.44%	65	10.37%	52	13.23%	62	3.30%	86	23.82%

Table 8.8: Frequencies of all markers compared to *PE* in six Modern Mauritian texts

By modern Mauritian, the overall frequencies have not increased considerably since 20th Century Mauritian, but *PE* is used consistently in all the modern texts apart from Ezop {2012} which has an abnormally high amount of *TI* and low frequencies for all the other markers. Interestingly, *PE* occurs more frequently than *POU*, which might hint that *PE* is starting to encroach increasingly upon the future domain.

8.2.3.2 Analysis of PE in Modern Mauritian texts

Whilst all of the examples in *Tizan* constitute ‘ongoing’ actions, only half of them are happening right at the moment of speech. This is because there are a few past examples, which provide background information and some of the other non-‘right now’ examples constitute inchoatives, so are forward-looking, rather than focussing on the moment in hand. This doesn’t mean that *PE* is not used in the traditional progressive manner, but that it now has many more functions.

The following is ambiguous in the meaning. It could simply be a progressive referring to the state of affairs in the moment of speech, inchoative in starting to bear fruit or even have an imminent meaning. The example is unusual as it addresses the audience directly.

EP2	Ki	zot	krwar	pye	la	pe	raporte?
2003	What	2/3pl	think	tree	DEF	PE	bear?
	Wi,	gato kanet	mem				
	Yes,	marble	even				
		sweet					

‘What fruits do you think the tree is starting to bear? Yes that’s right! Marble sweets’

As expected, there is a continued use of *PE* in inchoative contexts. As the old woman sees that Tizan will not come down from his tree easily in EP8, she realizes that she’ll have to change tactics – this is the moment in the example where she starts to lose her patience and instead turns to threatening the boy rather than coaxing him down with niceties.

EP8	Bolfam	pe	perdi	so	pasyans
2003	Woman	PE	lose	3sg.POSS	patience

‘The woman starts to lose her patience’

The use of *PE* to express inchoativity is supported by APiCS for Modern Mauritian. However, they note that it is somewhat controversial as some speakers insist that *vinn* ‘become’ is required (Michaelis et al., 2013). This will be explored more in Part II. The other striking development from the 20th century data is the increased occurrence of non-agentive subjects which total 70%, and very few locative elements (only 10%). This shows how far *PE* has moved away from the original meaning where an agent was physically located in the middle of an action, and supports the hypothesis that overt locative elements occur increasingly infrequently with *PE* over time.

As could be seen from the frequencies, the translation of Ezop’s fables has much more overt TMA marking than other texts, although *PE* has a lower proportion overall than in other modern texts.

We see some of the tendencies noted in the 20th century continue, such as examples of *PE* used with statives, adjectives and in generic and habitual contexts. One habitual example is:

FP15	mo	finn	dekouver	solision	pou	tou
2012	1sg	FINN	discover	solution	for	all
	problem	ki	pe	afekte	nou	
	problem	REL	PE	affect	1pl	

‘I’ve found a solution for all the problems which are/have been affecting us’

PE's usage with adjectives poses some interesting questions about the status of verbs and adjectives in Creoles. Whilst the examples below appear quite un-controversial from their translations, we shall see that it is not so straight-forward:

FP10	Pou	enn	lisien	ki	pe	mordefen,	enn
2012	For	INDEF	dog	REL	PE	starving	INDEF
	lapo	zanimo	li	enn	repa	extra	
	skin	animal	3sg	INDEF	meal	extra	
	<i>'For a dog who is starving, animal skin is a great meal'</i>						

Although a first attestation of *PE* being used with an adjective was discussed in section 8.2.2.2., this was in an inchoative sense, and until now, no adjectives were possible with a progressive interpretation of *PE*. This example could be considered a bridging context, since it does not have an inchoative meaning so provides scope to extend the amount and type of adjectives which can combine with *PE*.

Incompatibility with *PE* has been put forward as a criterion for distinguishing adjectives from verbs in Mauritian Creole (Véronique, 2000). Whilst *mordefen* 'starving' in this example translates as an adjective, I shall consider whether it could be categorized as a verb as it literally means 'dying of hunger' and is compatible with *PE*.

The issue of whether Creoles have a separate category of adjective, or whether these can simply be grouped under verbs (or nouns in some cases) has been discussed by many (Alleesaib, 2014; Holm & Patrick, 2007; Véronique, 2000). Adjectives in French Creoles differ from French in that there is little morphological variation and no agreement (Véronique, 2000:62), which makes them less distinctive from verbs. The first example of *PE* with an adjective in Baker {1970} (*fatige* 'tired') is also ambiguous as to whether it is an adjective or a verb. FP13 is an example of *fatige* from Ezop {2012}. This is clearly a verb, due to the short form *fatig*, which is used for verbs followed by a complement, rather than the long form of the verb *fatige*, which has an identical form as the adjective:

FP13	Dir	mwa	ki	lapeti	ki	pe
2012	Tell	1sg.OBJ	which	small one	REL	PE
	fatig	ou	latet?			
	tire	2pl	head			

'Tell me which of the little ones it is who is causing you grief'

Many verbs have this long/short alternation, which differentiates them from adjectives in Mauritian Creole. However, the verb *mor* 'die', from which *mordefen* 'starving' is derived, does not have a long form, so cannot help distinguish its category in this case. Although an adjectival interpretation of FP10 seems plausible to me, my contact interpreted this as a verb (Othello, 2020, p.c.), so it is best to be cautious.

The last text to be investigated for Modern Mauritian is Lalit {2016}, which comprises a number of news articles, often to do with politics. Interestingly, none of the examples occurred in past situations, yet only 33% of these examples can be described as happening 'right now'. This is due to its use in more forward-looking contexts, as was beginning to be the case in the previous texts.

There is a possible inchoative example in this text too:

GP3	Li	pe	literalman	grene,
2016	3sg	PE	literally	go to the dogs
	gro-gro	but	beton	tombe
	big-big	piece	concrete	fall

'It is literally (starting to) fall(ing) apart, massive pieces of concrete fall down'

Lalit {2016} also provides the first attestations of forward-looking, imminent meanings, although this likely appeared in speech much earlier. Example GP11 below can be interpreted in this way:

GP11	Nu	finn	pran	not	ki	Guvernman	pe
2016	1pl	FINN	take	note	REL	government	PE
	lans	enn	Plan	Martial	pu	sulaz	povrete
	launch	INDEF	Plan	Martial	for	relieve	poverty

'We have taken note that the government is launching/about to launch/going to launch a Martial Plan to relieve poverty.'

There are still a number of examples of statives used with *PE*, for example the verb *asize* 'to sit' and *res* 'to stay', and its use with habituais continues:

GP4 Guvernman pe depans par milyon pu sibvansyonn
 2016 Government PE spend by million for subsidy
'The government is spending money on subsidies by the millions'

The following table provides a summary for all the Modern Mauritian examples with *PE*:

Modern <i>PE</i>	n=37	%
past	3	8.1%
right now	14	37.8%
ongoing	37	100%
with locative	6	16.2%
with adj.	1	2.7%
with stative	5	13.5%
with percept.	3	8.1%
generic	5	13.5%
habitual	5	13.5%
imminence	2	5.4%
inchoative	4	10.8%
background	8	21.6%
iterative	5	13.5%
non-agentive	17	45.9%
imperative	0	0%
non-finite	5	13.5%

Table 8.9: Percentage of *PE* examples which occur with each feature in all Modern Mauritian texts

Overall, *PE* is still characterized by its ‘ongoing’ or durative nature, which can be seen in all of the Modern Mauritian examples. There are fewer ‘right now’ uses, due to its increased use in inchoative and imminence contexts which are forward-looking. Almost 15% of the modern examples of *PE* occurred with statives and 45% of them did not have an agent as the subject. We also see more habitual and generic uses than in the 20th century. As well as extending its usage within the present/imperfective domain, *PE*’s increased use in imminent, future contexts is significant because this is not simply a matter of providing an aspectual viewpoint to an already future context, which is what *PE* does in the past, but is being used as a future marker in its own right, which will have an impact on *POU*. This will be investigated more thoroughly in Part II.

Returning to the situation types that *PE* occurs with, the amount of activities reduced slightly, and the remainder were spread quite equally across accomplishments, statives and achievements.

Situation type	Number	Percentage
activity	23	62.16%
accomplishment	5	13.51%
stative	5	13.51%
achievement	4	10.81%

Table 8.10: Number of examples which belong to each situation type and their percentages

The trend found in Mayberry (2011) that backgrounded accomplishments tended to be progressive does not hold for the modern data as all the accomplishments with *PE* occurred in foregrounding contexts. This could be partly due to the text types, which included news articles rather than solely focussing on narratives.

8.2.3.3 Canonical approach to Modern Mauritian *PE*

The features for Modern Mauritian show more exceptions from a canonical progressive, with ‘ongoing’ the only feature with no exceptions and occurrence with a stative predicate much more common than in 20th Century Mauritian. The top five features are:

- ongoing > not ongoing (exceptions = 0)
- not with adjective > with adjective (exceptions = 1)
- not imminent > imminent (exceptions = 2)
- not habitual > habitual (exceptions = 5)
- no stative predicate > stative predicate (exceptions = 7)

The canonical approach emphasizes a difference in the behaviour of *PE* in comparison with the chapters focussing on past and future expression, whereby the markers were in competition. If a marker becomes more restricted in its usage, it can be more accurately described by the features. It is evident that *PE* is expanding its usage, as has been observed for progressive markers in many other languages cross-linguistically (Bybee et al., 1994:142).

8.3 Diachronic developments

The developments that have been observed across the time periods can be summarized in the following table:

<i>PE</i>	OLD n=31	20 th C n=47	MODERN n=37
past	58%	21.3%	8.1%
right now	19.4%	51.1%	37.8%
ongoing	100%	100%	100%
with locative	35.5%	17%	16.2%
with adj.	0%	2.1%	2.7%
with stative	0%	4.3%	13.5%
with percept.	29%	14.9%	8.1%
generic	0%	2.1%	13.5%
habitual	0%	6.4%	13.5%
imminence	0%	0%	5.4%
inchoative	0%	6.4%	10.8%
background	74.2%	29.8%	21.6%
iterative	9.7%	8.5%	13.5%
non-agentive	12.9%	29.8%	45.9%
imperative	0%	0%	0%
non-finite	12.9%	14.9%	13.5%

Table 8.11: Summary of changes of features associated with *PE* across all time periods (key- yellow = under 30%, orange = between 30-70%, red = over 70%)

We have seen that *PE* has increasingly moved away from its locative origins which portrays an agent in the middle of an action to being possible in stative, habitual and even imminent contexts. With regard to English, Mair (2012) claims that the spread of the progressive is due to its increased frequency and that it is highly dependent on text-type or genre. We certainly see an increase in the frequency of *PE* over time and will consider how spoken or different genres affect this in chapter 11. A drift from a strict progressive meaning to a general imperfective marker has been observed by many researchers in typologically distinct languages (e.g. Bertinetto et al., 2000; Bertinetto & Squartini, 2016; Deo, 2015; Mair, 2012; Sidnell, 2002), and this certainly seems to be the direction *PE* is heading in.

Many of the occurrence features such as ‘with stative’ do not tell us about the basic meaning of *PE*, but describe how its usage has expanded. Similarly, ‘iterative’ may have less to do with *PE*’s inherent meaning and more to do with its interpretation when a punctual action and progressive aspect are combined.

Bybee et al. (1994:136) propose that the progressive is made up of the following components, which are gradually lost over time:

- a) An agent
- b) Is located spatially
- c) In the midst of
- d) An activity
- e) At reference time

Even from early examples, Mauritian Creole did not require the subject to be an agent. ‘Non-agentive’ became increasingly common overtime, as can be seen in the ‘non-agentive’ row of Table 8.11. Old Mauritian had around 13% of non-agentive examples, this increased to almost 30% in 20th Century Mauritian and in the Modern texts, 45% of the examples had a non-agentive subject. Although the early examples never had a purely locative meaning, the occurrence of a locative element with *PE* decreased from around 35% to 16% over time.

‘In the midst of’ can be construed narrowly or more broadly. Spanish has a narrow interpretation of what it means to be ‘in the midst of’ something, as the progressive cannot be used with activities of longer duration without an overt temporal adverb (Bybee et al., 1994:137). The Mauritian Creole examples, however, allow a much wider interpretation to include habitual expressions which include the reference time but are not necessarily happening in that moment.

Mauritian Creole has also gone a step further by allowing accomplishments, achievements and stative to appear with *PE* as well as activities. This is the fourth of Bybee et al.’s (1994) five elements of progressive which have been slowly disappearing throughout Mauritian Creole’s development. Activities are no longer required with *PE*.

Deo (2015) proposed the following schema, which posits four stages of development. It shows the interaction over time between two elements: X, which starts off as an imperfective marker, and Y which emerges and expresses progressive aspect, then generalizes to take over from X by stage 4.

Stage		
1	X _{impf}	Zero-PROG
2	(Y _{prog}), X _{impf}	Emergent-PROG
3	Y _{prog} , X _{impf}	Categorical-PROG
4	Y _{impf}	Generalized-PROG

Table 8.12: Deo's stages of progressive development (2015:20)

The first stage only has a simple present/imperfective marker. In the case of Mauritian, before the first attestation of *PE* in 1822, we can assume that Creole was in stage 1, with no overt progressive marker; \emptyset being the only means of expressing imperfectivity in the present. Stage 2 represents the time when *PE* first emerged. In stage 3, the progressive has a clearly delimited domain and in stage 4, *PE* becomes generalized to express imperfectivity.

There are several issues with assuming a development such as that proposed by Deo (2015) for Mauritian Creole. Firstly, as mentioned above, a lack of an overt imperfective marker is problematic, especially as zero marking is typically used in perfective contexts in the past (Winford, 2017:198). Secondly, a lack of marker for *PE* to contrast with also makes it difficult to assess the exact division of labour until stage 4 where *PE* would be obligatory in, and zero-marking absent from all present contexts. Finally, the diagram gives the impression that progressives develop directly from a categorical-PROG to a generalized-PROG. However, for both Mauritian Creole and English, these languages appear to be somewhere in between these two categories, having expanded to include certain general imperfective characteristics (such as occurrence with habituais) but not yet being the main marker of imperfectivity.

Imperfective drift has also been documented from Latin into Romance and is characterized by the following stages:

Table 58.2 Imperfective drift of progressive periphrases from Latin to Romance

(i)	Pure locativity	Stative, durative
(ii)	Progressivity I	Residually locative, durative, aspectually neutral
(iii)	Progressivity II	Durative, aspectually neutral
(iv)	Progressivity III	Focalized, strictly imperfective
(v)	Pure imperfectivity	Loss of the specifically progressive character

Table 8.13: Bertinetto and Squartini's diagram showing imperfective drift (2016)

Early Romance varieties were characterized by stativity, but this was not the case in Mauritian Creole, where the first stage was absent. This could be an instance of *apparent* or *instantaneous* grammaticalization (Bruyn, 2009); either it was already grammaticalized when it came into the Creole, or it happened in such a short time that the few texts which exist from the time did not capture this development.

Stage (ii) could correspond to the early attestations of *PE* (pre 1850) and by Baissac [1888] both stages (iii) and (iv) co-occur. Just as in Deo's model, there is not much detail about what happens between the progressivity III (iv) and pure imperfectivity (v), which from the Mauritian data is much less of a 'jump' but the gradual use of *PE* in increasingly more non-canonical progressive contexts.

We can see source determination at play with *PE*, since *après* is more than just a locative expression. It has the characteristic of being both forwards and backwards-looking, as well as having a temporal element to its meaning. These factors enabled it to develop not only progressive marking, but also future marking, and as a verb meaning 'to chase'. Nevertheless, it is clear that modern *PE* is moving away from its locative origins, as is common cross-linguistically.

This chapter has presented *PE* examples from Old to Modern Mauritian to examine how Mauritian's progressive expression has developed over time. We have seen that the Mauritian data generally follows cross-linguistic tendencies, although existing models could be refined to account for the more gradual nature of change, or at least include more intermediate stages.

Part II

Elicitation tasks: Current TMA markers

Part II: Introduction

Part II consists of three main chapters (9-11), corresponding to the markers investigated in the corpus analysis in order to track their continued development and current usage today. A further chapter is dedicated to zero-marking (\emptyset), which was not investigated in detail in the corpus analysis due to the difficulty of identifying non-overt marking. The elicited data provided an opportunity to explore the specific contexts in which \emptyset occurs. An overview is presented in chapter 12.

Unlike Part I, which relied on qualitative observations and general tendencies across text types from similar periods, Part II takes advantage of the larger number of data points to run statistical tests. Due to the categorical nature of the data collected (presence vs absence of features), chi-square tests were calculated to determine the statistical significance of features for the markers in each task (see Appendix IV for sample R scripts).

In order to establish the most relevant features and rank them for each marker, the number of instances that each marker appeared with each feature was counted and compared to when it was not used and when that feature was absent. This produced contingency tables for each marker in relation to each feature. As an example, Table ii.0.1 shows the number of instances that \emptyset was used in the translation task in near (future) and not-near (future) contexts and contrasts this with using an alternative marker.

	Near	Not-near
\emptyset	8	69
Not \emptyset (other markers)	202	321

Table ii.0.1: Contingency table for marker \emptyset and feature 'near'

Table ii.0.1 shows that \emptyset appears in 'not-near' contexts much more frequently than 'near' ones and that other markers occur more frequently in 'near' contexts than \emptyset , although overall, other markers were more frequent in 'not-near' contexts than 'near' ones too. With this information it is possible to run a chi-square test of independence to determine whether the presence or absence of the feature 'near' influences the likelihood of \emptyset being used with this feature in comparison to the other markers.

In this case, the absence of ‘near’ was significant in determining whether \emptyset was used, with a very small p value of 0.00000234. This means it is extremely unlikely that this distribution could have occurred by chance and that there is something about \emptyset which makes it more likely to occur in not-near contexts than other markers.

Another difference in Part II is that after the specific analysis relating to the main markers, the results are presented together in broad temporal groupings in order to provide a more holistic view of which markers occur in which contexts. This provides scope to explore less-typical or emerging usage, such as the use of *PE* and \emptyset in both future and past contexts, as well as for present expression, thus avoiding assumptions about which contexts certain markers will occur in.

Overview of the tasks

Five tasks⁶⁹ were devised to analyse current usage of the markers from different perspectives comprising three written and two spoken tasks. As detailed in chapter 4, they consist of:

- Written
 - o a translation task
 - o an acceptability judgment task
 - o a cloze test
- Spoken
 - o a semi-structured interview
 - o a narrative re-telling task

Two of the tasks in this thesis (the cloze test and narrative re-telling) involved a narrative. This was important to enable comparison with the corpus analysis, which primarily consisted of narrative texts. Additionally, the same sets of features as in the corpus analysis were used in all five tasks in order to track the features which occur with the markers and investigate to what extent the markers display the same tendencies as in the corpus texts.

⁶⁹ Ethics approval for the translation task was granted by the Central University Research Ethics Committee (CUREC) of the University of Oxford under reference R54962/RE001 (Dec 2017-May 2018). The other four tasks were approved under reference R61139/RE001 (July 2019-Dec 2019).

It was important to include spoken tasks since Creole is primarily an oral language and has a relatively short written history, which was guided by the French literate elite in the Old Mauritian period, and intellectuals in the 20th century who wished to promote the Creole language. The modern elicitation tasks explore both written and spoken Creole, which are assumed to differ despite the fact that written Creole is almost always used for informal communication (e.g. text messaging) (Rajah-Carrim, 2009) and very few adults have had any formal Creole teaching (besides those who studied for the BA in French and Creole, first introduced in August 2014 (Alleesaib, 2020, p.c.)). As an example, we can examine how the proportion of *PE* with various features differed in written and spoken tasks in Table ii.0.2.

Marker	<i>PE</i>	
	Written	Spoken
<i>right now</i>	59.61%	98.61%
<i>ongoing</i>	67.40%	98.61%
<i>locative element</i>	69.59%	25.00%
<i>with adj.</i>	14.11%	0.00%
<i>with stative predicate</i>	37.71%	2.78%
<i>with perception</i>	0.00%	5.56%
<i>generic</i>	1.70%	0.00%
<i>habitual</i>	11.44%	1.39%
<i>imminence</i>	9.98%	9.72%
<i>inchoative</i>	30.66%	1.39%
<i>backgrounded</i>	10.46%	65.28%
<i>iterative</i>	19.71%	19.44%
<i>non-agentive</i>	24.82%	6.94%
<i>imperative</i>	0.00%	0.00%
<i>non-finite</i>	0.00%	0.00%

Table ii.0.2: Differences between written and spoken tasks for *PE* in present contexts (green = less than 10% difference between written and spoken tasks, yellow = 10-20% difference, red = over 20% difference)

As can be seen in Table ii.0.2, the proportion of *PE* used with ‘right now’, ‘ongoing’, ‘locative’, ‘stative’, ‘inchoative’, ‘backgrounded’ and ‘non-agentive’ features differed by more than 20% between the written and spoken tasks. The simplest explanation for these differences can be attributed to task type, since the written tasks elicited infrequent usages such as ‘stative’ and ‘inchoative’ *PE*, which were simply rare in more natural language. It seems unlikely that spoken or written modality alone could account for these differences, and unfortunately it is not possible to tease apart the various factors involved to determine to what extent spoken and written Creole differs.

Although separate analyses were carried out for the spoken and written tasks to check if they differed, the data can be best understood when combining the results of all five tasks and exploring written/spoken differences qualitatively.

Another issue in comparing the spoken and written tasks in this thesis is that they are not overly comparable. In particular, the written tasks sought to elicit specific less-common and borderline cases through carefully designed prompts, while the spoken tasks allowed for much more freedom and therefore included more natural and frequently occurring expressions. Furthermore, there were many more relevant data-points across the three written tasks (1000s) than in the two spoken tasks (100s) due to the targeted nature of the written elicitation tasks.

An overview of the five tasks and the participants who completed them follows. A total of 30 participants completed the translation task, which was an online task using English as the source language for translation into Creole (see Appendix II.1). Of these participants, 12 were female (40%). The most represented age-group was 18-24 (46%), and there was also a sizable group over 50 (23%). In each of the intermediate age groups, there were just a few participants. Although Creole as a native language was one of the criteria for taking part in the task, only 80% of participants considered it their first language. Six participants claimed to have a different first language, three of them most comfortable in English and the other three most comfortable in French. 29 of the 30 participants claimed they were fluent in English⁷⁰ and 28 said they were fluent in French.

The online acceptability judgement task was primarily aimed at students, so the majority (92%) of the 48 participants were in the two youngest age groups (18-24 and 25-29). However, some older participants also took part (8% were aged 45+). There were no significant differences in responses between age groups. Remarkably, there was an equal number of male (24) and female (24) participants and those who came from urban (24) or rural (24) areas. All but one of the nine districts

⁷⁰ The results of the one participant who did not say they were fluent in English were compared against the rest to see whether this may have affected their understanding of the original sentences and therefore their performance in the task. Their results were not significantly different from the other participants. This participant was probably being modest about their English skills.

of Mauritius were represented, with most participants coming from Pleines Wilhems (21%) and the capital, Port Louis (27%). This is unsurprising since these areas are the most densely populated and are close to the university, where most participants were recruited. There was no overall effect of variables such as age, gender and others mentioned above on the acceptability judgement responses. See Appendix II.2 for the list of sentences that participants rated.

The cloze test was carried out by 19 participants who came to the University of Mauritius for an interview. The task involved filling in 34 gaps by hand on a print-out of one of the modern Mauritian narrative stories examined in the previous section: ‘Tizan’ {2003} (see Appendix II.3). The text was chosen since it is a typical narrative, so is comparable with the corpus analysis and provides a clear benchmark to see how variable modern speakers’ use of TMA marking is, and to what extent it resembles the original text. Participants were asked to read each section aloud and it was striking that some participants struggled to read the text at first. A number of participants were students on the BA French and Creole programme, so were familiar with reading and writing Creole. Those who did not have this background took much longer to complete the task and read the text aloud, but had no trouble filling in the blanks once they had ‘deciphered’ the written form.

The semi-structured interview was carried out at the University of Mauritius by 19 participants⁷¹ who responded to advertisements (Appendix III) placed at the university and publicized online via three native speaker helpers. There were 22 general questions which were written in advance to cover present, past and future expression, although the native speaker helpers were encouraged to ask additional questions which arose naturally during the conversation. A translation of typical questions asked during the interview can be found in Appendix II.4.

19 participants⁷² completed the narrative elicitation task which was administered directly after the semi-structured interview at the University of Mauritius. Participants were asked to re-tell a story of

⁷¹ One interview was not included in the analysis because the quality of the audio recording was not good enough to understand and transcribe, even by native speakers.

⁷² Again, one narrative was not transcribed and used in the analysis, for the same reasons as above.

a video that they watched in the interview. The task comprised of a ‘during’ condition, in which participants said what was happening during the video as it was happening, and a ‘recall’ condition, where participants had to retell the story after the video had finished. Half of the participants completed the task in the ‘recall’ condition, which elicited past marking, so will be analysed in chapter 10, whilst the other half did the ‘during’ condition, which elicited present expression so will be analysed in chapter 11. I split the narrative into 16 scenes for the purposes of the analysis. This task produced a set of restricted, comparable, spoken narratives, in which all of the markers could be tagged, including \emptyset , and compared to the other tasks. The video, known as ‘Pear Stories’, can be found on Erbaugh’s website⁷³ and the screenshots of the scenes can be found in Appendix II.5.

⁷³ <http://pearstories.org/>

Chapter 9:

Elicitation tasks - *POU*, *VA* and future expression

This chapter firstly reports the results of *POU* and *VA* in the five elicitation tasks carried out between 2017 and 2019 with speakers of Mauritian Creole, then takes a more holistic approach exploring the data for future expression as a whole, outlining the results for other future-marking strategies.

9.1 Summary of findings from corpus analysis and predictions for elicitation

The corpus analysis showed that *VA* was initially the dominant future marker, used in almost all future contexts. However, as *POU* emerged in the mid-1800s, first retaining much of its original source meaning of purpose, and then developing an aspectual sense of ‘imminence’, it began to take on a near-future meaning, pushing *VA* out of this domain.

Throughout the 20th century, *POU* increased in frequency and the markers were labelled by many linguists as definite (*POU*) and indefinite (*VA*) futures. Whilst this was criticized for being vague and inconsistent in chapter 6, seven potential ‘indefinite’ features were examined, and it was concluded that there was a difference between the features associated with *VA* in pre-1950 and post-1950 texts.

Indefinite feature	pre-1950	post-1950
non-proximal	72%	80%
lack of present relevance	67%	100%
non-specific date/time	94%	100%
lack of speaker control	78%	13%
lack of speaker certainty	78%	73%
lack of agent intention	50%	33%
low situation probability	28%	80%

Table 9.1: Table showing differences for *VA* between pre- and post-1950 texts

Moving into the 2000s, *VA* became extremely rare, although it continued to display similar features as those identified in the post-1950 texts when it occurred. It was considered whether *VA*'s modern usage might be reminiscent of an older style of Creole.

The prediction, based on trends observed in the corpus data, is that *POU* will be used consistently throughout all of the elicitation tasks by modern speakers, even in those sentences which constitute possible *VA* or 'indefinite' contexts. *VA*, on the other hand, is not expected to occur in the spoken tasks (interview and narrative) and will be rare in written tasks where participants are free to choose a specific marker (translation, cloze). However, *VA* is still expected to be rated as acceptable in the acceptability judgement task. This would support the hypothesis that *VA* is primarily used in writing today to maintain an older usage.

Recall Bybee et al.'s semantic ages for future development:

Futage 1: agent-oriented uses of obligation, desire, ability

Futage 2: later agent-oriented uses of intention, root possibility and immediate future

Futage 3: simple future as only use

Futage 4: epistemic, speaker-oriented and subordinate uses

It was unclear whether *POU* and *VA* are both going through these stages (against the hypothesis of source determination) but if so, the 20th century saw *VA* acquire more specific, speaker-oriented uses and become restricted to these contexts (futage 4), although it began life in Mauritian Creole already grammaticalized as a simple future marker (futage 3). As a next step, we would expect it to fall out of usage altogether although this will take time. If *VA* does occur in the elicitation tasks, it should occur with features that are compatible with an 'indefinite' future and have a speaker-oriented or subjective nature.

POU may have moved through futages 1-3 in the corpus analysis (if we expand futage 1 to include *POU*'s source meaning) and it was already clearly the main general-purpose future marker (futage 3) by the end of the 20th century and early 2000s. It had not moved into the final stage by this time.

This would be unlikely without a new emerging future marker gaining ground over some of *POU*'s domains. It is expected that *POU* will retain its status of general future marker, but any signs of shifts towards epistemic or speaker-oriented uses will be noted.

9.2 Results from elicitation tasks for *POU* and *VA*

9.2.1 Translation task

There were 20 future sentences in the translation task which the 30 participants translated, resulting in a total of 600 future sentences altogether. As in Dahl (2000), the verbs in the English sentences were written in capitals in the infinitive to prevent the English TMA marking influencing the choice of TMA marker in Creole. See the list of sentences in Table 9.2:

Sentence code	Tested features	Stimuli
TF1	Future: Hypothetical	If I GET my wages tomorrow, I BUY you a beer.
TF2	Future: Intention, imminence	Question: What are you planning to do right now? Answer: I WRITE a letter.
TF3	Future: Prediction, near future	There are black clouds in the sky. It RAIN in a few minutes.
TF4	Future: Habitual	A: My brother has got a new job. He'll start tomorrow. B: What kind of work he DO there? A: He WRITE letters.
TF5	Future: Progressive	Question: What your brother DO when we arrive, do you think? (=what activity will he be engaged in?) Answer: He WRITE a letter.
TF6	Future: Prediction	It's no use trying to swim in the lake tomorrow. The water BE cold (then).
TF7	Future: Promise, commissive	Talking to someone who is leaving in a while: when you RETURN, I WRITE this letter (=I FINISH it already at that time).
TF8	Future: Threat, commissive	Mother to child: If you not STOP PLAY with that ball, I TAKE it away.
TF9	Future: Intention, distant	Do you intend to stay here? A: No, I LIVE in Oslo next year.
TF10	Future: Prediction, pres relevance, remote	There are black clouds in the sky. It RAIN in the evening.
TF11	Future: Prediction, no pres relevance	The weather is changing. It be COLD in the evening.
TF12	Future: Certain, prediction	The boy is expecting a sum of money. When the boy GET the money, he BUY a present for the girl.
TF13	Future: Prediction, pres relevance, near	There are black clouds in the sky. It RAIN very soon.
TF14	Future: Speaker uncertainty	The weather is changing. Maybe it RAIN tomorrow.
TF15	Future: Speaker certain	The weather is changing. It be COLD tomorrow.
TF16	Future: Hypothetical, subordinate.	She not HELP you if you GO home now.

TF17	Future: Uncertainty	The boy thinks that he will perhaps get a sum of money. If the boy GET the money, he BUY a present for the girl.
TF18	Future: Speaker certainty	The weather is changing. It RAIN tomorrow.
TF19	Future: Based on VA in Virahsawmy (2017)	If they not ABLE HAVE children, they ADOPT.
TF20	Future: Based on VA in Tizan (2003)	Because you have done many good deeds in the past, God PROTECT you in the future.

Table 9.2: Future sentences in the translation task

As *POU* was used consistently for most future expression, it was difficult to detect a clear preference for many of the features. *POU* occurred when many of the features were both present and absent (for example there were 210 instances of *POU* in ‘present relevance’ contexts, and 245 in ‘non-present relevance’ contexts). However, even if a marker is distributed fairly evenly across the presence and absence of features, a feature can still be significant if there are very few cases of other markers in one of the contexts, as this means that that context is primarily the domain of the marker in question.

Table 9.3 shows the top statistically significant features. As in the corpus analysis, only the top five most relevant features are reported, even though a further five features were significant to a lesser degree for *POU* in this case. Also, I continue to implement a canonical approach. Since each feature is either present or absent, the opposite feature must be less canonical than the significant feature. This is annotated in the same way as in the corpus analysis: > means ‘more canonical than’. The significance level is reported as a * if the p value corresponds to ≤ 0.05 after correction for multiple testing, ** if it corresponds to ≤ 0.01 and *** if it corresponds to ≤ 0.001 .

Features for <i>POU</i> in the future (10/21 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value ⁷⁴	Sig. level
non-progressive > progressive	1	$p < 0.00054$	123.78	9.39E-29	***
non-habitual > habitual	1	$p < 0.00054$	123.78	9.39E-29	***
no animate subject > animate subject	1	$p < 0.00054$	68.444	1.31E-16	***
no agent control > agent control	1	$p < 0.00054$	68.444	1.31E-16	***
specific date > no specific date	1	$p < 0.00054$	48.285	3.69E-12	***

Table 9.3: Significant features for *POU* in future in the translation task

The features which were most significant for *POU* were generally the absence of a feature. The most significant features for *POU* were ‘non-progressive’ and ‘non-habitual’. It is anticipated that this is

⁷⁴ E is standard scientific notation for powers of 10. So: 9.39E-29 = 9.39×10^{-29}

because ‘progressive’ is more associated with *PE*, and ‘habitual’ with \emptyset , so *POU* is used less frequently in these contexts. The fact that ‘no animate subject’ is significant shows how generalized *POU* has become, because early stages of future development are characterized by a preference for first person subjects (Detges, 2000) before extending to animate ones. However, the fact that a number of the sentences were to do with the weather means that the significance of ‘no animate subject’ and ‘no agent control’ is probably at least partially a result of the prevalence of impersonal constructions in this task.

VA occurred just three times in the whole task and therefore the number of instances was too small to run significance tests. Participants who took part in the translation task were later asked whether they thought there is a difference in meaning between *POU* and *VA*. Although participant introspection is not a reliable method of researching phenomena which do not form part of our conscious knowledge of language, this approach did result in some interesting and mixed responses.

Of the twelve participants who responded, four did not believe there to be a difference between *POU* and *VA*. The other eight tried to explain in what ways the two markers are different, although two of these said that *VA* is rare or even obsolete. It was also noted that younger people tend to use the form *ava* rather than *va* or *a* if they use it at all, whilst older people prefer the form *va* (Othello, 2020, p.c.). Several sociolinguistic factors including age and region were mentioned, and a number of participants noted a lack of firm decision as a reason for using *VA*, which corresponds with a lack of the features ‘speaker certainty’ and ‘specific time’ analysed here. Most interestingly, ‘obligation’ was suggested by three people. This is unexpected, considering obligation would come under futage 1, assumed to occur at the beginning of future development, rather than in later stages. In the following task, there is scope to explore this potential, unexpected development of *VA*. However, the fact the *VA* is extremely rare raises the question of whether speakers can be considered competent in its usage if they (almost) never use it. I will address this in the following section.

9.2.2 Acceptability judgement task

There were nine future sentences with *POU* which were rated by participants for acceptability from 1 (unacceptable) to 7 (most acceptable) and the judgements were consistently high (mean=6.47). See

Table 9.4:

Sentence code	Tested features	Stimuli
AX02	Future: Indefinite features	Mem si nou pa gagn sans, nou zanf an pou/ava/pe/Ø profite.
AX05	Future: Proximal	Li ti dir nou ki li pou/ava/pe/Ø arive biento.
AX08	Future: Speaker certainty	Mo sir ki to pou/ava/pe/Ø fini sa liv-la avan mwa.
AX11	Future: Speaker speculation	Mo pa sir, me si zot pa gagn zanf an, zot pou/ava/pe/Ø adopte.
AX14	Future: Obligation	Si li ariv laboutik tro tar, li pou/ava/pe/Ø manz dipin rasi.
AX17	Future: Unrealis 'if'	Si li apel Trisha aster, li pou/ava/pe/Ø mank spektak-la
AX20	Future: Expectation	Kan li ena larzan, li pou/ava/pe/Ø aste enn kado pou so neve.
AX23	Future: Prediction	Pou/ava/pe/Ø fer fre diman.
AX25	Future: Subordinate	Mo pa ti kone ki to pou/ava/pe/Ø al Lafrans mardi prosin.

Table 9.4: Future sentences in acceptability judgement task

None of the future sentence features were significant. This is not especially surprising, since *POU* was consistently rated as acceptable across all contexts (lowest mean=5.74, highest mean=6.96) so was not affiliated with specific features. However, these results differ from the translation task, where the absence of ten features was significant for *POU*.

The relatively low Standard Deviation (SD) scores (0.665- 1.462) show that there is some consensus across participants. The higher the SD, the more variation across participants. None of the responses for *POU* sentences were unexpected since they were expected to be acceptable and the results supported this. In the translation task, the most significant features for *POU* were 'non-progressive' and 'non-habitual', but since none of the future acceptability judgement sentences were 'progressive' or 'habitual', these features could not be tested in this task.

The nine sentences with *VA* paint a very different picture and are highly dependent on the context. The *VA* means ranged from as low as 1.5 right up to 6.13 depending on the context. The sentences which were most acceptable for *VA* were AX02 (indefinite), AX11 (speaker speculation), AX14 (obligation) and AX20 (expectation).

The sentence AX14 (obligation) was devised to explicitly test the assumption made by a number of participants in the translation task that *VA* can be used in obligation contexts. Participants were asked to rate the following sentence:

AX14 **Si** **li** **ariv** **laboutik** **tro** **tar,** **li** **ava** **manz** **dipin** **rasi**
If 3.sg arrive shop too late, 3.sg VA eat bread stale
'If he gets to the shop too late, he'll (have to) eat stale bread'

The mean rating for *VA* in this sentence was 6, compared to 6.1 for *POU*, suggesting that *VA* is certainly possible in such contexts, although it is not a domain reserved exclusively for *VA*. Although the sentence lends itself to an obligation interpretation, it cannot be certain that the participants necessarily interpreted it that way. Indeed, this particular sentence could be interpreted as a simple consequential conditional, i.e. 'if one thing happens, another will follow' or a necessitive. I expect that *VA* has an obligation connotation for some, but not all speakers and that its infrequency makes it susceptible to subjective interpretation due to very few examples in daily life. More evidence would be needed to test this further and an analysis of spontaneous occurrences of this marker could shed light on its modern, yet infrequent usage.

The presence of a 'hypothetical' context dramatically increased the likelihood of *VA* being acceptable. In 'hypothetical' sentences, the mean response was 5.396, yet in non-hypothetical sentences the mean fell to 2.996. Pearson's chi-square test shows that the presence or absence of this feature is highly significant in determining the acceptability of *VA*. To a slightly lower degree, the features of 'present relevance' and a 'specific date' were also significant, but had a negative correlation with *VA*'s acceptability. The means were much higher for *VA* in sentences which weren't relevant to the present (4.872, as opposed to 2.444 in present relevance contexts) and didn't express a specific date (4.861, as opposed to 2.465 in specific date contexts). The standard deviations (SD) were generally much higher for *VA* than for *POU* (most over 2) showing less consistency amongst participant responses for *VA*, although the SD was lower for those features which were significant.

Below is a ranking for the features which were most significant in determining *VA*'s acceptability, in terms of canonicity. The features in bold are those tested (features present), so if the mean when

the feature is absent is higher, this means that a lack of this feature is more canonical. The corrected significance threshold accounts for the quantity of tests run. This means the p value must be considerably lower than $p < 0.05$ for a feature to be considered significant (see chapter 4).

Significant features for VA (10/17 features significant)	Mean when feature present	Mean when feature absent	Corrected significance threshold	P value	Pearson's chi-square value
1. <i>hypothetical</i> > <i>non-hypothetical</i>	5.396	2.996	$p < 0.00054$	<0.0001	110.45
2. <i>lack of present relevance</i> > <i>present relevance</i>	2.444	4.872	$p < 0.00054$	<0.0001	96.854
3. <i>lack of specific date</i> > <i>specific date</i>	2.465	4.861	$p < 0.00054$	<0.0001	94.053
4. <i>speaker expectation</i> > <i>no speaker expectation</i>	4.383	1.5	$p < 0.00054$	<0.0001	69.65

Table 9.5: Significant features and means for VA in future contexts in the acceptability judgement task

It was not expected that VA would be accepted by the majority of participants across so many features (10 out of 17). In four of the nine sentences, VA was almost or just as acceptable as *POU*. Some of these unexpected cases will be discussed later in section 9.3.2.2. when future expression is examined more broadly.

9.2.3 Cloze test

In total, nine of the gaps in the cloze test referred to future events. In the original text, *POU* and *VA* each occurred four times, which is a higher proportion of *VA*-usage than typical for a text from the early 2000s. The ninth future gap did not have any overt marker, and will be discussed in more detail in section 9.3.2.3. The future sentences can be seen in Table 9.6:

Sentence code	Marker in original	Stimuli
CT01_05	pou	Li dir koumsa: Zordi, mo (pou) manz enn sel gato kanet
CT01_06	pou	Lot la, mo (pou) gard li
CT01_07	pou	mo (pou) plant li
CT01_08	∅	tanto ler mo () rant lakaz
CT05_04	va	Bondie (va) donn twa benediksjon
CT06_03	va	Taler mo (va) koz avek to mama
CT06_04	va	li (va) koz avek to papa tanto ler to rant to lakaz
CT06_05	va	tanto to (a) kone
CT06_06	pou	Tizan gagn per li (pou) al gagn bate. Li desann lor pie gato kanet

Table 9.6: Future sentences in the cloze test

Overall, VA was used least of all the markers in just 19% of cases where it appeared in the original text. In gap CT05_04, only one participant out of 19 chose VA:

CT05_04 Bondie ___ donn twa benediksjon
 God ___ give 2sg.OBJ blessing
 ‘God will bless you’

17 participants used *POU* instead, and one participant chose *PE*. Although the acceptability judgement task showed that VA is still acceptable in certain contexts, this task suggests that it is rarely chosen over *POU*, even in contexts where the original author used VA.

The use of VA in ‘obligation’ contexts was discussed to some extent for the translation and acceptability judgement task, and the cloze test can also contribute to this discussion. VA occurred in the original text four times, and the number of participants who also used VA in these gaps ranged from 1 out of 19 (5%) to 7 out of 19 (36%) with an average of 19%. Interestingly, the gap above (CT05_04) where only one participant used VA, cannot be understood with an ‘obligation’ interpretation. However, the gap with most VA usage involved the old lady getting frustrated that Tizan would not come down from his tree, so she said: “I’ll (have to) tell your mother”, which could definitely convey the idea of being obliged to do so. This provides some support for the hypothesis that VA has now acquired an ‘obligation’ meaning for some speakers, although it is far from conclusive. More elicited data would be needed to test this explicitly.

Similar to the chi-square results for *POU* in the acceptability judgement task, most of the features were not significant for *POU*, supporting the assumption that *POU* is a general future marker rather than being associated and occurring more frequently with certain features. The only significant feature (out of 16) was ‘not-subordinate’ where 97 of the 107 instances of *POU* given in the gaps in the cloze test were not in subordinate clauses. None of the features for *VA* turned out to be significant in the cloze test.

9.2.4 Semi-structured interview

The semi-structured interview included five or six questions aimed at eliciting future markers covering the topics of future plans, whether Creole usage will increase or decrease in future, whether it will be used in government or parliament and how participants will celebrate the next festival in Mauritius. See Table 9.7 for a list of typical future questions:

Question and features	English	Creole
1. near future	What will you be doing for the rest of the day today?	<i>Ki to pou fer pandan leres lazourne zordi?</i>
2. plan/intention	Do you have any plans for the weekend?	<i>Eski to ena plan pou weekend?</i>
3. uncertain future	Do you think the use of Creole will decrease or increase in the future? Why?	<i>Eski to panse litalizasion kreol pou diminie ou ogmante dan lefitir? Kifer?</i>
4. uncertain future	Do you think Creole will ever be used in government?	<i>Eski to panse pou servi kreol dan gouverman?</i>
5. more definite future	What is the next festival that you will celebrate in Mauritius? How will you celebrate?	<i>Ki prosenn fet to pou selebre dan Moris-la? Kouma to pou selebre la?</i>

Table 9.7: Typical future questions in the interview

VA was completely absent from every interview and did not occur once, although its reduced form *a* was used by two participants when accompanied by *TI* to express a conditional. It could be that *VA* only survives in speech in the conditional construction *ti a* today, occurring more commonly than future *VA* on its own. Further research would be needed to test this hypothesis and unfortunately the lack of occurrence in spontaneous speech meant I was unable to explore *VA*'s potential obligation meaning in this task.

Possible combinations of markers have been used in previous research to determine whether a marker constitutes tense, mood or aspect. On the assumption that tense markers cannot combine with other tense markers, and that aspect will be closest to the verb if expressed (Syea, 2013:114), it is assumed that, for example, if *TI* can combine with *VA*, they cannot both be tense markers. A questionnaire exploring possible combinations with *POU* and *VA* was conducted in 1993 (Touchard & Véronique, 1993:85) and found that *VA* and *POU* cannot be combined, suggesting they are the same kind of marker, and that participants were undecided whether *POU* or *VA* can be combined with *FINN*. This study is now rather out-of-date, because 17 out of the 18 participants rated *POU PE* as unacceptable, although this is acceptable nowadays (and occurred in the translation task). This could be because *POU* was not a fully-fledged future tense marker at that time.

Further research should explore to what extent grammaticality judgements of marker combinations have changed in the past 30 years. Nevertheless, even if marker combinations are used to shed light on whether a marker is tense, mood or aspect, I do not believe that it is particularly insightful. This is because marker collocations may be more powerful predictors of compatibility than its status as tense, mood or aspect. This can be seen in *ti a*, which still occurs today, despite the fact that the form of *VA 'a'* has fallen out of usage. This discussion about tense, mood and aspect will continue in subsequent chapters.

As expected, *POU* was used consistently to express future, and, as in the acceptability judgement task, none of the features were significant as its usage spanned all features. One additional usage of *POU* which was not identified in the corpus analysis and has therefore not been discussed before is its use in non-future habitual contexts. I noticed this usage by several participants in the interviews, when talking about generic or habitual behaviours regarding language use and daily routine:

P19: bann dimounn ki ena ledikasion, mo remarke mem kan pou rant dan enn magazin zot pa pou koz kreol, zot pou koz enn lezot lang, zot pou dir... zot koz franse par exanp.

P19: 'people who are educated, I've noticed, when (you/they) (**will**) go into a shop, they don't/**won't** speak Creole, they(**'ll**) speak another language, they(**'ll**) say... they speak French for example.'

Future ‘will’ in English can also take on a similar function, such as ‘boys will be boys’ or ‘I’ll often do my shopping on Sundays’, so corresponds roughly to this use of *POU* by participant 19. This usage was not investigated explicitly in the elicited tasks as I was unaware of this possibility until now. However, this usage will be explored in more detail in chapter 11 on present expression.

9.2.5 *Narrative re-telling*

Although the two conditions of the narrative task were not designed to elicit future expression, the marker *POU* did occur a handful of times in both the ‘recall’ and ‘during’ conditions. In total, *POU* occurred 4 times in the ‘recall’ condition, where participants were asked to recall what happened in the video, and 6 times in the ‘during’ condition, when they described what was happening in the video as it was happening. In most of the instances where it occurred, the participant made an aside explaining what they thought the person in the video was doing/saying. For example:

P17

sirman li pou al vande apre – ‘surely he will go and sell (the pears) afterwards’

P12

mo ti panse bann-la pou fer enn kout voler ar li – ‘I thought they’ll steal from him’

Although these examples do not belong to the storyline so are not relevant for exploring marker usage in narratives, they give an insight into what the participant was thinking at the time. Due to low numbers, no statistical tests were carried out. This task will not be discussed further in relation to future expression.

9.2.6 *Overview of POU and VA in the elicitation tasks*

Table 9.8 shows a summary of the results for *POU* and *VA* in the tasks outlined above. No chi-square tests could be run for *VA* in the translation task, as it only occurred three times, and the narrative task did not elicit future marking. (+) or (-) next to the significance level shows the direction of significance (i.e. whether the presence or absence of the feature is significant). The results from each

task seem to show very different tendencies regarding the number and types of significant features (highlighted in yellow). For example, the one significant feature for *POU* in the cloze test does not correspond to any of the significant features in the translation task.

Feature	POU				VA	
	Trans.	Acceptability	Cloze	Interview	Acceptability	Cloze
+/- near	** (+)	ns ⁷⁵	ns	ns	ns	ns
+/- present relevance	ns	ns	ns	ns	*** (-)	ns
+/- specific date	*** (+)	ns	ns	ns	*** (-)	ns
+/- time mentioned	ns	ns	ns	ns	*** (-)	ns
+/- speaker control	* (-)	All 0 ⁷⁶	ns	ns	All 0	ns
+/- speaker expectation	ns	ns	ns	All 0	*** (+)	ns
+/- speaker certainty	* (-)	ns	ns	ns	*** (+)	ns
+/- agent control	*** (-)	ns	ns	ns	ns	ns
+/- agent intention	ns	ns	ns	ns	ns	ns
+/- probability	ns	ns	ns	ns	ns	ns
+/- commissive	ns	All 0	ns	All 0	All 0	ns
+/- prediction	ns	ns	ns	All 0	*** (+)	ns
+/- hypothetical	ns	ns	All 0	ns	*** (+)	All 0
+/- subordinate	ns	ns	*** (-)	ns	ns	ns
+/- first person	* (-)	All 0	ns	ns	All 0	ns
+/- dynamic	ns	ns	ns	ns	* (+)	ns
+/- animate subject	*** (-)	ns	All 0	ns	* (+)	All 0
+/- progressive	*** (-)	All 0	All 0	ns	All 0	All 0
+/- habitual	*** (-)	All 0	All 0	All 0	All 0	All 0
+/- durative	ns	ns	All 0	All 0	ns	All 0

Table 9.8: Overall chi-square results for *POU* and *VA* in the written elicitation tasks

Nonetheless, the fact that many features are not significant ('ns') across all tasks is also meaningful. In cases where all tasks result in 'ns' for a feature, we can be quite sure that this feature is irrelevant for the marker as its presence or absence makes no difference to the likelihood of this marker being used. In this case, these tasks show that 'present relevance', 'time mentioned', 'speaker expectation', 'agent intention', 'probability', 'prediction' and 'dynamic' are not important when it comes to using *POU* in the future. As noted in the modern corpus analysis section, *POU* is no longer associated with 'present relevance' and the likelihood of the event occurring. This is supported by *POU*'s ambivalence towards 'present relevance' and 'probability' in all of the tested elicitation tasks.

⁷⁵ ns means 'not significant'.

⁷⁶ All 0 means that all sentences in this task had a value of 0 for this feature, so no chi-square test could be run.

As for *VA*, a number of significant features resulted from the acceptability judgement task, but none at all in the cloze test. ‘Hypothetical’ was singled out in the previous section as being particularly significant in the acceptability judgement task. Unfortunately, this could not be corroborated in the cloze test because none of the sentences had this feature. The small number of instances of *VA* in the cloze test in comparison with the acceptability judgement task might explain the lack of significant features because the more instances which show a certain trend, the higher the likelihood of it being significant.

The other significant features in the acceptability task were mostly in line with expectations and it was discussed whether speaker stance and subjectivity could be more relevant for *VA* than the notion of uncertainty nowadays. A lack of *VA* in the interview could be indicative of a possible restriction to the written domain, although it could be that the contexts identified as ‘acceptable’ in the acceptability judgement task, simply did not occur spontaneously in the interview.

We should also consider the possibility that speakers can no longer be considered competent users of *VA*: it simply sounds archaic and literary to them and they do not understand the nuances of its previous usage patterns.

9.3 Future expression as a whole

The first section developed naturally from the corpus analysis to explore *POU* and *VA* in these modern elicitation tasks. However, by focussing exclusively on these two future markers, this approach obscures the reality of future expression which can be captured by these tasks. Instead, this section looks at future expression holistically, without zooming in on certain markers. In particular, this allows us to explore to what extent less common (or less-commonly studied) strategies of future marking are possible and how they relate to the other markers they are competing with. This broader approach allows us to gain a clearer overview of all the markers used in future contexts, as well as systematically examining their frequencies in each task.

9.3.1 Predictions

As in the first section, I shall set out the predictions for the other anticipated future marking strategies in addition to *POU* and *VA*, which include *PE* and zero marking.

PE was not analysed as a future marker in the corpus analysis, although it appeared in both inchoative and imminent contexts in modern Mauritian texts, suggesting its gradual development into the future domain. It is anticipated that this usage will continue to occur in all of these tasks, but be more common in tasks which allow for a more spontaneous use of language (i.e. translation task, interview and narrative).

Zero marking was not considered in its own right during the corpus analysis due to the difficulty of identifying it, although Stein (2007:165) calculated that it was the most common strategy in Old Mauritian, as 75% of Old Mauritian verbs had no overt TMA marker. Although it was not possible to track its development through time, I hypothesize that future marking will be primarily expressed with overt, rather than zero markers based on previous research, which generally labels modern Mauritian \emptyset as a present, or habitual marker (e.g. Syea, 2013:106). Consequently, \emptyset is expected to

be rare in future contexts in these tasks. Throughout Part II, I will address my research question about whether \emptyset can be used for past and future expression today.

The previous section concluded that *VA* is now extremely rare, although it is still acceptable in certain contexts. It could be that *PE* is now used in the contexts which *VA* used to occupy. These hypotheses, along with the general predictions about *POU* and *VA* set out at the beginning of the chapter will be considered throughout this overview section and discussed in section 9.3.4.

9.3.2 Overview of elicitation tasks

9.3.2.1 Translation task

As mentioned in section 9.2.1, *POU* was the most frequent marker in the translation task and *VA* was only used in 0.5% of the future sentences. Additionally, *PE* and \emptyset contributed to the future marking strategies employed by the participants, as can be seen in Figure 9.1.

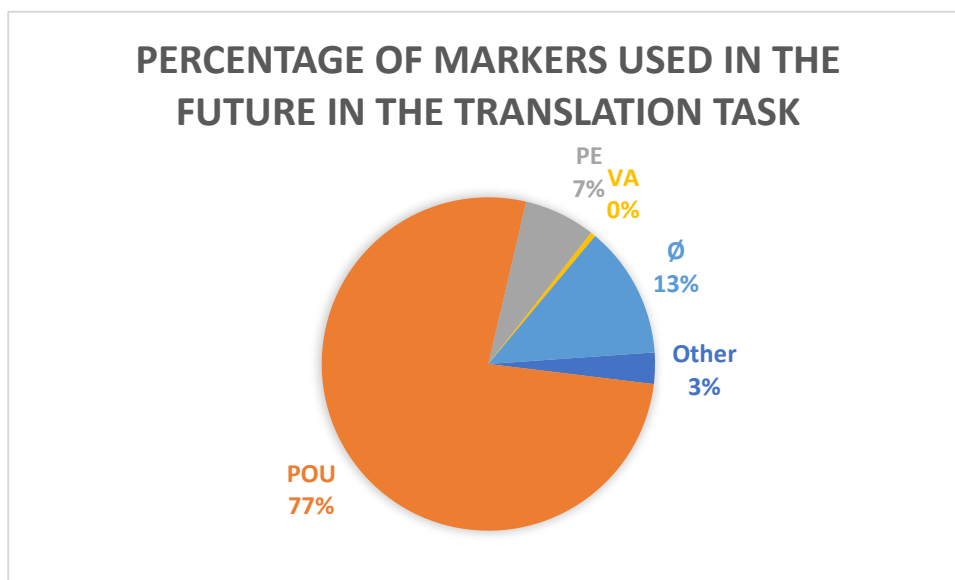


Figure 9.1: Pie chart showing percentages of markers in the future in the translation task

Figure 9.2 is a mosaic to show an overview of the markers used by the participants to translate each of the 20 future sentences. As well as *POU* and a few instances of *VA*, *PE* and \emptyset predominate in certain sentences as alternative future markers. The fact that \emptyset occurred in 13% of the responses

directly contradicts the assumption that overt markers are preferred in future contexts. The modal *kapav* ‘can’ and combinations of markers, such as *POU PE* ‘will be -ing’ also occur, but the focus of the analysis will remain on individual TMA markers.

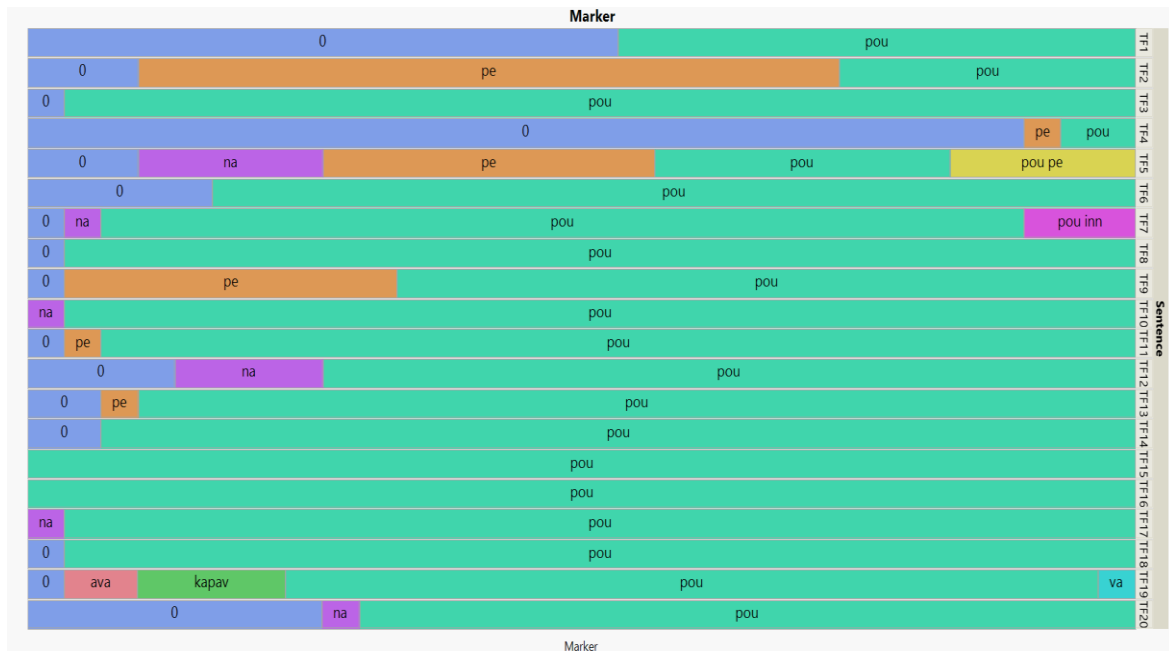


Figure 9.2: Mosaic showing response proportions according to sentence number in the translation task. Markers ordered alphabetically ('0' refers to 'Ø' marking, and 'na' to 'not applicable to future context').

POU is by far the most common marker overall, being the only response by all 30 participants for TF15 and TF16. Nevertheless, there are four sentences in which *POU* does not constitute the majority response and in two of these sentences (TF1 and TF4) \emptyset was the most frequent marker. Since \emptyset was so frequent in the future habitual context of TF4, it seems unlikely that \emptyset is rare in future contexts, contrary to the prediction in section 9.3.1. *PE* was the most common marker in two of the sentences (TF2 and TF5). *VA* marking was extremely rare and was only produced in TF19 by three of the 30 participants.

In each sentence, the marker used to translate it was recorded and consequently associated with the features that that sentence had. The mosaic in Figure 9.3 provides an overview of the features which were most associated with certain markers.

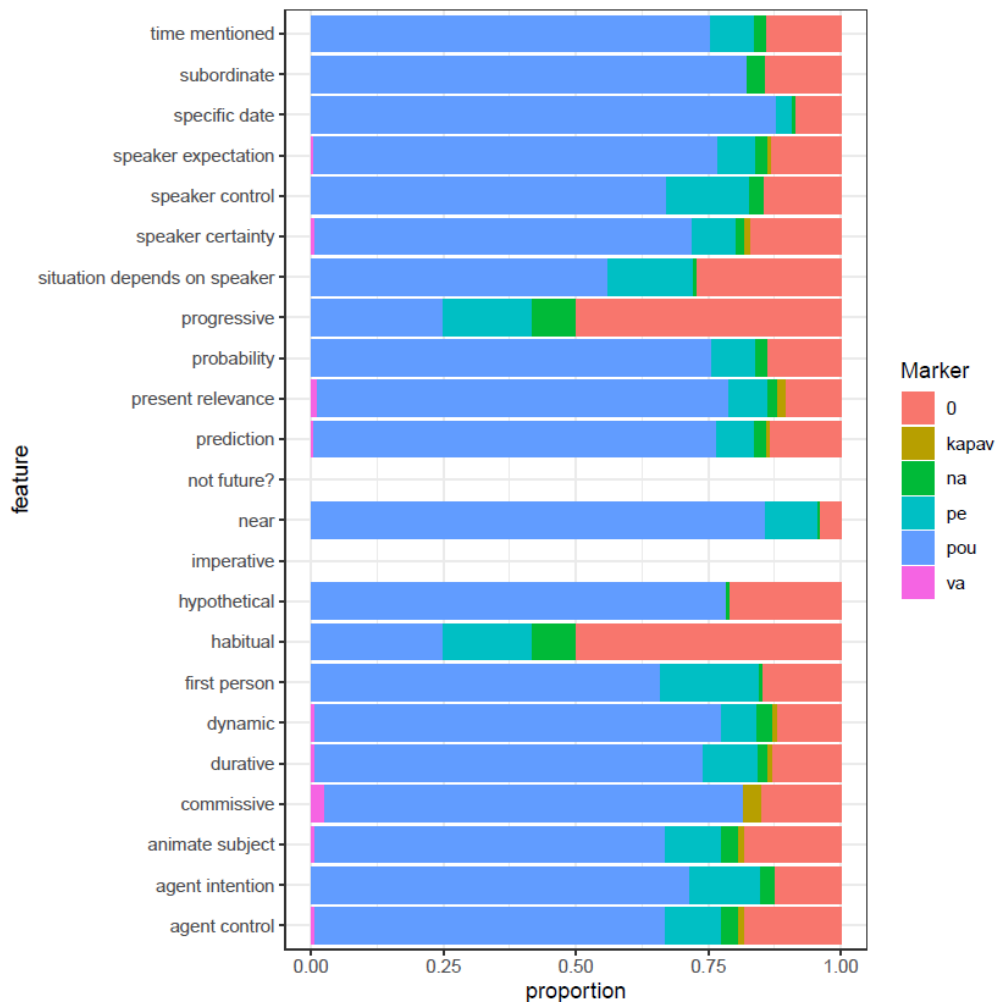


Figure 9.3: Mosaic showing features associated with future marking in the translation task. Features are ordered alphabetically.

As expected, *POU* was associated with most of the features in the future sentences. Since *POU* was used to translate 455 (over 75%) of the 600 possible sentences, it is unsurprising that *POU* is so prevalent across features. As well as the features which are present, the features which are not associated with a marker are also meaningful. For example, *PE* does not seem to occur in hypothetical situations or subordinate clauses. Since subordinate uses are associated with later developments (Bybee et al., 1994; Givón, 1976:170), it is unsurprising that *PE*, as a relatively new possibility for expressing future, does not yet appear in subordinate contexts.

TF19 was the only sentence which some participants translated with *VA*:

TF19

If they not ABLE HAVE children, they ADOPT.

Looking at Figure 9.3, it can be seen that *VA* occurs most in ‘commissive’ contexts. It is unexpected for ‘agent control’, ‘speaker certainty’ and ‘speaker expectation’ to be associated with *VA*, since these do not constitute any of the seven ‘indefinite’ features identified in chapter 6. Although ‘agent control’ is relevant for the use of *VA* in TF19, note that ‘speaker control’ is absent. This makes sense because the agents ‘they’ have full control over whether they adopt, but the speaker doesn’t, implying that the speaker’s relationship with the event is more important than the agent’s for the use of *VA*. Also, it seems relevant that an ‘obligation’ interpretation (i.e. ‘they’ll have to adopt’) is entirely possible in this context, supporting the possibility that *VA* may have acquired this meaning for some speakers.

Two features stand out as being less associated with *POU*: ‘progressive’ and ‘habitual’. \emptyset is used in more than half of the sentences which have these features and *PE* is also used here. It is significant that *PE* is not at all restricted to progressive contexts, but used with the whole range of features examined here, implying that it is establishing itself as a future marker rather than simply expressing progressive features with a function similar to its usage in the present domain. Also, it does not appear to be taking on features typically associated with *VA*, contrary to the prediction above.

9.3.2.2 *Acceptability task*

A summary graph of the means of each of the future markers for each sentence can be seen in Figure 9.4. The y axis is the acceptability score mean for all participants and the x axis is the sentence label.

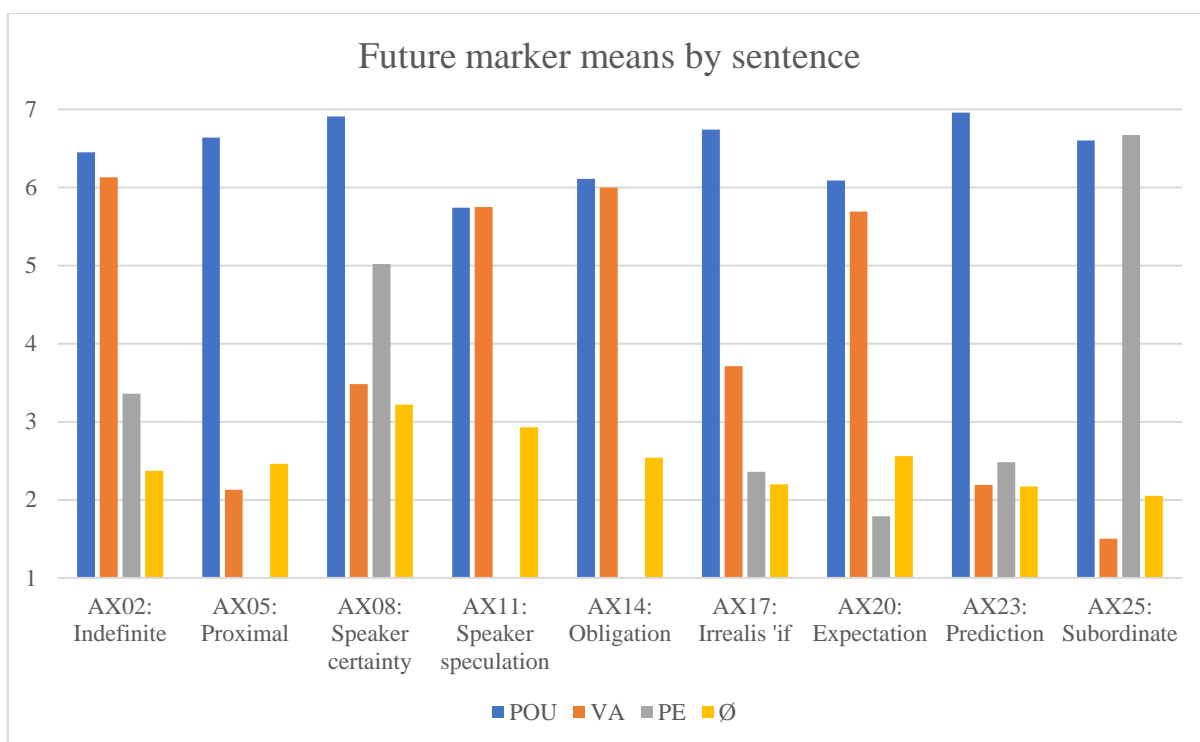


Figure 9.4: Graph showing average acceptability ratings for each future marker in the acceptability judgement task

Each sentence was devised specifically to test whether each marker was acceptable in that context. The labels of the sentences often coincide with features (e.g. AX08: speaker certainty). However, this just means that the sentence was devised with ‘speaker certainty’ in mind to test whether VA would be possible in the presence of overt expression of certainty *sir* ‘sure’. This, and the other sentences on the x axis, also contain many other features, but this graph only focusses on the means of these nine future sentences. I repeat the future sentences tested again for convenience:

Sentence code	Tested features	Stimuli
AX02	Future: Indefinite features	Mem si nou pa gagn sans, nou zanfou pou/ava/pe/Ø profite.
AX05	Future: Proximal	Li ti dir nou ki li pou/ava/pe/Ø arive biento.
AX08	Future: Speaker certainty	Mo sir ki to pou/ava/pe/Ø fini sa liv-la avan mwa.
AX11	Future: Speaker speculation	Mo pa sir, me si zot pa gagn zanfou, zot pou/ava/pe/Ø adopte.
AX14	Future: Obligation	Si li ariv laboutik tro tar, li pou/ava/pe/Ø manz dipin rasi.
AX17	Future: Irrealis 'if'	Si li apel Trisha aster, li pou/ava/pe/Ø mank spektak-la
AX20	Future: Expectation	Kan li ena larzan, li pou/ava/pe/Ø aste enn kado pou so neve.
AX23	Future: Prediction	Pou/ava/pe/Ø fer fre diman.
AX25	Future: Subordinate	Mo pa ti kone ki to pou/ava/pe/Ø al Lafrans mardi prosin.

Table 9.9: Repeat of future sentences in the acceptability judgement task

Sentences with *POU* were rated consistently high and \emptyset was rated consistently low. *VA* and *PE* varied considerably depending on the context with *VA* being most accepted in AX02 (indefinite), which involved a sentence including all the ‘indefinite’ features identified in the corpus analysis. *PE* was most acceptable to participants in AX25 (subordinate):

AX25 **Mo** **pa** **ti** **kone** **ki** **to** **PE** **al** **Lafrans** **mardi** **prosin**
 1sg NEG TI know REL 2sg PE go France Tuesday next
 ‘I didn’t know that you’re going to France next Tuesday’

Recall, however, that *PE* did not occur in subordinate clauses in the translation task and that this was attributed to its early stage of development as a future marker. It is therefore unexpected that the sentence devised in order to test acceptability in subordinate clauses turned out to be the most acceptable for *PE*. This apparent contradiction will be discussed in more detail after summarizing the results for the other markers.

Unlike in the translation task, where \emptyset was even preferred over *POU* in one sentence, its low acceptability scores across all tested sentences is more in line with the assumption that overt TMA marking is preferred for future expression nowadays. *VA* was rated much higher than expected from its extremely low frequencies in modern texts and the translation task. We will examine some of these sentences below:

AX02 **Mem** **si** **nou** **pa** **gagn** **sans,** **nou** **zanfan** **(a)va** **profite**
 Even if 1pl NEG get chance, 1pl.POSS children VA profit
 ‘Even if we don’t get a chance ourselves, our children will benefit’

This context was chosen because it includes all the main ‘indefinite’ features investigated in the corpus analysis. Neither \emptyset nor *PE* were acceptable in this context and *POU*’s mean was just slightly higher. A further example where *VA* was rated highly was:

AX20 **Kan** **li** **ena** **larzan,** **li** **(a)va** **aste** **enn** **kado** **pou** **so** **neve**
 When 3sg have money, 3sg VA buy INDEF present for 3sg nephew
 ‘When he has money, he’ll buy a present for his nephew’

This context, where the speaker expects the future event to occur, was chosen to contrast with the more indefinite and speculative ones, assuming that *VA* would be less acceptable in this context. This

was not the case. Whilst *PE* and \emptyset were unacceptable, *VA* again came close to the mean of *POU* (see Figure 9.4). As shown above, ‘speaker expectation’ was actually a significant feature in determining whether *VA* was acceptable in this task, which was an unexpected but interesting finding. This could suggest that *VA*’s development is continuing towards an increased importance of the speaker and their subjective stance on an utterance, and away from the notion of ‘uncertainty’, in line with Bybee et al.’s (1994) futage 4.

AX08, which was designed to test the notion of ‘speaker certainty’, was inconclusive for *VA*:

AX08 Mo sir ki to (a)va fini sa liv -la avan mwa
 1sg sure REL 2sg VA finish DET book DEF before 1sg.OBJ
‘I’m sure you’ll finish that book before me’

This was not expected to be acceptable due to the clear certainty, but speakers were unsure (mean: 3.479). The SD supports this as it was higher (2.25) than for any of the other sentences with *VA*, implying that there was little consensus. Again, it seems that in the modern variety, *VA* is less linked with (un)certainty than it was assumed to be in the past, but has a stronger affinity with the subjective stance of the speaker, as identified above with the significance of ‘speaker expectation’⁷⁷.

Of the six future sentences with *PE*, AX25 (subordinate) was as acceptable as *POU* (mean: 6.67) and AX08 ‘speaker certainty’ was relatively acceptable (mean: 5.02), but the others were generally not accepted by participants (as low as 1.79) or inconclusive (mean: 3.36), spanning the whole range of possibilities and showing that *PE*, like *VA*, is highly context-dependent.

One unexpected result for *PE* was the unacceptability of AX23 (prediction): *pe fer fre dime* ‘it’ll be cold tomorrow’ (mean: 2.5), because this expresses both predictability and time mentioned. However, the lack of agent is probably a major factor in rendering this sentence unacceptable. Interestingly, \emptyset and *VA* were even less acceptable in this context, and *POU* was the only accepted marker.

⁷⁷ Also, it should be noted that *VA* may be associated with an older style of speech nowadays, and therefore use of old-fashioned or formal vocabulary may trigger its usage.

Nine sentences contained \emptyset and acceptability was consistently low in all contexts (means from 2.05-3.22). The translation task results showed that \emptyset could be used to translate sentences with an overt future temporal marker or where it was obviously a future context, so its unacceptability was unexpected. Nevertheless, as stated above, this supports the initial hypothesis that overt marking is preferred in future contexts. This also ties in with Stein’s (2007) observation that future marking (more so than past and present) became increasingly overt over the Old Mauritian period, and Virahsawmy’s (2017, p.c.) claim that he systematically uses overt TMA markers in his writing.

The graph below in Figure 9.5 shows the acceptability of a marker according to the features the sentence exhibited.

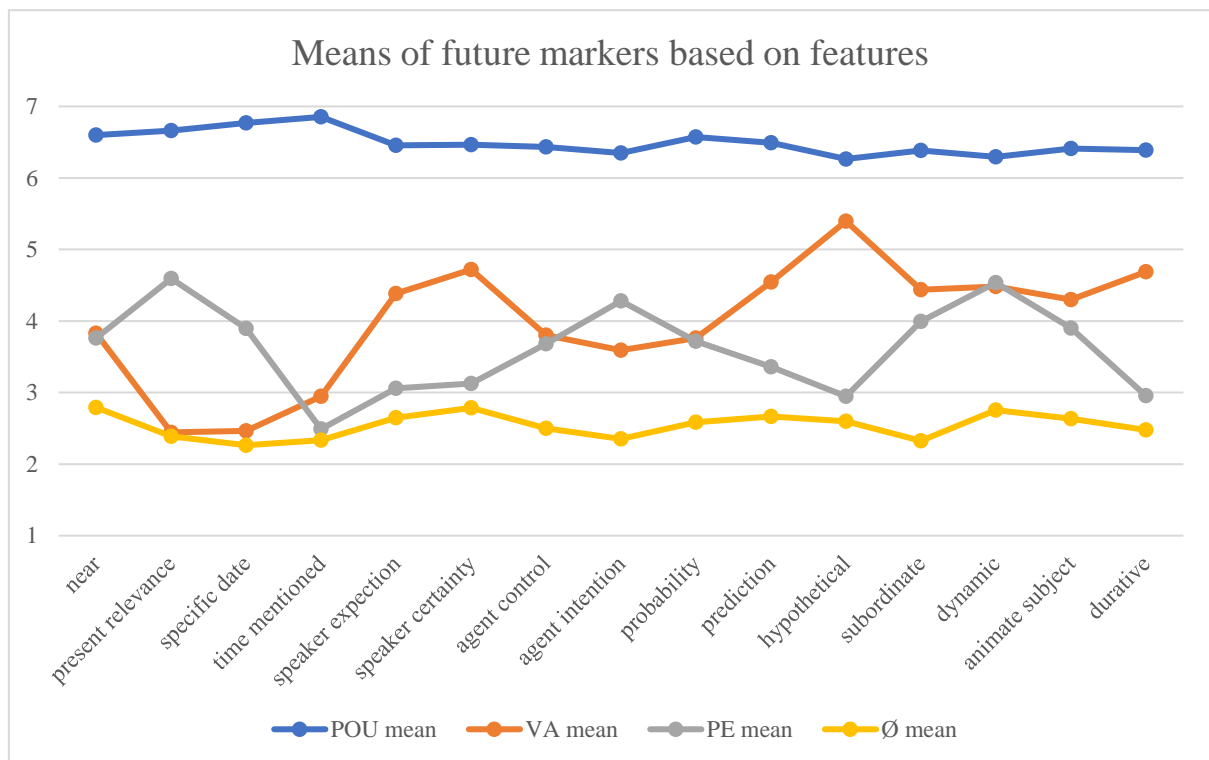


Figure 9.5: Graph showing means of future markers according to features in the acceptability judgement task

As with the translation task, each sentence was coded for the features it contained (the same as in the corpus analysis) and examined for each marker. This broadly shows the same trend as in Figure 9.4 for the individual sentences. *POU* was generally acceptable in all contexts, \emptyset was consistently unacceptable across the board, whilst *VA* and *PE* varied according to the context, roughly mirroring

each other. It can be seen in the graph that 'hypothetical' was the feature where VA was most acceptable, and it was least acceptable in 'present relevance' contexts. PE, on the other hand, was most acceptable in 'present relevance' contexts, but least acceptable in sentences with the feature 'time mentioned'. This does not provide any evidence for the initial hypothesis of PE taking on some of VA's features.

Returning to the apparent contradiction of PE not appearing in subordinate contexts in the translation task, but being most acceptable in the sentence with a subordinate clause in this task, this could be for several reasons. It could simply be a coincidence that PE did not occur in any subordinate clauses in the translation task and that this task is an anomaly, or, perhaps more likely, these results suggest that PE does not have a clear preference for or against subordinate clauses, as well as the possibility that certain features might 'trump' others. It should be emphasized again that although AX25 is labelled as 'subordinate', this particular sentence is associated with a whole range of different features, of which subordinate is just one. It seems likely that in the sentence in question (*I didn't know that you're going to France next Tuesday*), some of the other features (such as 'probability' and 'agent control') are driving the use of PE. The fact it is subordinate may not be as important.

This means that the features examined throughout this thesis may not all carry the same weight and that some will be more consequential for a certain marker than others. In absolute terms, the translation task suggests that the 'subordinate' feature is unimportant for PE, while the acceptability judgement task suggests it is important. Yet in relative terms, the features could all have different values and the subordinate feature could be masked by a stronger feature. The approach taken in this thesis only allows for a binary distinction between presence or absence, but future research should attempt to quantify the relative weight of features in relation to their importance for the expression of a particular marker.

9.3.2.3 Cloze test

There were 646 data points for this task, which were compared to the original text. All the gaps occurred directly before a verb, where a TMA marker had either been used or could have been used in the original text. Of all the gaps filled in by all the participants, less than half of them (46%) were filled in with the same marker as in the original text, showing the flexibility of TMA marking in modern Creole.

Below in Figure 9.6 is a mosaic showing the features associated with different markers used in future contexts in the cloze test.

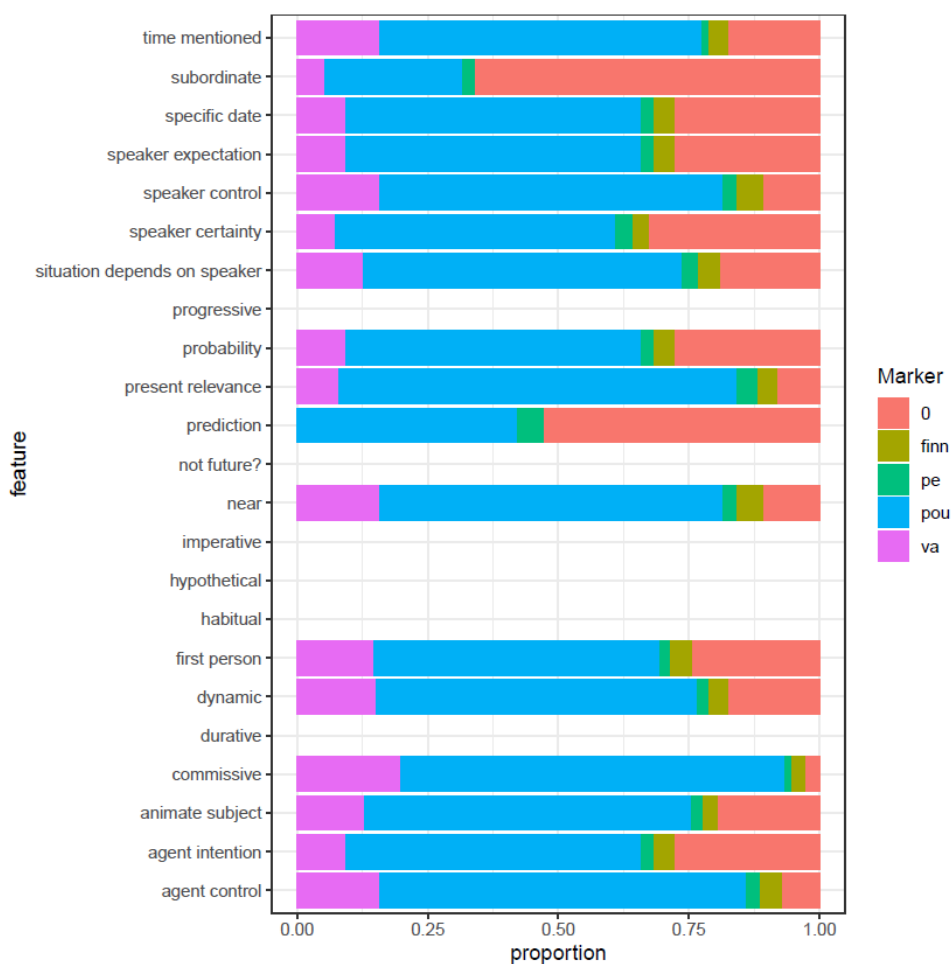


Figure 9.6: Mosaic showing features associated with future marking in the cloze test

Non-future markers were also used in future gaps in cases where participants interpreted a sentence as past even though the original text used a future marker. For example, in CT01_05 three of the 19 participants understood this sentence as past, translating it with *FINN* rather than *POU*:

CT01_05	Zordi,	mo	___	manz	enn	sel	gato kanet
	Today,	1sg	___	eat	INDEF	single	marble sweet
	<i>'Today I will eat/I ate a single marble sweet'</i>						

Zero marking only occurred once in one future context in the original text, but was used by some participants in most gaps which occurred in a future context, in almost 20% of the future gaps in total. Despite the acceptability judgement task showing low acceptability for \emptyset in future contexts, the cloze test suggests that \emptyset was consistently preferred over an overt marker by some participants, going against the hypothesis that overt future marking is preferred nowadays. This is further discussed in the following tasks and chapters where comparisons of \emptyset 's use and frequency are made.

VA is reasonably well represented across features, occurring most in 'commissive' contexts, contexts with 'agent control', 'speaker control', 'time mentioned' and 'near' future. It seems significant that VA occurs in contexts with commissives and agent/speaker control, which are more modal in nature, while it is absent from prediction contexts, which are most closely associated with future tense. In the translation task, *POU* was used considerably less in 'progressive' and 'habitual' contexts. However, these features were absent from this task, so no further conclusions about the role of *PE* and \emptyset in these domains can be made. *PE* occurred infrequently in future contexts, but was slightly more associated with prediction than any other feature. As also alluded to in the acceptability task, this could point to the possibility of *PE* being more closely associated with future expression rather than progressive aspect in future contexts.

It is also striking that \emptyset was more common than *POU* in 'prediction' and 'subordinate' contexts. It was assumed above in the acceptability judgement task that use in subordinate clauses shows a more advanced stage of grammaticalization than restriction to main clauses (Givón, 1976:170). *POU* has been used in future contexts since the mid-1800s and has already progressed through most stages associated with future development to become the main future marker (see chapter 6). Although \emptyset

was not investigated in the corpus analysis, its usage in future contexts goes back even further than *POU* and *VA* in Old Mauritian, potentially explaining its frequent occurrence in subordinate contexts.

All participants were asked about why they used certain markers during the task. When asked why they had chosen *VA* over *POU*, a number of participants mentioned that they were trying to use markers which were in-keeping with the story. For example, one participant said that the person speaking was an old woman, so they chose *VA* because it is associated with old people's speech (P7, 15/08/19). Whilst this poses a methodological problem, since this means the responses cannot be taken at face value as representative of the modern variety used by the participants themselves, the responses nonetheless show trends towards general use of *POU*, but infrequent use of *VA*. This was also observed in the corpus analyses and translation task. Talking to participants about their responses provided insights such as the one above. The fact that *VA* was used much less frequently than in the original 2003 text, and by some participants only as reminiscent of the people and style of the text, suggests that the marker is much less widespread than at the beginning of the 21st century.

9.3.2.4 *Semi-structured interview*

The individual TMA markers which occurred in the semi-structured interview were: *POU*, *PE* and \emptyset . *VA* was completely absent from any interviews, except as a conditional form *ti a*, as mentioned in section 9.2.4.

The interview provided a possibility to examine marker frequencies in spontaneous speech, which is displayed in the pie chart in Figure 9.7. Counting only clauses which directly related to the future (i.e. not including 'I think' in 'I think Creole will be used more in the future'), future is mainly expressed by *POU*, although a significant proportion of future marking is expressed with no overt marker. *PE* was used in a similar proportion of future utterances as in the translation task, and the modal verbs *bizin* 'should', *k(ap)av* 'can' and *oblize* 'have to' were also used to convey the future.

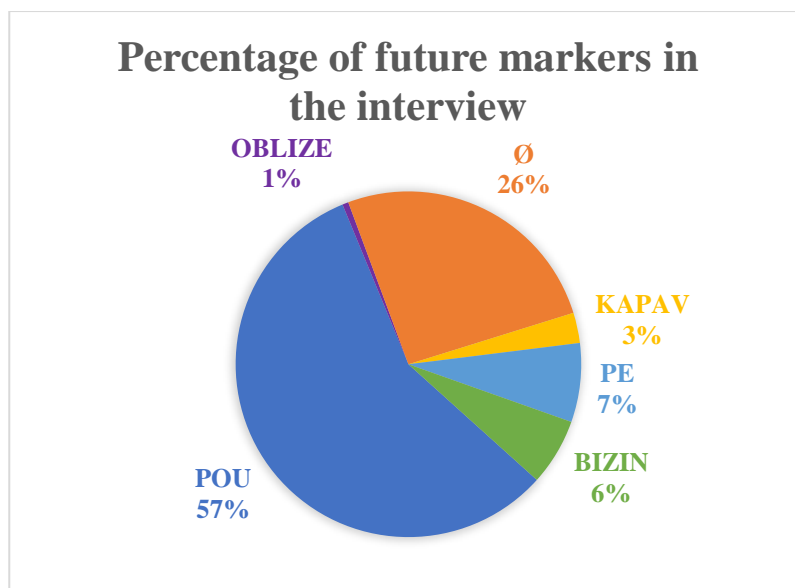


Figure 9.7: Pie chart showing proportions of future markers in the interview

The narrow focus of the first section regarding the interview task missed almost half of the possibilities for expressing future, due to focussing solely on *POU*. Nevertheless, as throughout this thesis, the focus will remain on TMA markers rather than modals. The mosaic in Figure 9.8 shows the features which are associated with each of these strategies for expressing future.

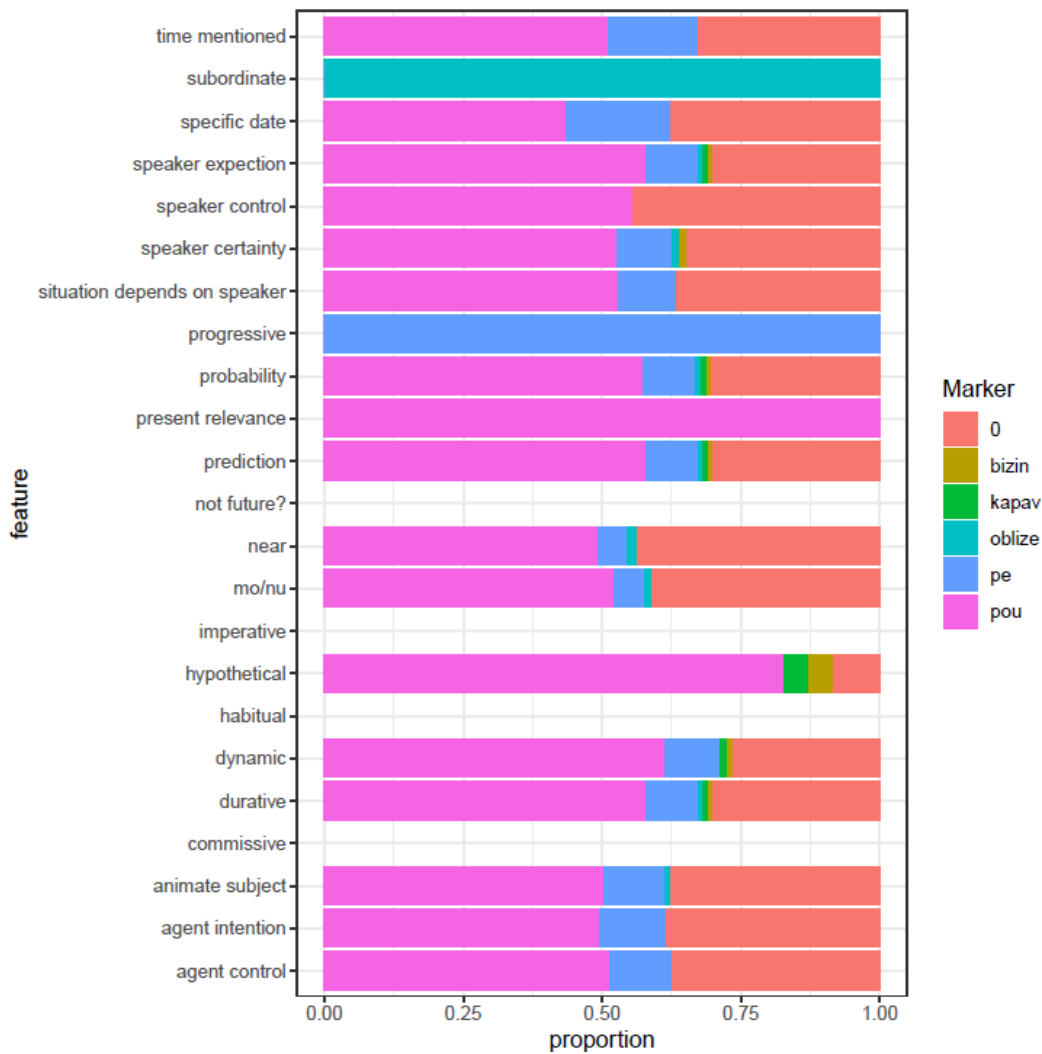


Figure 9.8: Mosaic showing features associated with future marking in the interviews

POU appears to share more features with \emptyset and *PE* in this task, often accounting for around half of the instances. This is more in line with the frequencies of the markers, rather than being the dominant marker as in previous tasks. *POU* was the only marker associated with ‘present relevance’, *PE* the only marker used with the feature ‘progressive’, and *oblize* happened to be the only form used in subordinate clauses in this task. *PE* is again absent from ‘hypothetical’ contexts, as in the translation task, and when \emptyset is used, it appears consistently across the board, but also noticeably less in ‘hypothetical’ contexts.

PE occurred most often as a future marker when talking about the next festival in Mauritius. For example, one participant mentioned the Pope’s visit to Mauritius and said:

P2 Se premie fwa ki nou pe al asiste enn fet koumsa
 It's first time REL 1pl PE go attend INDEF festival like.that
'It's the first time we're going to/we'll go and attend a festival like that'

A further interesting usage occurred directly before a noun, when a participant was talking about plans for Christmas this year:

P16 sa lane -la mo ser pe Moris
 DEM year DEF 1sg sister PE Mauritius
'This year, my sister will be in Mauritius'

These contexts seem to be suited to *PE* usage, as they refer to events rooted in the real-world, rather than some of the other future questions such as whether participants thought Creole usage is likely to increase or not, which are more subjective. *PE* did not occur in response to questions involving opinions; only when plans had already been made. This is exemplified in the following example, where the participant's relative has a flight to catch at the airport, but she doesn't know if she's going to see him off yet:

P2 mo mama so frer pe al laeropor
 1sg.POSS mum 3sg.POSS brother PE go airport
'My Mum's brother is going to the airport'

P2 Pa kone si mo pou al laeropor mwa aster
 NEG know if 1sg POU go airport 1sg.EMP now
'I don't know yet if I'll go to the airport too'

PE is used in the first utterance as the event has been planned, but the more general marker *POU* is used in the second utterance where it is unclear whether the participant will go. Here, *PE* is reminiscent of *POU*'s earlier usage in the 20th century as it began increasing in frequency and was labelled as a 'definite' future. It certainly appears that *PE* is following a similar trajectory as *POU* half a century later.

∅ was also used in future contexts when talking about plans. When asked the question "Do you already have a plan for the weekend? What do you think you will do?", one participant responded:

P12 **An-fet** **samdi** **mo** **Ø** **al** **'cellule'** **dan** **legliz**
 Actually Saturday 1sg Ø go cell.group in church
'Actually on Saturday I'm going to the cell group at church'

Out of context, this could be a habitual usage, where Ø would be expected and therefore more likely than a future interpretation. However, this is the first utterance after being posed the question about weekend plans, and the use of the adverb *an-fet* 'actually' anchors the response in the specific weekend which was coming up. If this is not convincing enough, the participant goes on to explain what is involved in a cell-group meeting before reiterating:

P12 **Be** **sa** **samdi** **Ø** **mo** **al** **laba**
 Well DEM Saturday Ø 1sg go there
'So, this Saturday I'm going there'

This second example is clearly an instance of a zero-marked future due to the demonstrative *sa* 'this/that' before the day. Together with the fact that Ø occurred in 26% of future contexts in the interview, these examples suggest that Ø is not as rare in future contexts as the acceptability judgement task led us to believe. It could be that the spoken nature of the interview task led to a higher occurrence of Ø in future contexts. This will be discussed again in chapter 11.

9.3.3 Overall results for elicitation tasks combined

Although the individual tasks have shed some light on some of the features which were relevant for future marking in modern written Mauritian, the tasks were not always very comparable as certain tasks seemed to accentuate certain features, as discussed in section 9.2.6. For a number of markers, there was not sufficient data to carry out statistical tests in certain tasks, but by combining the data from all elicitation tasks, it is possible to take all the data into consideration and gain a better overview of the features which persist for each marker when viewed as a whole. This approach diminishes the idiosyncrasies of each individual task to give a more balanced view of the data.

Table 9.10 gives an overview of all the significant features for the main future markers in all tasks taken together.

All tasks: future	<i>POU</i>	<i>VA</i>	<i>PE</i>	\emptyset
Significant for:	7 features	9 features	6 features	5 features
+/- near	ns	ns	ns	ns
+/- present relevance	*** (+)	*** (-)	ns	ns
+/- specific date	*** (+)	*** (-)	ns	ns
+/- time mentioned	*** (+)	*** (-)	ns	ns
+/- speaker control	ns	*** (-)	ns	ns
+/- speaker expectation	ns	ns	*** (-)	ns
+/- speaker certainty	ns	ns	ns	*** (+)
+/- agent control	ns	ns	ns	ns
+/- agent intention	ns	* (-)	*** (+)	ns
+/- probability	ns	*** (-)	*** (+)	ns
+/- commissive	*** (+)	ns	*** (-)	ns
+/- prediction	ns	ns	ns	ns
+/- hypothetical	ns	*** (+)	*** (-)	ns
+/- subordinate	ns	ns	ns	ns
+/- first person	ns	*** (-)	ns	*** (+)
+/- dynamic	ns	ns	ns	ns
+/- animate subject	*** (-)	*** (+)	** (+)	*** (+)
+/- progressive	*** (-)	ns	ns	*** (+)
+/- habitual	*** (-)	ns	ns	*** (+)
+/- durative	ns	ns	ns	ns

Table 9.10: Significant features for future markers in all tasks

These results show that *POU* and *VA* appear to be in complementary distribution regarding ‘present relevance’, ‘specific date’, ‘time mentioned’, and ‘animate subject’. None of the features for *POU* and *VA* are significant in the same direction. This shows that although *POU* is very frequent and *VA* is rare, they still both tend to keep to separate domains of usage. In particular, *VA* was significant in situations where the speaker did not have control and when the probability of the event happening was low, which shows the continued relevance of ‘indefinite’ features as observed in the corpus analysis. One contribution of these tasks is the feature of ‘hypothetical’ which is highly significant across all tasks for *VA*, but significant in its absence for *PE*. This feature was not identified in the corpus analysis and it could be that *VA* is becoming further specialized to hypothetical contexts. The tendencies observed for *VA* in the acceptability task regarding the increased importance of subjective speaker stance do not seem to hold when all tasks are considered. Instead, similar tendencies to those observed in the corpus analysis persist with the addition of ‘hypothetical’.

PE, on the other hand, appears in ‘agent intention’, ‘probability’ and non-‘hypothetical’ contexts, implying that *PE* is associated with more certain contexts which are rooted in the real world. This is characteristic of early future developments and is reminiscent of *POU*’s early development. The initial hypothesis about *PE* taking on some of *VA*’s features does not appear to hold. \emptyset had the least significant features overall, showing it is less domain-specific than any of the overt markers. \emptyset was most significant with ‘speaker certainty’, ‘progressive’ and ‘habitual’. An affinity with ‘habitual’ was expected, but as discussed above, ‘progressive’ is surprising, especially as *PE* was not significant for this feature. It is likely that *PE* rarely has a progressive function when it is used in the future, more often displaying features which are typical of developing future markers.

9.3.4 Conclusions regarding hypotheses for future marking in all tasks

We return to the hypotheses set out in section 9.1. Table 9.11 gives an overview of the hypotheses for the future markers and whether they were supported by the results in the elicitation tasks. Since the narrative task did not seek to elicit future markers, it is not included.

Marker	Task	No. sig features	Hypothesis	✓?	Comments
<i>POU</i>	Trans	10/21	<i>POU</i> will be used consistently throughout all the tasks	?	Absence of certain features was significant
<i>POU</i>	Acc	0/17		✓	<i>POU</i> rated acceptable across all questions
<i>POU</i>	Cloze	1/16		✓	Lack of significance shows that <i>POU</i> appears across all contexts
<i>POU</i>	Int	0/15		✓	No significant features, as <i>POU</i> occurred in all contexts
<i>POU</i>	All tasks	7/20		✓	Most common future marker
<i>VA</i>	Trans	no test	VA will be rare but acceptable in 'obligation' contexts	✓	Not enough data to run statistical tests, but was used in 'obligation' context
<i>VA</i>	Acc	10/17		✓	Highly significant in hypothetical, no present relevance, no specific speaker expectation contexts, and acceptable in 'obligation' context
<i>VA</i>	Cloze	0/16		✓	Only used in 19% of original gaps, most frequently in 'obligation' context
<i>VA</i>	Int	-		✗	Did not occur at all
<i>VA</i>	All tasks	9/20		✓/✗	Rare overall, cannot test obligation
∅	Trans	8/21	∅ will be rare due to preference for overt TMA marking in the future	✗	Significant in habitual, progressive, not near, animate subject, and agent control contexts, not rare at all
∅	Acc	0/17		✓	∅ rated unacceptable across all contexts
∅	Cloze	5/16		✗	Significant in subordinate, no agent control, speaker certainty, not commissive and prediction contexts
∅	Int	2/15		✗	∅ was common in future contexts
∅	All tasks	5/20		✗	No clear preference for overt marking
<i>PE</i>	Trans	9/21	<i>PE</i> will occur as a future marker (most commonly in translation and interview)	✓	Occurred in 7% of future contexts
<i>PE</i>	Acc	8/10		✗	Mean of 3.61 does not support its future acceptability
<i>PE</i>	Cloze	no test		?	Rare (only used 4 times)
<i>PE</i>	Int	1/15		✓	Occurred in 7% of future contexts
<i>PE</i>	All tasks	6/20		✓	Occurs as future marker, most frequently in trans. and interview

Table 9.11: Overview of hypotheses and results for future markers

In all tasks, *POU* was used/accepted frequently and was always the favoured marker in future contexts, supporting the hypothesis that it can now be considered a general future marker. The prediction made at the beginning of the chapter put forward the hypothesis that *VA* would rarely be used actively by participants in the tasks, although it would still be accepted in the acceptability judgement task in restricted contexts. Indeed, *VA* was used in just one sentence in the translation task and the acceptability task showed that *VA* was considered as acceptable as *POU* by most participants

in contexts with a ‘hypothetical’ element which lacked ‘present relevance’ or a ‘specific date’, yet other sentences had a mean rating as low as 1.5.

The cloze test was interesting because it involved contexts where the original author used *VA*, yet this was the marker that participants used least when filling in the cloze test. It did not occur on its own in the interview and the narrative did not explicitly elicit future marking. Its non-occurrence in any interviews supports the hypothesis that it only occurs in written form today to maintain an older usage and this is further supported by participants in the cloze test who said they used *VA* because of the age of the character or style of the text in the cloze test. However, it is also probable that the interview questions didn’t provide the right contexts for *VA* to come up and more research into the spoken variety would be necessary before claiming *VA* is now restricted to the written domain.

The hypothesis about *VA*’s use in ‘obligation’ contexts was supported in the translation task, acceptability judgement task and the cloze test, but the marker did not occur at all in the interview. Cross-linguistic stages of future development show that obligation functions are common in the early development of future markers (Bybee et al., 1994:279; Traugott, 1989:36), so this is an unexpected development for *VA* considering its late stage of future development. Nevertheless, future > obligation developments are attested in an Austronesian language, Dehu (Devos & van der Wal, 2014:113) and it is also used in formal Romanian (Maiden, 2019, p.c.). Therefore, Mauritian Creole is not completely alone in such a development and traditional grammaticalization paths could be updated to include this possibility.

It was anticipated that *PE* would be used most often in the translation and interview tasks with a future meaning, where participants had the freedom to formulate sentences as they wished rather than rating an existing sentence or inserting a marker into a fixed template. *PE* occurred in around 7% of all future sentences in both the translation task and in the interviews, had a mean of 3.61 in the acceptability judgement task and was only used four times in the cloze test (less than 1%). Although 7 or 8% doesn’t sound like a large percentage of *PE*-marking, this is a similar proportion to that of *POU*-marking found in the first larger Old Mauritian text [1867] when *POU* first emerged

as a future marker. The fact *PE* was used by almost all participants in the translation task to translate some sentences and used spontaneously by around half of the interview participants suggests that it is already established as a future marker.

Only the acceptability judgement task supported the hypothesis that overt marking is preferred over \emptyset in future contexts. This will be investigated in more detail in the following chapters and specifically in chapter 12.

9.4 Overall conclusions

Throughout this chapter, four different elicitation tasks were reported to investigate whether they supported the hypotheses set out for four different future marking strategies. *POU* and *VA* were examined in the first section, following on from the corpus analysis in chapter 6. As expected, *VA* was rare across the tasks, although it was rated highly in some contexts in the acceptability judgement task. Its non-occurrence in the interviews should be investigated further to find out whether it still occurs in speech or if it is primarily restricted to the written domain.

The second section explored future expression more broadly, viewing *POU* and *VA* within a wider context and examining how \emptyset and *PE* fit into the picture. \emptyset was used more systematically and frequently than hypothesized, and the subsequent chapters will discuss how this compares to its usage and frequency in past and present contexts. *PE* showed tendencies typical of an emerging future marker and appeared in around 7% of future contexts in both the translation and interview tasks which gave participants more freedom of expression. Also, a non-future usage of *POU* was noted in the interview task, which will be explored further in chapter 11.

Taken individually, the tasks sometimes contradicted each other, highlighting the importance of investigating the same phenomenon from multiple angles through five different tasks. By combining

all of the results, this eliminated some of the task-specific idiosyncrasies and provided a much more coherent picture of the data.

The next chapter firstly zooms in on the past markers *TI* and *FINN* to see how these markers have developed since the corpus analysis. It then includes further past marking strategies in a similar vein as in this chapter, exploring the behaviour of *FEK*, \emptyset and *(TI) PE* as well.

Chapter 10:

Elicitation tasks - *TI*, *FINN* and past expression

As in the previous chapter on future expression, this chapter firstly focusses on the results pertaining to specific past markers explored in the corpus analysis, *TI* and *FINN*, before zooming out to explore past marking strategies in general.

10.1 Summary of findings from corpus analysis and predictions for elicitation

The corpus analysis showed that multiple lexifier, substrate and language-internal change influences contributed to the early development of *FINN*. Contrary to Bybee et al.'s (1994:105) path for perfect markers, *FINN* already had a perfective meaning in early examples, although a preference for 'perfect' contexts with 'current relevance' in [1888] examples was more in line with their proposal:

Perpage 1 – completives

Perpage 2 – young anteriors⁷⁸

Perpage 3 – old anteriors

Perpage 4 – perfectives

Perpage 5 – simple pasts

As *FINN* increased in frequency over the 20th century, typically 'perfect' features became less relevant as it expanded in scope, and followed the expected trajectory. By the modern Mauritian period, there were examples of *FINN* being used in perfective contexts again with no current relevance at all, although it was still the main marker for perfect contexts too. It was shown to progress through perpages 2-3, with instances of perpage 4 usage. It is expected that *FINN* will be

⁷⁸ 'Anterior' is used as a synonym for 'perfect' here. 'Young anteriors' exclusively have a perfect usage, 'old anteriors' have additional usages.

increasingly used in perfective contexts in the elicitation tasks and may also expand into perpage 5 to become a general past marker, understood as a possible marker in all past contexts.

TI already began as a general past marker in Old Mauritian. The corpus analysis found that *TI* was used to give background information in narratives, whilst a non-overt marker \emptyset provided foreground information. Throughout the 20th century and into Modern Mauritian, *TI* was most frequently used in non-recent past contexts. *TI* is not assumed to be on any established grammaticalization paths, therefore it will be important to establish in which contexts it is used through the elicitation tasks.

The prediction for these modern elicitation tasks is that *FINN* will be used across most past contexts and *TI* will be rare in non-narrative tasks, but have a main function of giving background information when it occurs in narratives.

10.2 Results from elicitation tasks for *TI* and *FINN*

10.2.1 Translation task

TI occurred just 16 times (4.5%) in 360 past translations and *FINN* was used in 65% of them. Table 10.1 shows the past sentences in the translation task:

Sentence code	Tested features	Stimuli
TP1	Past: Narrative: Backgrounding	He WALK in the forest.
TP2	Past: Narrative: Perfective	Suddenly, he STEP on a snake
TP3	Past: Narrative: Perfective	and it BITE him in the leg.
TP4	Past: Experiential	Question: you MEET my sister? (at any time in your life up to now)?
TP5	Past: Typical perfect, present relevance	[A child asks: Can I go now?] Mother: You DO your homework?
TP6	Past: Telic, perfective	I GET my wages yesterday, so I can now BUY you a beer.

TP7	Past: Passive meaning	[A guide, showing ruins to tourists:] This city BE DESTROYED about 3000 years ago.
TP8	Past: Present relevance, duration	[She is still watching TV! How long she DO that?] Answer: She WATCH (it) for three hours.
TP9	Past: Direct perception, current relevance	[Looking at the house.] Who BUILD this house?
TP10	Past: Indirect news, recent past	[A comes from the kitchen very agitated and tells B what he has just seen happen:] The dog EAT our cake!
TP11	Past: Already	[A: Don't talk so loud! You'll wake the baby.] B: He WAKE UP already.
TP12	Past: Perfective	[It is cold in the room. The window is closed.] Question: You OPEN the window?

Table 10.1: Past sentences in the translation task

It was not considered reliable enough to run statistical tests for *TI* due to low numbers. As in the previous chapter, contingency tables were created for each of the markers according to each of the features. Chi-square tests were then run to establish whether the presence or absence of a feature affects the likelihood of a certain marker being used.

Below are the top five statistically significant features for *FINN*, although almost all of the features tested reached the corrected p value threshold:

Features for <i>FINN</i> in the past (10/11 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
perfective > non-perfective	1	p<0.00071	87.231	9.66E-21	***
telic > non-telic	1	p<0.00071	87.231	9.66E-21	***
non-durative > durative	1	p<0.00071	87.231	9.66E-21	***
current relevance > non-current relevance	1	p<0.00071	44.505	2.54E-11	***
direct speech > non-direct speech	1	p<0.00071	34.449	4.38E-09	***

Table 10.2: Significant features for *FINN* in the past in the translation task

These data support the observation that *FINN* is no longer simply a perfect marker, but now again marks perfectivity for completed events in the past as well. However, it is also still the preferred marker in typically perfect contexts which have 'current relevance'. I hypothesize that this perfective trend will continue in the subsequent tasks, and if they show that these features play a role, this will strengthen the reliability of the conclusions that can be drawn about the specific contexts *FINN*

occurs in in modern Mauritian. However, all the significant features are restricted to perfect or perfective ones, suggesting it is not yet a general past marker.

Although there was not enough data to carry out chi-square tests for *TI*, none of the features stood out as relevant for *TI*. This is mainly because many of the sentences to be translated constituted perfect or perfective situations, which have never been *TI*'s primary domain. This simply means that the contexts in this task were not relevant for pinpointing *TI*-usage, and subsequent tasks should be more useful in highlighting this.

Recall in chapter 7 the observation that experientials were expressed in Old Mauritian with *TI zame* 'have (n)ever', but during the 20th century, this changed to *FINN deza* 'already' rather than *zame* '(n)ever'. When asked to translate 'have you ever been to Spain?' my contact wrote *to 'nn deza al lespagne?* with a reduced form of *FINN 'nn* and the adverb *deza* (Parmessur, 2018, p.c.). The translation task expanded upon this in sentence TP4 to see whether this would be replicated with 30 participants or whether they would use other constructions.

TP4: Question: you MEET my sister? (at any time in your life up to now)?

29/30 of the participants used *FINN* in this context, although only 12 of these (41%) combined *FINN* with *deza* 'already' and none used *zame* '(n)ever'. Although *zame* was completely absent in this task, it is impossible to distinguish from this task whether it is simply rare or ungrammatical. Therefore, this will be tested explicitly in the acceptability judgement task.

10.2.2 Acceptability judgement task

TI and *FINN* were both rated in eight sentences in the acceptability judgement task. See Table 10.3:

Sentence code	Tested features	Stimuli
AX01	Past: Experiential	To (f)inn zame tann enn lorkes ki otan bon?
AX04	Past: Current relevance	Ser sitwayin. Nou presidan fek mor. Nou pre pou vot enn lot dan so plas.
AX07	Past: Contrary to expectation	Kan Nabil (f)inn ariv dan fet, so kopinn pa fek la.
AX10a	Past: Permanent states: adj	Tantinn Palavi ((f)inn sourd) e (f)inn viv lor enn laferm tou long so lavi.
AX10b	Past: Permanent states: v	Tantinn Palavi (f)inn sourd (e (f)inn viv lor enn laferm tou long so lavi.)
AX13	Past: Recent Past	Li (f)inn al lakaz-la.
AX16	Past: Change of state	Ler li finn trouve zanfana-la pe lager mem, tonton Fardeez ti ankoler.
AX19a	Past: Duration, still	Alexandra (f)inn travay dan enn labank depi lontan (e li ankor travay laba)
AX19b	Past: Duration, not any more	Rukhaya ti travay lontan dan labank (me li ti aret travay laba lane dernie)
AX22	Past: Telicity and already	Li ti deza manz tou diri-la.

Table 10.3: Past sentences in the acceptability judgement task

TI was acceptable to varying degrees, with means from as low as 1.87 in AX04 (current relevance) up until 6.87 in AX07 (contrary to expectation). As became evident in the corpus analysis, *TI* is possible in both imperfective (durative and atelic) contexts as well as perfective ones, although the acceptability judgements and significance for these features and contexts were not as clear-cut as anticipated. The sentence which was rated most highly was AX07 (contrary to expectation):

AX07 Kan Nabil (f)inn ariv dan fet, so kopinn pa ti la
 When Nabil FINN arrive in party, 3sg.POSS friend.f NEG TI there
'When Nabil arrived at the party, his friend wasn't there'

None of the sentences constituted narrative contexts, so a backgrounding function was not expected to be a significant feature for *TI* in this task. Conversely, the feature 'foregrounded' turned out to be marginally significant, which may instead allude to *TI*'s acceptability in both perfective (often used to foreground events) and imperfective contexts.

The most significant features were 'non-recent past' and 'not direct speech', with *TI*'s acceptability with the presence of 'durative' and 'non-agentive' features also being significantly different from their absence, as can be seen in Table 10.4.

Significant features for <i>TI</i> in the past (10/11 features significant)	Mean when feature present	Mean when feature absent	Corrected significance threshold	P value	Pearson's chi-square value
1. <i>non-recent past</i> > <i>recent past</i>	2.392	4.37	<0.00089	<0.0001	72.577
2. <i>not direct speech</i> > <i>direct speech</i>	2.392	4.37	<0.00089	<0.0001	72.577
3. <i>durative</i> > <i>non-durative</i>	4.277	2.972	<0.00089	<0.0001	46.914
4. <i>non-agentive</i> > <i>agentive</i>	3.732	3.565	<0.00089	<0.0001	40.465

Table 10.4: Significant features and means for *TI* in the past in the acceptability judgement task

On the other hand, *FINN* ranged from a mean of 2.2 in AX07 (contrary to expectation) to 6.4 in AX04 (current relevance), which is the polar opposite of *TI* in these two contexts. The features of ‘completed action’, ‘perfective’ and ‘telic’ were highly significant, along with ‘non-durative’ and ‘non-stative’ to a slightly lesser degree:

Significant features for <i>FINN</i> in the past (11/11 features significant)	Mean when feature present	Mean when feature absent	Corrected significance threshold	P value	Pearson's chi-square value
1. <i>completed action</i> > <i>non-completed action</i>	6.055	2.776	<0.00089	<0.0001	180.395
2. <i>perfective</i> > <i>non-perfective</i>	6.055	2.776	<0.00089	<0.0001	180.395
3. <i>telic</i> > <i>non-telic</i>	6.055	2.776	<0.00089	<0.0001	180.395
4. <i>non-durative</i> > <i>durative</i>	3.547	6.094	<0.00089	<0.0001	116.20
5. <i>non-stative</i> > <i>stative</i>	3.679	5.963	<0.00089	<0.0001	100.962

Table 10.5: Significant features and means for *FINN* in the past in the acceptability judgement task

The chi-square values for *FINN*'s significant features are particularly high overall. This is partly because the features which were chosen are elements relevant for the development of perfect/perfective so it is unsurprising that they correspond so well with *FINN*. Three of these features (‘perfective’, ‘telic’ and ‘non-durative’) were also identified as statistically significant for *FINN* in the translation task, providing some further support for *FINN*'s affiliation with these features. This task shows that perfect and perfective contexts are primarily *FINN*'s domain, as expected, although there are still contexts, such as ‘contrary to expectation’ in which *TI* is the preferred marker.

Following on from the translation task, experiential constructions were investigated to determine which marker and which adverb is most acceptable in modern Mauritian. The translation test established the possibility of using *FINN deza* or *FINN* on its own in experiential contexts, but it was

not clear whether *zame* was possible. The acceptability judgement test therefore also enabled me to gain judgements for those constructions not used in the translation task.

The experiential sentences were not included in the chi-square tests for *FINN* and *TI*, but dealt with separately to make sure the adverbs *deza* and *zame* did not have an effect on the overall acceptability of these markers. The context (in Creole) given to participants before rating the four experiential sentences was ‘You go to a concert for your sister’s birthday. After the concert, you say to your sister:’

- a) To (*f*)*inn deza* tann enn lorkes ki otan bon?
- b) To (*f*)*inn zame* tann enn lorkes ki otan bon?
- c) To *ti deza* tann enn lorkes ki otan bon?
- d) To *ti zame* tann enn lorkes ki otan bon?

These sentences translate as ‘have you ever heard an orchestra which is that good before?’ and the results can be seen in the graph below:

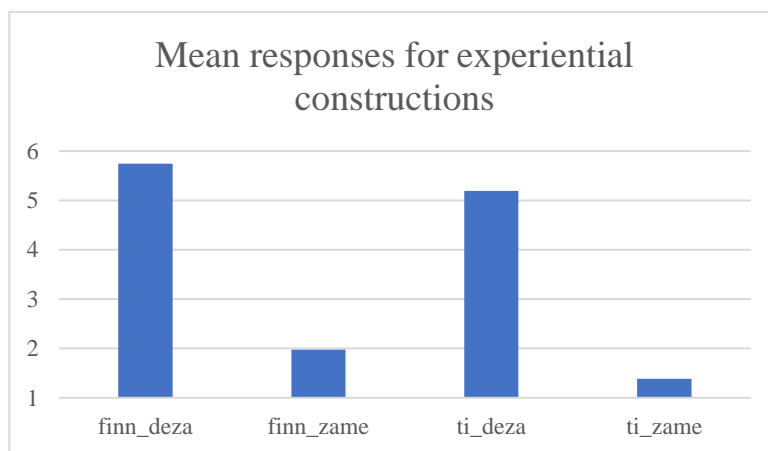


Figure 10.1: Graph showing mean responses for experiential constructions in the acceptability judgement task

It seems that the adverb rather than the marker is driving acceptability in these sentences, although *FINN* is more acceptable than its counterpart with *TI* in both cases. We now have evidence that *zame* is not considered acceptable by modern Mauritian speakers, which is supported by its absence in the translation task.

It is clear that the Old Mauritian construction *TI zame* is no longer acceptable in modern Mauritian, however *TI deza* was surprisingly acceptable. It could be that *TI deza* is acceptable with a pluperfect

interpretation ‘had you ever...’, so it was rated as acceptable although its meaning is different from *FINN deza*. Further research is needed to establish whether *TI deza* is possible with a past rather than a pluperfect meaning.

10.2.3 Cloze test

In comparison with previous tasks, there were very few significant features for *TI* and *FINN*. The task was a narrative, and overall *TI* was used 55 times and *FINN* 116 times in past gaps. See the past sentences below:

Sentence code	Marker in original	Stimuli
CT01_01	ti	Koumsamem ki souvan Tizan (ti) aste enn ti gato
CT01_03	ti	Enn zour, ek sa ti kas ki so mama (ti) donn li la,
CT01_04	Ø	Tizan () rant dan laboutik, li aste de gato kanet.
CT03_01	Ø	Apre enn ti-mama, li () trouv enn ti pie koumans zerme.
CT03_02	finn	Tizan kontan! Kan pie (finn) gran
CT03_03	Ø	li () koumans donn zoli zoli fler. Anfin, sezon rapor aprese.
CT03_05	Ø	Tou dimoun () pase get li koumadir mirak.
CT04_01	Ø	Enn tanto apre so lekol, Tizan () anler
CT04_02	Ø	lor so pie, () tann enn lavwa depi anba.
CT04_03	Ø	Li () bes latet
CT04_04	Ø	() pran enn kont
CT04_05	Ø	Ki li () trouve? Enn vie bolfam dan enn gran zip afler inpe zonn-zonn, enn fisi nwar lor so latet, enn gro tant lor enn zepol ek enn vie kaba dan so lame gos.
CT05_03	Ø	Li () tranble so lavwa pli for ankor li dir: "Desann vini do mo ti garson.
CT06_07	Ø	Bolfam () met li dan so gro tant!
CT06_08	Ø	Tizan () kriye lasasin dan tant. Li kriye, pa enn dimunn tande.
CT07_01	pe	Letan sa marenwar (pe) arive
CT07_02	Ø	Bolfam () aret lor peron laboutik.
CT07_03	Ø	Lerla Tizan () debriye larg lakord gro tant, degaze rod ros, boutey kase, vie tol tousala, ranplas li dan tant e re-atas li.
CT07_04	finn	Ala ki manyer Tizan (finn) resi sape.

Table 10.6: Past sentences in the cloze test

The significant features are summarized briefly below. The multiple testing corrected significance threshold for the past chi-square tests was 0.00093, so all p-values had to be under this figure to be considered significant. Two out of 12 features were significant for *TI*; the absence of ‘foregrounded’

($p=0.0000703$) and absence of ‘current relevance’ ($p=0.00008064$). These two features support the assumption that *TI* is used in backgrounding and does not overlap with *FINN*’s original perfect meaning with current relevance. *FINN* also had two significant features: ‘subordinate’ ($p=0.000646$) and ‘non-iterative’ ($p=0.00008376$), yet these do not seem to be relevant for the hypotheses regarding *FINN*. None of the perfective features which were significant in the translation and acceptability tasks were significant in the cloze test.

10.2.4 Semi-structured interview

There were generally around seven past questions in the interview (although this differed according to participant), which asked about what the participant was doing before the interview, where they grew up, how their childhood differed from their parents’, their school experiences and the languages used at school. Table 10.7 shows some typical examples:

Question and features	English	Creole
1. past progressive	What were you doing just before the interview?	Ki ou ti pe fer avan sa antretian-la?
2. past complete	Where did you grow up?	Kot sa ou finn grandi?
3. past experience	How did you find school?	Kouma lekol ete pou ou?
4. past state	What things did you really like as a child?	Ki zafer ou ti extra kontan dan tipti?
5. past progressive	What languages were spoken in your school?	Ki langaz ti pe servi dan ou lekol?

Table 10.7: Typical past sentences in the interview

Two features were significant for *TI*, and three for *FINN*. These markers showed the opposite trends for the features ‘completed action’ and ‘stative’. As expected, *FINN* was highly significant for completed action ($p=6.02E-11$) whilst *TI* was significant when this feature was absent ($p=0.00016$). Conversely, *TI* was highly significant in stative contexts ($p=4.36E-09$), whilst *FINN* was significant in non-stative ones ($p=0.00017$). Additionally, *FINN* was significant in perfective contexts ($p=3.81E-08$).

This shows that these two markers still have preferred domains, although their usage can encompass overlapping uses. For example, *FINN* can be used in stative contexts, just as *TI* can occur in perfective ones. Overall, *FINN* does not yet appear to be a general past marker. There were no examples of experientials occurring spontaneously in the interviews.

10.2.5 Narrative re-telling

The ‘recall’ condition of the narrative task was designed to elicit past marking in spoken form. Participants were asked to watch a 6-minute video called Pear Stories (Erbaugh, 2001) and then recall what happened in the video after it had finished. The markers were counted and it was found that overall, *FINN* was the most common marker, occurring with 45% of the verbs, whilst *TI* was much less frequent, despite it being a narrative, appearing with around 8.5% of the verbs in this task. See Appendix II.5 for screenshots of the story.

It was noted in the translation, acceptability and interview tasks that *FINN* was mostly associated with ‘perfective’ features and this is confirmed again in the statistical analysis for the narrative re-telling. As can be seen in Table 10.8, the features associated with perfectivity are all highly significant, but no other features pass the corrected significance threshold of $p < 0.00071$.

Features for <i>FINN</i> in the past (4/10 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
perfective > non-perfective	1	$p < 0.00071$	55.42995	9.68E-14	***
completed action > non-completed action	1	$p < 0.00071$	53.95078	2.06E-13	***
telic > non-telic	1	$p < 0.00071$	29.60054	5.31E-08	***
foregrounded > non-foregrounded	1	$p < 0.00071$	22.65698	1.94E-06	***

Table 10.8: Significant features for *FINN* in a chi-square test

TI was only significant for two features; it was highly significant for ‘stative’ ($p = 3.63E-09$) and reasonably significant for ‘non-agentive’ ($p = 5.96E-05$). The expectation that *TI* would be used to provide background information in narratives is not supported by this task.

10.2.6 Overview of *TI* and *FINN* in all tasks

Taking the results from all of the tasks together, more tendencies than were identified for the future markers *POU* and *VA* arise, as can be seen in Table 10.9.

Feature	<i>FINN</i>					<i>TI</i>			
	Trans	Acc	Clo	Int	Narr	Acc	Clo	Int	Narr
+/- recent past	* (+)	*** (+)	All 0	ns	All 0	** (-)	All 0	ns	All 0
+/- direct speech	*** (+)	*** (+)	ns	All 0	All 0	** (-)	ns	All 0	All 0
+/- completed action	*** (+)	*** (+)	ns	*** (+)	*** (+)	* (-)	ns	** (-)	ns
+/- foreground	ns	* (+)	ns	ns	*** (+)	* (-)	** (-)	ns	ns
+/- current relevance	*** (+)	* (-)	ns	ns	All 0	ns	** (+)	ns	All 0
+/- result	*** (+)	** (+)	ns	All 0	All 0	** (+)	ns	All 0	All 0
+/- experiential	* (+)	All 0	All 0	All 0	All 0	All 0	All 0	All 0	All 0
+/- perfective	*** (+)	*** (+)	ns	*** (+)	*** (+)	* (-)	ns	ns	ns
+/- telic	*** (+)	*** (+)	ns	ns	*** (+)	* (-)	ns	ns	ns
+/- stative	*** (-)	*** (-)	ns	** (-)	ns	* (-)	ns	*** (+)	*** (+)
+/- durative	*** (-)	*** (-)	ns	ns	ns	** (+)	ns	ns	ns
+/- iterative	All 0	All 0	** (-)	All 0	ns	All 0	ns	All 0	ns
+/- subordinate	All 0	All 0	* (+)	ns	ns	All 0	ns	ns	ns
+/- non-agentive	All 0	*** (-)	ns	ns	ns	** (+)	All 0	ns	** (+)

Table 10.9: Overview of significant features for *TI* and *FINN* in all tasks

Unlike for the main future markers, the tasks broadly showed consistent findings for the past markers *FINN* and *TI*. An exception is ‘current relevance’, since this was highly significant for *FINN* in the translation task, but its absence was significant in the acceptability judgement task, yet not significant in the cloze and interview tasks. However, this ties in with *FINN*’s development away from a purely perfect function (characterized by ‘current relevance’) to a perfective marker, so it makes sense that variation in this feature should exist. For *TI*, there were differing results for ‘stative’, since *TI* was significant in ‘non-stative’ contexts in the translation task, but in ‘stative’ ones in the interview and narrative re-telling. The corpus analysis showed that ‘stative’ is too broad as *TI* occurs with permanent states, but not in all stative contexts, which can explain this anomaly to some extent.

Otherwise, the overarching trend is for those features which are positive for *FINN* to be negative for *TI* if that feature is significant, and vice versa. For example, four of the tasks showed that *FINN* was highly significant for ‘completed action’, and two of the tasks showed that *TI* was significant when

the action was incomplete. Conversely, two tasks showed that *FINN* was significant when ‘durative’ was absent, and one task showed that *TI* was significant when it was present.

The hypothesis for *TI* refers explicitly to it having a backgrounding function in narratives. Although this was surprisingly not the case in the narrative re-telling, *TI* was significant when the ‘foregrounded’ feature was absent (i.e. backgrounded) in the translation and acceptability judgement tasks, whilst *FINN* was significant for foregrounded events in the acceptability and narrative tasks.

Chapter 9 mentioned how the grammaticality of marker combinations can provide hints about their status as tense, mood or aspect markers. Regarding the past markers, the past elicitation tasks provide evidence for the possibility of combining *TI* and *FINN* (commonly as *ti’nn*, but recorded as ‘na’ in some tasks) to express pluperfect. Assuming that tense markers cannot co-occur with markers of the same kind, we might assume one of the markers expresses tense, while the other expresses the aspectual notion of completion. As *TI* is more commonly associated with distant past than *FINN*, we can posit that *TI* expresses tense information, whilst *FINN* expresses completive aspect. However, since *FINN* is assumed to be moving towards a purely temporal marker, this combination may not be possible in the future. The fact they can be combined implies *FINN* has not yet reached this final stage of development. Nevertheless, I expect that the combination of *ti’nn* will continue to be possible, even once it is considered to be a simple past marker, due to collocation, much like *ti a* (*TI* + *VA*), which remains possible today, even though no one uses the form *a* anymore. Therefore, I do not believe we should place too much emphasis on marker combinations for making claims about their category.

As in chapter 9 on future expression, it is clear that the individual tasks cannot provide unanimous support for the hypotheses posited at the beginning of this chapter, although they do show more consistent results than for *POU* and *VA*. In order to gain a more holistic overview of past marking across the elicitation tasks, the following section will explore these markers further within a broader context alongside further past marking strategies.

10.3 Past expression as a whole

The markers in addition to *TI* and *FINN* which occurred in past contexts in the elicitation tasks were (*TI*) *PE*, *FEK* and \emptyset . These will be explored in more detail below.

10.3.1 Predictions

These additional markers which occurred in past contexts were not investigated during the corpus analysis. Therefore, there is less information to base the predictions on. Nevertheless, chapter 9 found that \emptyset did occur in future contexts, although it was not rated highly in the acceptability judgement task. In comparison with the results in future contexts, it is anticipated that \emptyset will occur more frequently across all tasks and be rated more highly on the acceptability judgement task. Furthermore, it is hypothesized that \emptyset will portray foregrounded actions or series of events in line with the analysis in chapter 7. *TI PE* is predicted to commonly occur in narratives when giving background information. *FEK* is expected to be rare in all tasks and only be used in recent past contexts when it occurs.

10.3.2 Overview of elicitation tasks

10.3.2.1 Translation task

In addition to *FINN* and *TI*, \emptyset was used to translate around 14% of the past sentences, and *PE* was more common than *TI PE*:

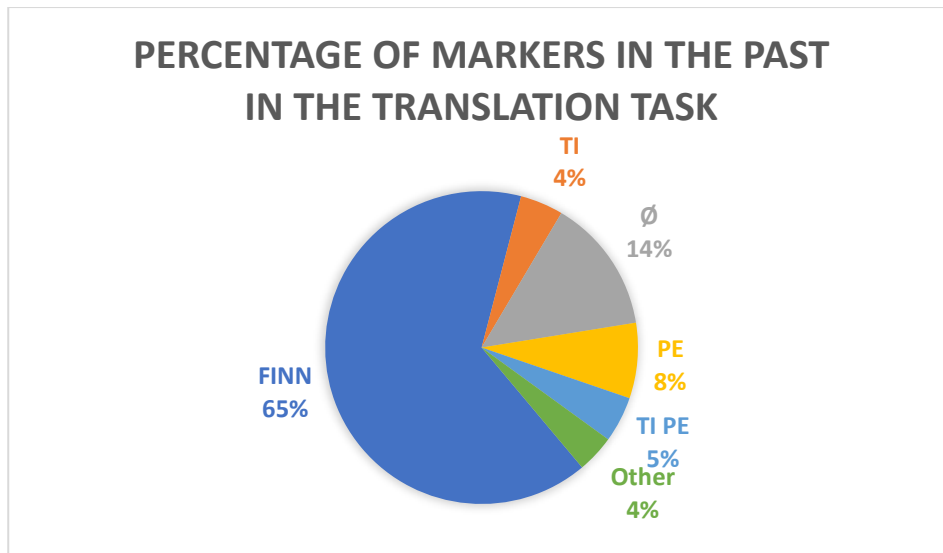


Figure 10.2: Pie chart showing percentage of markers in the past in the translation task

This already suggests that there are not extensive differences between the proportion of \emptyset -marking in future and past contexts, since this task only had 1% more \emptyset -marking in past contexts in comparison to the 13% in future ones.

Below in Figure 10.3 is a mosaic to show an overview of the markers used by the participants to translate each of the twelve past sentences. See Appendix II.1 for a list of sentences that participants translated.

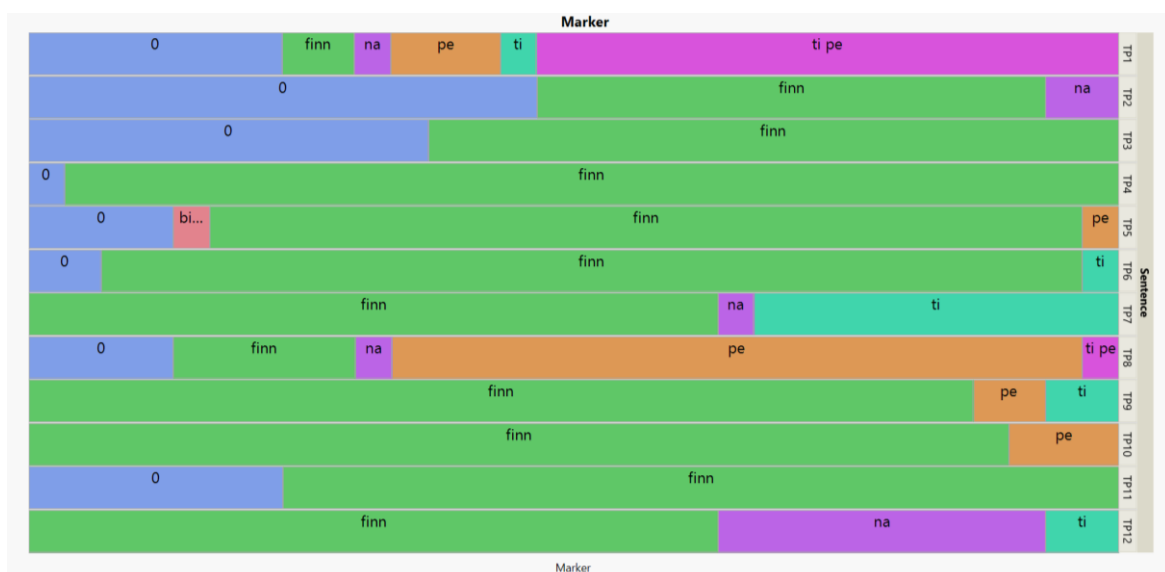


Figure 10.3: Mosaic showing past markers according to sentence in the translation task

Apart from in TP1 and TP8, *FINN* was the most common response across all sentences. Sentences TP1-TP3 constitute the beginning of a narrative:

TP1: He WALK in the forest.

TP2: Suddenly, he STEP on a snake

TP3: and it BITE him in the leg.

TP1 sets the scene with background information about what was happening before a series of sudden punctual events. In chapter 7, we saw that *TI* and *FINN* had a backgrounding function in Old Mauritian, whilst the zero marker was used to express perfective, foregrounded events. This is no longer so clear-cut in modern Mauritian. As can be seen in Figure 10.3 for TP1, the backgrounding function can be expressed by a number of different markers, with the most common being a combination of *TI* (past) and *PE* (progressive). For the punctual foregrounded series of events which follow, however, both *FINN* and \emptyset are frequently used. *FINN*'s increased use in perfective contexts was documented in the corpus analysis and is evidenced here, as it is used by more participants than \emptyset in TP3. TP8 is clearly a progressive, durative context which favoured the use of *PE*:

*TP8: [She is still watching TV! How long she DO that?]
Answer: She WATCH (it) for three hours.*

The prevalence of *PE* in this sentence with no overt temporal marking is not as unexpected as one might first think due to the strong link to the present time, since the action is still happening at the moment of speech. The sentences in the translation task were chosen to investigate the development of perfect expression, so this explains why *TI* is used infrequently. It should also be noted that *FINN* and *PE* are never combined.

The features associated with the use of each marker can be seen below in Figure 10.4:

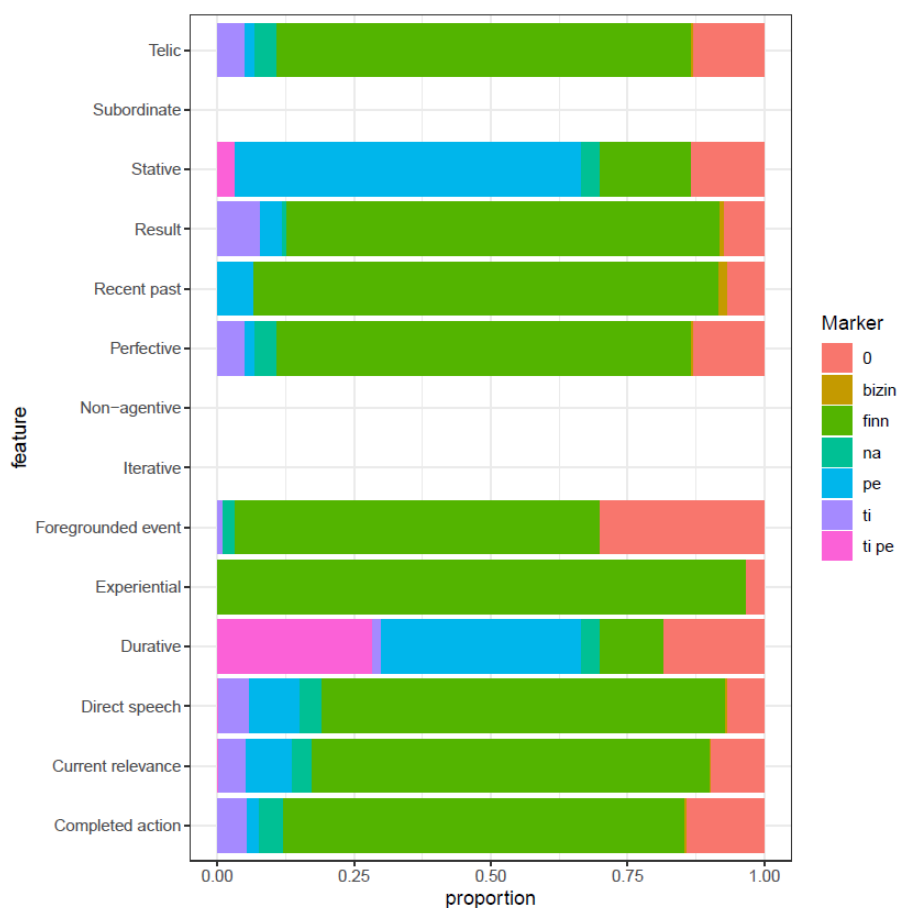


Figure 10.4: Mosaic showing features associated with past marking in the translation task

Although *FINN* is used consistently across most contexts, it is used much less frequently in ‘durative’, ‘stative’ contexts, confirming its specialization towards ‘completed,’ ‘perfective’ ones and suggesting that it is still in perpage 4 rather than having progressed to perpage 5 (Bybee et al., 1994). ‘Experiential’ contexts are almost exclusively the domain of *FINN*. In the areas where *FINN* is used less frequently (‘stative’ and ‘durative’), *PE* and *TI PE* step in. Remarkably, *TI* is absent from ‘stative’, ‘durative’ contexts, but is present in small numbers in more typically perfective ones. \emptyset is present across all contexts, but notably more frequent in ‘foregrounded’ contexts, although still to a lesser extent than *FINN*.

In line with the prediction, \emptyset occurs most frequently with foregrounded events, but also with a range of features which span both typical perfective (e.g. telic) and imperfective (e.g. durative) usage.

10.3.2.2 Acceptability task

Below is a graph showing the means for the past markers. In comparison with the future markers, the interaction between the past markers is much more complex. No past marker is preferred in all contexts and no marker is consistently unacceptable. I might even go as far as positing a complementary distributive relationship between *FINN* and \emptyset . Such a relationship was not possible to establish in the corpus analysis due to the difficulty in searching for and identifying something that isn't present. However, from these examples, there is certainly a tendency for \emptyset not to be accepted in the contexts in which *FINN* is rated as acceptable and vice versa.

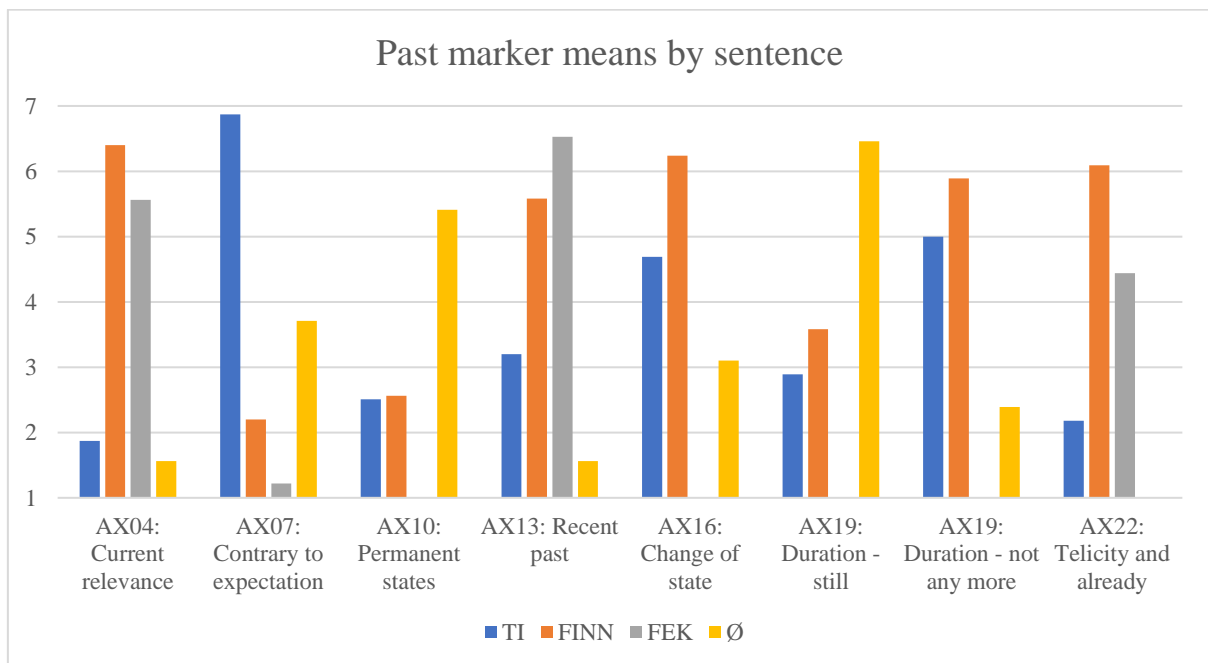


Figure 10.5: Graph showing past marker means according to sentence in the acceptability judgement task

In addition to the contexts in Figure 10.5, experiential contexts including a marker and an element meaning ‘already’ were also investigated. Initially, however, I will solely concentrate on the eight primary contexts in Figure 10.5 and only look at the four past markers in isolation.

Figure 10.6 shows the acceptability of the past markers according to features.

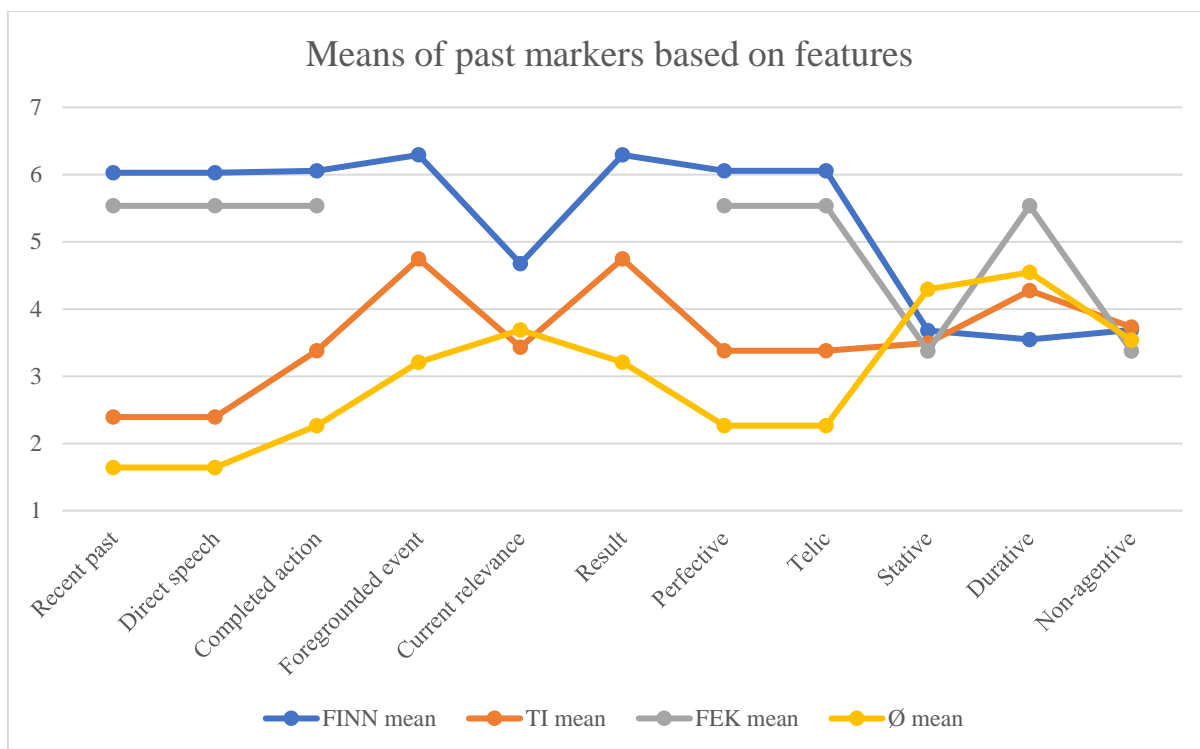


Figure 10.6: Graph showing means of past markers based on features in the acceptability judgement task

In the sentences tested in this task, *FINN* was the most acceptable marker with most features. The least acceptable contexts for *FINN* were ‘stative’, ‘durative’ and ‘non-agentive’ ones. \emptyset was more accepted in ‘stative’, ‘durative’ contexts with ‘current relevance’ than in others. *TI* was least acceptable in ‘recent past’ contexts, but surprisingly most acceptable with ‘foregrounded’ events. *FEK* was accepted in typically ‘perfective’ contexts, although ‘durative’ was surprisingly also ranked highly.

There were a number of unexpected results for *FINN*. In AX19_13, the context presents an action which is clearly completed with no current relevance. This sentence was expected to be more compatible with *TI*, however *FINN* was the most accepted marker (mean: 5.894):

AX19_13 Rukhaya (f)inn travay lontan dan labank (me li ti
 Rukhaya FINN work longtime in bank (but 3sg TI
 aret travay laba lane dernye)
 stop work there year last)
 ‘Rukhaya worked in the bank for a long time (but she stopped working there last year)’

This shows that in the modern variety, *FINN* can be used to refer to completed actions with no link to the present, a function which used to be reserved for *TI*. This again supports the assumption that *FINN* has moved away from its perfect function, as noted in the translation task.

In the opposite situation, when the state of affairs is ongoing, the results are inconclusive for *FINN*:

AX19_08 **Alexandra** **(f)inn** **travay** **dan** **enn** **labank** **depi** **lontan**
 Alexandra FINN work in INDEF bank since longtime
(e **li** **ankor** **travay** **laba)**
 (and 3sg still work there)
'Alexandra has worked in a bank for a long time (and she still works there)'

It was anticipated that *FINN* would be most appropriate, but participants were divided, and the mean was a neutral 3.646. Again, this strengthens the assumption that *FINN* is no longer used consistently in 'current relevance' contexts. Since *TI* has never been used in 'current relevance' contexts this left no obvious contender if *FINN* started not to be used in these contexts; this question could not be answered in the corpus analysis. However, these results show that \emptyset is the most appropriate marker in this case. It could be that \emptyset is now the preferred way of expressing the 'current relevance' contexts if *FINN* is not used. Since 'current relevance' was significant for *FINN* in the translation task, we would need more evidence to draw conclusions about how common and acceptable *FINN* is in current relevance contexts, now that it is commonly used in perfective contexts lacking this feature. We will have to see whether 'current relevance' is significant for \emptyset below.

On the basis of historical texts, it was also assumed that *FINN* had lost its early inchoative sense and that either *PE* could be used to express this or if *FINN* was used, an extra lexical item *vinn* 'be/come' would be necessary to convey this meaning. However, in AX16, a sentence which expresses the fact that Uncle Fardeez became angry, *FINN* alone was the most acceptable marker with a high mean of 6.292. However, whilst an inchoative reading is possible, it cannot be certain participants understood it as such.

AX16 **Ler** **li** **(f)inn** **trouve** **zanfan-la** **pe** **lager** **mem,**
 When 3sg FINN see children-DEF PE fight even
tonton **Fardeez** **(f)inn** **ankoler**
 uncle Fardeez FINN angry
'When he saw the children fighting, Uncle Fardeez got angry'

Some further research is therefore necessary to examine inchoative expression in more detail. As with the previous markers, none of the personal variables correlated significantly with the acceptability judgements of *FINN* so this does not appear to be socially conditioned.

It was expected that *TI* would be acceptable in permanent states, however AX10 was not accepted, with a mean of 2.521:

AX10 **Tantinn** **Palavi** **ti** **sourd** **e** **ti** **viv** **lor**
 Aunt Palavi TI deaf and TI live on
enn **laferm** **tou** **long** **so** **lavi**
 INDEF farm all long 3sg.POSS life
'Aunt Palavi was deaf and lived on a farm her whole life'

FINN was equally unacceptable in this sentence with \emptyset being the preferred marker. This is unexpected but most likely due to the fact that there is both an adjective *sourd* 'deaf' and a verb *viv* 'live' in this sentence which weren't both equally acceptable. Even if only one of these was acceptable, the presence of an unacceptable element would bring down the acceptability of the whole sentence. This sentence is therefore problematic and may be bringing down the overall means for *TI* and *FINN*.

Overall, the acceptability judgement task showed variable results. It suggested that *FINN* has not yet moved into the final stage of development, but is still somewhat specialized to perfect and perfective contexts. Also, \emptyset was neither completely accepted, nor unacceptable and highly depended on the context, unlike in future expression.

10.3.2.3 Cloze test

In the original text, *TI* occurred twice, as did *FINN*. \emptyset occurred 16 times, of which 14 were in past contexts. *PE* occurred once in a past context without being accompanied by an overt past marker.

Overall, in comparison with all the markers, the highest percentage of participants agreed with the marking of *FINN*. In 71% cases, *FINN* was used in the gaps in which it appeared in the original text. *TI*, however, only appeared in 50% of the original gaps. This is just over the average for all markers combined (46%). *TI PE* occurred six times in the first two gaps of the narrative, one gap originally filled by *TI* and the other by *PE*. \emptyset originally occurred in 74% of the past gaps of the narrative, yet this fell to 35% of the gaps filled in by the participants.

The gap with the most consensus was CT07_04; the last line of the story. 17 participants filled it with *FINN* as in the original text (one chose *TI* and another \emptyset):

CT07_04 **Ala** **ki** **manyer** **Tizan** **finn** **resi** **sape**
Here is what way Tizan *FINN* succeed escape
‘That’s how Tizan managed to escape’

The other instance of *FINN* in the original text appeared to be inchoative:

CT03_02 **kan** **pie** **finn** **gran**
when tree FINN big
‘When the tree became/got big’

Unlike in the CT07_04 example above, where most participants agreed, only around 50% of the participants used *FINN* in CT03_02. It caused problems for some speakers who didn’t think any marker was adequate on its own and suggested *PE vinn*.

Recall discussions about inchoatives in chapters 7 and 8. First *FINN* was used in inchoative contexts before appearing with *vinn* ‘become’ to express this, then *PE* became more associated with inchoative. Although half of the participants used *FINN* when strongly encouraged to choose from a list of markers, many thought the future marker *POU* was more appropriate, some preferred \emptyset and

PE vinn was put forward as an alternative. This lack of consensus for *FINN* expressing inchoativity was also found in the acceptability judgement task, showing that there is no single way of expressing inchoativity in modern Creole.

The two instances of *TI*, on the other hand, came at the beginning of the original text to set the scene:

CT01_01 Koumsamem ki souvan Tizan ti aste enn ti gato
like.that REL often Tizan TI buy INDEF DIM cake
'That's how Tizan often bought a little cake'

It is noteworthy that in the original text, the overt past markers occurred very infrequently (twice each), whilst the zero marker was used consistently throughout the text. This is consistent with Old and 20th century findings in the corpus analysis whereby overt markers gave background information, and \emptyset was used for the main narrative events.

However, this is not the pattern of results obtained from the participants, who tended to use overt markers throughout the narrative (\emptyset was only used in 48% of the originally \emptyset -marked gaps).⁷⁹ Let's turn to the features associated with each marker to see whether the features, rather than grounding can shed more light on the distribution of past marking.

⁷⁹ Although participants were told that they didn't need to put anything in the gaps, it is possible that the task itself may have encouraged the choice of an overt marker, as people usually expect to fill a gap with something rather than nothing.

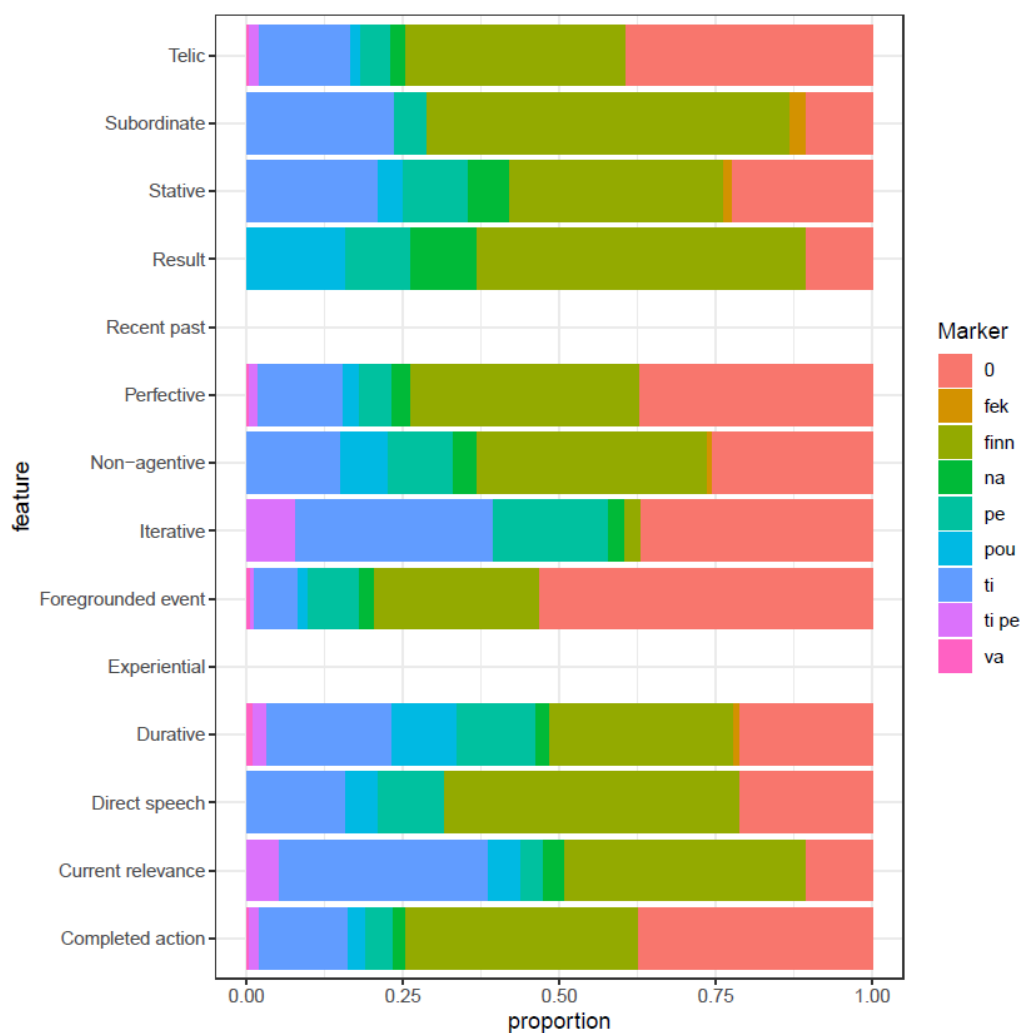


Figure 10.7: Mosaic showing features associated with past marking in the cloze test

Again, a number of other markers appear in cases where participants interpreted the sentence to refer to a different timeframe. In typically perfective contexts ('completed action', 'perfective', 'telic'), *FINN* and \emptyset occur fairly equally, although \emptyset still dominates with foregrounded events. \emptyset occurs much less frequently in typically perfect characteristics like 'current relevance' and 'result', where *FINN* holds its ground. Surprisingly, *TI* occurs more in 'current relevance' contexts than in others. More in accordance with *TI*'s behaviour in the corpus analysis, it is also used in 'durative', 'iterative' and 'stative' contexts. Following similar tendencies as *TI*, but with fewer attestations, is *TI PE*, which was used most in 'iterative' and 'current relevance' contexts. The other relevant marker in the past is *PE* without temporal specification. Its occurrence in 'durative' and 'iterative' contexts is in

accordance with its aspectual characteristics and its use with ‘statives’ shows its continued development to include further verb types, as identified in chapter 8.

The cloze test appears to suggest \emptyset -marking is less common in past contexts than when the story was written in 2003. However, if absolute proportions are considered, its 35% occurrence in past contexts is considerably higher than the 20% in future contexts for this task, supporting the initial hypothesis that \emptyset -marking is less common in future contexts.

10.3.2.4 Semi-structured interview

Markers occurring in past contexts in the interview were *TI*, *FINN*, *PE*, *TI PE* and \emptyset . Their proportions can be seen in the pie chart in Figure 10.8. Only explicit reference to a past context was included, so utterances like ‘I remember that...’ in response to past questions such as ‘what was your childhood like?’ were excluded, since they pertain to present rather than past expression.

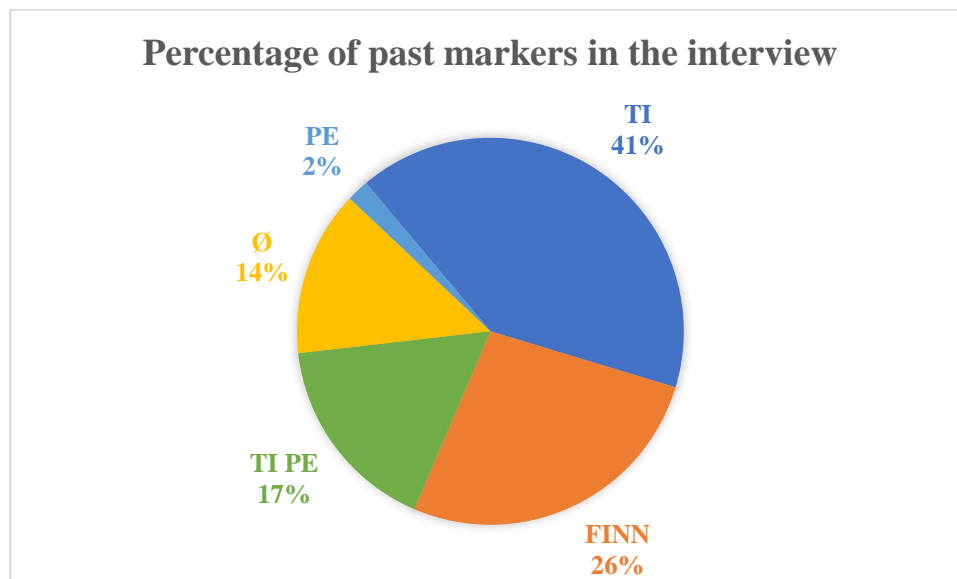


Figure 10.8: Pie chart showing proportion of past markers in the interview

The fact that *TI* is the most common marker is particularly surprising, considering the hypothesis about it being rare in non-narrative tasks. This is certainly not the case and will be discussed in more

detail below. Overall, *PE* was the least frequent marker (2%), generally occurring when the past context was already well established. For example, participant 18 explained:

P18 **nou** **pa** **ti** **konpran** **ki** **zot** **pe** **dir**
 1pl NEG TI understand REL 3pl PE say
 'We didn't understand what they (the teachers) were saying'

PE can only have a past interpretation in this context because past time is overtly expressed in the previous clause with *TI*. *PE* occurred considerably more often in combination with *TI* (17%) than on its own (2%).

Chapter 9 hypothesized that there is a preference for overt marking rather than \emptyset for future expression and it was expected that \emptyset would be much more frequent in past contexts than those reported for future contexts. The task results were inconsistent and will be explored more thoroughly in chapter 12.

The prevalence of *TI* in the interviews was particularly surprising as they did not explicitly elicit narratives from the participants. As mentioned in 10.2.4, questions pertaining to past expression in the semi-structured interviews asked about experiences of school and childhood. In particular, the question about how their childhood differed from their parents' resulted in much longer utterances, even from less-talkative participants, re-telling stories they'd heard from their parents and comparing this to their own experiences. For example, participant 9, who had given minimal one or two-word responses to previous questions responded to this question with:

Hmm a lepok, 'I mean', Moris ti diferan, dan linfrastruktir mem ti diferan. Get kouma to 'nn demande sipa nou ti pe get televizion dan tipti, bann-la mem pa ti ena televizion e pena tablet... Wi ti difisil pou bann-la, me aster tou inn sanze.⁸⁰

⁸⁰ Participant 9: "Hmm, at the time, I mean, Mauritius was different, even the infrastructure was different. See how you asked me whether I watched TV growing up, they didn't even have a television, or a tablet... Yes, it was difficult for them, but now, everything has changed".

As an illustration, of the eight predicates in that utterance, four of them were marked with *TI*. It could be that this question produced narrative-like contexts which favoured the use of *TI*, or perhaps that these passages refer to events which are much further back in time than the sentences in many of the other tasks. Unfortunately, the feature pertaining to distance from the present is binary, so a sentence is either categorized as ‘recent past’ or ‘non-recent past’. It is therefore not possible to establish whether *TI* is now restricted to remote past, except through qualitative examples.

One of the questions asked what the participants were doing just before the interview, which was designed to elicit ‘recent past’. If *TI* is now only used to describe remote events, we would not expect *TI* to be used at all in response to this question. Of the 15 participants who were asked this question, almost half of them responded with *TI*. Although *TI* referred to a time just before the interview, it could be that when *TI* is used in ‘recent past’ contexts, it is used with states to give background information. See Table 10.10:

Participant	Marker	Example	Translation	State?	Background?
2	<i>TI</i>	Avan mo vini, mo ti lakaz	Before coming, I was at home	Yes	Yes
4	<i>TI</i>	Mo ti dan enn ‘lecture’	I was in a lecture	Yes	Yes
5	<i>TI</i>	mo ti touzour lor whatsapp	I was still on whatsapp	Yes	Yes
7	<i>TI</i>	mo ti an tan lib	I had/was on free time	Yes	Yes
15	<i>TI</i>	mo ti kwinse dan enn abouteyaz	I was stuck in a traffic jam	Yes	Yes
17	<i>TI</i>	Ti avek twa dan parking	I was with you in the car park	Yes	Yes
18	<i>TI</i>	Lerla zistaman zordi mo ti al travay	Now then today, I went to work	No	No

Table 10.10: Use of *TI* in response to question: “what were you doing before the interview?”

Indeed, when foregrounded events were mentioned in response to this question, they tended to be expressed with *FINN*, as in participant 19’s response: *mo ’nn pran bis pou vini* ‘I took the bus to come (here)’. *TI* is used with states to give background information for the first seven participants, yet participant 18 shows that this theory does not hold, since they used *TI* to express the foregrounded event of going to work. Perhaps the mosaic in Figure 10.9 may shed more light on the features which were associated with *TI*.

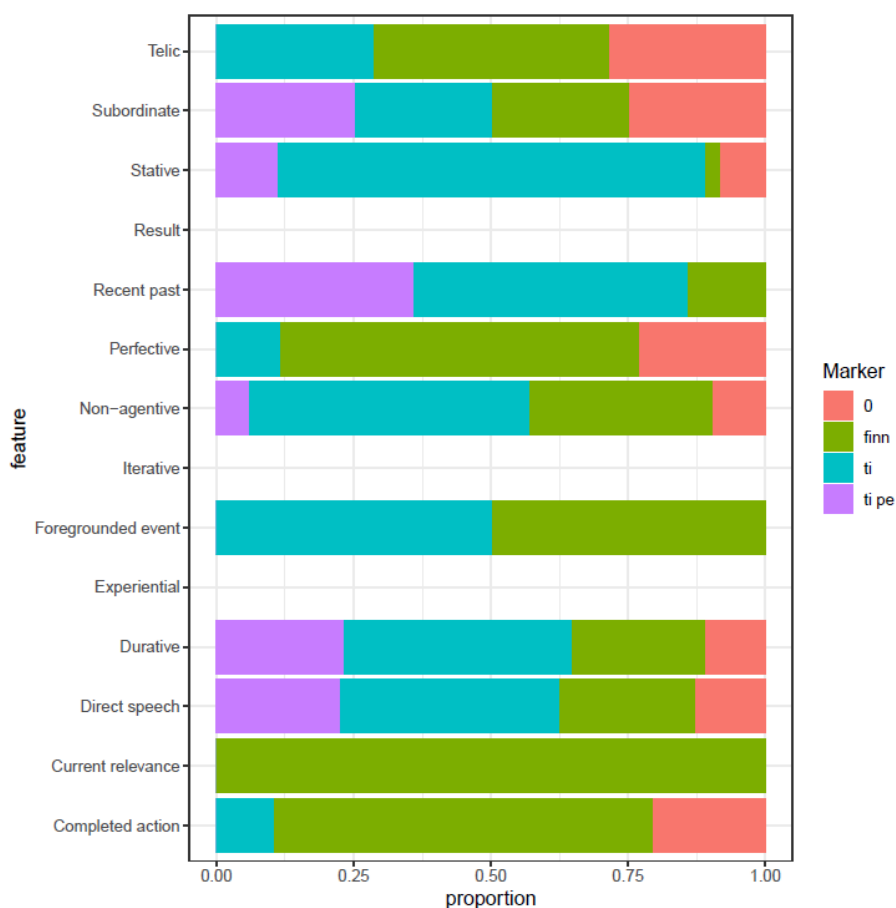


Figure 10.9: Mosaic showing features associated with past marking in the interview task

The features which were identified in section 10.2.4 as significant for *TI* in the interviews were ‘stative’ and ‘non-completed action’. This was expected; however, some of the other associated features with *TI*, which can be seen in Figure 10.9 are rather surprising. The feature ‘foregrounded’ is split almost equally between *FINN* and *TI*, although \emptyset would be expected here, and *TI* is expected to occur with backgrounded, rather than foregrounded events. It could be that *TI* is used with foregrounded events when telling stories anchored in the remote past. However, this is disputed by the example from participant 18 in Table 10.10 above and the fact that *TI* is also associated with a large proportion of recent past contexts. It is clear that the usage of *TI* is much more complex than posited on the basis of the corpus analysis and is not just restricted to remote past or backgrounding contexts.

An alternative explanation could be that Mauritian Creole’s multiple past markers do not all belong to the same dimension (Hayashi & Oshima, 2015), which is why a linear description based on

distance from the moment of speech is clearly inadequate for distinguishing *TI*, *FINN*, *FEK* and \emptyset . This problem is not unique to Creole, and, as mentioned in chapter 2, it is not uncommon for languages to have multiple overlapping past markers. This is notably the case in Bantu languages, which likely contributed to the emergence of Mauritian’s TMA system. On the basis of Bantu languages, Botne & Kershner (2008) propose instead that tense markers belong to either a primary dimension (P-domain), on which markers are organized in terms of their distance from the utterance time (UT), or to a dissociated dimension (D-domain), which is a cognitive dimension, separate from the temporal one. Therefore markers on this dissociated dimension may not be consistent regarding temporal distance, a feature by which tense markers are typically characterized.

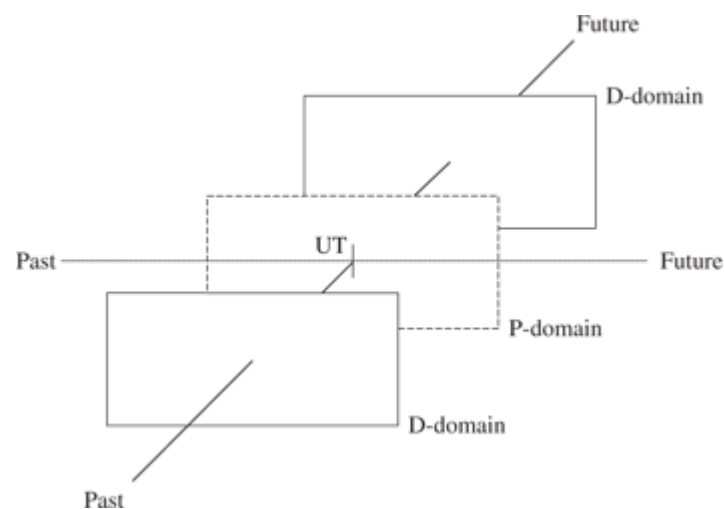


Figure 10.10: P- and D-domains for tense expression (UT = utterance time) taken from Hayashi & Oshima (2015)

On the one hand, such a conception could potentially explain why *TI* is not solely used in contexts which are based in the remote past, as instead, it could belong to this dissociated domain, and be cognitively distant, despite occurring in recent past contexts, as seen in Table 10.10. On the other hand, however, the introduction of a dissociated dimension, or domain, which relies on a “speaker’s subjective perception” (Hayashi & Oshima, 2015:802) seems to allude to mood, rather than tense. This again reinforces the idea that we cannot talk about tense, mood or aspect in isolation, since they are all closely linked.

Returning to Figure 10.9, *FINN* continues to be associated with ‘perfective’ features rather than in all past contexts, which can be seen from its near-absence in ‘stative’ contexts. It also remains the only marker used to express ‘current relevance’. This again suggests *FINN* cannot yet be considered a general past marker. *TI PE* primarily occurred in ‘recent past’ contexts and was absent from typical perfect and perfective features, as would be expected.

\emptyset appears to be rather variable according to the features it is associated with in the interviews, which was also the case in the acceptability judgement task. It was completely absent from ‘recent past’, ‘current relevance’, and surprisingly also ‘foregrounded event’, yet more frequently associated with other perfective features, including ‘telic’ and ‘completed action’. This follows the same patterns established in the translation, acceptability and cloze tasks, where it did not occur across all past contexts. This is one way \emptyset differs in past and future contexts, since it was associated with most future features in chapter 9, rather than being more specialized, as is the case here.

10.3.2.5 Narrative re-telling

The ‘recall’ condition involved re-telling the Pear Story video after it finished, so is most relevant for exploring past marking in narratives. The most frequent marker was *FINN* (45%), although interestingly, *TI* (8%) was less frequent than both \emptyset (26%) and *PE* (10%). This is in stark contrast to the interview, where *TI* was the most common marker. This is surprising, since *TI* was expected to occur more frequently in narratives. Even if participants used *TI* in the interview to provide narratives about their past, it is clear that simply being a narrative is not enough to explain *TI*’s usage, considering its relatively low frequency in this entirely narrative task.

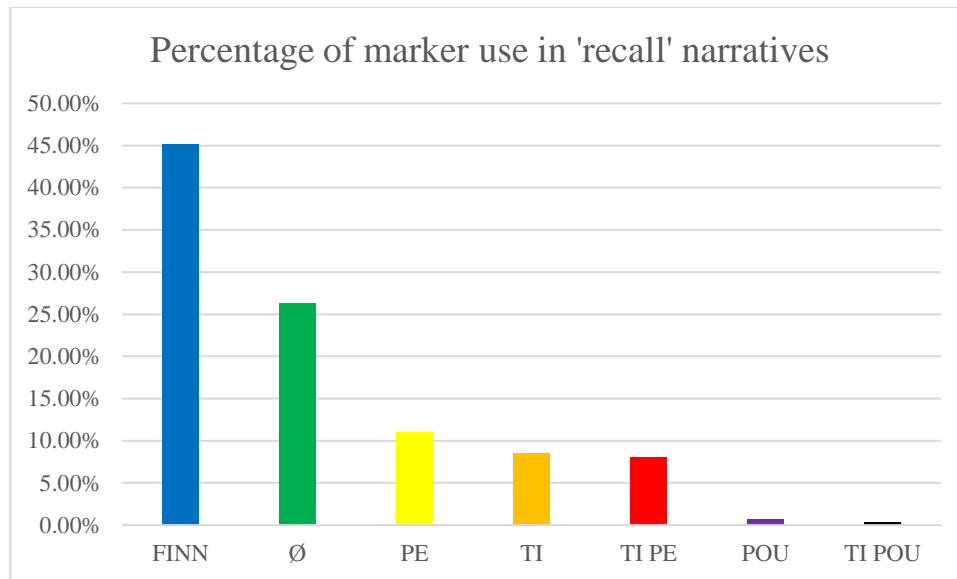


Figure 10.11: Graph showing percentage of marker use in 'recall' narratives

It seems meaningful that *PE* and *TI* on their own were just as, or even more frequent than the combination of *TI PE*, suggesting that underspecification of TMA marking is common in past spoken narratives. For example, when *PE* occurred in the past, it had the same meaning as *TI PE*, yet occurred more frequently on its own rather than overtly marked for past with *TI*. Such usage only accounted for 2% of the past utterances in the interview, but over 10% in this narrative task. As noted in the future marking section, *POU* and *TI POU* were also used in this condition to add information about what the participant thought will/would happen in the narrative, although this was very infrequent and not part of the narrative re-telling.

As can be seen in Figure 10.11 above, \emptyset was the second most frequent marker in the 'recall' condition, making up over a quarter of all TMA marking. In comparison with the cloze test, which was also a narrative, but where participants were only free to choose a marker, we saw that in the original 2003 text, 74% of the past contexts were \emptyset -marked, yet when the modern participants filled in the blanks in the elicitation task, \emptyset was chosen in only 35% of the past contexts.

Let us turn to the features associated with each marker in this task:

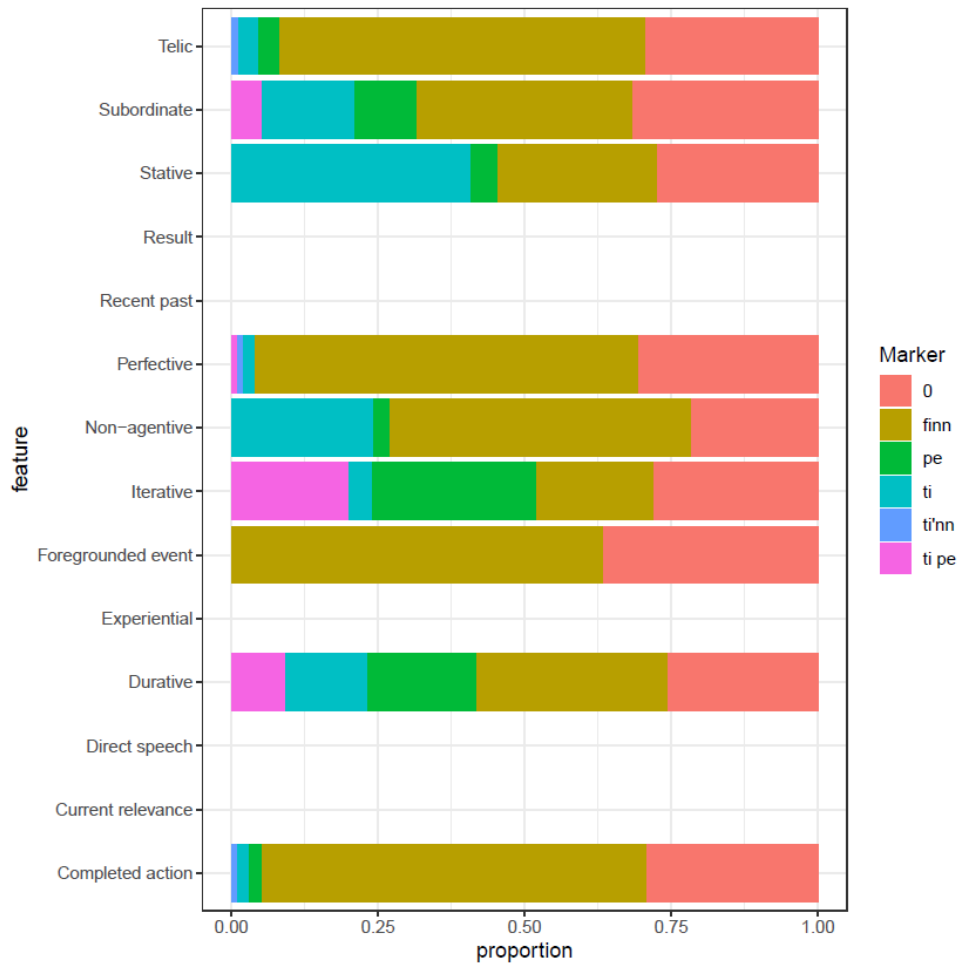


Figure 10.12: Mosaic showing features associated with past marking in the narrative 'recall' condition

Although *FINN* was used frequently, as predicted at the beginning of this section and confirmed by the frequency graph in Figure 10.11, it does not occur with a 'perfect' function at all and is only used in 'perfective' contexts. Notice, in fact, that no marker occurred in typically perfect contexts, which include the features of 'current relevance', 'result', 'experiential' and 'recent past'. This is because the task involved retelling the story after it had finished, so there was no scope for relevance to the present. Instead, the participants narrated completed, perfective events alongside background information which provided more context to the story. The fact *FINN* was the most frequent marker in a task which was not suited to 'perfect' expression shows how far *FINN* has come since the 20th century, when *FINN* was rarely used in 'perfective' contexts. *FINN* and \emptyset are both seen consistently across all features which occur in the narrative, although *FINN* is more variable than \emptyset . It can also

be seen that \emptyset is less specialized than *FINN*, since it occurs consistently with all attested features in this task to a similar degree.

As would be expected, *TI* is the most common marker in ‘stative’ contexts, whilst *PE* occurs frequently in ‘durative’ and ‘iterative’ contexts. The fact that pears were a major part of the narrative meant that the occurrence of a verb which can be iterated with plural objects was frequent, making the probability of iteration higher. Notably, *PE* is absent from foregrounded contexts. To give this some more context, I will now examine how a number of participants expressed the series of events in the lead up to scene 10, where the boy fell off his bike, and scene 11 with the arrival of the three boys, shown in Figure 10.13.



Figure 10.13: Scene 10 where the boy falls off his bike and scene 11 when the three boys arrive

Participants described the lead-up to scene 10 with different degrees of detail and different TMA marking strategies. Some mentioned how the girl took his hat as he rode past, others said his hat flew off and some didn't mention his hat at all. Most said his bike hit a rock which caused him to fall off. The following scene (11) shows three boys nearby. This is also described differently by participants. Some simply said there were three boys, others said three boys came/arrived, whilst others said they were playing. The choice of perspective and choice of verb can subsequently have an effect on the choice of marker, although generally participants either marked the main foregrounded events of the narrative with *FINN* or \emptyset and remained consistent. Two participants' narrations of scenes 8-11 are compared in Table 10.11.

Participant	Scene	Description	Example	Long Verb	Marker
14	8	Hat comes off	<i>So sapo inn anvole</i>	<i>anvole</i> 'fly off'	<i>FINN</i>
3	9	Bike hits rock	<i>Li tap ar enn ros</i>	<i>tape</i> 'hit'	∅
14	9	Bike hits rock	<i>li'nn tap ar enn ros</i>	<i>tape</i> 'hit'	<i>FINN</i>
3	10	Falls off bike	<i>li tonb anba</i>	<i>tonbe</i> 'fall'	∅
14	10	Falls off bike	<i>inn tonbe.</i>	<i>tonbe</i> 'fall'	<i>FINN</i>
3	11	Three boys exist	<i>Lerla ti ena trwa person ...</i>	<i>ena</i> 'have/be'	<i>TI</i>
14	11	Three boys exist	<i>Lerla ti ena trwa garson</i>	<i>ena</i> 'have/be'	<i>TI</i>
3	11	The three boys see the other boy	<i>...inn trov li.</i>	<i>trouve</i> 'see'	<i>FINN</i>
14	11	Three boys playing	<i>ti pe zwe laba</i>	<i>zwe</i> 'play'	<i>TI PE</i>
3	11	The three boys come and help	<i>E zot ed li.</i>	<i>ed</i> 'help'	∅

Table 10.11: Narrative extracts of two participants for scenes 8-11 with verbs and markers in the 'recall' condition

Participant 3 and 14 use two different strategies. Participant 3 uses ∅ to mark the series of foregrounded events in this section of the narrative, then introduces the three boys with *TI*. Extra information about the three boys (that they saw the boy who fell of his bike) is marked with *FINN*, before continuing with the narration of the main events with ∅ when they help him. Conversely, participant 14 consistently marks the foregrounded events with *FINN* and background information with *TI* and *TI PE*.

This short comparison shows that different TMA markers can be used to express the same concepts and take on the same function regarding information structure. This variation is natural and has been seen throughout this thesis. Nevertheless, the fact that no single marker can be pinpointed to occur consistently with a particular feature emphasizes the gradient nature of this work and the importance of recognizing and including such variation throughout the hypotheses, analyses and reporting.

10.3.3 Overall results for elicitation tasks combined

While the individual tasks did not always present a clear-cut conclusion, taking the results for all tasks combined counteracts the biases of each task when examined in isolation. Table 10.12 provides an overview of all significant features for past markers in the elicitation tasks:

All tasks: past	FINN	TI	TI PE	PE	∅	FEK
Significant for:	12 features	9 features	8 features	7 features	10 features	9 features
+/- recent past	** (+)	*** (-)	ns	* (-)	*** (-)	*** (+)
+/- direct speech	*** (+)	*** (-)	ns	ns	*** (-)	*** (+)
+/- completed action	*** (+)	*** (-)	*** (-)	*** (-)	*** (-)	*** (+)
+/- foreground	ns	* (-)	** (-)	ns	*** (+)	*** (-)
+/- current relevance	*** (+)	ns	*** (-)	** (-)	*** (-)	*** (+)
+/- result	*** (+)	ns	ns	ns	*** (-)	*** (-)
+/- experiential	*** (+)	ns	ns	ns	ns	ns
+/- perfective	*** (+)	*** (-)	*** (-)	*** (-)	*** (-)	*** (+)
+/- telic	*** (+)	*** (-)	*** (-)	*** (-)	*** (-)	*** (+)
+/- stative	*** (-)	*** (+)	ns	ns	*** (+)	ns
+/- durative	*** (-)	*** (+)	*** (+)	** (+)	*** (+)	*** (-)
+/- iterative	*** (-)	ns	* (+)	*** (+)	ns	ns
+/- subordinate	ns	ns	ns	ns	ns	ns
+/- non-agentive	*** (-)	*** (+)	* (-)	ns	ns	ns

Table 10.12: Overview of significant features for past markers in all tasks

Table 10.12 clearly shows some overlap regarding these features for the past markers. *FEK* shares seven of its nine significant features with *FINN*. The main differences are *FEK*'s absence from 'result' and 'foregrounded' contexts and a higher significance level of 'recent past' than *FINN*. Similarly, *TI* shares seven of its nine features with \emptyset . Here the main difference is that *TI* is not significant for 'foregrounded' whilst \emptyset is highly significant. Similarly, \emptyset is highly significant when 'current relevance' and 'result' are absent, unlike *TI*. Finally, *TI* is more likely to occur in 'non-agentive' contexts, than \emptyset , which occurs in both agentive and non-agentive contexts. Unsurprisingly *TI PE* and *PE* also pattern together.

As was observed in the future, we also see complementary distribution for a number of features. Broadly, *FINN* and *FEK* occur in the opposite contexts as *TI* and \emptyset regarding 'recent past', 'direct speech', 'completed action', 'perfective', 'telic' and 'durative'. More specifically, *FINN* seems to be

in complementary distribution with *TI* or \emptyset (i.e. apart from for ‘experiential’ and ‘iterative’). When *FINN* is not in complementary distribution with *TI*, it is in complementary distribution with \emptyset .

This provides a different perspective from the corpus analysis, where *TI* was becoming less frequent and *FINN* was taking over many of its earlier functions. This shows, however, that *TI* still has quite a specific domain of usage distinctly different from *FINN*. The lack of corpus analysis for \emptyset would have obscured the reality that *TI* shares many features with \emptyset , giving the impression instead, that non-*FINN* contexts simply fell out of use. The similarity between *TI* and \emptyset is an important factor which has previously been overlooked.

10.3.4 Conclusions regarding hypotheses for past marking in all tasks

Returning to predictions set out at in 10.3.1, it was expected that *FINN* would be used as a general past marker, *TI* would be restricted to giving background information, \emptyset would portray foregrounded series of events and be more frequent than in future contexts, and finally *FEK* would be rare and only used in recent past contexts. No specific hypotheses were generated for *PE*, since it was thought to have the same features whichever temporal domain it occurred in. Its usage will be investigated in detail in the next chapter.

Table 10.13 summarizes these hypotheses and findings for the past markers:

Marker	Task	No. sig features	Hypothesis	✓	Comments
<i>FINN</i>	Translation	10/11	General past marker	✗	Significant features were all to do with perfect/ perfective
<i>FINN</i>	Acceptability	11/11		✗	Preference for perfect and perfective features
<i>FINN</i>	Cloze	2/12		?	<i>TI</i> was often replaced by <i>FINN</i> , although only two significant features overall
<i>FINN</i>	Interview	3/10		✗	Seems to be specialized to perfective contexts
<i>FINN</i>	Narrative	4/9		✗	Seems to be specialized to perfective contexts
<i>FINN</i>	<i>All tasks</i>	12/14			✗
<i>TI</i>	Translation	no test	Provides background information in narratives, rare otherwise	-	-
<i>TI</i>	Acceptability	10/11		✗	Foregrounded event was significant and had one of the highest means for <i>TI</i>
<i>TI</i>	Cloze	2/12		✓	Absence of foregrounded was highly significant
<i>TI</i>	Interview	2/10		✗	Absence of foregrounded event was not significant
<i>TI</i>	Narrative	2/9		✗	Absence of foregrounded event was not significant
<i>TI</i>	<i>All tasks</i>	9/14			✓/✗
∅	Translation	3/11	Foregrounded series of events, more frequent in past than future	?	Highly significant for foregrounded, but similarly frequent in past and future
∅	Acceptability	9/11		✗	Slightly less acceptable than non-foregrounded contexts
∅	Cloze	2/12		✓	Highly significant for foregrounded and more frequent in past
∅	Interview	0/10		✗	Foregrounded events were not significant, less frequent in past than future
∅	Narrative	0/9		✗	Foregrounded events were not significant
∅	<i>All tasks</i>	10/14			✓/✗
<i>FEK</i>	Translation	no test	Rare, but used in 'recent past' contexts when occurs	-	-
<i>FEK</i>	Acceptability	8/8		✓	Highly significant in recent past contexts
<i>FEK</i>	Cloze	no test		-	-
<i>FEK</i>	Interview	no test		-	-
<i>FEK</i>	Narrative	no test		-	-
<i>FEK</i>	<i>All tasks</i>	9/14			✓

Table 10.13: Hypotheses and findings for past markers in all tasks

All the tasks apart from the cloze test suggest that *FINN* cannot be considered a general past marker due to its clear affinity with perfect and perfective features. Although the cloze test showed a preference for *FINN* in gaps where the original author had used *TI*, this was not reflected in the overall results.

TI was expected to mainly provide background information. There wasn't enough data for *TI* to carry out statistical tests in the translation task, although its near absence from 'foregrounded' contexts suggests it may have been significant if more data were available. However, the data from the acceptability judgement task did not support this hypothesis. Although it was not one of the most significant features, *TI* actually had a higher mean when 'foregrounded' was present rather than absent. However, the lack of a 'foregrounded' was the most significant feature in the cloze test. This inconsistency could be due to the task style; grounding is a feature which is most relevant in narratives, and the cloze test (comprising a narrative) is the task where this feature was most significant. Overall, however, *TI* is significant in 'backgrounded' contexts. *TI* was expected to be rare in non-narrative texts, however this was clearly not the case as it was the most frequent marker in the interview.

The hypothesis for \emptyset was also formulated in terms of the discourse feature 'foregrounded'. As with *TI*, there were differing results. This hypothesis was not supported by the acceptability task, yet the presence of this feature was significant in the cloze test and associated with \emptyset in the translation task. Overall \emptyset was significant in foregrounded contexts, but the results suggested there was much more to \emptyset than foregrounding; \emptyset might be more associated with perfective features rather than occurring across all past contexts. There was no consistent evidence that \emptyset was used more often in past rather than future contexts.

For the first time, it is possible to comment on the contexts in which *FEK* is used. *FEK* was highly significant in the acceptability judgement task in 'recent past', 'direct speech', 'completed', 'perfective', 'telic' and 'durative' contexts. It was significant to a lesser extent in 'non-stative' and 'agentive' contexts. Apart from 'recent past' and 'durative', these features broadly correspond with

those associated with *FINN*. It was thought that *FEK* might occur more often in the elicitation tasks, unlike in the corpora where it has always been rare. However, it turned out to be just as infrequent in these tasks, yet reliably acceptable and significant in ‘recent past’ contexts.

If just the results from the two narrative tasks are considered, *TI* is highly significant when ‘foregrounded’ is absent, whilst \emptyset is highly significant when it is present, as was expected from these initial hypotheses. *FINN* remains ‘not significant’ for foregrounding in the narrative tasks, although extracts from the narrative re-telling task showed the *FINN* can be used as an alternative marker to \emptyset for foregrounded events.

Returning to the tense, mood or aspect problem, we have seen so far that it is difficult to tease these categories apart. They appear to be interdependent, and although viewing traditional tense markers on different dimensions is attractive for understanding their behaviour, this does not deal with this issue directly. This is discussed further in relation to *PE* and \emptyset in the next chapter.

10.4 Overall conclusions

This chapter firstly investigated the two main past markers *TI* and *FINN* to examine how they developed following the corpus analysis in chapter 7. The results were more consistent than for the future, as *FINN* tended to be significant for the opposite features of *TI*. It was concluded that *FINN* cannot be considered a general past marker and that although, overall, *TI* was significant in backgrounded contexts, it is more complex and frequent than had previously been thought. The proposal that *TI* might belong to a different dimension (Botne & Kershner’s D-domain) was considered, since this could explain how it is not used consistently with regard to temporal distance.

As in chapter 9, the second part focussed more broadly on all past-marking possibilities to explore how (*TI*)*PE*, *FEK* and \emptyset related to *TI* and *FINN*. *PE* occurred more frequently than *TI PE* in the translation and narrative task, and consistently occurred with features typically associated with its

aspectual ‘progressive’ usage. *FEK* did not occur more frequently in these tasks than in the corpus analysis, but it did consistently occur with ‘recent past’, and broadly patterned with *FINN*. Finally, \emptyset ’s behaviour was different in past contexts in comparison with the future ones; it was more context-dependent and seemed to pattern with *TI*. Overall, however, it did not occur more frequently in past contexts than in future ones.

Again, by accumulating the datapoints from all the tasks, it was possible to gain a better overview of the data and see how the markers related to each other without individual task differences obscuring this. Chapter 11 returns to *PE* and \emptyset , which have already been examined in future and past contexts, in order to explore their usage in present contexts. I dedicate the final chapter to zero-marking to explicitly address what it means to be a zero marker in Mauritian Creole on the basis of the elicitation data.

Chapter 11:

Elicitation tasks - *PE* and \emptyset and present expression

\emptyset and *PE* are considered together in this chapter for two main reasons. Firstly, they are both primarily associated with present expression.⁸¹ Secondly, as seen in the previous chapters on future and past marking, these markers both also span all temporal domains.

Unlike the two previous chapters, this chapter will not offer a quantitative overview of present expression as a whole, since none of the other markers which occurred in response to present stimuli were frequent enough to run statistical tests. Since the elicitation tasks were designed to target future, past and present expression separately, the results in this chapter will be primarily dealt with in terms of present marking. However, the discussion will revolve around the markers more holistically, discussing results from all three chapters.

11.1 Summary of findings from corpus analysis and predictions for elicitation

The corpus analysis focussed on *PE* and saw substantial changes from the 1800s until the early 2000s. In line with its source meaning, Old Mauritian *PE* more commonly occurred with locatives, but this tendency decreased over time. *PE* was also highly associated with backgrounding in Old Mauritian, yet, as it was used increasingly to express actions happening in the moment, it became less associated with this feature. New uses for *PE* began to arise in the 20th century where the first examples of generic, habitual and inchoative uses could be seen, and by Modern Mauritian there were even instances of imminence and futurity in the corpus texts. These additional uses were considered to be the first signs of *PE* developing from a purely progressive marker to a general imperfective marker, as observed across typologically-diverse languages (Mair, 2012).

⁸¹ It should be noted that *PE*'s primary association with present expression is likely simply a result of most speech occurring in the present.

\emptyset was not investigated explicitly in the corpus analysis, but it was noted that it had a foregrounding function in past narratives, when it co-occurred with *TI/FINN*. It will be investigated whether it also has this function in present narrative contexts. More broadly, I will continue the discussion about whether there is a tendency towards overt rather than zero TMA marking in specific temporal domains.

One aspect of *PE*'s development which could not be investigated easily in the corpus analysis was whether *PE* was obligatory in strictly progressive contexts. This entails that zero-marking is ungrammatical in such contexts and finding counter-evidence would involve the difficult task of identifying all the strictly progressive contexts which do not have an overt marker. However, the elicitation tasks include constructed contexts, so if participants do not use *PE* in a strictly progressive context, we can conclude that the marker is not obligatory. It is considered that a strictly progressive context is one which has retained all the elements of a progressive, as outlined in Bybee et al. (1994:136):

- a) an agent
- b) is located spatially
- c) in the midst of
- d) an activity
- e) at the reference time

The hypotheses that *PE* can be considered a general imperfective marker and is obligatory in strictly progressive contexts will be explored. It will be further investigated whether *PE* and \emptyset can be differentiated in narratives according to whether they provide background (*PE*) or foreground (\emptyset) information. This was posited for the simple present and present progressive in Spanish (Mayberry, 2011) and found some support in the corpus analysis.

11.2 Results from elicitation tasks in the present

11.2.1 Translation task

The translation task included ten progressive sentences. See Table 11.1.

Sentence code	Tested features	Stimuli
TPr1	Prog: Postural verb	A: I need my blue shirt right now; where is it? B: It HANG in the wardrobe.
TPr2	Prog: Non-agentive intransitive	[Look out of the window now!] The sun SHINE.
TPr3	Prog: Stative verbs	[Now, unexpectedly,] Peter KNOW the answer.
TPr4	Prog: Remoteness, invisibility	/on the phone/ A: Is Ann with you right now? ...she SHOP. She left one hour ago.
TPr5	Prog: Durative adverbials	He continually FORGET people's names.
TPr6	Prog: Temporariness	Ann STAND in the doorway [right now].
TPr7	Prog: Negation	[Let's go out,] it not RAIN now.
TPr8	Prog: Modal verbs	Ann should TEACH now [I guess].
TPr9	Prog: Imperative	/Mother to daughter, whom she wants to punish/ You NOT GO to that party!
TPr10	Prog: Past background	[Last night at 8 o'clock,] when John came, Ann still WORK.

Table 11.1: Progressive sentences in the translation task

Figure 11.1 below is a mosaic to show an overview of the markers used by the participants to translate each of the sentences.

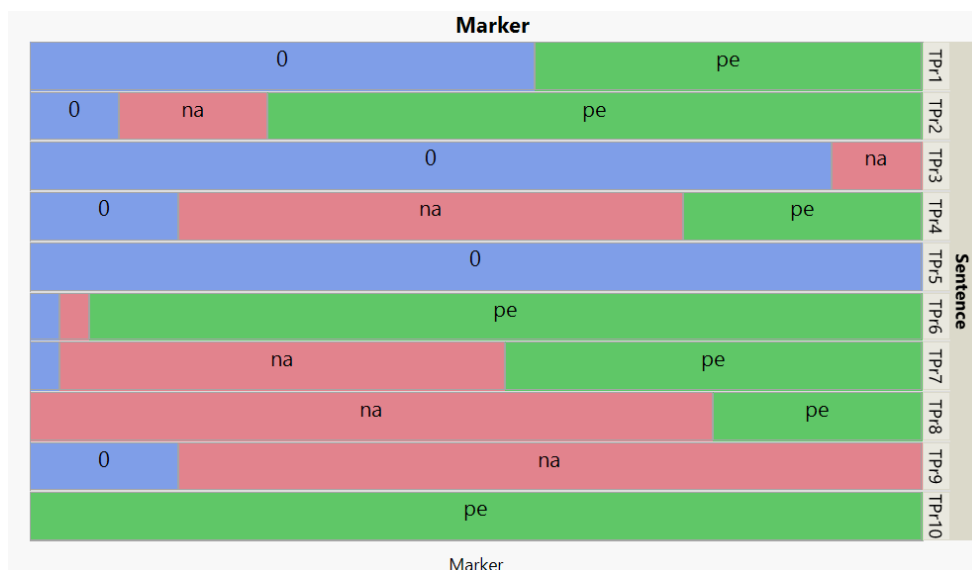


Figure 11.1: Mosaic showing the present markers according to sentence in the translation task

It is striking that there was such a large proportion of other markers ('na') in this task. 'Na' refers to any marker apart from *PE* and \emptyset .⁸² As before, only TMA markers are considered in this analysis.

TPr5 was translated exclusively with \emptyset . This is a first indication that the hypothesis that *PE* is used as a general imperfective marker in modern Mauritian is false. Let's take a closer look at this sentence:

TPr5: He continually FORGET people's names.

The combination of *PE* with a durative adverbial like *continually* appears to be incompatible from this sentence, since all the participants translated this sentence with no overt marker. However, it is not necessarily the durative adverbial which is affecting the choice of marker, because participants used adverbs such as *touletan* 'all the time' or *souvan* 'often' and verbal constructions like *res bliye* (lit: stay forget) 'keeps forgetting' or *abitie bliye* 'usually forgets'. If *PE* were a general imperfective

⁸² 'Na' mainly consists of *FINN* in TPr4, where participants translated "she SHOP" as "she has gone shopping", rather than "she is shopping". In TPr7, participants translated "it not RAIN now" with a construction that means "there is no rain" (*pena lapli*). *Pena* is an amalgamation of the negative *pa* 'not' and *ena* 'have' which cannot be combined with an overt TMA marker, since TMA markers come in between negation and the verb. To say "there wasn't any rain", you would have to split up *pena*: "*pa ti ena lapli*". TPr8 involves the modal *bizin* 'should', often combined with *PE*, and TPr9 is a command not to go to a party, which is mainly translated by *POU* (i.e. you will not go to the party).

marker, it would be used to translate this sentence, as *PE* has been shown to combine with ‘stative’ and ‘durative’ features in the corpus and past written elicitation tasks, and the context in TPr5 is clearly imperfective. This suggests that *PE* has not yet reached a stage where it can be considered a general imperfective, a conclusion also supported by other examples (e.g. TPr1).

Another aim of the elicitation tasks was to establish whether *PE* is obligatory in strictly progressive contexts which can be described as occurring right in the moment of speech, such as ‘I am eating a banana’. As mentioned in section 11.1, I consider strict progressives to be those which have all of Bybee et al.’s (1994:136) elements of a progressive. Nowadays, however, it is rare for progressives to have all of these features, since the requirement for *PE* to occur with several of these elements was already lost in Old Mauritian and 20th Century Mauritian periods (see chapter 8).

The feature ‘right now’ was chosen to isolate contexts where an event is happening at the moment of speech from those which provide a backgrounding function. In the translation task, TPr6 (Ann STAND in the doorway [right now]) is the sentence which includes the ‘right now’ feature with the highest proportion of *PE* usage (93%). However, this sentence cannot be considered strictly progressive because no activity is taking place (instead the stative verb ‘stand’ is used). The status of the subject as an agent with the stative verb ‘stand’ is disputed (Kastovsky et al., 1986:943), yet the fact that Ann can intentionally stand in the doorway provides some evidence that she could be an agent. Although the translation task does not contain any strictly progressive contexts so we cannot test the initial hypothesis, the fact that other sentences with non-agentive subjects (or at least non-human ones) used *PE* less (e.g. TPr1 ‘my shirt’ *PE* = 43% and TPr2 ‘the sun’ *PE* = 73%) suggests this may influence the acceptability of *PE* and will be investigated in subsequent tasks.

As with the future and past examples, the features associated with each sentence were categorized and are presented below with the markers used in each of the contexts:

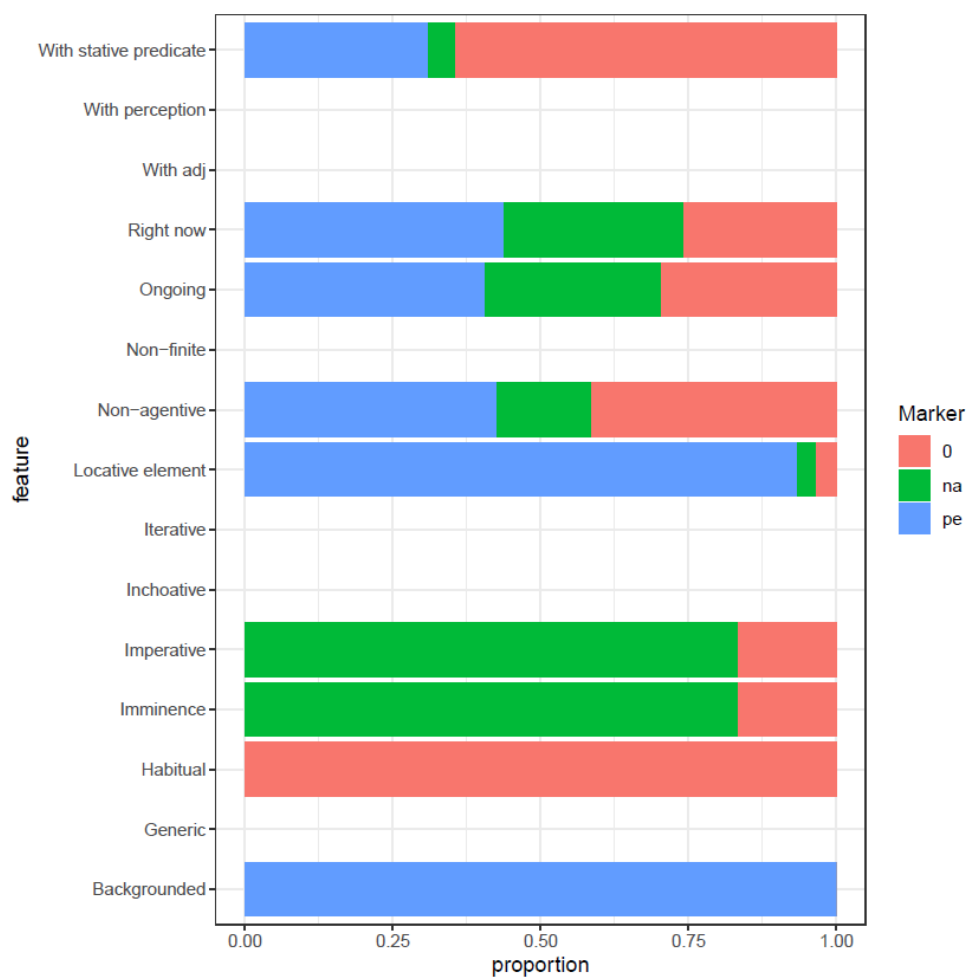


Figure 11.2: Mosaic showing features associated with present marking in the translation task

The large number of white gaps show several features were not present for any of the 10 progressive sentences. We therefore cannot say anything about markers which were used in ‘generic’, ‘inchoative’, ‘iterative’ or ‘non-finite’ contexts or with adjectives or verbs of perception.

As noted above, ‘right now’ contexts are not the sole domain of *PE*. All the sentences which provided background information, on the other hand, were translated by *PE*. The imperative sentence which refers to a future event (TP_{r9}) was unsurprisingly translated by *POU* by the majority of participants, as were those sentences with the feature ‘imminent’. It is striking, however, that *PE* is not associated with ‘imminence’ at all in the translation task. Habituality is exclusively expressed with \emptyset , which is also most common with ‘stative’ predicates. ‘Non-agentive’ contexts are fairly equally divided between *PE* and \emptyset .

Let's examine to what extent the features were significant for *PE*.

Feature for <i>PE</i> in the present (5/8 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
backgrounded > non-backgrounded	1	p < 0.0016	45.94	1.22E-11	***
locative element > no locative element	1	p < 0.0016	35.932	2.04E-09	***
non-habitual > habitual	1	p < 0.0016	21.012	4.56E-06	***
non-imminent > imminent	1	p < 0.0016	21.012	4.56E-06	***
non-imperative > imperative	1	p < 0.0016	21.012	4.56E-06	***

Table 11.2: Significant features for *PE* in the present in the translation task

As noted in the corpus analysis, Mayberry (2011) broadly found that the simple present (equivalent of \emptyset) had a foregrounding function, whilst the progressive (equivalent of *PE*) was used to give background information in narratives. There was also an interaction with situation type. The most significant feature for *PE* in this task was 'backgrounded', which supports the hypothesis that *PE* provides background and \emptyset foreground information. 'Locative element', which alludes to the origins of progressive constructions, appears to still be significant in modern Mauritian on the basis of this translation task.

The translation task does not provide any evidence for *PE* being used as a general imperfective marker, since it was not used in any 'habitual' contexts, although there are attestations of this usage in modern corpus texts. Nevertheless, the fact that 'right now' is not significant shows that *PE* is at least more generalized than a strict progressive. The acceptability judgement task will be able to investigate these hypotheses in more detail.

Next, we turn to the results for \emptyset .

Feature for \emptyset in the present (4/8 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
habitual > non-habitual	1	p < 0.0016	75.325	3.99E-18	***
stative > non-stative	1	p < 0.0016	72.166	1.98E-17	***
non-agentive > agentive	1	p < 0.0016	18.467	1.73E-05	***
non-backgrounded > backgrounded	1	p < 0.0016	12.525	4.02E-04	*

Table 11.3: Significant features for \emptyset in the present in the translation task

The most significant features are ‘habitual’ and ‘stative’, which seem slightly at odds with the assumption that \emptyset has a foregrounding function in present narratives, as this is the opposite of the function of statives and habituais, which generally provide background information (Lee, 2017:78). The fact there is a mixture of narrative and non-narrative sentences could explain this since \emptyset is expected to have a foregrounding function in narratives, but not necessarily otherwise. Looking back to \emptyset ’s function in the past in chapter 10, the fact \emptyset was used consistently in most contexts, including stative ones, suggests it has a more generalized function in the past, rather than being specialized to perfective contexts. Overall, however, the foregrounded feature was the most significant one.

The significance of ‘non-backgrounded’ for \emptyset and ‘backgrounded’ for *PE* in the translation task supports the initial hypothesis about \emptyset taking on a foregrounding function alongside *PE*’s backgrounding function in present expression.

11.2.2 Acceptability judgement task

See Table 11.4 for a list of the progressive sentences in this task:

Sentence code	Tested features	Stimuli
AX03	Prog: Habitual	Darell pe netway lakwizinn.
AX06	Prog: Right now	Daphné pe zwe kart dan lasam akote aster.
AX09	Prog: Stative verbs	Li pe konn plis ki zot.
AX12	Prog: Gradularity adverb	Nivo dilo dan larivier pe ogmante inpe.
AX15	Prog: Quasi-habitual	Si to kontinye vinn dan mo biro, to pa pe respekte mo lintimite.
AX18	Prog: With adj	To pe impoli zordi.
AX21	Prog: Imminence	Ayo! Bis pe parti biento!
AX24	Prog: Non-voluntary perception	Asterla mo pe trouv some montagn-la.

Table 11.4: Progressive sentences in the acceptability judgement task

TMA marking in the present is rather variable although the broad trend is for *PE* to be acceptable where \emptyset is unacceptable and vice versa. This is the case for most sentences except in AX24 where both markers are acceptable.

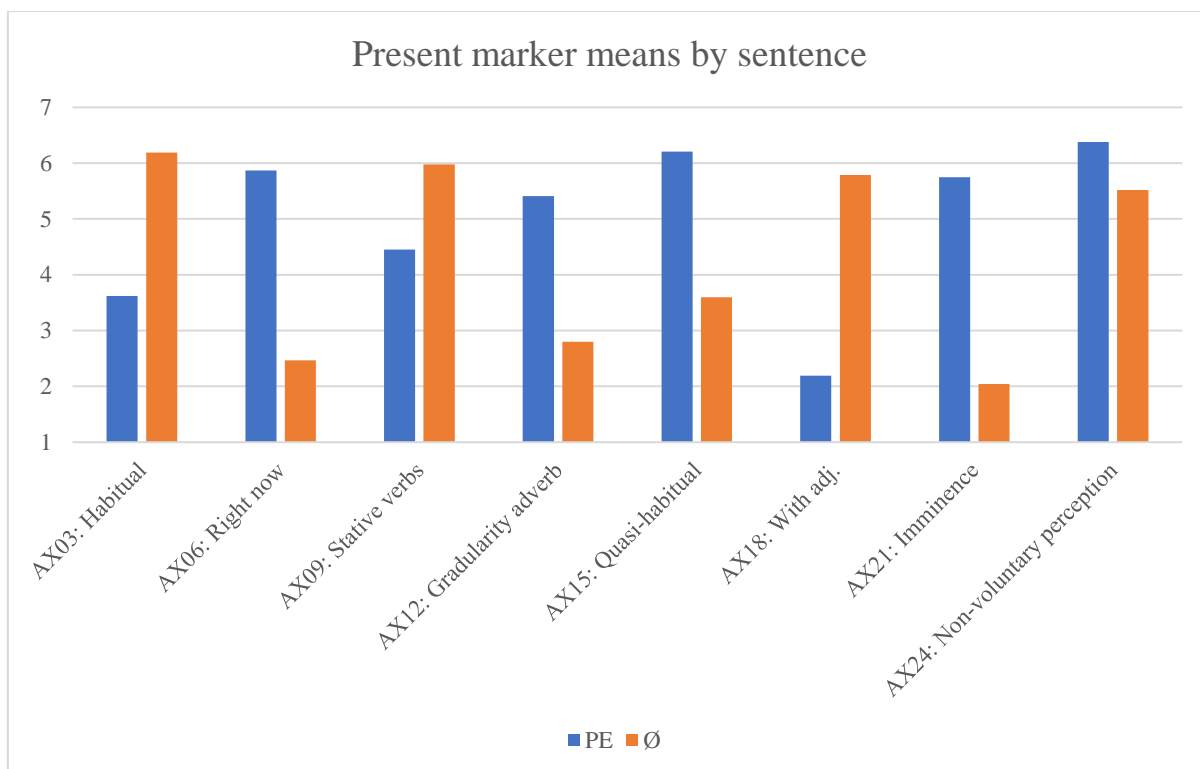


Figure 11.3: Graph showing present marker means by sentence in the acceptability judgement task

AX06 contains a sentence which can be considered strictly progressive:

AX06	Daphné	pe	zwe	kart	dan	lasam	akote	aster
	Daphné	PE	play	cards	in	room	near	now
	<i>'Daphné is playing cards in the room next door now'</i>							

Unlike in the translation task, this sentence has an agent (Daphné), who is located spatially (in the room next door) in the midst of an activity (playing cards) at the reference time (now), so contains all the elements of a progressive posited by Bybee et al., (1994:136). The hypothesis that *PE* is obligatory in such contexts can finally be investigated.

As can be seen in Figure 11.3, *PE* is much more acceptable than \emptyset in AX06. Although there is certainly a preference for *PE*, a small number of participants rated \emptyset as most acceptable (7) in this context, so it is difficult to claim that *PE* is obligatory from this data. However, is it justified to require 100% consensus before considering something obligatory? Even something like the third person singular -s on regular present verbs in English is not obligatory in all dialects and it is likely on a similar acceptability judgement test in English that some participants would rate the absence of

this inflection as acceptable. The question is formed with a more absolute view of what consists of grammatical, yet the reality is more nuanced.

A look at the features that *PE* and \emptyset are associated with shows a more complex picture than the results for each sentence in Figure 11.3:

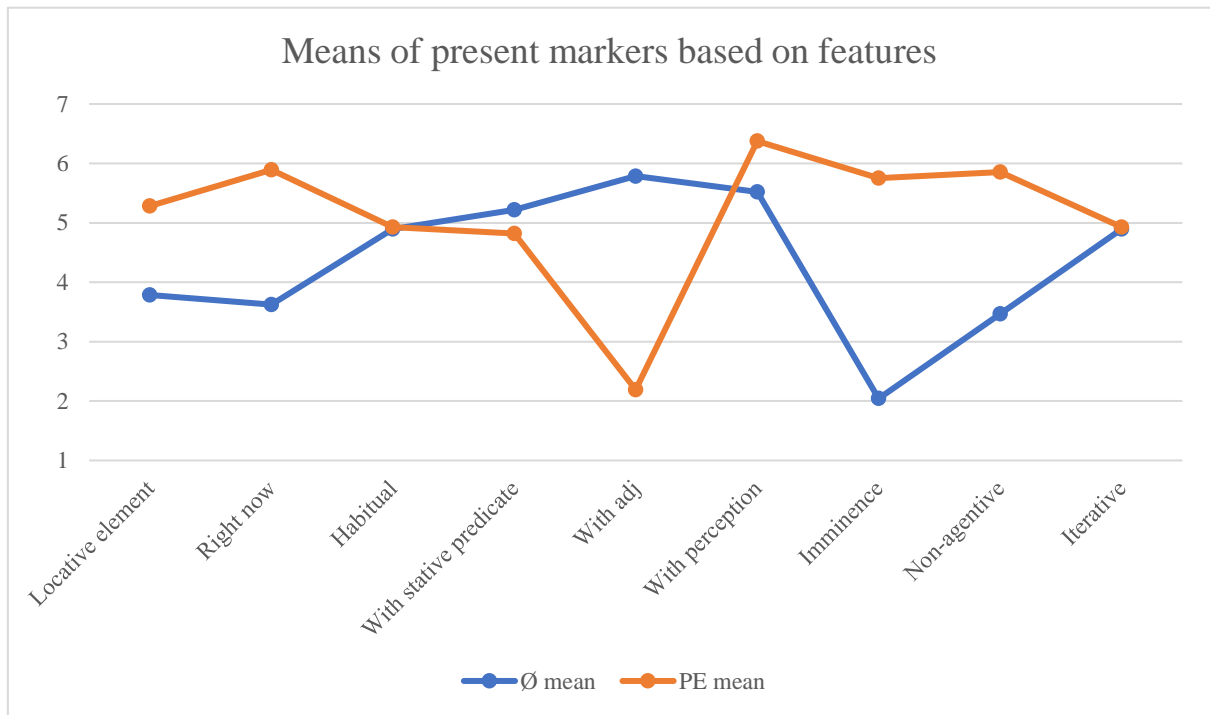


Figure 11.4: Graph showing means of present markers based on features in the acceptability judgment task

The hypothesis that grounding can distinguish *PE* from \emptyset cannot be tested in this task, since none of the sentences constituted backgrounded contexts. As in the corpus examples and the translation task, all of the sentences can be considered ‘ongoing’. The relationship between ‘right-now’ and ‘ongoing’ is one-way. Whilst all ‘right-now’ examples are ‘ongoing’, not all ‘ongoing’ examples are ‘right-now’. This task also does not have any ‘inchoative’ contexts. We can see that *PE* had a much higher mean in ‘imminent’ contexts (5.75) than \emptyset and the other large difference between *PE* and \emptyset is with the feature ‘with adj’, which is the least acceptable sentence for *PE*. This will be discussed in more detail below.

PE's highest mean (6.38) is in AX24 (non-voluntary perception) and lowest mean (2.19) in AX18 (with adj.). Absence of 'with adj.' was also the most significant feature for determining *PE*'s acceptability, followed by 'right now' and 'non-agentive'.

Significant features for <i>PE</i> in the present (5/9 features significant)	Mean when feature present	Mean when feature absent	Corrected significance threshold	P value	Pearson's chi-square value
1. <i>without adjective</i> > <i>with adj.</i>	2.191	5.39	p<0.001562	<0.0001	87.827
2. <i>right now</i> > <i>not right now</i>	5.894	4.456	p<0.001562	<0.0001	36.624
3. <i>non-agentive</i> > <i>agentive</i>	5.852	4.475	p<0.001562	<0.0001	32.129
4. <i>locative element</i> > <i>non-locative element</i>	5.282	4.705	p<0.001562	0.0001	27.814
5. <i>with perception</i> > <i>without perception</i>	6.375	4.791	p<0.001562	0.0002	25.949

Table 11.5: Significant features and means for *PE* in the present in the acceptability judgment task

Although 'right now' is a typical feature of progressive, notice that the mean in contexts which are not happening 'right now' are somewhat acceptable, moving away from a clear delimitation of progressive meaning. The fact that features such as 'habitual' are not significant is meaningful because it means this feature does not affect the acceptability of *PE*. Participants were undecided about the acceptability of *PE* in AX03, which translates as 'every day, Darrell is cleaning the kitchen', showing that use of *PE* in 'habitual' contexts is not acceptable for all speakers. This is more nuanced than in the corpus analysis where it was assumed that *PE*'s attestation in a habitual context entailed general acceptability. The inconclusive results regarding habituality in this task reflect assumptions about the gradual nature of language change; *PE* will not become acceptable for all speakers overnight, but its usage and acceptability will spread gradually across the population.

Many of the results for *PE* in the present were unexpected. The least acceptable context for *PE* was surprisingly the one with an adjective. This is unexpected because *PE* was attested in potential (although not clear-cut) adjectival contexts in the corpora and it was anticipated that adjectives would occur more commonly with *PE* in the elicitation tasks. In the participants' comments for this context, the only alternative suggestion that made use of *PE* was a verb (*to pe mank manier zordi* – 'you're lacking manners today') and most suggestions were other adjectives without a marker (*maleleve* 'ill-mannered', *pa zanti* 'not polite', *indesan* 'improper', *inpe inpoli* 'a little impolite'). It seems that the

use of *PE* with adjectives is much less acceptable than assumed. My contact confirmed that *PE* cannot occur with adjectives for most Mauritians in urban areas and is not part of standard Mauritian Creole (Othello, 2020, p.c.).

On the other hand, the use of *PE* with states and (quasi-)habituals was more acceptable than with adjectives, suggesting that *PE* is expanding into more imperfective domains, rather than remaining limited to progressivity.

AX09 **Li** **pe** **konn** **plis** **ki** **zot**
 3sg PE know more REL 3pl
 'He is knowing more than them'

AX15 **Si** **to** **kontinye** **vinn** **dan** **mo** **biro,** **to**
 If 2sg continue come in 1sg.POSS office, 2sg
 pa **pe** **respekte** **mo** **lintimite**
 NEG PE respect 1sg.POSS privacy
 'If you continue to come into my office, you're not respecting my privacy'

AX15 could be a case of a state being interpreted as an action when accompanied by a progressive marker. As such, it could be understood as 'you're not being respectful of my privacy'.

Interestingly, the most acceptable context for *PE* was 'non-voluntary perception', which is outside the domain of a typical progressive marker:

AX24 **Asterla** **mo** **pe** **trouv** **some** **montagn** **-la**
 Now 1sg PE see summit mountain -DEF
 'Now I am seeing the summit of the mountain'

As can be seen from the English translations, the originally progressive marker *PE* in Creole has clearly surpassed the limits of the English progressive. However, we cannot talk of an imperfective marker yet. Again, none of the personal variables, such as age, gender or region, had a significant impact on the acceptability of *PE*.

Turning to \emptyset , it was significant in six of the nine features tested. Table 11.6 shows the top five features.

Significant features for \emptyset in the present (6/9 features significant)	Mean when feature present	Mean when feature absent	Corrected significance threshold	P value	Pearson's chi-square value
1. <i>with stative</i> > <i>without stative</i>	5.216	3.388	p<0.001562	<0.0001	59.365
2. <i>not imminent</i> > <i>imminent</i>	2.042	4.636	p<0.001562	<0.0001	51.221
3. <i>agentive</i> > <i>non-agentive</i>	3.468	4.806	p<0.001562	<0.0001	36.357
4. <i>not right now</i> > <i>right now</i>	3.621	4.71	p<0.001562	<0.0001	33.568
5. <i>with adj.</i> > <i>without adj.</i>	5.787	4.097	p<0.001562	<0.0001	29.28

Table 11.6: Significant features and means for \emptyset in the present in the acceptability judgment task

The most significant feature with \emptyset is occurrence ‘with stative’ predicates. Although it is unsurprising for \emptyset to occur with statives, it is interesting that the third most significant feature was ‘agentive’, since agentives correspond with dynamic rather than stative situations and would also be frequent with foregrounded events. The fact that seemingly very different features are significant simply shows that \emptyset has multiple functions and is not restricted to stative contexts, although there is a slight preference for ‘stative’ over ‘agentive’ contexts as can be seen from the higher chi-square value.

It was anticipated that \emptyset would be perfectly acceptable in the quasi-habitual context in AX15. However, the mean was rather inconclusive at 3.604. On the other hand, although *PE* was expected to be marginal in this context, it was actually highly acceptable with a mean of 6.208, so the predictions for this sentence were not borne out.

11.2.3 Cloze test

See Table 11.7 for a list of present contexts in the cloze test:

Sentence code	Marker in original	Stimuli
CT01_02	pe	partaz ar so bann kamarad letan zot (pe) al lekol.
CT03_04	pe	Ki zot krwar pie la (pe) raporte? Wi, gato kanet mem
CT05_01	∅	Bolfam dir li: "Ala to () ena zoli zoli gato kanet la! Eta fer mwa kado enn de do."
CT05_02	pe	Li kontign koze dir li: "Mo bien malere. Mo de lame (pe) tro tranble."
CT06_01	pe	Tizan get li dir li: "Be gramer, si ou lame (pe) tro tranble, pare ou gran zip mo avoye."
CT06_02	pe	Bolfam (pe) perdi so pasians ar sipliye Tizan pa bouze depi so brans ver lor pie kanet.

Table 11.7: Present sentences in the cloze test

In the original cloze text, *PE* occurred six times, five of these in present contexts. \emptyset occurred 16 times in the cloze test, but only one of these was in a present context. Surprisingly, *PE* was used in only 35% of the original gaps. The gap least participants agreed upon was CT03_04.

CT03_04 **Ki** **zot** **krwar** **pie** **la** **pe** **raporte?**

What 2pl believe tree DEF PE bear?

'What fruits do you think the tree is bearing/is starting to/is going to bear?'

As noted in chapter 8, this sentence is unusual as it addresses the reader directly, and it is unclear whether a progressive, inchoative or imminent meaning is meant. This ambiguity is reflected in the responses, which include both past and future markers, and just two instances of *PE*. Notably, no participants chose \emptyset .

The instance of \emptyset -marking in the present was the gap with the most consensus (89%) among participants:

CT05_01 **"Ala to** **___** **ena** **zoli** **zoli** **gato kanet** **la!"**

Here 2sg ___ have pretty pretty marble sweet there

'Well, you have a very nice marble sweet there!'

A clear difference between these two examples is stativity – perhaps this feature might stand out as relevant in the features associated with markers in the present. See Figure 11.5.

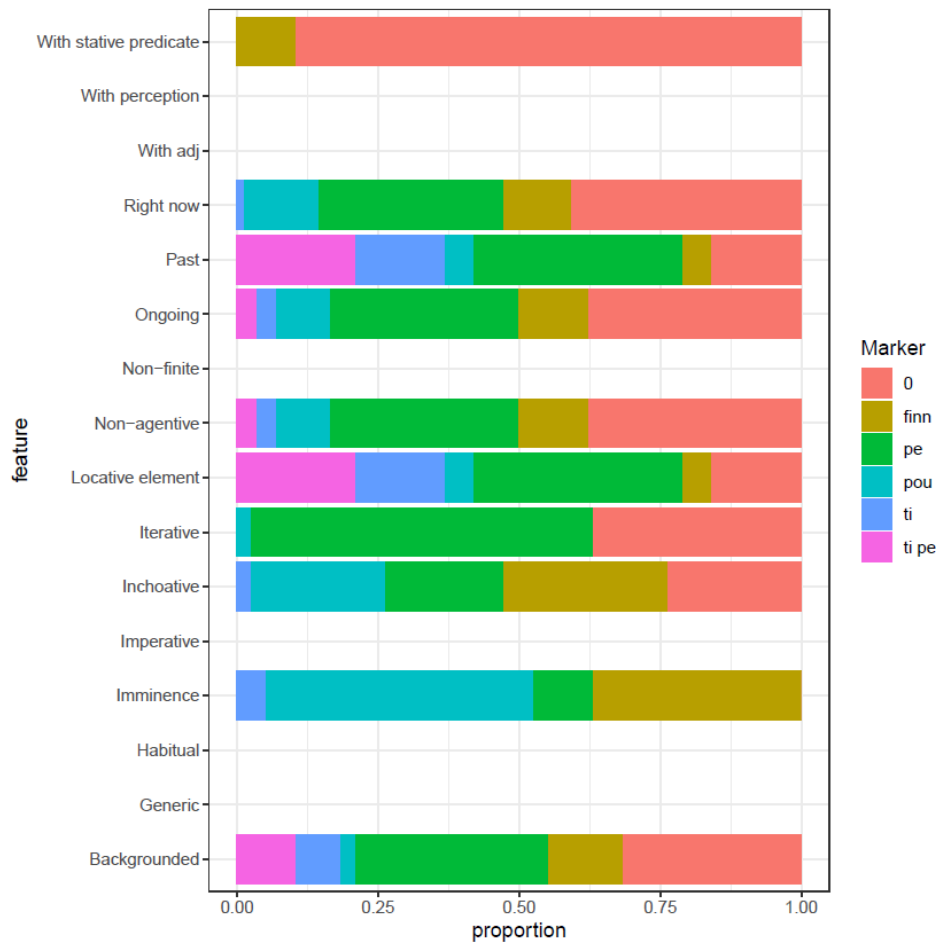


Figure 11.5: Mosaic showing features associated with present marking in the cloze test

As predicted, only \emptyset (and a couple of past interpretations with *FINN*) occurred with ‘stative’ predicates. Due to the scope for interpretation in this task, many of the originally present sentences could be understood as past or future contexts, leading to a whole range of markers which were used to fill these gaps.

Although the corpus analysis showed tendencies towards *PE* being used increasingly with statives, this is clearly not a common usage of *PE*. While it was attested in the translation task, and possible in the acceptability task, \emptyset was clearly preferred in both tasks. Apart from with ‘stative’ predicates and in ‘imminence’ contexts (where *POU* was most common), *PE* was used consistently with most other features and \emptyset occurred with all features apart from ‘imminence’.

Like in the translation task, there is no sentence which satisfies all the criteria for a strict progressive (all of the ‘right now’ sentences have a non-agentive subject), yet after the discussion above, this

question may not be fruitful anyway. Also, although the cloze test consists of a narrative, the feature ‘backgrounded’ is more or less equally spread across *PE* and \emptyset , so does not support the hypothesis regarding grounding. The cloze test does not provide clear-cut evidence about *PE*’s expansion into general imperfective marking either.

The cloze test yielded very few significant features in the present. The small number of instances in the present (81) in comparison to the past (335) and future (166) might account for this. There were no significant features for *PE*. \emptyset was significant with ‘stative’ predicates ($p=1.30E-06$) and absence of ‘imminence’ ($p=5.47E-04$). ‘Stative’ has been associated with \emptyset in all of the elicitation tasks so far. This therefore appears to be a robust tendency.

11.2.4 Semi-structured interview

Typical present questions participants answered in the interview included:

Question and features	English	Creole
1. present habitual	What is your daily routine like?	Ou routinn toulezour kouma ete?
2. present habitual	How often do you speak Creole every day?	Komie fwa ou koz kreol toulezour?
3. present right-now	What is your family doing right now?	Ki ou fami pe fer la?

Table 11.8: Typical present questions in the interview

The responses to questions in the present were overwhelmingly zero-marked, with *PE*, *FINN* and *POU* being most common when a TMA marker was selected. *FEK* occurred three times and the proportions of these markers can be seen in Figure 11.6.

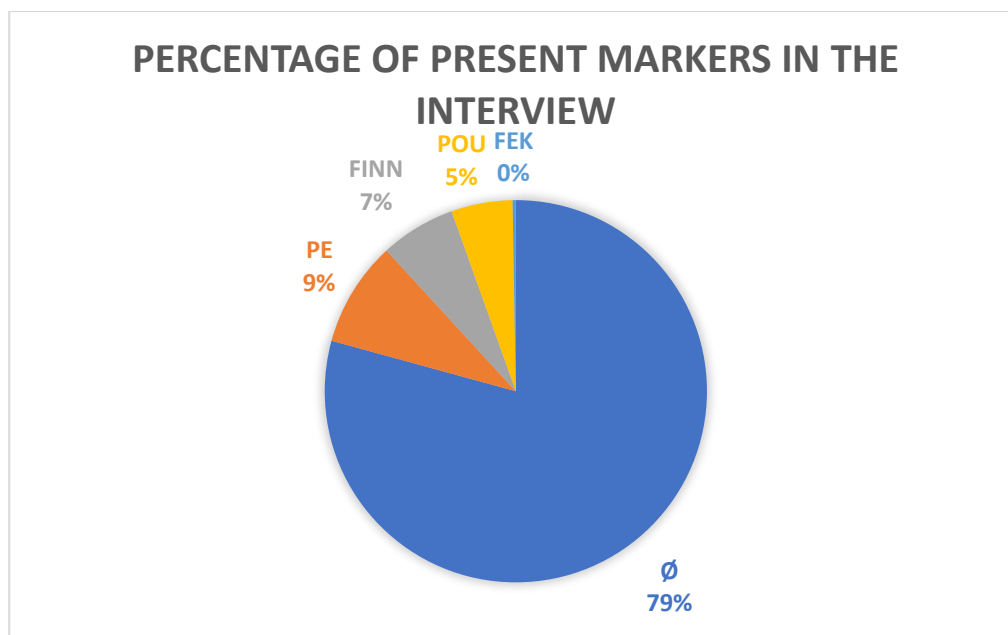


Figure 11.6: Pie chart showing the proportions of present markers in the interview

At first, it was assumed that *POU* must have constituted anomalous future references in response to a present question. However, upon further consideration, many of these instances seemed to have a generic or habitual function. This was mentioned briefly in chapter 9. This usage was clearest when participants were asked about their daily routine and how long they spend doing various activities:

P4 Si mo pou ‘chat’, li kapav dizon lamwatie ‘de la journée’
 If 1sg POU chat 3sg can let’s say half of the day
‘If I chat, it can be for around half of the day’

P11 si mo pena kour, mo pou asize enn zourne dan lakaz
 If 1sg NEG-have class, 1sg POU sit INDEF day in house
‘If I don’t have class, I sit at home all day’

P17 Travay ziska ‘huit heures trente’, mo pou rant lakaz nef-er trant
 Work until eight thirty 1sg POU return home nine thirty
‘Work (is) until 8:30pm, I get home at 9:30pm’

Since the questions specifically asked about daily routine, these sentences cannot simply refer to the future, but instead are assumed to hold for all time, or at least occur habitually. Notice that two of these examples contain conditional clauses, and one of them contains this use of *POU* in a subordinate clause. This usage does not appear to occur in restrictive contexts. In addition to *PE* and \emptyset being possible in all temporal domains, this observation provides another instance of a marker crossing temporal boundaries which can no longer simply be considered a ‘future marker’. It seems,

as is often the case in Creoles, that tense is not used to delimit usage at all. This issue will be discussed again regarding *PE* in section 11.4 and \emptyset in chapter 12. Overall conclusions from throughout this thesis about whether Mauritian Creole’s TMA markers constitute tense, mood and aspect will be drawn in chapter 13.

Figure 11.7 shows the features associated with the markers which appeared in the present contexts in the interview.

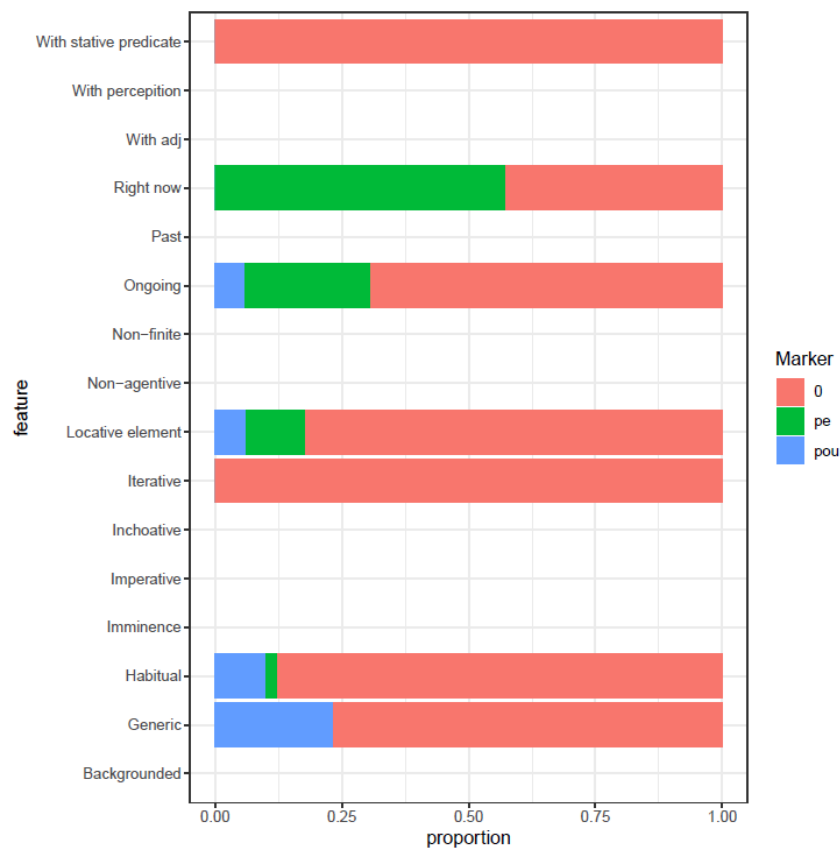


Figure 11.7: Mosaic showing features associated with present marking in the semi-structured interview

Many features were simply absent from the present contexts in the interview. However, the instances of *POU* which occurred can be described as ‘habitual’, ‘generic’, ‘ongoing’ contexts, with a ‘locative element’. Since *POU* had not been considered as a habitual marker before, this usage was not explored in the acceptability judgement task. In fact, this usage is unexpected since *POU* was highly significant in ‘non-habitual’ contexts in future contexts, so the features associated with this marker

differ considerably depending on the temporal domain. This suggests that tense is indeed a relevant distinction in Creole, but that it does not determine the boundaries of expression of a certain marker.

As expected, *PE* was the most frequent marker in ‘right now’ contexts and was also common when the situation was ‘ongoing’. There are some instances of *PE* being used in ‘habitual’ contexts, but it is not as common as *POU* for this feature. In line with its high frequency, \emptyset was dominant across all attested features except ‘right now’.

However, the chi-square test resulted in just two significant features for *PE* and \emptyset .

Feature for <i>PE</i> in the present (2/6 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
right now > not right now	1	p < 0.0017	23.94950	9.89E-07	***
non-habitual > habitual	1	p < 0.0017	23.94950	9.89E-07	***

Table 11.9: Significant features for *PE* in the present in the interview

PE still prefers contexts which are not ‘habitual’, and as expected, is highly significant in contexts happening ‘right now’. Although \emptyset also occurred in ‘right now’ contexts, it was much more likely to occur in ‘non-right now’ contexts, as shown by the significance of this feature in Table 11.10.

Feature for <i>PE</i> in the present (2/6 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
non-right now > right now	1	p < 0.0017	13.82418	0.000201	**
habitual > non-habitual	1	p < 0.0017	13.82418	0.000201	**

Table 11.10: Significant features for \emptyset in the present in the interview

In contrast to *PE*, \emptyset frequently occurred and was significant in habitual contexts. The significance level for \emptyset was lower than for *PE*. This is probably because \emptyset was spread more evenly across the features than *PE*.

Overall, the interview task also supports the assumption that *PE* cannot yet be considered a general imperfective marker. The lack of the feature ‘backgrounded’ in this task means it cannot contribute to this hypothesis.

11.2.5 Narrative re-telling

The ‘during’ condition of the narrative task involved participants saying what was happening whilst watching the video in real-time. See Appendix II.5 for screenshots showing the story that participants described. Figure 11.8 shows the proportion of markers used with all the verbs in the ‘during’ condition.

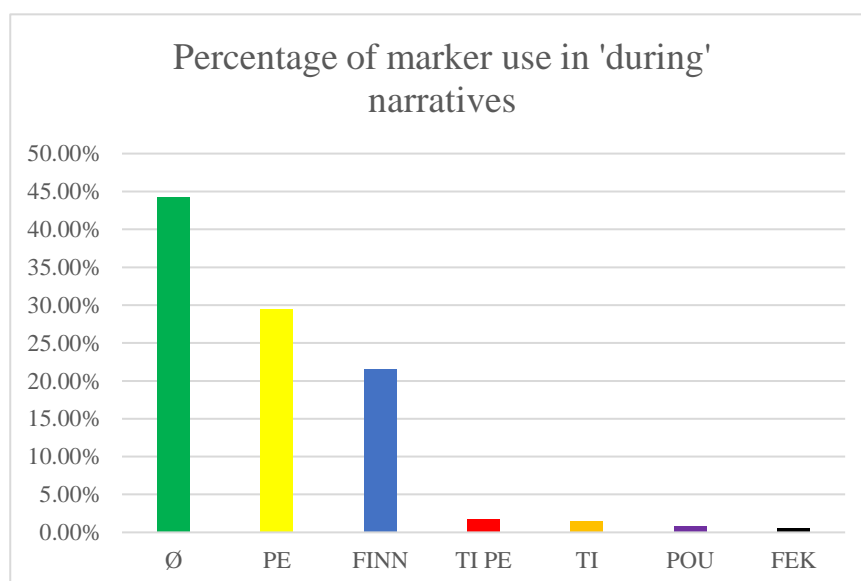


Figure 11.8: Graph showing percentage of marker use in ‘during’ narratives

The proportion of \emptyset -marking is much higher in the ‘during’ condition than in the ‘recall’ condition. Nevertheless, the three most frequent markers remain the same: \emptyset , *PE* and *FINN*, corresponding with the frequencies in the interview task. The use of *FINN* was still expected in this condition, but unlike in the ‘recall’ condition, it is anticipated that *FINN* will have a perfect/recent past meaning rather than perfective. Other markers were much rarer, which makes sense since participants were narrating the story as it happened so there was not as much scope for using past or future expression.

The mosaic in Figure 11.9 shows which features the markers are associated with.

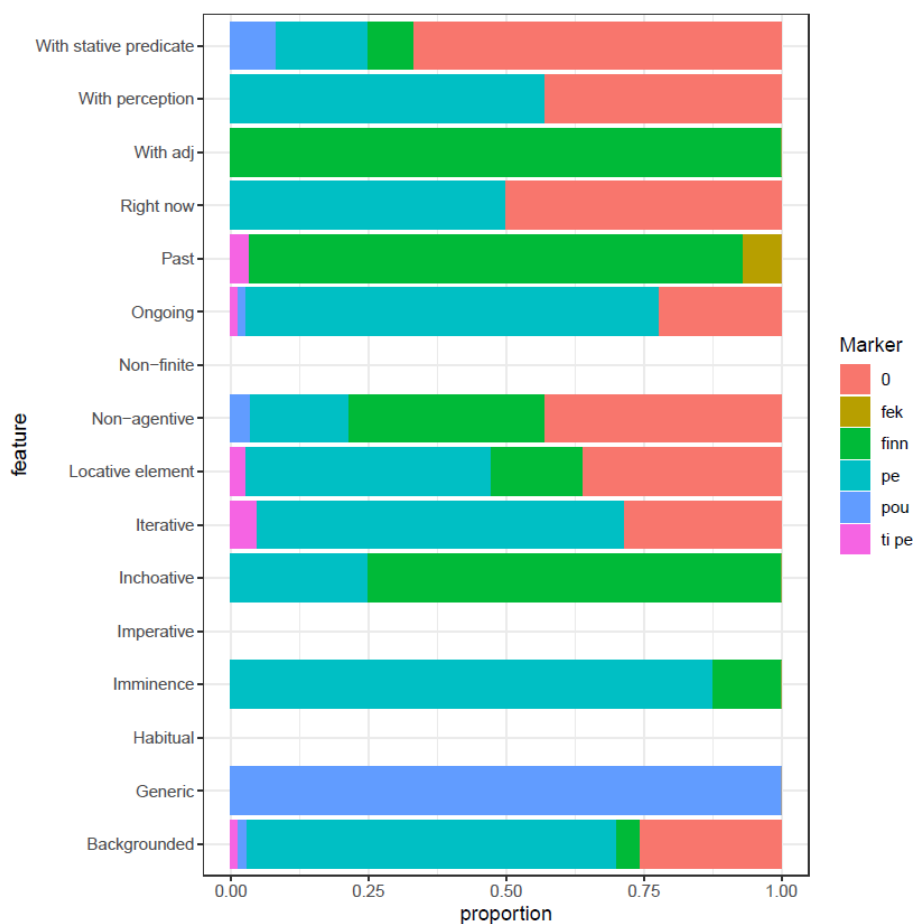


Figure 11.9: Mosaic showing features associated with present marking in 'during' narratives

Although Figure 11.8 showed that \emptyset was clearly the most frequent marker in the 'during' narratives, *PE* is used in a much higher proportion of 'backgrounded', 'iterative' and 'ongoing' contexts than \emptyset . This is unsurprising given *PE*'s primary aspectual function of progressive. \emptyset , on the other hand, was clearly preferred 'with stative predicates' and in 'non-agentive' contexts. *PE* also occurred in contexts which imply 'imminence'. As in the interview task, *POU* had a generic function in this task.

One puzzling example of *POU* was the following:

P15 **Li** **realize** **ki** **ah!** **enn** **panie** **pou** **manke!**
 3sg realize REL ah! INDEF basket POU miss
 'He realizes that ah! a basket is/will be missing!'

This does not appear to be future because it describes what the participant assumes to be happening in the farmer's head as he sees that one of the baskets is no longer there. Yet, this usage seems to be different from the generic function in the interview task, where they often involved an *if*-clause and

referred to the first-person. My contact claims such usage is common in Creole speech and refers to both the present and future: i.e. the basket is missing now for something the farmer intends to do in the future (Othello, 2020, p.c.). If this is the case, then there is still a clear link to the future, but it is a different usage to both future *POU* and generic *POU*.

FINN was primarily used to refer to actions which had happened just before the participant narrated them, and continued to the present, rather than in perfective contexts as was the case in the ‘recall’ condition. *FINN* was the only marker to occur with adjectives, a number of which could be interpreted as ‘inchoative’. For example: *so linz inn sal* ‘his clothes are/have got dirty’. Again, *PE* is not attested with adjectives, suggesting that the ambiguous examples in the corpora were not adjectives either.

FEK occurred 4 times by one participant to express something that had just happened. It appeared with a variety of agentive, non-agentive and relative clause subjects and with four common verbs. It was expected that *FEK* would occur much more frequently in the spoken tasks than in the written elicitation tasks, yet *FEK* was extremely infrequent in both the interviews and the narrative tasks. It is clear that *FEK* occurs in modern day Creole in specific contexts, which are probably simply more likely to occur in spontaneous conversational speech rather than in the written or more formal spoken tasks conducted for this thesis.

TI PE also appears in the ‘during’ narratives, when referring back to something that was happening earlier in the story. Participants commonly used this marker to refer back to the farmer “who was picking pears” in the opening scenes, as the boys walk past him at the end of the narrative. *TI PE* seems to be associated with those features which are predominant for *PE* (‘backgrounded’, ‘iterative’, ‘with locative element’ and ‘ongoing’), but in past contexts.

To put these observations into context, I again present extracts from two participants to show different narrative marking strategies in the ‘during’ condition.

Participant	Scene	Description	Example	Long Verb	Marker
4	8	Hat comes off	<i>So sapo inn anvole</i>	<i>anvole</i> 'fly off'	<i>FINN</i>
15	8	Hat comes off	<i>Tifi-la kokin sapo garson-la.</i>	<i>kokin</i> 'steal'	\emptyset
4	9	Bike hits rock	<i>Li'nn tap avek enn ros</i>	<i>tape</i> 'hit'	<i>FINN</i>
15	9	Bike hits rock	<i>Garson-la tap ek enn ros, ...</i>	<i>tape</i> 'hit'	\emptyset
4	10	Falls off bike	<i>... inn tonbe avek so bann pwar</i>	<i>tonbe</i> 'fall'	<i>FINN</i>
15	10	Falls off bike	<i>... tonbe.</i>	<i>tonbe</i> 'fall'	\emptyset
4	11	Three boys exist	<i>Ena trwa ti-garson...</i>	<i>ena</i> 'have/be'	\emptyset
4	11	The three boys see the other boy who fell	<i>... pe get li.</i>	<i>gete</i> 'look at'	<i>PE</i>
4	11	Three boys come	<i>Zot inn vinn ed li</i>	<i>vini</i> 'come'	<i>FINN</i>
15	11	Three boys come	<i>Enn group kamarad pe vini.</i>	<i>vini</i> 'come'	<i>PE</i>

Table 11.11: Narrative extracts from participants for scenes 8-11 with verbs and markers in the 'during' condition

Whilst participant 4 mainly used *FINN* to narrate foregrounded sequences of events, participant 15 used \emptyset , much like in the 'recall' condition. *PE* is used by both of these participants to contrast with their choice of foregrounding marker (\emptyset or *FINN*).

Table 11.12 shows the chi-square test results for *PE*:

Feature for <i>PE</i> in the present (3/12 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
ongoing > not ongoing	1	p < 0.0011	77.88655	1.09E-18	***
backgrounded > non-backgrounded	1	p < 0.0011	44.62603	2.38E-11	***
right now > not right now	1	p < 0.0011	24.05044	9.38E-07	***

Table 11.12: Significant features for *PE* in the present in the narrative

As would be expected for this aspectual marker, the most significant feature was 'ongoing', which is typical of *PE*'s meaning whenever it occurs, and since participants narrated a video as it was happening, it makes sense that 'right now' was highly significant. As in the translation task, and to some extent in the cloze test, *PE* was associated with backgrounding, which was highly significant in this task.

\emptyset , on the other hand, was significant in ‘non-backgrounded’ events, as can be seen in Table 11.13.

Feature for \emptyset in the present (3/12 features significant)	Degrees of freedom	Corrected significance threshold	Pearson's chi square value	P value	Sig. level
not ongoing > ongoing	1	p < 0.0011	18.03361	2.17E-05	***
right now > not right now	1	p < 0.0011	17.96782	2.25E-05	**
non-backgrounded > backgrounded	1	p < 0.0011	10.80328	0.001013	*

Table 11.13: Significant features for \emptyset in the present in the narrative

In line with a foregrounding function, \emptyset was highly significant in ‘not ongoing’ contexts, although they were happening at the same time as the video, so could be considered ‘right now’. The combination of these three significant features all support the hypothesis that \emptyset has a foregrounding function in narratives. However, this contrasts with the results from the cloze test (the other narrative task) where this feature was not significant.

This narrative task showed a clear tendency for *PE* to give background information and set the scene, and for \emptyset and *FINN* to be used to introduce foregrounded events in the narrative. The tendency to use a progressive marker in the present to express backgrounding was supported by the chi-square results above and in the translation task, and can be seen in action in the following extract, which is associated with scene 13:



Figure 11.10: Screenshot from scene 13 of the Pear Stories video when one of the three boys gives the hat back

P11: Trwa lezot garson-la PE al dan sans anvers. ... La, enn garson dan sa trwa garson-la INN trov sapo ki lot garson lor bisiklet-la TI perdi. Li \emptyset ramas li, li \emptyset sifle, li \emptyset al donn li.
(Participant 11, 20/08/19)

‘Three other boys (*PE*) are going in the other direction. ... Just now, one of the three boys (*FINN*) found the hat that the other boy (*TI*) had lost. He (\emptyset) picks it up, he (\emptyset) whistles, he (\emptyset) goes to give it to him.’

The first sentence is marked with *PE* describing the scene as the three boys head off in the opposite direction. There is then a pause as the participant watches further, then recaps what happened. The

foregrounded event of finding the hat is marked with *inn* (variant of *FINN*) since it happened in the past, then *TI* is used in a relative clause as a pluperfect since the boy had lost the hat before the point at which the other boy found it. Finally, there is a series of \emptyset -marked events, as the participant narrates the foregrounded events taking place in real-time.

11.2.6 Overview of *PE* and \emptyset in each individual task

A summary of all the chi-square test results carried out in the tasks reviewed above can be seen in Table 11.14 and Table 11.15.

Present	<i>PE</i>				
	Trans	Acc	Cloze	Int	Narr
+/- right now	ns	* (+)	ns	*** (+)	*** (+)
+/- ongoing	All 1	All 1	All 1	All 1	*** (+)
+/- locative element	*** (+)	* (+)	ns	ns	ns
+/- with adjective	All 0	** (-)	All 0	All 0	ns
+/- with stative predicate	ns	ns	ns	ns	ns
+/- generic	All 0	All 0	All 0	ns	ns
+/- habitual	*** (-)	ns	All 0	*** (-)	All 0
+/- imminence	**** (-)	ns	ns	All 0	ns
+/- inchoative	All 0	All 0	ns	All 0	ns
+/- background	*** (+)	All 0	ns	All 0	*** (+)
+/- iterative	All 0	ns	ns	ns	ns
+/- non-agentive	ns	* (+)	ns	All 0	ns
+/- imperative	*** (-)	All 0	All 0	All 0	All 0

Table 11.14: Summary of chi-square results for all individual tasks in the present for *PE*

Unlike in the future chapter, the results from individual tasks for *PE* do not directly contradict each other. For example, three of the tasks support *PE* having a ‘right now’ function, and two tasks support it having a backgrounding function. Some support for *PE*’s continued development towards imperfectivity is its lack of significance in ‘right now’ contexts in the translation and cloze tasks. The hypothesis of *PE* taking on a backgrounding function is supported by two tasks, it could not be tested in another two and was not supported by the cloze test. Since there is no clear consensus, the next section, which takes all of the data together, should be more reliable and helpful for evaluating the hypotheses.

Below is the summary of results for \emptyset :

Present Task:	\emptyset				
	Translation	Acceptability	Cloze	Interview	Narrative
+/- right now	ns	* (-)	ns	** (-)	** (+)
+/- ongoing	All 1	All 1	All 1	All 1	*** (-)
+/- locative element	ns	ns	ns	ns	ns
+/- with adjective	All 0	* (+)	All 0	All 0	ns
+/- with stative predicate	*** (+)	** (+)	*** (+)	ns	ns
+/- generic	All 0	All 0	All 0	ns	ns
+/- habitual	*** (+)	ns	All 0	** (+)	All 0
+/- imminence	ns	** (-)	* (-)	All 0	ns
+/- inchoative	All 0	All 0	ns	All 0	ns
+/- background	* (-)	All 0	ns	All 0	* (-)
+/- iterative	All 0	ns	ns	ns	ns
+/- non-agentive	*** (+)	* (-)	ns	All 0	ns
+/- imperative	ns	All 0	All 0	All 0	All 0

Table 11.15: Summary of chi-square results for all individual tasks in the present for \emptyset

For \emptyset , the tasks do contradict each other in two instances: the narrative task was significant in ‘right now’ contexts, yet two tasks showed that ‘not-right now’ was significant for \emptyset , and two tasks were not significant in either direction. Similarly, ‘non-agentive’ was positive in the translation task, negative in the acceptability judgement task, not significant in the cloze and narrative tasks, and could not be tested in the interview. The feature which received most consensus was ‘stative’ as this was supported in the first three tasks and when habitual usage occurred, \emptyset was significant in two out of three tasks.

The main hypothesis for \emptyset that it will have a foregrounding function was supported in the translation and narrative tasks. As mentioned above, taking these results individually cannot provide clear evidence and allows for the idiosyncrasies of each task to bias the results. In the next section, I present all the results together for a better overview.

11.3 Overall results for elicitation tasks combined

Combining the results from all tasks proves to be a more intuitive and methodologically sound approach to understanding the data, and avoids biases associated with individual tasks. I present a summary for all the tasks in Table 11.16.

All tasks:	PE	Ø
Significant for:	7 features	7 features
+/- right now	** (+)	ns
+/- ongoing	ns	*** (-)
+/- locative element	*** (+)	ns
+/- with adjective	ns	ns
+/- with stative predicate	ns	*** (+)
+/- generic	*** (-)	*** (+)
+/- habitual	* (-)	*** (+)
+/- imminence	ns	*** (-)
+/- inchoative	*** (+)	* (-)
+/- background	*** (+)	*** (-)
+/- iterative	ns	ns
+/- non-agentive	ns	ns
+/- imperative	*** (-)	ns

Table 11.16: Significant features for present markers in all tasks

The lower number of data points when analysing each task individually means that some broader trends across all of the data were missed. By combining all tasks, no feature had the same value throughout, so the ‘All 0’ or ‘All 1’ results can contribute to the bigger picture, resulting in a higher number of significant values. For example, because most tasks did not include imperative contexts, no conclusions could be drawn about *PE*’s occurrence in such contexts. However, with this larger dataset, it is clear that *PE* is extremely unlikely to occur in imperative constructions.

‘Generic’ is one of the most general imperfective uses, and the fact that non-generic is highly significant provides more evidence that *PE* has not yet reached the point of expressing general imperfectivity. The lack of significance in habitual contexts also supports this. Overall, we can see that extended imperfective usage is rather uncommon with *PE*, and although it has certainly expanded beyond progressive usage, it cannot be considered a general imperfective marker.

As was clear in the future chapter, *PE* has already progressed to expressing futurity. ‘Inchoative’ contexts which led to this development can still be seen, although the lack of significance for ‘imminence’ could be because *PE* has moved past this initial stage of development so now functions as a full future marker, not just an emerging one in ‘imminent’ contexts. Finally, the data provide clear evidence for *PE* having a backgrounding function in present contexts, which was not as obvious from the individual tasks.

The data show that certain domains remain associated with a certain marker in the present. \emptyset generally takes on ‘generic’ and ‘habitual’ features, which is less common for *PE*, whilst *PE* is the primary marker in ‘inchoative’ and ‘backgrounded’ contexts. The hypothesis that \emptyset occurs in foregrounding contexts is also supported overall.

11.4 Conclusions regarding hypotheses for present marking in all tasks

The questions and hypotheses regarding present marking, mentioned in 11.1, were whether *PE* is obligatory in strictly progressive contexts, whether *PE* can be considered a general imperfective marker and whether grounding can differentiate *PE* from \emptyset in narratives.

Table 11.17 summarizes the findings for *PE* and \emptyset with regard to these hypotheses. It was suggested in section 11.2.2. that it may not be realistic to look for evidence of a 100% obligatory marker in a dynamic, changing system, so although the answer would have to be ‘no’ from the elicitation data, this hypothesis was not considered to be in line with assumptions regarding the gradualness of language change and therefore not reported below.

Marker	Task	No. sig features	Hypothesis	✓	Comments
<i>PE</i>	Translation	5/8	<i>PE</i> can be considered a general imperfective marker and provides backgrounding in narratives	✗/✓	Not used in habitual or imminent contexts, although backgrounded significant
<i>PE</i>	Acceptability	5/9		?	Participants undecided about acceptability in more general imperfective contexts, no backgrounded sentences
<i>PE</i>	Cloze	0/9		?	Not significant for any features
<i>PE</i>	Interview	2/6		✗/?	Highly significant for non-habituals, no backgrounded sentences
<i>PE</i>	Narrative	3/12		✗/✓	Significant for backgrounded but not significant in further imperfective domains
<i>PE</i>	<i>All tasks</i>	7/13		✗/✓	Extended imperfective features not significant, but backgrounding was
∅	Translation	4/8	∅ has a foregrounding function in narratives	✓	'Non-backgrounded' was significant
∅	Acceptability	6/9		?	Could not test as all sentences were foregrounded
∅	Cloze	2/9		✗	Not significant for +/- backgrounded
∅	Interview	2/6		?	Could not test as all sentences were foregrounded
∅	Narrative	3/12		✓	Non-backgrounded was significant
∅	<i>All tasks</i>	7/13		✓	Non-backgrounded highly significant overall

Table 11.17: Hypotheses and findings for present markers in all written tasks

None of the tasks provided evidence that *PE* had already expanded to fulfil the role of general imperfective marker at this point in its development, as it shares imperfective marking with ∅. Bybee et al.'s (1994:148) typologically-valid sample of languages showed that it is uncommon for a progressive marker to reach the point where it can be considered a general imperfective marker, but it is extremely common for it to be situated somewhere along the continuum between a strict progressive and general imperfective. Current Mauritian *PE* is more nuanced than was assumed from the corpus analysis since its occurrence with adjectives, statives, habituals and in 'imminent' contexts was not as widely accepted and used in the elicitation tasks as had been anticipated.

Although the individual tasks did not provide unanimous support for *PE* and \emptyset to be distinguished on the basis of grounding individually, the larger dataset including all tasks, did show that *PE* was highly significant in backgrounding contexts whilst \emptyset was highly significant in non-backgrounded ones, supporting this hypothesis.

The implication of *POU* occurring in present contexts on its status as tense, mood and aspect was discussed in section 11.2.4. In a similar vein, *PE* is not restricted by tense, as this and previous chapters have shown that it can occur in all temporal domains. In the future, it can maintain its use as a progressive aspectual marker in combination with another marker (e.g. *POU PE*), whilst also having a future function in its own right. This means that *PE* cannot be blind to tense altogether, otherwise it would not have acquired this additional function exclusively in future contexts.

Also, in its future function, the notion of mood comes into play. Not only does *PE* simply refer to events which take place after the time of speech (thus expressing tense information), but future expression also necessarily involves the subjective perception, judgements and opinions of the speaker, moving into the realm of mood. Coupled with *PE*'s most common function of expressing aspectual information, *PE* could be labelled as any of tense, mood or aspect. Due to the flexibility of such notions, I do not believe that it is important to assign a specific label to the markers, but I do think that the markers are sensitive to the notions of tense, mood and aspect.

The concept of alternative dimensions was mentioned in chapter 10, and it was noted that the cognitive D-domain, which is considered separate from the temporal one and more subjective in nature, had parallels with mood. When considering *PE*'s future usage, it could be problematic to assume that some markers in the future belong to a different dimension than others. Perhaps *PE* might be considered more agent-oriented than *POU* and \emptyset in line with its emerging future usage, and therefore be situated in the D-domain. Yet, as mentioned above, and in chapter 2, it is almost impossible to make an assertion about the future without bringing mood into the equation. Therefore this delimitation by placing markers in entirely different dimensions does not capture the interrelatedness of tense, mood and aspect. I continue this discussion regarding \emptyset in the next chapter.

Chapter 12:

Zero marking and overall results

This chapter explores what it means to be a non-overt, zero TMA marker in Mauritian Creole by presenting its frequencies in the elicitation tasks and then discussing the overall results for \emptyset . Through doing this I aim to narrow down the features which form its inherent meaning in the different temporal domains. The final section presents the overall results for all markers in the elicitation tasks.

12.1 Zero marking

12.1.1 Frequencies in the elicitation tasks

There is no doubt that \emptyset is very common and perfectly acceptable in present contexts. It is less clear whether, and to what extent, there is a preference for overt TMA marking in future and past contexts. I have attempted to address this question throughout Part II, but I systematically present the findings in terms of frequency in this section. If \emptyset is less acceptable in future contexts, as implied by the results of the acceptability judgement task, it should be less frequent in future contexts than in past and present ones. Table 12.1 shows the frequency of \emptyset -marking in all elicitation tasks apart from the acceptability judgement task⁸³, divided into future, past and present contexts, in order to explore this hypothesis:

Task	\emptyset in future	\emptyset in past	\emptyset in present	\emptyset overall
Translation	12.7%	13.9%	29.7%	17.1%
Cloze	19.3%	35.2%	37.7%	31.4%
Interview	25.9%	13.9%	74.0%	53.5%
Narrative	-	26.3%	44.2%	35.7%
<i>Average</i>	<i>19.3%</i>	<i>22.3%</i>	<i>46.4%</i>	<i>34.4%</i>

Table 12.1: Frequency of \emptyset -marking in elicitation tasks in future, past and present contexts

⁸³ Frequency is not relevant for the acceptability judgement task, since all markers were shown to participants equally frequently.

Although the frequencies in the cloze test might suggest that \emptyset is less frequent in future than past or present contexts, this is certainly not the case in the translation task, where \emptyset is similarly frequent in future and past contexts, nor in the interview, where \emptyset occurred much more frequently in future than past contexts. It therefore seems unlikely that \emptyset is less acceptable in future contexts because its usage frequency was not consistent across tasks. If we take the average, \emptyset expression in the future is slightly less frequent (19.3%) than in the past (22.3%), but these proportions are rather similar in comparison to the present, where \emptyset is twice as frequent as either future or past (46.4%).

Potential differences between the written (translation, acceptability and cloze) and spoken (interview and narrative) tasks were acknowledged in the introduction of Part II, but it was explained that it is not possible to tease apart confounding variables such as task differences from a potential effect of spoken or written modality. Returning one final time to the question of whether \emptyset is more/less acceptable in certain domains, we can turn to frequency to explore this in more detail. If \emptyset has a clear preference for spoken/written, or a certain temporal domain, we would expect to see a difference in frequency. Table 12.2 shows the frequency differences for \emptyset between the written and spoken elicitation tasks in future, past and present contexts:

Task	\emptyset in future	\emptyset in past	\emptyset in present	\emptyset overall
Written task average	22.4%	24.6%	33.7%	24.3%
Spoken task average	25.9%	20.1%	59.0%	44.6%

Table 12.2: Frequency differences in \emptyset -usage in spoken and written tasks

The fact that the proportions of \emptyset are not that different between future and past, on the one hand, and spoken and written tasks on the other, suggests that these factors are not relevant for the acceptability of \emptyset . There is, however, a clear difference in the frequency of \emptyset in the present according to whether the task is written or spoken, which is most likely a combination of the task type and differences between written and spoken modalities.

For comparison, recall that Stein (2007) found that 75% of verbs were unmarked in Old Mauritian and Virahsawmy (2017, p.c.) claims to use overt past markers systematically in his writing. The

percentages of \emptyset -marking in the elicitation tasks show that overt use of TMA marking has reduced considerably since Old Mauritian (from 75% to an average of 34.4% in all elicitation tasks), but it has not reached a point where all verbs are systematically marked.

12.1.2 *Acquiring a function without a form*

If \emptyset does not have any overt form, can it even be considered a marker? One might assume that zero marking would not carry any meaning on its own. However, when it is contrasted with an overt TMA marker, it acquires meaning through inferential reasoning (Bybee, 1994:235).

As explained in chapter 2, some markers become obligatory as they grammaticalize. When these markers occur in a certain environment frequently, in cases where they are not used in that environment, it is subsequently assumed that some other meaning is intended. This other meaning is then attributed to \emptyset (Bybee, 1994:240). To take an example relevant for present expression, when *PE* increased in frequency in Old and 20th Mauritian, it became strongly associated with progressive meaning. Present expression is made up of progressive, habitual and stative. Therefore, in those contexts where *PE* did not occur, \emptyset was assumed to have a habitual or stative meaning. Although \emptyset does not have any formal substance, its semantic substance comes from the discourse and cognitive context (Bybee, 1994:241).

Some linguists have claimed that \emptyset in Mauritian Creole only refers to present tense, or habitual aspect in the present. Sycia (2013:109) provides the two following ungrammatical examples to support his claim that \emptyset is a present, and not a past or future marker:

37) 2013

* **li** **travay** **dan** **lizin** **yer**
 3sg work in factory yesterday
**'He work in the factory yesterday'*

38) 2013

* **li** **travay** **dan** **lizin** **dimen**
3sg work in factory tomorrow
**'He work in the factory tomorrow'*

Although \emptyset is ungrammatical in these two contexts, the elicitation tasks have provided countless examples where \emptyset does appear in clearly past and future contexts. Its past usage is most clear in non-narratives, where it cannot be interpreted as a 'present historic'. For instance, in the interview, all participants were asked about their experiences of school. Since all the participants had left school, these utterances were necessarily anchored in the past, yet participants did not always use an overt TMA marker to express this:

P1

mem bann profeser ou si, zot \emptyset koz angle, franse, kreol ansam
'even the teachers too, they spoke English, French and Creole together'

P2

Kan bann profeser \emptyset explike, zot \emptyset explik an angle, ou franse
'When the teachers explained (something), they explained (it) in English, or French'

P9

dabitid nou \emptyset koz an kreol ant bann kamarad
'usually we spoke in Creole amongst our friends'

P18

Aprè kreol \emptyset vinn angle
'After Creole came English'

P19

me apre par laswit mo \emptyset sans ekol
'but after that I changed school'

These are not isolated instances, but quite common across all participants when talking about clearly past events, suggesting that although Syea's examples above in (37) and (38) are intuitively ungrammatical, \emptyset certainly does occur as a variant to express past in naturally occurring Creole.

In contrast to Syea's (2013) approach, Stein (2007:157) argues that \emptyset 's meaning and function are context-dependent and this is similar to Holm's (1988:150) view that the unmarked verb in Creoles portrays "whatever time is in focus". However, this contrasts with the norm in Atlantic Creoles, where \emptyset occurs with stative verbs in present contexts, and dynamic verbs in past contexts (Winford, 2017:196). This is a division of functions, which is typologically common for zero marking (Bybee et al., 1994), yet it has been claimed that Mauritian's \emptyset -marker does not follow this pattern (Syea,

2013:109) and this does not seem to be the case in this thesis either. The specific results for \emptyset from all the elicitation tasks will be summarized below and it will be considered whether any of the above hypotheses fit the data.

12.1.3 Summary of results for \emptyset in all tasks

Overall, the results from the elicitation tasks have shown that \emptyset is not restricted to present contexts as it can occur in future and past contexts too. The results from the acceptability judgement task implied that \emptyset 's usage in future contexts was less acceptable than in past ones. However, this did not seem to be the case from the other elicitation tasks or the frequencies examined above.

Table 12.3 shows the significant features associated with \emptyset in the different temporal domains:

Features	\emptyset in future	\emptyset in past	\emptyset in present
Time-related		- recent past - current relevance	
Speaker-oriented	+ speaker certainty		
Sentence	+ first person + animate subject		
Aspectual	+ habitual + progressive	+ stative + durative - completed action - telic	+ habitual + generic - ongoing - imminence - inchoative
Discourse		+ foregrounded - direct speech	- backgrounded
Occurrence			+ with stative predicate
Perfect vs. perfective		- result - perfective	

Table 12.3: Significant features associated with \emptyset in different temporal domains

Firstly, it must be emphasized that the features are not directly comparable, since not all features were analysed in all temporal domains. For example, past and present domains analysed discourse features, yet these were not part of the future analysis, so from this analysis, it is impossible to determine whether \emptyset has a foregrounding function in future contexts too. Nevertheless, there is some clear overlap of features. Aspectual features are significant for \emptyset across all temporal domains. In

particular, ‘habitual’ and ‘stative’ features occur in future, past and present contexts, which ties in with previous research that emphasizes \emptyset ’s habitual function (Syea, 2013:107).

There is also support for claims about Mauritian Creole’s \emptyset not following the Atlantic pattern of occurring with statives in present contexts, but with dynamic verbs in past contexts. This is because \emptyset was in fact significant in non-perfective (i.e. ‘non-dynamic’) contexts in the past. However, the past results appear somewhat contradictory because it is highly significant in ‘stative’, ‘durative’ and ‘non-perfective’ contexts on the one hand, but also in ‘foregrounded’ contexts on the other, which typically portray punctual, perfective events. These conflicting results most likely came about because \emptyset is not highly-specialized or used exclusively with a certain set of features.

The results from the elicitation tasks go against \emptyset only occurring in present or habitual contexts, but instead support the idea that \emptyset is context-dependent. This is in line with Stein (2007) and the assumption that \emptyset takes on the remainder of the meaning that is not expressed by overt markers. An important consequence of this is that, as the other markers change over time, so too will the meaning attributed to \emptyset . Bybee et al. (1994:159) note that overt habitual markers are rare in the world’s languages, so it follows that \emptyset commonly takes on habitual meaning in Mauritian Creole too.

Returning to the question of whether the markers constitute tense, mood or aspect, it is clear that \emptyset cannot simply be considered a ‘present’ tense marker, since it can occur in all three temporal domains. Furthermore, the significant features common to all these domains for \emptyset are aspectual (see Table 12.3), suggesting tense is not relevant for determining its usage. This goes against Syea’s (2013) assumption that \emptyset is a tense marker. In addition to his claim that \emptyset is incompatible with temporal adverbs such as ‘tomorrow’, part of his reasoning stems from the meaning of subject-less sentences. When an overt tense marker is used without an overt subject, the meaning of the subject is an ‘indefinite existential’, i.e. ‘*someone* sold fish on the beach’. Yet, when \emptyset is used, the meaning is generic or universal, i.e. ‘*people* sell fish on the beach’. Syea (2013:109) argues that this supports \emptyset ’s status as a present tense marker. However, it seems strange to assume that this generic function, which holds for all time rather than being restricted to the present, supports a ‘tense’ interpretation.

Instead, I consider \emptyset 's behaviour to be more consistent with an 'aspectual' interpretation, which is underspecified for tense, although it is still sensitive to temporal distinctions. Its competition with different overt markers in different temporal domains can affect its meaning accordingly.

It is worth posing the question of how the underspecification for tense can be interpreted. From Syea's examples, it is clear that an overt temporal adverb is not enough to 'license' \emptyset marking in the past or future, yet this does not mean \emptyset cannot occur in non-present contexts at all, as seen in my interview examples. Instead, I propose that \emptyset is interpreted anaphorically in relation to a preceding overt tense marker. In the case of my interviews, these were all preceded by a question which contained the overt marker *TI*, to which \emptyset was anchored. This also means that although Stein (2007) is on the right track in describing \emptyset as 'context dependent', in reality, this isn't enough, because otherwise Syea's examples with overt temporal adverbs should also be acceptable with \emptyset .

It seems that \emptyset does not need any specific context to be acceptable in the present, but \emptyset requires at least one overt past or future marker in the preceding context (minimally, this could be one sentence or question containing a marker) in the past or future. More research could be done to test this systematically.

As mentioned previously, it is clear that the markers show sensitivity to tense, mood and aspect, yet I do not believe the actual label assigned to a marker is of importance. Whether or not an interpretation in terms of primary and dissociated dimensions (discussed in chapter 10) is appropriate for Mauritian's TMA markers will be considered in the final chapter.

12.2 Overall results

I conclude this final chapter with an overview of the results for all the markers.

The approach taken throughout this part of the thesis has relied on grouping all of the elicited data together. This took advantage of the higher statistical power due to much larger sample sizes and

successfully showed trends which reflect all tasks combined. A summary of these results for all the markers can be seen in Table 12.4.

Temporal domain	Marker	Significant features overall, considered to be canonical for Modern Mauritian
Future expression	<i>POU</i>	+ specific date, + time mentioned, + present relevance, + commissive - animate subject, - progressive, - habitual
	<i>VA</i>	+ hypothetical, + animate subject - specific date, - time mentioned, - present relevance, - speaker control, - agent intention, - probability, - first person
	<i>PE</i>	+ agent intention, + probability, + animate subject - speaker expectation, - commissive, - hypothetical
	\emptyset	+ speaker certainty, + first person, + animate subject, + progressive, + habitual
Past expression	<i>FINN</i>	+ recent past, + direct speech, + completed action, + current relevance + result, + experiential, + perfective, + telic - stative, - durative, - iterative, - non-agentive
	<i>FEK</i>	+ recent past, + direct speech, + completed action, + current relevance + perfective, + telic - foregrounded, - durative
	<i>TI</i>	+ stative, + durative, + non-agentive - recent past, - direct speech, - completed action, - foreground, - perfective, - telic
	\emptyset	+ foregrounded, + stative, + durative - recent past, - direct speech, - completed action, - current relevance, - result, - perfective, - telic
	<i>PE</i>	+ durative, + iterative - recent past, - completed action, - current relevance, - perfective, - telic
	<i>TI PE</i>	+ durative, + iterative - completed action, - foregrounded, - current relevance, - perfective, - telic, - non-agentive
Present expression	<i>PE</i>	+ right now, + locative element, + inchoative, + background - generic, - habitual, - imperative
	\emptyset	+ with stative predicate, + generic, + habitual - ongoing, - imminence, - inchoative, - background

Table 12.4: Summary of all significant features across all tasks for all markers

In Table 12.4, a number of features are highlighted to emphasize the ways in which certain markers are similar or have complementary distributions. Pinning down the meaning of *VA* has been a major focus of inquiry for future expression, and this table enables us to show in which ways *VA* differs from the other markers. For example, it is different from *POU* in that it is significant in contexts with no ‘present relevance’, the new future marker *PE* differs from *VA* by being used when the agent intends to carry out the action and the situation is not hypothetical at all, and *VA* differs from \emptyset in its tendency not to be used with first person subjects.

Moving to the past marker results, we see certain markers patterning together. *FINN* and *FEK* share the majority of their features and unsurprisingly *TI PE* and *PE* pattern together. More surprisingly, *TI* and \emptyset share many features with the notable exception that *TI* is significant with ‘non-foregrounded’ events (i.e. backgrounded ones), unlike \emptyset , which is the only marker which is significant in ‘foregrounded’ contexts. *FINN* is not significant for this feature, showing that it can have both foregrounding and non-foregrounding functions depending on the context. Its foregrounding function was highlighted in the narrative re-telling section, since *FINN* was used as an alternative foregrounding strategy to \emptyset . Finally, the results from the present expression data show that *PE* tends not to occur in ‘habitual’ contexts, but that it occurs in ‘inchoative’, ‘backgrounding’ ones, unlike \emptyset .

12.3 Overall conclusions

This chapter explored \emptyset 's usage and frequency throughout the tasks to examine what it means to be a zero-marker and whether it has any meaning of its own. It was concluded that the results did not support the assumption that \emptyset is only a present and/or habitual marker, since it also occurs in past and future contexts. Instead, it makes sense to consider \emptyset context-dependent, but underspecified for tense, requiring tense anchoring to be expressed in the preceding context.

Chapter 13:

Diachronic overview and final conclusions

One thing which cannot be ignored is the complexity of the markers in question and the multiple factors which have influenced their development over time. This chapter returns to the research questions set out in chapter 3 to examine what this thesis has achieved before drawing some final conclusions. In order to answer the first research question about Mauritian's TMA markers, I start by giving a diachronic overview of the markers *POU*, *VA*, *TI*, *FINN* and *PE* on the basis of the corpus analysis and elicitation tasks, presenting schematic diagrams of their development from Old to Modern Mauritian. Since the other markers \emptyset and *FEK* were not analysed historically, I present an overview of the results pertaining to their current usage.

Whilst the diachronic approach taken in this thesis examines possible usage of the markers over time, the canonical approach points to typical usage. Despite different focuses, their strength lies in how they complement each other. In the second part of the chapter, I finish by acknowledging the limitations and looking to where this research could lead in the future.

13.1 Overarching findings and contributions

In order to evaluate the results and conclusions which can be drawn from this thesis, I return to the initial research questions set out in chapter 3. I will not return to the hypotheses, which made specific predictions about each marker, as I dealt with these at the end of each chapter in Part II. The four main research questions which have guided this thesis are:

- 1) How have the functions of *POU*, *VA*, *TI*, *FINN* and *PE* changed over time, and how are \emptyset and *FEK* used today?
- 2) To what extent do source meaning, substrate, lexifier and internal language change play a role in their development?
- 3) Is the development of Mauritian's TMA markers comparable with tendencies and hypotheses put forward in cross-linguistic and typological research?
- 4) Are the terms tense, mood and aspect relevant for describing these markers?

Through summarizing each of these below, I present the overarching findings and contributions of this thesis.

13.1.1 *How have the functions of POU, VA, TI, FINN and PE changed over time, and how are \emptyset and FEK used today?*

The markers which occurred and were studied in this thesis, and are assumed to express tense, mood and aspect information in Mauritian Creole are *POU*, *VA*, *TI*, *FINN*, *PE*, *FEK* and \emptyset . I firstly address the five markers which formed part of the corpus analysis: *POU*, *VA*, *TI*, *FINN* and *PE*. I briefly recall the main findings regarding the diachronic changes that the markers have gone through before presenting a diagram summarizing these developments. I then discuss the current situation of the markers \emptyset and *FEK*.

13.1.1.1 *POU's development*

This thesis has tracked *POU*'s development as an emerging future marker in the 1800s, from its source meaning of purpose or predestination, through to its widespread use in most future contexts in Modern Mauritian. We saw its early usage was characterized by an affinity with near-future contexts with 'present relevance', which gradually became less important over time. In the 20th century analysis, I investigated to what extent *POU* could be considered a 'definite' future alongside an 'indefinite' *VA*. Whilst it is common for early future markers to occur in situations which are

more likely and of which the speaker is more certain, this was not characteristic of *POU* in the 20th century texts, since it commonly occurred in uncertain contexts post-1950. The elicitation tasks confirmed *POU*'s use as a more general future marker, and also identified a new generic usage in present contexts.

As mentioned in Part I, the concept of polygrammaticalization was considered as an alternative to traditional grammaticalization paths for understanding diachronic development. This concept is based on the assumption that one source can lead to multiple grammaticalization chains (Craig, 1991:455; Lai, 2001). One way of understanding polygrammaticalization is that it represents a more realistic depiction of developments, whilst grammaticalization paths present an idealized schema, which abstract away from variation and anomalies. Although idealization certainly enables us to see broader patterns and tendencies, for the purposes of tracking Mauritian's development, a polygrammaticalization approach seems more appropriate for understanding micro-changes. Based on the data from the corpus analysis and elicitation tasks, I propose the following diagram, using the concept of polygrammaticalization, to show *POU*'s development over time. The diagram does not track form changes, but starts with the form of the first attestation, in this case *pour*.

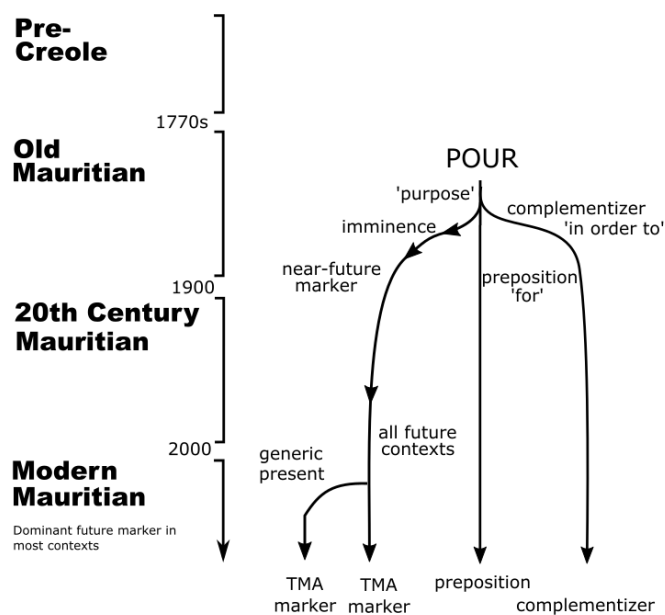


Figure 13.1: Proposed development of *POU* based on the corpus analysis and elicitation tasks

At first, a single form, *pour* in Old Mauritian, is used as a preposition and complementizer, as well as appearing in TMA contexts with a source meaning of purpose (or predestination). I explained in section 6.1.1.2 that I believe one should be cautious about attributing *POU*'s TMA function directly to the French expression *être pour*, which is why its development firmly starts in the Old Mauritian, rather than pre-Creole period. Its development as a TMA marker from the source meaning, through an 'imminent' stage and near-future marker to becoming the dominant marker in all future contexts can be seen in the left branch of the diagram. The newly identified generic present meaning is an off-shoot which would not be expected in a traditional grammaticalization path. Another advantage of applying the concept of polygrammaticalization is that it is clear from this diagram that *POU* occurs with four distinct functions nowadays: as a complementizer, a preposition, a future and a present TMA marker. I believe three of these developed from the original source, whilst the generic present is a later development. Traditional grammaticalization paths, with their single, linear, discrete stages would mask the resulting polysemy in the modern variety.

In no specific order, the features which can best describe *POU*'s usage today, and which I therefore consider canonical for Modern Mauritian, consist of:

- Criterion 1: specific date > no specific date⁸⁴
- Criterion 2: time mentioned > no time mentioned
- Criterion 3: present relevance > no present relevance
- Criterion 4: commissive > not commissive
- Criterion 5: no animate subject > animate subject
- Criterion 6: non-progressive > progressive
- Criterion 7: non-habitual > habitual

Although *POU* has expanded to be used in the majority of future contexts, it is still commonly used in contexts which are relevant to the present, reminiscent of its earlier usage, and commonly occurs with explicit temporal references. The lack of significant features to do with certainty, subjective or agentive features suggests that the 'definite' future label discussed in chapter 6 has no bearing on its modern usage and it has not reached Bybee et al.'s (1994) futage 4.

⁸⁴ Recall that > means 'more canonical than'

13.1.1.2 VA's development

VA's development was more elusive than *POU*'s due to its unsatisfactory description in previous research, which insisted on labelling it an 'indefinite' future. A major issue was the inadequate definition of 'indefinite' and many examples where it occurred in situations which appeared instead to be 'definite'. Nevertheless, unlike *POU*, it is not polysemous, so its development appears to be more linear. See the proposed development of *VA* in Figure 13.2:

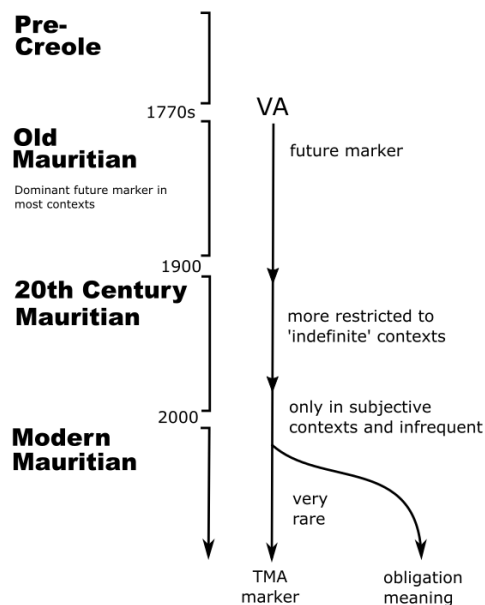


Figure 13.2: Proposed development for *VA* based on corpus analysis and elicitation tasks

We start observing *VA*'s development when it is already the dominant future marker. The corpus analysis showed that as the 20th century progressed, *VA* became more and more restricted. If we define 'indefinite' more robustly in terms of seven features which can be present to a greater or lesser extent, it can be said that *VA* primarily occurred in 'indefinite' contexts by the end of the 20th century. As it became more restricted, it also became less frequent, which made it difficult to draw solid conclusions about its development. The elicitation tasks offered the opportunity to target its usage to establish a more fine-grained description of the contexts in which it occurs. In addition, participants who took part in the translation task mentioned assumptions about an 'obligation' usage, which could then be explored in subsequent tasks.

An ‘obligation’ meaning at this late stage of development is unexpected according to Bybee et al.’s (1994:279) semantic ages and Traugott (1989:36), who claims the change from deontic > epistemic, but not the other way around, is “cross-linguistically robust”. However, as mentioned in chapter 9, Mauritian is not alone in having a future marker develop an obligation meaning, so traditional grammaticalization paths could benefit from recognizing this further possibility in future development. It should also be noted, however, that not all speakers attribute an obligation meaning to *VA*, so this appears to be the beginning of a gradual change affecting just some speakers. Unfortunately, *VA*’s extremely low frequency means that it is very difficult to study this development explicitly, especially as *VA* did not occur in any of the spoken tasks.

In comparison to *POU*, *VA*’s development appears to be more linear. Apart from the later ‘obligation’ possibility, *VA* seems to move through various stages, becoming more and more restricted and doesn’t develop any other meanings. I propose that this could be because it already entered the Creole as a function word, rather than developing from a lexical source like *POU*. I will return to this idea when discussing *TI*.

In no particular order, the features associated with *VA* today based on all the elicitation data are:

- Criterion 1: hypothetical > non-hypothetical
- Criterion 2: animate subject > no animate subject
- Criterion 3: no specific date > specific date
- Criterion 4: no time mentioned > time mentioned
- Criterion 5: no present relevance > present relevance
- Criterion 6: no speaker control > speaker control
- Criterion 7: no agent intention > agent intention
- Criterion 8: low probability > high probability
- Criterion 9: not first person > first person

One feature which did not come up in the corpus analysis was ‘hypothetical’, which was consistently present with *VA* in the elicitation tasks and alludes to a restriction to ‘unreal’ usage, not based in the real world. We can also see that five of the seven ‘indefinite’ features continue to play a role when it is used by modern speakers, namely: lack of ‘present relevance’, non-‘specific date/time’, lack of ‘speaker control’, lack of ‘agent intention’ and low ‘situation probability’. It was noted in the cloze test that some participants used the form to represent an older person’s language, so it is certainly

possible that when it occurs nowadays, it is used to maintain an earlier usage. This is further supported by the fact that it did not occur in the spoken tasks at all, suggesting that it may now be confined to the written domain, although further evidence of this would be needed.

13.1.1.3 *FINN's development*

In Figure 13.3 is my proposed development schema for *FINN*, again based on the concept of polygrammaticalization, whereby a single morpheme *fini* leads to several different grammatical developments. It shows *FINN's* development with the various influences and functions it has from its earliest attestation in 1734 up until the present day, which cannot be accounted for in a single grammaticalization path.

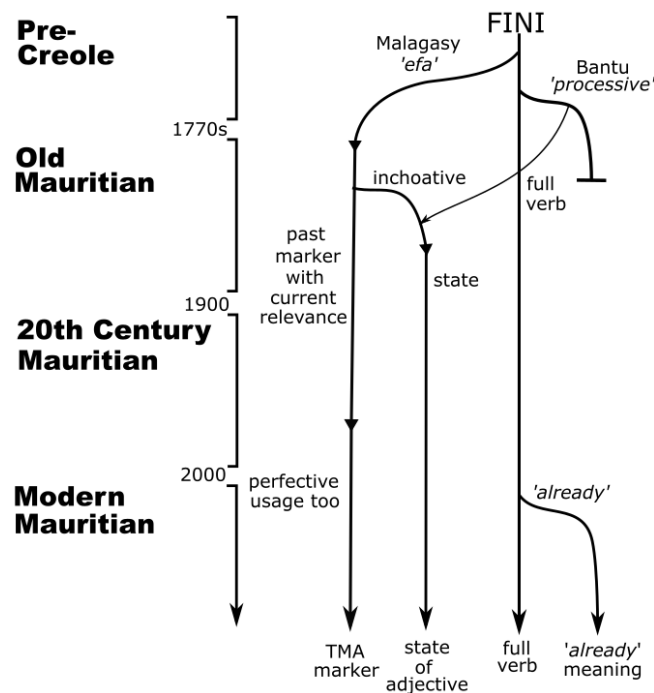


Figure 13.3: Proposed development of *FINN* based on the corpus analysis and elicitation tasks

On first contact with French colonizers from the early days of French colonization in the 1720s, the French verb *finir* was likely identified by the first 30 Malagasy slaves in Mauritius as a form with a similar function to *efa* in Malagasy. It also exists as a full verb simply meaning ‘finish’ like in French,

but most commonly occurs with another verb, mirroring its usage in Malagasy. At this stage, however, the Creole was not stable and there was no community of Creole speakers who did not speak other languages.

Although early West and East African slaves would have been exposed to the variety spoken by the Malagasies and originally acquired this variety, by the mid-1800s, *FINN* started to be used in a way which was no longer compatible with all of *efa*'s uses; it was used as a regular TMA marker with the features 'recent past' and 'current relevance'. By this time, Mauritian Creole had emerged as a language in its own right and the Malagasy slaves were overshadowed by the influx of Bantu speakers. *FINN* started to be used with adjectives with a 'processive' meaning, reminiscent of inchoative verb stems in Bantu languages. *Fini* retained its use as a full verb, even if it was infrequent.

As early as 1855, there is evidence that the Bantu inchoative meaning was no longer in use because *FINN* was used with the verb *vini* meaning '(be)come'. Interestingly, by this point in time, the huge numbers of Indian labourers who were brought to Mauritius due to the shortage of workers following the abolition of slavery then outnumbered every other race in Mauritius. It seems likely that the massive numbers of Indian speakers who acquired Creole did not adopt the inchoative meaning of *FINN*. However, I believe this early parallel with Bantu verbs is still relevant for its further inchoative development, which is why, in the diagram, the Bantu 'processive' is connected to the inchoative development with an arrow, although the original usage dies out by the mid-1800s.

After the early stages, internal language change seems to play a larger role. *FINN* continues to be used with adjectives, but rather than with an inchoative meaning, it simply implies the state of the adjective: *zafan finn pare* – 'the children are ready', as predicted in Bybee et al. (1994:76) for markers from 'finish' sources. The most recent development in *FINN*'s development is its combination with *fini* to mean 'already', only observed in the modern variety.

The elicitation tasks showed that while *FINN* has certainly developed perfective usage, it still commonly occurs in perfect contexts. The features associated with *FINN* today, in no particular order, are:

- Criterion 1: recent past > non-recent past
- Criterion 2: direct speech > not direct speech
- Criterion 3: completed action > non-completed action
- Criterion 4: current relevance > no current relevance
- Criterion 5: result > no result
- Criterion 6: experiential > not experiential
- Criterion 7: perfective > not perfective
- Criterion 8: telic > atelic
- Criterion 9: non-stative > stative
- Criterion 10: non-durative > durative
- Criterion 11: non-iterative > iterative
- Criterion 12: agentive > non-agentive

Almost all of the features were significant for *FINN* and this shows that it has not yet left its ‘perfect’ roots behind to become a general past marker.

13.1.1.4 TI's development

TI's development is relatively straight-forward compared to *FINN*, with fewer external influences at play. Below is a schematic diagram for *TI*:

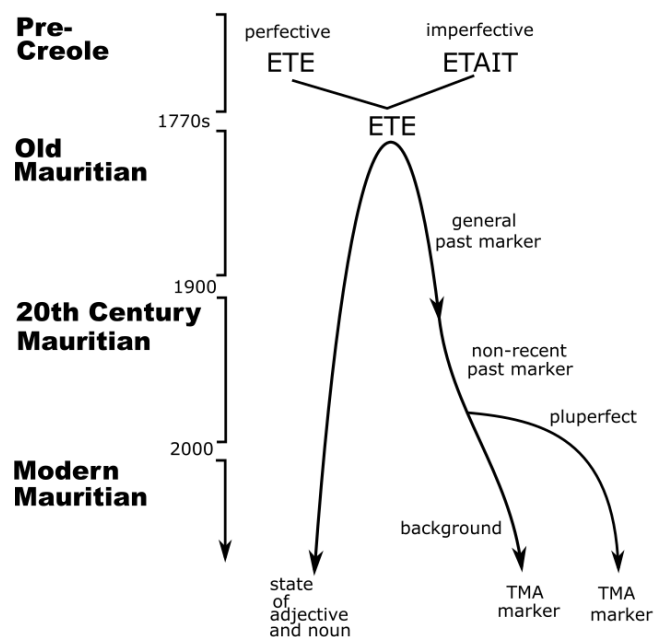


Figure 13.4: Proposed development of TI based on the corpus analysis and elicitation tasks

I assume *TI* has two sources, *été* and *était*, as explained in chapter 7, and that it has both the function of a TMA marker and state of adjective/noun right from its first occurrences. In its early usage, *TI* is generally perfective as a TMA marker (usually with events) and imperfective with states (adjectives and nouns). However this distinction is soon blurred as *TI* becomes used in imperfective verbal contexts too.

In terms of canonicity, *TI* starts off with a clear ‘backgrounded’ discourse function, although this is not as important in the 20th century. By then, ‘non-recent past’ moves up into first place as the most canonical *TI* criterion and remains here in the analysis of the Modern Mauritian texts. The canonical criteria for *TI* show how it has become more closely associated with ‘non-recent past’ over time, explaining why it is often attributed a pluperfect function. The elicitation tasks also confirmed that *TI* continues to be used in backgrounded contexts and interestingly patterned with \emptyset for many of the significant features.

Like *VA*, *TI* has fewer other functions in comparison to *POU* and *FINN*, which may stem from it entering the language with a functional (past) meaning rather than developing from a lexical item. This goes back to one of Bybee et al.'s (1994:9) fundamental hypotheses about grammaticalization, which claims “the meaning of the construction that enters grammaticization⁸⁵ determines the path and resultant grammatical meanings”, known as source determination. Since function words become semantically (and phonologically) reduced in comparison with content words, *VA* and *TI* would have started life in Mauritian Creole with much less content than the other overt TMA markers. The source of a marker can potentially explain additional usages and subsequent development. *TI* and *VA* only have predicative functions, unlike *POU*, *FINN* and *PE* which have less-grammaticalized sources.

The features which can best describe *TI*'s usage today (in no particular order) are:

- Criterion 1: stative > non-stative
- Criterion 2: durative > non-durative
- Criterion 3: non-agentive > agentive
- Criterion 4: non-recent past > recent past
- Criterion 5: not direct speech > direct speech
- Criterion 6: non-completed action > completed action
- Criterion 7: non-foregrounded action > foregrounded action
- Criterion 8: non-perfective > perfective
- Criterion 9: atelic > telic

Most of these features directly contrast with those which were significant for *FINN*, with *TI* clearly preferring non-perfect and non-perfective contexts.

13.1.1.5 *PE*'s development

Again, as for *POU* and *FINN*, polygrammaticalization seems to be a more representative way of depicting the development of *PE*, as it can capture the multifaceted, layered reality much more successfully than a single series of discrete stages can. See Figure 13.5 for a diagram of *PE*'s development throughout the history of Mauritian Creole:

⁸⁵ Bybee et al. (1994) use the term grammaticization with the same meaning as grammaticalization.

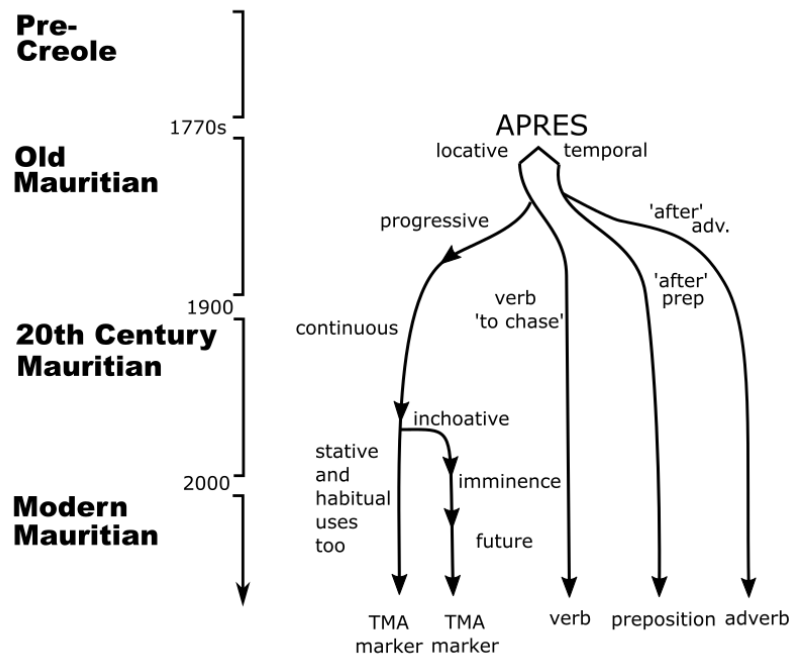


Figure 13.5: Proposed development of *PE* based on the corpus analysis and elicitation tasks

Like many progressives, *PE* has its roots in a locative meaning, although the source *après* can be considered to be both locative and temporal. Traditional grammaticalization paths depict ‘imperfective drift’, whereby locatives develop into progressive markers, which then appear with states, labelled ‘continuous’ markers before acquiring ‘habitual’ uses and eventually appearing in all imperfective domains. Whilst this describes the leftmost branch that *PE* has followed up until a certain point, *PE*’s development into a future marker cannot be captured in a single grammaticalization path. Only a polygrammaticalization approach can understand this development within the wider context of the other TMA developments and functions that *PE* has, including its uses as a preposition, adverb and verb.

The corpus analysis showed that *PE* had already started to move away from a strict progressive meaning towards a more general imperfective through its appearance with ‘statives’ and in some ‘habitual’ contexts. The analysis of 20th century texts also identified ‘inchoative’ and ‘imminent’ uses of *PE*, which, by the elicitation tasks, had developed into a full future TMA marker. It also became clear in the elicitation tasks that *PE* takes on a backgrounding function in narratives.

Interestingly, although instances of expanded progressives were attested, the elicitation tasks showed that these were not common and indeed insignificant when all instances of *PE*-marking were analysed statistically. This does not negate the findings of the corpus analysis, but puts them in perspective, since ‘habitual’ and ‘generic’ uses of *PE* are uncommon overall.

On the basis of all the elicitation data, the features which can account for *PE* usage today in no particular order, are:

- Criterion 1: right now > not right now
- Criterion 2: locative element > no locative element
- Criterion 3: inchoative > not inchoative
- Criterion 4: backgrounded event > non-backgrounded event
- Criterion 5: not generic > generic
- Criterion 6: non-habitual > habitual
- Criterion 7: not imperative > imperative

We see that canonical *PE* does not occur in ‘habitual’ or ‘generic’ contexts. Recall discussions in chapter 4, where it was emphasized that canonical features do not illustrate ‘real’ usage, but rather portray typical or prototypical usage from the examples analysed. Indeed, canonical Mauritian *PE* looks very much like a typical progressive marker, apart from the inchoative feature, which alludes to Mauritian’s alternative branch leading to a future marker. This distinguishes it from expected trajectories for progressive development.

13.1.1.6 *Ø*’s development

Ø was not analysed in depth during the corpus analysis, so I can only comment on its current usage.

I believe *Ø* can, and should also be considered a TMA marker with equal status to the others, since its use is extensive and function clear according to the other markers it is competing with. It is also clear that the marker is sensitive to tense and aspect distinctions. As discussed in chapter 12, *Ø*’s function is determined by the ‘left-over’ meaning from the overt marker, in much the same way as two overt markers in competition negotiate the domains for their distribution. For example, as *POU*

increased in frequency and took on more of the future domain, this directly impacted VA, which became more restricted.

Although \emptyset was not examined in depth in the corpus analysis, it was discussed in relation to its foregrounding function in narratives, and the elicitation tasks also showed that this function continues today in both past and present contexts. Frequencies from the elicitation tasks showed that \emptyset occurred in all temporal domains, although it was much more frequent in present contexts. This is likely because there are fewer markers in present contexts for it to compete with. Unfortunately, it was not possible to show exactly how \emptyset has changed over time regarding other features. As already discussed in chapter 12, the elicitation task allowed us to see the features associated with \emptyset in future, past and present domains today. I present an overview again in Table 13.1:

<i>Features</i>	<i>\emptyset in future</i>	<i>\emptyset in past</i>	<i>\emptyset in present</i>
Time-related		- recent past - current relevance	
Speaker-oriented	+ speaker certainty		
Sentence	+ first person + animate subject		
Aspectual	+ habitual + progressive	+ stative + durative - completed action - telic	+ habitual + generic - ongoing - imminence - inchoative
Discourse		+ foregrounded - direct speech	- backgrounded
Occurrence			+ with stative predicate
Perfect vs. perfective		- result - perfective	

Table 13.1: Features associated with \emptyset in future, past and present contexts

A puzzling finding about \emptyset is that it can be used in the somewhat contradictory contexts of ‘stative’ and ‘perfective’. This raises the question of whether \emptyset constitutes one marker, or two markers with different functions. This is difficult to assess without a thorough investigation into its historical development and should be a priority for future research. It is clear from Table 13.1 that time-related features are not relevant for determining \emptyset ’s usage, but aspectual features occur across all temporal domains. It seems that \emptyset is underspecified for tense, but how is tense interpreted? Syea’s (2013:109)

examples showing ungrammaticality of \emptyset with ‘yesterday’ or ‘tomorrow’ mean overt temporal adverbs are not enough to ‘license’ a past or future interpretation of \emptyset . Instead, I propose that modern \emptyset is interpreted anaphorically from overt tense marking in the preceding context.

13.1.1.7 *FEK's development*

FEK has been given limited consideration due to its extremely infrequent occurrence in the corpus texts and elicitation tasks. The defining feature of *FEK* is ‘recent past’. Since *FINN* has become less and less associated with this feature over time, it was expected that *FEK* would consequently step in and increase in frequency. This does not seem to be the case. Throughout the elicitation tasks, *FEK* only occurred a handful of times. The majority of the data for *FEK* therefore come from the acceptability judgement task, where it was confirmed that *FEK* was acceptable in the expected contexts and patterned similarly with *FINN*. Unlike *FINN*, however, *FEK* does not take on a foregrounding role.

Like \emptyset , it is not possible to show how *FEK* has changed over time. However, the canonical features for its usage today, based on the elicitation tasks and in no particular order, are:

- Criterion 1: recent past > non-recent past
- Criterion 2: direct speech > not direct speech
- Criterion 3: completed action > non-completed action
- Criterion 4: current relevance > no current relevance
- Criterion 5: perfective > non-perfective
- Criterion 6: telic > atelic
- Criterion 7: non-foregrounded > foregrounded
- Criterion 8: non-durative > durative

When it occurs in pre-verbal position, *FEK* seems to behave like any other TMA marker, but more research is needed to confirm this.

13.1.1.8 Summary

In response to the research question about how the main TMA markers have changed over time, I have presented diachronic diagrams for the markers which were examined in the corpus analysis and an overview of the elicitation findings for \emptyset and *FEK*. This fulfils the first aim of my thesis to track the diachronic evolution of five Mauritian tense, mood and aspect (TMA) markers *POU*, *VA*, *TI*, *FINN* and *PE* and provide a detailed historical account up until the present day. My second aim to quantify and clarify the functions expressed by each marker through identifying features that constitute ideal, or canonical instances, was also realized through the canonical criteria set out for each marker on the basis of all the examples and data collected in the elicitation tasks.

13.1.2 *To what extent do source meaning, substrate, lexifier and internal language change play a role in their development?*

This thesis has emphasized the importance of considering a range of factors in order to better understand the development of Mauritian's TMA markers. Source meaning, substrate, lexifier and internal language influences were explored in relation to the five primary markers in the corpus analysis. Many of the languages which may have been present in the early days of French colonization are lesser-studied languages. This was addressed in Baker (1982) who investigated all the potential non-French languages involved in the peopling of Mauritius. However, even this extensive work was obliged to rely on scant resources in many under-researched languages (Baker, 1982:70). Future collaboration with experts in lesser-known languages may shed more light on their contribution to Mauritian Creole.

A language which has not been considered in the Mauritian context before is Yoruba: a West African language discussed in some detail in Part I. It is typologically more similar to Mauritian than many of the East African, Malagasy or Indian languages and there is evidence to suggest Yoruba speakers would have been on slave ships destined for Mauritius (Eltis, 2005:29). Along with other Gbe

languages such as Fongbe, Yoruba has isolating morphological typology with little inflection and zero-marking. Whilst such characteristics could also be attributed to second language acquisition (SLA) strategies, I believe that Yoruba and other West African languages should not be dismissed, although more evidence is certainly required before any claims about its contribution to Mauritian can be seriously posited. Even if the presence of a certain structure can be easily attributed to one factor, this does not mean that other factors could not have contributed too. The more potential factors that we consider, the broader understanding of the situation we will have.

Regarding future developments, I am cautious about directly attributing the French construction *être pour* to Mauritian Creole's *POU* on the basis that Gougenheim (1971:119) states that it was already in decline in regional French in the 18th century, yet *POU* is absent or extremely rare in early texts and not attested with a future meaning in Mauritian Creole until the mid-19th century. Although tenuous, the tendency for future forms in both Bantu (East African) and Niger-Congo (West African) languages to contain an /a/ sound was also noted as a possible contribution towards *VA* being chosen (and accepted) as the main future marker in early Mauritian.

In the development of Mauritian's past markers *TI* and *FINN*, I identified a number of possible relevant substrate influences and internal language changes which had previously been downplayed. Also, in the case of *FINN*, some substrate languages have been given more attention than others. Malagasy has only been mentioned in passing, despite slaves from Madagascar being the first in Mauritius in the 1720s, and there being evidence for the Malagasy language being spoken in Mauritius right up until the 1830s (Baker, 2009:49). I therefore believe this language deserves more attention than it has been paid so far, particularly in terms of its contribution to *FINN*.

Despite this, I believe substrates have also been given too much attention in some cases, with the consequence of overlooking tendencies which commonly occur cross-linguistically through language-internal change, irrespective of language contact. Regarding the inchoative development of *FINN*, Bybee et al. (1994:75) note that markers with a source meaning 'finish' commonly develop

inchoative meanings anyway. Therefore, *FINN* would have likely developed an inchoative meaning irrespective of the other languages present on the island at this time.

Regarding *PE*'s development, it was noted that progressive expression typically develops from locatives, and that the function of locative expressions in Niger-Congo and Bantu languages could well have been attributed to the form *après* in Creole. This would explain why the form *après* also took on a verbal meaning 'to chase', which is clearly spatial and not possible in the lexifier French.

Whilst it is not possible to know for sure the extent to which these factors influenced Mauritian's TMA markers, overall, I conclude that it is important to consider all possible influences, and that it does not make sense to favour certain explanations over others, unless there is clear evidence, which is unfortunately rarely the case. The discovery of another potential factor does not negate any others, especially because the historical data is so sparse, so very little is certain. I believe that a multitude of factors can be mutually compatible and should be viewed as complementary. For example, although *FINN* would have likely acquired an inchoative meaning in time regardless of Bantu influence, the presence of these speakers likely sped up this process. The analysis of grammatical development with no recourse to other influences seems very short-sighted, especially in such a language-rich context such as early Mauritius. Many of the languages and factors explored did not have any obvious relation to Mauritian's TMA markers, so it makes little sense to posit links without convincing similarities. However, this approach has enabled me to consider a variety of potential factors which could have influenced the development of Mauritian's TMA markers.

Throughout this thesis I have also considered the hypothesis of source determination (Bybee et al., 1994:9). In the previous section, I claimed that TMA markers which entered Mauritian already grammaticalized have fewer usages than other markers from more lexical sources, supporting this hypothesis to some extent. However, I also mentioned in chapter 6 that *POU* and *VA* appear to be following the same future trajectory which would be unexpected according to source determination. It is hard to determine whether their development really is similar since we have not observed their full development. We observed *VA*'s decline since Old Mauritian and *POU*'s early development to

becoming a main future marker. Although they both superficially show similar tendencies (changes in frequency, loss of certainty etc.), the next 100 years will show whether *POU* too becomes restricted and develops subjective uses like *VA* or not. Such evidence will shed more light on the hypothesis of source determination.

13.1.3 *Is the development of Mauritian's TMA markers comparable with tendencies and hypotheses put forward in cross-linguistic and typological research?*

Broadly speaking, the Mauritian data fit with a number of proposed grammaticalization paths and cross-linguistic tendencies put forward in the literature. For example, *FINN* followed cross-linguistic tendencies for markers from 'finish' sources to develop inchoative meanings. Similarly, we saw evidence of 'imperfective drift' in *PE* and changes from early agentive uses, through to future expression and epistemic uses for *POU* and *VA*.

In addition to these expected developments, however, the Mauritian data showed additional and/or unanticipated developments which were not predicted from previous research. *VA*'s possible 'obligation' meaning was unexpected since it does not appear in general grammaticalization proposals, and goes counter to assumptions that deontic usages precede epistemic ones. This possibility could be included in future grammaticalization proposals. The emergence of an 'already' meaning with the full verb *fini* was unexpected since it had not been mentioned in previous research to my knowledge, although from a semantic perspective, the meaning develops quite naturally from 'finish' and completive aspect.

A few developments which are not unexpected, but cannot be depicted well in traditional grammaticalization paths are *FINN*'s inchoative usage, which developed into 'state of adjective/noun', and other polysemy, including the meaning of 'already', *PE*'s use as a future TMA marker and *POU*'s multiple uses alongside a generic present meaning. It was discussed in the previous section and earlier chapters how polygrammaticalization differs from traditional

grammaticalization paths. For the purposes of describing and tracking Mauritian Creole's TMA markers, I believe polygrammaticalization can better capture multiple developments from a single source and more successfully represent the complex reality of how Mauritian's TMA markers have changed over time.

13.1.4 *Are the terms tense, mood and aspect relevant for describing these markers?*

Previous research tended to label Mauritian's TMA markers as one of tense, mood or aspect. However, these labels were used inconsistently as the same marker was considered either tense, mood or aspect, depending on the linguist. Previous research into these categories suggested that they are difficult to tease apart, so I did not pursue this task.

The analysis of the elicitation tasks in three distinct temporal groupings drew my attention to the observation that tense does not appear to be relevant for delimiting the markers since many of them overlap. For example, *PE* occurs in past, present and future contexts, so it does not make sense to say it is a 'present' or a 'past' marker. Aspect, rather than tense, seems to be much more important for defining a marker's usage. This is not new. It is clear from previous research that aspect is much more relevant for Creoles. I chose to group the markers together in this way because the domains of *POU* and *VA* in future contexts and *TI* and *FINN* in past contexts overlapped to some extent and are often contrasted. I did not wish to make an assumption about whether they were tense markers, so chose instead to talk of future, past or present expression.

However, the fact that some markers have different functions and meanings according to the temporal domain, means that we cannot disregard tense altogether, otherwise there would be no way of explaining why a marker may behave differently in future and past contexts, for example. *POU* is often described as a future marker, yet the elicitation tasks showed that it was also used in present contexts to express a generic or habitual function. Tense is a relevant distinction because its function

depends on the temporal domain. We therefore cannot talk of Mauritian's TMA markers being blind to tense, since it can determine the meaning of a marker.

Similarly, the concept of separate dimensions for tense was mentioned in chapter 10 regarding *TI*. If *TI* belonged to a separate dimension from *FINN*, based on subjective and cognitive, rather than temporal distance, this might explain its behaviour more successfully. I argued that this seems to bring mood into play. We know, as well, that almost all future expression involves mood, since the future cannot be certain. These two examples emphasize the extent to which the categories are interrelated and the difficulty of teasing them apart.

I maintain that it is not important whether we use the label tense, mood or aspect, and to some extent, they are probably flexible. However, this work has shown me that the concepts of tense, mood and aspect are certainly relevant distinctions that Mauritian's TMA markers are sensitive to.

13.2 Limitations

Inevitably, there are a number of limitations regarding the data, methodology and analysis carried out in this thesis, which I summarize below.

The nature of the historical data means that the analysis is based on a small number of examples, which could be biased by text-type and are not very generalizable. To some extent, this is inevitable, due to the lack of early texts in Mauritian Creole and the skewed sample of the documents that did survive. It was also not possible to contextualize some of the examples, and impossible to go back in time and ask speakers what they meant by a certain marker. For the modern texts, I chose to analyse a proportional sample despite many more texts being available in order to keep the time periods as comparable as possible. One of the aims of the elicitation tasks was to counteract this by analysing a much larger dataset. The elicitation results combine data from all the spoken and written elicitation tasks, rather than relying on a small sample of texts, so provide more robust findings for

the current usage of the markers. These results are therefore thought to be more reliable and representative of the TMA markers in Modern Mauritian than the modern corpus analysis texts.

Turning to the elicitation tasks, differences in literacy and perceived proficiency in Creole may have affected participants' responses, particularly in the written tasks: the translation task, the acceptability judgement task and cloze test. It was less obvious during the online tasks, but impossible to ignore the large difference in how comfortable participants were with reading Creole in the cloze test, which was done in person during the interview. Whilst those who were enrolled on the BA French and Creole course at the University of Mauritius had no problem reading and filling in the gaps, others took twice as long to read and complete the task because the newly standardized orthography was unfamiliar to them. Although these participants had no problem understanding the meaning once they had deciphered the written form, this may have influenced the results in some way. However, I tried to check this by comparing the results of those who used standard orthography with those who didn't, and I didn't find any significant differences.

Finally, the choice to analyse the markers in temporal groupings meant that it was difficult to compare a marker which occurred in different temporal domains with its usual features. For example, features relevant for present expression were not investigated in markers which occurred in future contexts. Had all the markers been analysed according to all the features, markers occurring in secondary temporal domains (e.g. *POU* in the present, and *PE* in the future) may have been more systematically analysed. Nevertheless, grouping the markers according to temporal domains meant that the results could be more easily compared to cross-linguistic tendencies and previous research and made sense in order to account for mainstream usage. If all features had been analysed in all temporal domains, this would have contributed some small details to the analysis of the markers which cross temporal boundaries, but many features would have simply been irrelevant (e.g. experiential perfect in future contexts).

13.3 Future directions

There are a number of possible lines of future research. One, which was mentioned briefly in chapter 9, is the possibility of attributing a weight to the features according to how much their presence affects the likelihood of a certain marker being used. Whilst such an approach would not be expected to alter the substance of the overall findings from this thesis, weighted features would add a layer of detail to contribute to a better understanding of the intricacies of the markers. Similarly, it would be interesting to re-run the analysis on the basis of aspectual distinctions rather than temporal ones. Perhaps such an approach would reveal more fine-grained details regarding aspect, although it would likely miss the fact that temporal distinctions are certainly relevant for Mauritian's TMA markers.

In future research I would also like to establish whether *VA* is used in speech at all these days since it did not occur in either of my spoken elicitation tasks, except in a few instances in combination with *TI*. My contact said that it is almost only exclusively found in older people's speech or in those from rural areas (Othello, 2020, p.c.). Further research to confirm this and investigate whether this usage corresponds to earlier usage, or whether it has developed further from the corpus analysis would be needed to build on the findings in this thesis.

\emptyset -marking turned out to be more common and meaningful than initially assumed, and in retrospect, the large investment of time and effort that would be required to identify non-overt marking in historical texts would have made a difference to our understanding of \emptyset 's development. \emptyset receives relatively little attention in comparison to overt markers, and filling in the gaps regarding how it has developed since early Mauritian will contribute not only to our understanding of its usage and development in Mauritian Creole, but it could also be insightful for other languages in which it occurs too.

Although this thesis has attempted to be as broad as possible in considering sociolinguistic factors relevant in the early development of Mauritian Creole, and collecting data about age, gender, region, and linguistic background etc. for the elicitation tasks, the markers themselves and their linguistic

realization have remained the focus. Sociolinguistic variables were controlled for to an extent in the translation and acceptability judgement tasks and were not found to have an effect on the responses given by participants. A more thorough investigation into some of these factors may provide a more detailed insight into the speakers who are more conservative or innovative in their TMA usage.

Limits on time and resources meant I was unable to carry out an in-depth analysis of other Creole varieties. In particular, Seychelles Creole could be an interesting point of comparison for future work, since it developed from Old Mauritian (Michaelis & Rosalie, 2013:261) and could shed light on the pace of grammaticalization in similar varieties.

A further direction of research that I hope to pursue in future is the impact of the standardization of Mauritian Creole on TMA marking and whether this has led to the decline of \emptyset -marking. Creole was introduced into schools for the first time in 2012 (Harmon, 2016) so we are seeing the first generation of young people entering the workplace who can comfortably read and write in Creole. As well as its effect on the TMA markers examined in this thesis, I would also like to investigate whether formal instruction in Creole has emphasized the difference between the spoken and written language, and what effect this has had on attitudes towards the language.

13.4 Final conclusion

In summary, this thesis has successfully fulfilled its main aim of tracking the diachronic evolution of Mauritian's TMA markers from their first attestations up until the present day, providing a detailed historical account. Secondly, the application of a canonical approach throughout has enabled the decomposition of each marker into features: this allowed me to reach a deeper understanding of their behaviour through a finer-grained analysis of their changes over time. We have seen that this micro approach to change does not always align with the general macro grammaticalization paths attested in the literature, although a number of broader tendencies, such as imperfective drift and developments from perfect to perfective expression were attested in the Mauritian data to some

extent. It was suggested that polygrammaticalization may offer a more suitable tool to account for the more complex and multifaceted nature of *POU*, *FINN* and *PE* in particular. Finally, the data presented in this thesis can serve as a point of reference and comparison for future studies. In presenting instances of features that do not develop according to established diachronic patterns in the literature, they pose a challenge for theories of language change, which should be refined by taking into account the empirical evidence presented in this thesis.

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Appendices

Appendix I: Corpus text summaries

Baissac A: Zistoire Iève Av Tourtie Dans Bord Bassin Léroi – The story of the hare and the tortoise at the edge of the king’s pool [1888]

Author: Charles Baissac, Franco-Mauritian born in Port-Louis, Mauritius in 1831.

Length: 1,169 words.

Style: Folktale.

Notes: Baissac (1888) notes that this is one of the most widespread and popular folktales and can also probably be found in the colonies of the West Indies. The conception of the king being obsessed with bathing, however, is thought to be a particularly ‘Mauritian’ way of seeing royalty (Baissac, 1888: 14).

Summary: The water in the king’s pool has been dirty for three days in a row, so he tells the watchman that there’ll be trouble if the pool is dirty again the next day. That night, the hare comes to the pool again and gives the watchman some “honey” which makes him fall asleep. The hare then bathes in the pool and makes it dirty again. The next morning, the king finds the watchman asleep, is angry and wakes him up. The watchman runs into the woods, never to be seen again.

The king advertises the job of pool watchman, but says he’ll cut off their head and eat them for dinner if they let anyone near the water - no one comes forward. The king goes seven days without taking a bath. Finally the tortoise comes forward and says he’ll do the job.

The tortoise puts tar on his shell. The hare arrives and thinks the tortoise is a bench. He sits down, but gets stuck. The tortoise moves slowly towards the king and delivers the hare to him. The tortoise says *Napas tourtie qui vous pour manze dans vous dine mais iève qui vous va manzé*: ‘it’s not tortoise you’ll be eating for dinner, but hare’ - the king chops off the hare’s head and sends him to the kitchen.

Baissac B : Zistoire Tranquille Av Brigand - The story of Tranquille and Brigand [1888]

Author: Charles Baissac, Franco-Mauritian born in Port-Louis, Mauritius in 1831.

Length: 3,395 words.

Style: Folktale.

Notes: Baissac (1888:260-261) notes that this story is an adaptation, but a perfect one. It has a strong moral; that anything in excess is a flaw. The story has a gloomy theme, although goodness wins out in the end.

Summary: A king has two children, one called Tranquille (Peaceful) and the other Brigand (Rascal), named after their temperaments. As the king goes off to another land, he calls his two children together and tells Brigand to take charge of the out-housing and Tranquille to be in charge of the house. Brigand bullies everyone around and neglects those who live there; their mother and horse both die as Brigand forces them to drink boiling water and Tranquille and the servants all leave. As there is no one left to cook his meals or keep the house in order, Brigand has to leave too. He becomes a soldier but loses his sight fighting so can hardly manage to look after himself.

Years later, Tranquille comes across Brigand, recognises him and says he must come and live with him where he and his wife can take care of him. Tranquille thought he would have changed now that he is blind and dependent on others, but he is just his old self. Tranquille's wife tries to do what she can for him, but he is impossible and eventually she tells Tranquille that Brigand must go. Tranquille knows Brigand can't survive on his own, so goes with him. They walk for miles, then come across a big house, which happens to be the house of a king. The king receives them and puts them up in a beautiful room. Brigand manages to break the chandelier and they get scared so they decide to leave as the king would be angry and might kill them. They try to escape but all their exits are barred. Just in time, they meet a tortoise who shows them a way out. Brigand is hungry so he kills the tortoise for its meat.

They continue walking but fall into a giant hole that they can't get out of. A bird flies above and they call out to it to ask for help. The bird agrees to pull them up if they hold onto its wings, but says they mustn't open their eyes. Brigand opens his eyes, the bird lets go of him and he falls to his death. Tranquille lands safely and comes across the tortoise who has come back to life and explains that it was he who sent his bird to pull them out of the hole because he knew that Brigand would open his eyes and die. He tells Tranquille to go back home to his wife; Brigand will never cause them any trouble again. The story ends with the tortoise's words of advice: *Bon, li bon; mais bon zousqu'à bête napas bon* – 'Goodness is good, but goodness to the point of stupidity isn't'.

Other Baissac [1888] texts:

Zistoire Namcoticouti

A pregnant woman asks her husband to find her some water without any frogs, he eventually finds some delicious sweet water and brings it to his wife. The wife loves it, goes to the water and drinks a lot of it. The wolf watches and asks why she is stealing his water. He wants to eat her, but agrees instead that he'll take her son when he is 4 years old. The wolf comes but the son is very clever and gets all his friends to tell the wolf

they are called Namcoticouti. He meets an old lady and gives her water and she gives him a magic wand to turn himself into anything. Mum says he'll be in the attic eating, so wolf waits there but only a rat comes and eats the dinner. Wolf is angry. Boy keeps out-doing the wolf. Mum says she'll cut the boy's hair so the wolf knows which one he is. Boy asks the wand why his mum did that and cuts his father's hair so when the wolf comes, he takes his father instead, roasts him and eats him.

Zistoire ptit Jean laquee beif

Petit Jean finds a grasshopper, shows his Dad, who takes it off him and gives him something else. This happens with everyone he meets, until he goes to the king with a cow's tail and ends up with a cow.

The grasshopper turns into an arrow for the Mum, which turns into a coconut for the "negresse", which turns into lentils for the pigeon, which turns into a pen for the school child, which turns into paper for the blacksmith, which turns into a cow's tail, which turns into a cow.

The story ends with *ca zour-la, dernier fois dans paye Maurice mo fine voir ene sauterelle qui fine vine ene vace!* – 'that was the last time in Mauritius I ever saw a grasshopper turn into a cow!'

Zistoire Sabour

A trader asks his three daughters what they'd like him to bring back from his travels. First says a diamond, the second asks for a dress and the third, who was reading, says Sabour. When the father has finished his travels he hasn't worked out Sabour is, but his elephant won't go home until he has got everything. He asks a passer-by, who tells him Sabour is the King's son. The father goes to the palace with lots of gifts and Sabour is amused about being a present. He asks if the daughter is pretty and is shown a photo. He immediately falls in love. He gives the father a fan to give to his daughter, to be opened in private. It's a magic fan and when she opens it, Prince Sabour appears and proposes to her. He asks her father and they get married. Her sisters are jealous and put glass where Sabour will sleep. He comes and lies on the glass. He cannot move but asks the daughter to bring the fan. He then disappears. She doesn't hear anything for some months, but then she reads in the newspaper that he is very ill and will die. She dresses as a priest and walks for months to get there. She sleeps under a tree and hears the birds talking about what will cure him. She takes the cure with her. The King says if anyone can cure Sabour they can have anything they like. The daughter goes as the priest and cures Sabour, asking for Sabour to marry "his" daughter. Sabour says no because he is already married. Then she reveals it is her and they have a great feast.

Soulsobontemps : *Bonnefemme Magon – Mrs Magon* [1925]

Author: Soulsobontemps, Franco-Mauritian born in 1893 (Baker & Fon Sing, 2007:58).

Length: 4534 words.

Style: Folktale.

Summary: This text tells the story of Iderce, who wishes to marry Cécilly, but whose father won't allow it. He comes to the rescue of Bonnefemme Magon who repays him by telling him about some treasure which is hidden on an island – she is the only person who knows about it. He can then use the treasure to win over Cécilly's father. He sets off and finds himself in trouble as his boat gets damaged and thinks he'll never manage to leave the island, let alone find the treasure. In the meantime, everyone thinks he is dead and Cécilly agrees to marry Cinois. When Iderce finally finds the treasure and manages to get back, he goes to see Bonne Femme Magon and finds out about the marriage. He is angry but Bonnefemme Magon calms him down and explains how he will go to visit Cécilly and Cinois at dinner time to pay his compliments to the bride and they will have to invite him for dinner. He will then put some powder in Cinois' food and everything will turn out fine. This is what he does; Cinois feels unwell and thinks he's going to die. In the commotion, Iderce and Cécilly go off together to Iderce's uncle, who after some time offers Cécilly's father lots of money and Iderce and Cécilly get married. They live in a beautiful house in the village of Trois Soeurs and look after Bonnefemme Magon until the end of her days.

De Segrais A: Femmes are ène secret: 'Women with a secret' (1939) and De Segrais B: Voleirs are Bourique: 'Theives and a donkey' (1952)

Author: Xavier Le Juge de Segrais, Franco-Mauritian, born in Mauritius in 1871. Died: 1954

Length: De Segrais A: 661 words, De Segrais B: 466 words.

Style: Folktales

Summary of De Segrais A: This story begins by warning the audience not to tell women a secret because before long everyone will know about it. A man pretends he has laid an egg, but tells his wife not to tell anyone because they'll think he's a chicken! By the end of the story, rumour has it that he laid a hundred eggs the night before!

Summary of De Segrais B: This story is about two thieves who see a donkey and decide to take it. They spend the rest of the story arguing about what to do with it. One of them thinks they should sell it, but the other thinks they should keep it. Meanwhile someone else comes by, sees the donkey and takes it for themselves. The moral of the story is to come to an agreement when working with others otherwise you'll lose your money and hard work which you put in and someone else will benefit.

Virahsawmy: *Li: 'Him'* (1972)

Author: Indo-Mauritian, born in Mauritius in 1942.

Length: 8404 words.

Style: Play.

Notes: The play is set in a political prison and revolves around two main police officers and their views towards *li* 'him'; what they refer to as "enn prizonie danzere" (a dangerous prisoner). Throughout the whole play we never meet *li*. It tackles the issue of freedom through the differing views of the police officers.

Summary: The story follows Arjouna who is the replacement officer for Mike and is considered young, naïve and idealistic by Rawana, his boss. Arjouna is told to check on the 'dangerous prisoner' every 15 minutes and confirm with head office by telephone every 30 minutes that everything is fine, or "tou korrek". Arjouna finds that everything isn't fine, because the prisoner is extremely weak and frail and suggests calling a doctor. However Rawana insists he should write in the logbook that everything is fine nonetheless. Rawana believes the prisoner is dangerous because he has given the average person ideas about freedom and now workers are striking and causing chaos. Arjouna, however, sympathises with the prisoner. At the end Rawana actually kills the prisoner himself and the other prison officers don't know what to do as they will all be implicated. It turns out that Arjouna has been recording the truth about what has happened all along in the logbook.

Abaim: Tizan ar so 8 frer: 'Little John and his eight brothers' (2003)

Author: Abaim (cultural association)

Length: 7,173 words.

Style: Folktale.

Notes: These stories were published by *Abaim*, a cultural organisation for disadvantaged people, originally set up for the well-being of the blind in Mauritius. In the preface, we are told that this story goes back to the times of colonisation when Pa Lindor, well-known for his story-telling, would tell this and many similar tales to his fellow slaves. He himself is recounting this story from a time and land far away. (uses both pe and ape).

Tizan plants a pebble cake and it grows into a tree. An old lady asks him to give her some, he agrees but prefers to throw them down. She gets angry and tells him she'll tell his parents if he doesn't come down. She gets him and takes him home, stopping at the shop. He manages to escape, filling her basket with stones and broken bottles.

Virahsawmy: Original Prose and New Works {2003-2007/2017-2018}

Author: Indo-Mauritian, born in Mauritius in 1942.

Length: 49,533 words {2003-2007}, 3,875 words {2017-2018}.

Sample length for frequency count: 10,000

Style: Original Prose and New works.

Notes: All these texts can be found on Virahsawmy's (2020) website. Since they consist of over 50,000 words, these stories are not summarized.

Lalit: Political newsletters {2016-2018}

Author: Several members of the political organisation Lalit

Length: 103,000 words{2016-2018}.

Sample length for frequency count: 10,000

Style: Newsletters

Notes: Lalit is a pro-Creole political organisation, which publishes regular newsletters in Mauritian Creole,

The newsletters can be found on Lalit's (2020) website. There are too many newsletters to summarize here.

Appendix II: Elicitation task stimuli

II.1: Translation task contexts and sentences in English for translation into Creole:

Sentence code	Tested features	Stimuli
TF1	Future: Hypothetical	If I GET my wages tomorrow, I BUY you a beer.
TF2	Future: Intention, imminence	Question: What are you planning to do right now? Answer: I WRITE a letter.
TF3	Future: Prediction, near future	There are black clouds in the sky. It RAIN in a few minutes.
TF4	Future: Habitual	A: My brother has got a new job. He'll start tomorrow. B: What kind of work he DO there? A: He WRITE letters.
TF5	Future: Progressive	Question: What your brother DO when we arrive, do you think? (=what activity will he be engaged in?) Answer: He WRITE a letter.
TF6	Future: Prediction	It's no use trying to swim in the lake tomorrow. The water BE cold (then).
TF7	Future: Promise, commissive	Talking to someone who is leaving in a while: when you RETURN, I WRITE this letter (=I FINISH it already at that time).
TF8	Future: Threat, commissive	Mother to child: If you not STOP PLAY with that ball, I TAKE it away.
TF9	Future: Intention, distant	Do you intend to stay here? A: No, I LIVE in Oslo next year.
TF10	Future: Prediction, pres relevance, remote	There are black clouds in the sky. It RAIN in the evening.
TF11	Future: Prediction, no pres relevance	The weather is changing. It be COLD in the evening.
TF12	Future: Certain, prediction	The boy is expecting a sum of money. When the boy GET the money, he BUY a present for the girl.
TF13	Future: Prediction, pres relevance, near	There are black clouds in the sky. It RAIN very soon.
TF14	Future: Speaker uncertainty	The weather is changing. Maybe it RAIN tomorrow.
TF15	Future: Speaker certain	The weather is changing. It be COLD tomorrow.
TF16	Future: Hypothetical, subordinate.	She not HELP you if you GO home now.
TF17	Future: Uncertainty	The boy thinks that he will perhaps get a sum of money. If the boy GET the money, he BUY a present for the girl.
TF18	Future: Speaker certainty	The weather is changing. It RAIN tomorrow.
TF19	Future: Based on VA in Virahsawmy (2017)	If they not ABLE HAVE children, they ADOPT.
TF20	Future: Based on VA in Tizan (2003)	Because you have done many good deeds in the past, God PROTECT you in the future.

Sentence code	Tested features	Stimuli
TP1	Past: Narrative: Backgrounding	He WALK in the forest.
TP2	Past: Narrative: Perfective	Suddenly, he STEP on a snake

TP3	Past: Narrative: Perfective	and it BITE him in the leg.
TP4	Past: Experiential	Question: you MEET my sister? (at any time in your life up to now)?
TP5	Past: Typical perfect, present relevance	[A child asks: Can I go now?] Mother: You DO your homework?
TP6	Past: Telic, perfective	I GET my wages yesterday, so I can now BUY you a beer.
TP7	Past: Passive meaning	[A guide, showing ruins to tourists:] This city BE DESTROYED about 3000 years ago.
TP8	Past: Present relevance, duration	[She is still watching TV! How long she DO that?] Answer: She WATCH (it) for three hours.
TP9	Past: Direct perception, current relevance	[Looking at the house.] Who BUILD this house?
TP10	Past: Indirect news, recent past	[A comes from the kitchen very agitated and tells B what he has just seen happen:] The dog EAT our cake!
TP11	Past: Already	[A: Don't talk so loud! You'll wake the baby.] B: He WAKE UP already.
TP12	Past: Perfective	[It is cold in the room. The window is closed.] Question: You OPEN the window?

Sentence code	Tested features	Stimuli
TPr1	Prog: Postural verb	A: I need my blue shirt right now; where is it? B: It HANG in the wardrobe.
TPr2	Prog: Non-agentive intransitive	[Look out of the window now!] The sun SHINE.
TPr3	Prog: Stative verbs	[Now, unexpectedly,] Peter KNOW the answer.
TPr4	Prog: Remoteness, invisibility	/on the phone/ A: Is Ann with you right now? ...she SHOP. She left one hour ago.
TPr5	Prog: Durative adverbials	He continually FORGET people's names.
TPr6	Prog: Temporariness	Ann STAND in the doorway [right now].
TPr7	Prog: Negation	[Let's go out,] it not RAIN now.
TPr8	Prog: Modal verbs	Ann should TEACH now [I guess].
TPr9	Prog: Imperative	/Mother to daughter, whom she wants to punish/ You NOT GO to that party!
TPr10	Prog: Past background	[Last night at 8 o'clock,] when John came, Ann still WORK.

II.2: Acceptability task stimuli:

Sentence code	Tested features	Stimuli
AX02	Future: Indefinite features	Mem si nou pa gagn sans, nou zanfan pou/ava/pe/Ø profite.
AX05	Future: Proximal	Li ti dir nou ki li pou/ava/pe/Ø arive biento.
AX08	Future: Speaker certainty	Mo sir ki to pou/ava/pe/Ø fini sa liv-la avan mwa.
AX11	Future: Speaker speculation	Mo pa sir, me si zot pa gagn zanfan, zot pou/ava/pe/Ø adopte.
AX14	Future: Obligation	Si li ariv laboutik tro tar, li pou/ava/pe/Ø manz dipin rasi.
AX17	Future: Unrealis 'if'	Si li apel Trisha aster, li pou/ava/pe/Ø mank spektak-la
AX20	Future: Expectation	Kan li ena larzan, li pou/ava/pe/Ø aste enn kado pou so neve.
AX23	Future: Prediction	Pou/ava/pe/Ø fer fre diman.
AX25	Future: Subordinate	Mo pa ti kone ki to pou/ava/pe/Ø al Lafrans mardi prosin.

Sentence code	Tested features	Stimuli
AX01	Past: Experiential	To (f)inn zame tann enn lorkes ki otan bon?
AX04	Past: Current relevance	Ser sitwayin. Nou presidan fek mor. Nou pre pou vot enn lot dan so plas.
AX07	Past: Contrary to expectation	Kan Nabil (f)inn ariv dan fet, so kopinn pa fek la.
AX10a	Past: Permanent states: adj	Tantinn Palavi ((f)inn sourd) e (f)inn viv lor enn laferm tou long so lavi.
AX10b	Past: Permanent states: v	Tantinn Palavi (f)inn sourd (e (f)inn viv lor enn laferm tou long so lavi.)
AX13	Past: Recent Past	Li (f)inn al lakaz-la.
AX16	Past: Change of state	Ler li finn trouve zanfan-la pe lager mem, tonton Fardeez ti ankoler.
AX19a	Past: Duration, still	Alexandra (f)inn travay dan enn labank depi lontan (e li ankor travay laba)
AX19b	Past: Duration, not any more	Rukhaya ti travay lontan dan labank (me li ti aret travay laba lane dernie)
AX22	Past: Telicity and already	Li ti deza manz tou diri-la.

Sentence code	Tested features	Stimuli
AX03	Prog: Habitual	Darell pe netway lakwizinn.
AX06	Prog: Right now	Daphné pe zwe kart dan lasam akote aster.
AX09	Prog: Stative verbs	Li pe konn plis ki zot.
AX12	Prog: Gradularity adverb	Nivo dilo dan larivier pe ogmante inpe.
AX15	Prog: Quasi-habitual	Si to kontinye vinn dan mo biro, to pa pe respekte mo lintimite.
AX18	Prog: With adj	To pe impoli zordi.
AX21	Prog: Imminence	Ayo! Bis pe parti biento!
AX24	Prog: Non-voluntary perception	Asterla mo pe trouv some montagn-la.

II.3: Cloze task stimuli:

Fill-in-the-blanks

Please choose from the following possibilities to fill in the blanks:

pou, (f)inn, ti, (a)va, fek, pe, OR: no need to put anything in the blank.

Zistwar Tizan

Enn zour dan enn pei, ti ena enn ti garson ki ti apel Tizan. Toulezour, so mama ti avoy li lekol. Sa letan-la, pou al lekol, zanfan ti bizin mars enn long distans. Rezman, parfwa parfwa lor sime, ti ena enn ti laboutik.

Koumsamem ki souvan Tizan ^{Past}CT01_01 aste enn ti gato, partaz ar so bann kamarad letan zot ^{Pres}CT01_02 al lekol. Enn zour, ek sa ti kas ki so mama ^{Past}CT01_03 donn li la, Tizan ^{Past}CT01_04 rant dan laboutik, li aste de gato kanet. Enn lespri vinn dan so latet. Li dir koumsa: "Zordi, mo ^{Future}CT01_05 manz enn sel gato kanet. Lot la, mo ^{Future}CT01_06 gard li, mo ^{Future}CT01_07 plant li tanto ler mo ^{Future}CT01_08 rant lakaz."

Apré enn ti-mama, li ^{Pres}CT03_01 trouv enn ti pie koumans zerre. Tizan kontan! Kan pie ^{Past}CT03_02 gran, li ^{Past}CT03_03 koumans donn zoli zoli fler. Anfin, sezon rapor aprobe. Ki zot krwar pie la ^{Pres}CT03_04 raporte? Wi, gato kanet mem. Tou dimoun ^{Past}CT03_05 pase get li koumadir mirak.

Enn tanto apré so lekol, Tizan ^{Past}CT04_01 anler lor so pie, ^{Past}CT04_02 tann enn lawwa depi anba. Li ^{Past}CT04_03 bes latet, pran ^{Past}CT04_04 enn kont. Ki li ^{Past}CT04_05 trouve? Enn vie bolfam dan enn gran zip afer inpe zonn-zonn, enn fisi nwar lor so latet, enn gro tant lor enn zepol ek enn vie kaba dan so lame gos.

Bolfam dir li: "Ala to ^{Pres}CT05_01 ena zoli zoli gato kanet la! Eta fer mwa kado enn de do." Li kontign koze dir li: "Mo bien malere. Mo de lame ^{Pres}CT05_02 tro tranble." Li ^{Past}CT05_03 tranble so lawwa pli for ankor li dir: "Desann vini do mo ti garson. Bondie ^{Future}CT05_04 donn twa benediksjon."

Tizan get li dir li: "Be gramer, si ou lame ^{Pres}CT06_01 tro tranble, pare ou gran zip mo avoye." Bolfam ^{Pres}CT06_02 perdi so pasians ar sipliyé Tizan pa bouze depi so brans ver lor pie kanet. "Taler mo ^{Future}CT06_03 koz avek to mama, li ^{Future}CT06_04 koz avek to papa tanto ler to rant to lakaz tanto to ^{Future}CT06_05 kone." Tizan gagn per li ^{Future}CT06_06 al gagn bate. Li desann lor pie gato kanet. Bolfam ^{Past}CT06_07 met li dan so gro tant! Tizan ^{Past}CT06_08 kriye lasasin dan tant. Li kriye, pa enn dimunn tande.

Letan sa marenwar ^{Past}CT07_01 arive. Bolfam ^{Past}CT07_02 aret lor peron laboutik. Lerla Tizan ^{Past}CT07_03 debriye larg lakord gro tant, degaze rod ros, boutey kase, vie tol tousala, ranplas li dan tant e re-atas li. Ala ki manyer Tizan ^{Past}CT07_04 resi sape.

II.4: Interview task stimuli

PRESENT (expected markers: pe/zero)

1. What is your daily routine like?

To routinn toulezour kouma ete?

2. What do you like to do in your spare time?

Ki to kontan fer kan ou lib?

a. How long have you been doing these activities?

Komien letan to pe fer sa bann aktivite-la?

3. How often do you speak Mauritian Creole on a daily basis?

Komien fwa to koz kreol toulezour?

a. Who do you speak Creole with?

Avek kisann-la to koz kreol?

b. In what contexts do you write Creole down?

Kan eski to ekrir kreol?

4. Which other languages do you speak, and in which situations?

Ki bann lezot langaz ki to koze e dan ki sitiasion to servi sa bann langaz-la?

a. Which language do you feel most comfortable using?

Ki langaz to santi to pli alez pou servi?

5. What is your family doing right now?

Ki to fami pe fer-la?

PAST (expected markers: ti/(f)inn/fek)

1. What were you doing just before this interview?

Ki to ti pe fer avan sa antretien-la?

2. Where did you grow up?

Kotsa to (f)inn grandi?

a. Did you watch television as a child?

Eski to ti pe get televizion dan tipiti?

b. How do you think your childhood was different from your parents'?

Kouma eski to panse ou lanfans e ou paran zot lafans ti diferan?

3. Where did you go to school?

Ki lekol to ti ale?

a. What was your school experience like?

Kouma lekol ti ete pou to?

b. Which languages were used in your school?

Ki langaz ti pe servi dan to lekol?

4. What was your favourite thing as a child?

Ki zafer to ti extra kontan dan tipti?

FUTURE (expected markers: pou/(a)va)

1. What will you be doing for the rest of the day today?

Ki to pou fer pandan leres lazourne zordi?

2. Do you have any plans for the weekend?

Eski to ena plan pou weekend?

3. Do you think the use of Creole will decrease or increase in the future? Why?

Eski to panse litilizasion kreol pou diminie ou ogmante dan lefitir? Kifer?

4. Do you think Creole will ever be used in government?

Eski to panse pou servi kreol dan gouverman?

5. What is the next festival that you will celebrate in Mauritius? How will you celebrate?

Ki prosenn fet to pou selebre dan Moris-la? Kouma to pou selebre la?

II.5: Narrative task storyboard







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CREOLE-SPEAKING VOLUNTEERS NEEDED FOR ONLINE STUDY AND INTERVIEW

<https://www.soscisurvey.de/kreolmorisien/>

- *Online survey* – approx. **25 mins**
- *Interview at UoM* – approx. **40 mins**
- If you complete the interview (which can be arranged if you give your email in the survey), you will be paid **Rs 250**

Appendix IV: R scripts

Sample chi-square analysis script for future markers in the translation task

```
# Title      : R code to calculate statistical significance
# Created by: Hannah Davidson

library(data.table)
library(tidyverse)

# Read future data from file
markers = fread(file =
"Oxford/DPhil/Fieldwork/Interviews/Data/trans_long_fut.csv")

# Keep rows where Marker field is not empty
markers = markers[markers$Marker != ""]

# Examine the data
names(markers)
unique(markers$Marker)

calculate_chisq = function(df, marker, feature){
  # Function to calculate statistical significance
  # For a given marker, create a contingency table with a given feature
  # Determine the direction of the chisq test
  # Return the results of the chisq test as a data.frame
  df$markerornot = (df$Marker==marker)
  conttable = table(df$markerornot,df[[feature]])
  print(paste("-----", marker, feature))
  print(conttable)
  dft = as.data.frame.matrix(conttable)
  true0 = dft[2, 1]
  true1 = dft[2, 2]
  false0 = dft[1, 1]
  false1 = dft[1, 2]
  print(true1)
  if (!is.null(true0) & !is.null(true1)) {
    if (true0/(true0 + false0) > true1/(true1 + false1)) {
      direction = "0"
    } else {
      direction = "1"
    }
  } else {
    direction = "one column missing!"
  }
}

res = chisq.test(conttable)
p1 = 0.05 / 92
p2 = 0.01 / 92
p3 = 0.001 / 92
if (res$p.value < p3) {
  stars = "***"
} else if (res$p.value < p2) {
  stars = "**"
} else if (res$p.value < p1) {
  stars = "*"
} else {
```

```

    stars = "ns"
  }
  print(res)
  return(data.table(marker = marker, direction = direction,
                    chisq = res$statistic, pval = res$p.value,
                    is.sig = stars, corrected_siglevel = p1, sep = "-"))
}

# For each feature and each marker, calculate significance using the
# above function
# Note that the p value itself is not corrected for multiple testing
# here, but as
# described in the methodology section, alpha is adjusted for this when
# determining
# significance
features = names(markers) [23:45]
zero = sapply(X = features, FUN =
function(x) {calculate_chisq(df=markers,marker = "0", feature = x)})
pe = sapply(X = features, FUN =
function(x) {calculate_chisq(df=markers,marker = "pe", feature = x)})
pou = sapply(X = features, FUN =
function(x) {calculate_chisq(df=markers,marker = "pou", feature = x)})
va = sapply(X = features, FUN =
function(x) {calculate_chisq(df=markers,marker = "va", feature = x)})
datasum = rbind(zero, pe, pou, va)
write.csv(datasum, "Oxford/DPhil/Working
folder/Elicitation/trans_chisq_future-table_dir.csv")

```

Sample feature mosaic generation script for future markers in the cloze test

```

# Title      : R code to create a mosaic plot
# Created by: Hannah Davidson

library(data.table)
library(tidyverse)

# Load Cloze test data in long format
markers_df = fread(file = "Oxford/DPhil/Working
folder/Elicitation/Cloze/Cloze_long.csv")
# Examine data
names(markers_df)
# Subset future markers
future_markers_df = markers_df[markers_df$Tense=="Future",
c(1,3,6,10:32)]
names(future_markers_df)

# Generate counts for each feature and marker, after merging variants of
the same marker
select(future_markers_df, Participant, Sentence, Marker, 4:26) %>%
  gather(key = "feature", value = "used or not", -Marker, -Participant, -
Sentence) %>%
  arrange(Sentence) %>%
  group_by(feature, Marker) %>%
  summarise(proportion = sum(used or not)) -> future_features_counts

# Join total counts to feature counts and plot; rotate x and y axes

```

```
future_features_counts %>%  
  ggplot(aes(x = feature, y = proportion, fill = Marker)) +  
  geom_bar(position = "fill", stat = "identity") +  
  coord_flip() +  
  theme_bw()  
ggsave("cloze_future_mosaic.pdf", width = 7, height = 7)
```