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THE INTERLANGUAGE HYPOTHESIS AS
A MODEL OF PIDGIN/CREEOLE GENESIS:
EVIDENCE FROM CAMEROON PIDGIN ENGLISH

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Submitted for the degree of Doctor of Philosophy

University of Sussex

November 2021

Supervised by Dr Melanie Green and Professor Lynne Murphy
Declaration

I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree.

Signature: …Sarah FitzGerald………………
Abstract

This research tests the predictions of the interlanguage hypothesis developed by Ingo Plag (2008) on data from Cameroon Pidgin English (CPE), a West African pidgin/creole language. Plag’s approach draws parallels between the grammatical structures found in pidgin/creole languages and those of early-stage interlanguages. Plag uses processability theory, a cognitive theory of second language acquisition, to provide a theoretical underpinning to his approach. Plag’s model, while compelling has not to date been systematically tested. This thesis closes that empirical gap.

The research conducted for this study provides support for Plag’s hypothesis. The analysis presented in this thesis is conducted in three parts:

(i) An analysis based on Processibility Theory is conducted on CPE data, establishing that, for the most part, the language resembles an early-stage interlanguage.

(ii) An analysis of the most likely source for each of the grammatical features of CPE is conducted in order to compare Plag’s interlanguage hypothesis with two other major competing theories of pidgin/creole genesis. This analysis provides further evidence in favour of Plag’s theory while finding little evidence in favour of the alternate theories.

(iii) An analysis of the types of features that were incorporated into CPE as it developed is conducted, with results that further support Plag’s interlanguage hypothesis. Combined, the findings of these analyses provide convincing evidence in support of Plag’s hypothesis.

This thesis contributes to our knowledge on pidgin/creole linguistics in several ways. Firstly, it provides empirical support for Plag’s interlanguage hypothesis. Secondly, it establishes a methodological approach for applying Processability Theory to pidgin/creole data. Finally, it entails tracing a thorough history of CPE, proposing several languages that may have influenced the pidgin/creole as it developed and providing a typological sketch based on the earliest records of spoken Cameroon Pidgin English.
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References
Acknowledgements

I would like to thank my supervisor Dr Melanie Green for the guidance and wisdom she has provided throughout my time at Sussex and especially during this project. I am truly grateful to have such a wonderful mentor and friend. I cannot fully express how lucky I feel to have Melanie in my life. I would also like to thank my second supervisor Professor Lynne Murphy. Her innovation and creativity are primary reasons why studying linguistics at Sussex is such a rewarding experience and her feedback over the years has made me a better writer and researcher.

Thank you to my examiners, Professor Ingo Plag and Dr Lynne Cahill for their generous comments and feedback, and for an interesting discussion.

I am grateful to the Consortium for the Humanities and the Arts South-east England for funding my research and providing so many opportunities.

Thank you to Loreto Todd for her generous feedback, and to the Angus Museum in Oxford, for access to Baptist Missionary Society records.

I would like to thank all the Sussex linguists: Lynne Cahill, Melanie Green, Evan Hazenberg, Lynne Murphy, Roberta Piazza, Justyna Robinson, and Charlotte Taylor. You have taught me so much. Thank you for the feedback, the guidance, and the pub quizzes, and for being a lovely, welcoming group. I am also very grateful to Gabriel Ozón for his support and friendship, and to Barzan Ali, Rhys Sandow, and Adam Stewart for the camaraderie.

Thank you to my parents, Tim and Kerri FitzGerald, for raising me to be curious about the world and to believe in my own ability.

I would also like to thank Ada FitzGerald-Godwin for napping some of the time during the writing up of this thesis. I hope that you are proud of me. I only wish that you would stop claiming to be a doctor and demanding milk as I try to write my acknowledgements.

Finally, and most importantly, I would like to thank my partner, Harry Godwin, for his unending support, love, and belief in me. He is my sounding board, my biggest cheerleader, and possibly the most patient man on the planet. I could not have finished this PhD without him.
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<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>First person</td>
<td>MOD Modal</td>
</tr>
<tr>
<td>2</td>
<td>Second person</td>
<td>NEG Negation marker</td>
</tr>
<tr>
<td>3</td>
<td>Third person</td>
<td>NUM Number</td>
</tr>
<tr>
<td>5,7,9</td>
<td>Noun class numbers</td>
<td>OBJ Object pronoun</td>
</tr>
<tr>
<td>ADJ</td>
<td>Adjective</td>
<td>PART Particle</td>
</tr>
<tr>
<td>ADV</td>
<td>Adverb</td>
<td>PERS Person</td>
</tr>
<tr>
<td>AGR</td>
<td>Agreement</td>
<td>PF Perfective</td>
</tr>
<tr>
<td>APPL</td>
<td>Applicative</td>
<td>PL Plural</td>
</tr>
<tr>
<td>CD</td>
<td>Concord</td>
<td>POSS Possessive</td>
</tr>
<tr>
<td>COMP</td>
<td>Complementiser</td>
<td>PRED Predicate</td>
</tr>
<tr>
<td>COMPL</td>
<td>Completive</td>
<td>PREP Preposition</td>
</tr>
<tr>
<td>CONJ</td>
<td>Conjunction</td>
<td>PRES Present</td>
</tr>
<tr>
<td>COP</td>
<td>Copula</td>
<td>PRO Pronoun</td>
</tr>
<tr>
<td>DEF</td>
<td>Definite</td>
<td>PROG Progressive/continuous</td>
</tr>
<tr>
<td>DEM</td>
<td>Demonstrative</td>
<td>PRT Particle</td>
</tr>
<tr>
<td>DET</td>
<td>Determiner</td>
<td>PST Past</td>
</tr>
<tr>
<td>F</td>
<td>Feminine</td>
<td>Q Interrogative word</td>
</tr>
<tr>
<td>FOC</td>
<td>Focus</td>
<td>or particle</td>
</tr>
<tr>
<td>FUT</td>
<td>Future</td>
<td>QUANT Quantificational</td>
</tr>
<tr>
<td>FV</td>
<td>Final vowel</td>
<td>REL Relative/relativiser</td>
</tr>
<tr>
<td>IMPF</td>
<td>Imperfective aspect</td>
<td>RES Resumptive</td>
</tr>
<tr>
<td>INDEF</td>
<td>Indefinite determiner</td>
<td>S Singular</td>
</tr>
<tr>
<td>INF</td>
<td>Infinitive marker</td>
<td>SUBJ Subject</td>
</tr>
<tr>
<td>LOC</td>
<td>Locative</td>
<td>TOP Topic</td>
</tr>
<tr>
<td>M</td>
<td>Masculine</td>
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### Processability theory abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>S neg V(O)</td>
<td>Subject – negation – verb (– object) word order in negative declarative clauses</td>
</tr>
<tr>
<td>SVO?</td>
<td>Subject – verb – object word order in polar interrogatives</td>
</tr>
<tr>
<td>-ed</td>
<td>Regular past tense verb morphology</td>
</tr>
<tr>
<td>-ing</td>
<td>Progressive participle use</td>
</tr>
<tr>
<td>Plural -s (noun)</td>
<td>Regular plural marking</td>
</tr>
<tr>
<td>Poss -s (noun)</td>
<td>Regular possessor marking in possessive noun phrases</td>
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<tr>
<td>Do SV(O) -?</td>
<td><em>Do</em> fronting in polar interrogatives, followed by SVO word order</td>
</tr>
<tr>
<td>Aux SV(O) -?</td>
<td>Modal verb fronting in polar interrogatives, followed by SVO word order</td>
</tr>
<tr>
<td>Wh SV(O) -?</td>
<td>Constituent interrogative expression fronting in constituent interrogatives, followed by SVO word order</td>
</tr>
<tr>
<td>Adverb first</td>
<td>Adverb fronting in declarative clauses</td>
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<td>Poss (determiner)</td>
<td>Possessive determiner use in possessive noun phrases</td>
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<td>Object (pronoun)</td>
<td>Object pronoun use</td>
</tr>
<tr>
<td>Copula S (x)</td>
<td>Copula/subject inversion in polar interrogatives</td>
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<td>Wh copula (x)</td>
<td>Constituent interrogative expression/subject inversion in constituent interrogatives</td>
</tr>
<tr>
<td>V -particle</td>
<td>Use of phrasal verbs</td>
</tr>
<tr>
<td>Neg/aux 2nd -?</td>
<td>Insertion of negated dummy <em>do</em> following interrogative expression in negative constituent interrogatives</td>
</tr>
<tr>
<td>Aux 2nd -?</td>
<td>Insertion of dummy <em>do</em> following interrogative expression in constituent interrogatives</td>
</tr>
<tr>
<td>3sg -s</td>
<td>Use of third person singular verb forms with third person singular subjects</td>
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<td>Cancel aux 2nd</td>
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Chapter 1
Introduction

1.1 Introduction

This study aims to test the predictions of an interlanguage hypothesis on data from Cameroon Pidgin English (CPE), an English lexified pidgin/creole spoken in Cameroon. By testing Ingo Plag’s interlanguage hypothesis (PILH) this study establishes whether his approach can provide a plausible account of pidgin/creole genesis (or the ways in which such languages develop). Geographically disparate pidgin/creole languages have been shown to form a typological group distinct from both their lexifier languages and the languages spoken in the geographical areas where they developed (Bakker et al. 2011). Linguists have long hypothesised that their similarities are due to the specific mechanisms involved in pidgin/creole genesis, but they have not agreed on the specifics of those mechanisms. Those who subscribe to an interlanguage model propose that pidgin/creole grammatical features develop through second language acquisition mechanisms. PILH tested in this thesis was first proposed by Ingo Plag in 2008 (Plag 2008a), the core claim of Plag’s hypothesis is that pidgin/creole languages resemble early-stage interlanguages (Plag 2008a).¹ The findings of this study support Plag’s hypothesis, the data on CPE is for the most part in line with the predictions of his approach.

In developing PILH, Plag (2008a) applies a theory of second language acquisition, processability theory, to explain the features of pidgin/creole grammars. Processability theory, developed by Manfred Pienemann (1998), posits that second language grammar is acquired only when the learner has developed the cognitive apparatus required to process it (Pienemann 2000: 107). This processing ability builds in a series of implicational stages, resulting in the predictable acquisition order of second language features which is well established in second language acquisition research

¹ Plag was not the first person to put forward an interlanguage hypothesis, nor does he claim to be. Theories of pidgin/creole languages as incompletely learned versions of European languages were first proposed as early as the nineteenth century by authors such as Adolphe Coelho (1881) and Dirk C. Hesseling (1897), (Velupillai 2015: 139).
(Pienemann & Keßler 2012: 230). Plag has not published a great deal more on the topic since he proposed PILH in a series of papers between 2008 and 2009, and to date only a single published paper applies his hypothesis substantially to real pidgin/creole data (Plag 2011a). That paper has a fairly narrow focus, exploring noun phrases of Surinamese creoles, and its primary goal is to contrast PILH with a feature pools approach, (discussed further in §2.2.2). Thus, PILH remains a compelling but relatively untested hypothesis. This thesis partly fills that gap by testing the predictions of PILH against the structures found in CPE, ultimately concluding that PILH provides a highly plausible account of the development of CPE grammar.

The rest of this chapter provides an introduction to this study, first stating the research objectives (§1.2), next clarifying some terminological choices (§1.3), then discussing the methodological innovations required to operationalise the study (§1.4), before stating the research questions which underpin this work (§1.5). The final sections provide an overview of the thesis (§1.6), and a chapter summary (§1.7).

1.2 Objectives

The main objective of this study is to conduct a thorough evaluation of PILH based on data from CPE. To facilitate this research, three further objectives have been identified:

(i) Identify the point at which CPE became a stable variety, that is the point at which usage norms developed across the speech community, and to create a corpus of CPE as it was spoken shortly after stabilisation, or as close to that point as the linguistic record allows.

(ii) Identify the most likely substrate languages (first languages of the earliest speakers) and superstrate varieties (varieties of English that the earliest speakers were in contact with) for CPE and source information on the grammar of each to facilitate typological comparison. Establishing which languages made up the linguistic environment in which CPE developed allows investigation of the sources for CPE features.
(iii) Create a method for testing PILH that is replicable, thus facilitating future testing of the hypothesis and ensuring research transparency.

### 1.3 A note on terminology

Over the past four decades the terms *pidgin* and *creole* have been defined in contrasting and contradictory ways (Velupillai 2015: 5–43). Pidgins are often described as reduced languages which occur in language contact situations where there is a need for communication, and often an imbalance of power, between speakers of different languages (Holm 2000: 5). Creoles are generally thought to develop from pidgins (Mühlhäusler 1997: 8–9).² Pidgin languages are traditionally considered to have become creoles when a generation of speakers acquire them as a first language, developing the grammar required to function as such (Holm 2000: 7).

These definitions are neither full nor uncontroversial, nor are they the subject of this thesis. Rather than delve into the merits of various terminological options, any language which might be termed a *pidgin*, *creole*, or another related term such as *expanded pidgin*, *extended pidgin*, or *pidgin-creole* is referred to as a *pidgin/creole* language throughout. The only exceptions to this are points at which theories that use these labels in specific ways are discussed, in these cases the theorist’s terminology is used, and this is made explicit.

Some theorists prefer not to use terminology such as *pidgin* or *creole* at all, seeing these words as an extended form of colonialism (e.g., Muñwene 2001: 124–125; DeGraff 2003: 397; Ansaldo & Matthews 2007: 14), this thesis cannot engage fully in this debate. Nevertheless, I wish to acknowledge this perspective and the importance of thinking carefully about the extent to which the legacy of colonial and pre-colonial oppression may influence the language used in any field. The decision to use the term *pidgin/creole* here was made after assessing the arguments for and against their use. One argument against these terms is that pidgin/creole languages are no different from any other language and therefore should not be singled

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² Although the pidgin input to creole languages varies a great deal (Mühlhäusler 1997: 8–9).
out with these labels. But Bakker et al. (2011) provide strong empirical
evidence, based on statistical modelling, that pidgin/creole languages form a
distinct typological group. In any case, to date, no viable alternatives to
*pidgin* and *creole* have been put forward and it is necessary to have some
way of discussing these languages in order to study them. Therefore, the
label *pidgin/creole* is used throughout. Crucially, the use of *pidgin/creole*
here does not equate to a judgement of inferiority or deficiency.

The second terminological choice is the use of *substrate* to refer to the first
languages of the earliest speakers and *superstrate* to refer to the Englishes
spoken by the British people who the earliest CPE speakers had contact
with. These terms are helpful, brief, and clear, but the danger in representing
a group of languages using a single label is that it encourages us to think of
them as a single entity. The substrate of some pidgin/creole languages can
encompass multiple, diverse languages and treating them like a single entity
obscures this fact. Wherever possible, care is taken in this thesis to consider
and acknowledge that the substrate of CPE comprises a group of languages,
each with a unique history, speech community, and grammar.

1.4 Methodological innovations

PILH is a model which incorporates two further theories. PILH is based on
the theoretical framework of processability theory, a cognitive theory of
second language acquisition, outlined in (§2.3.1). Processability theory (PT)
in turn uses the parallel architectures of Lexical Functional Grammar (LFG)
to represent the information exchange inherent to the theory. Both PILH and
processability theory, as it relates to pidgin/creole genesis, lack explicit
methodology. PILH has not yet been systematically tested, so aside from the
processability theory methodology it adopts PILH has no associated
method. Pienemann lists the expected features of an English interlanguage
in many of his published works e.g. (Pienemann et al. 2011: 132) and this
list is reproduced in almost every processability theory study with English
interlanguages as a focus, but the list contains just 22 features. Since
processability theory is a theory of second language acquisition, its
methodology is not specifically designed to account for pidgin/creole
genesis. There is no information in the literature about how to use LFG to calculate the processing level of a feature which has not already been assigned one within processability theory.

In creating PILH Plag made decisions about which elements of processability theory were relevant to his work. Similarly, Pienemann chose what features of LFG to incorporate into processability theory as he developed his theory. Some of their decisions to omit part of an underpinning theory can be straightforwardly justified and therefore adopted into the approach taken for this study, others cannot.

For example, Plag does not explicitly incorporate into PILH the processability theory concept of hypothesis space, the cognitive creativity that learners have to experiment with their second language within their current range of processing ability (Pienemann & Keßler 2012: 232). Hypothesis space has a central role in PT, as it explains intra-speaker interlanguage variation (Pienemann & Keßler 2012: 232). However, hypothesis space is not especially relevant to a discussion of pidgin/creole languages as conventionalised interlanguages because PILH does not explore the interlanguages of individual speakers in the way that processability theory does.

In contrast it is more difficult to see the justification for some of the decisions Pienemann took when incorporating LFG into processability theory. Processability theory does not use traditional LFG (§2.3.2) but rather adapts its architectures primarily by adding annotation to the c-structure, or syntax tree (Pienemann 2011: 41). Pienemann uses phrase structure rules to represent the speaker’s cognitive constraints and does not utilise f-structures at all. F-structures are arguably the core innovation of LFG (Bresnan et al. 2016: 2). They make the functional relationship between each element in a clause or phrase explicit and allow these functions to be mapped to the grammatical structures produced by the speaker. F-structures could be of great use in processability theory as they outline the relationship between elements of the clause, or phrase, providing an empirical basis for assigning processing levels, which are key to a processability theory analysis (§2.3.1).
The methodological gaps in both PILH and processability theory need to be filled to allow PILH to be operationalised. To develop methodology for assessing the processability of CPE features, a decision has to be made about whether to adapt Pienemann’s approach and focus on c-structures, or whether to expand on his method and include f-structures as useful analytic tools. Ultimately the lack of explicit methodology for establishing processability levels in the processability theory literature, combined with the utility of f-structures means that they have been incorporated into the method developed for this study.

Therefore, this study implements a newly designed methodology for establishing processing levels, expanding on the ways in which Pienemann applies LFG to language data. This methodology combines the basic principles of LFG with those annotations and adaptions that are explicit in the processability theory literature. Since so much methodology has been developed for this study, care has been taken to make the approach explicit, replicable, and open to critique at every stage. The challenges involved in designing this methodology are discussed further in Chapter 4 (§4.3.2).

It is not sufficient to demonstrate that the CPE data supports PILH. It is also necessary to assess whether the same data can also support any other theoretical models of pidgin/creole genesis equally well. This assessment requires identifying good candidates for alternative theories and testing them in relation to the same data used to test PILH. This analysis requires a new methodological approach which allows several theoretical accounts of pidgin/creole genesis to be compared against the same data. While such comparison is an important step, the constraints of space mean that this analysis cannot be especially in-depth. Rather the methodology designed for this part of the study provides indicative results. The lack of in-depth exploration of each theoretical approach leaves the methodology designed for this section of the study open to criticism. The solution to this challenge is to be transparent about the applicability of the approach taken and the type of evidence it produces as well as explicit about the methodology used. The challenges of designing this method are discussed further in Chapter 4 (§4.3.4).
Finally, there is an opportunity to expand the scope of PILH. Plag notes that his model looks only at pidgin/creole structures as they relate to the development of interlanguages (Plag 2008a: 115). PILH essentially views a pidgin/creole as representative of the interlanguages of the individual speakers who first spoke it rather than specific to any one speaker. However, this focus on the end result ignores the process of stabilisation (or conventionalisation). During stabilisation, the variable features used by individual speakers are to some extent competing with each other. Some features are adopted by the speech community in which the pidgin/creole is developing while others are not. This process is complex and to some extent unknowable without explicit records from the point at which it was happening. However, there are elements of stabilisation which can be explored by examining which features ultimately became part of the language. Although not central to PILH, such analysis can be used to further assess its utility as a model of pidgin/creole genesis by establishing whether the type of features that became part of CPE indicate that the language developed from competing interlanguages. A comparative methodology, developed to explore the outcomes of feature selection at the population level, is outlined in Chapter 4 ($4.3.5$).

1.5 Research questions

Underpinning the methodological innovations outlined in the previous section are three research questions, each in two parts. Each question relates to a different element of this study. Question 1 explores how well a processability theory analysis can account for the CPE data. Question 2 explores whether there are any other theories of pidgin/creole genesis that can account for the CPE data just as well as PILH. Finally, question 3 explores the extent to which the selection of features at a population level during the stabilisation of CPE can provide evidence for assessing PILH. The research questions underpinning this study are as follows:

1. a. Does the list of English interlanguage features proposed by processability theory encompass all of the identified features of Cameroon Pidgin English?
b. Can a processability theory-based analysis of the features of Cameroon Pidgin English that aren’t on the list of English interlanguage features provide support for PILH?

2. a. Is there clear evidence that any of the features of Cameroon Pidgin English became part of the language through transfer, restructuring, or speaker innovation?
   b. Does the analysis carried out to address question (2.a) provide any evidence in support of PILH or does it better support an alternative model of pidgin/creole genesis?

3. a. Are there any observations that can be made about the types of features that were conventionalised/adopted to create Cameroon Pidgin English?
   b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?

The following chapters address these questions and demonstrate that, not only do the facts of CPE support PILH, but PILH accounts for the CPE data better than the alternative models of pidgin/creole genesis explored.

1.6 Overview of thesis

Chapter 2 provides the theoretical background to this study, starting with a brief history of theoretical approaches to pidgin/creole genesis and how they intersect with theories of second language acquisition. This is followed by a more in-depth outline of processability theory, the theory of second language acquisition which underpins PILH. First, providing an overview of the theory and a discussion of the studies in which it has been applied. Then, exploring LFG and how it is used in PT. Finally, the chapter discusses PILH, outlining the core concepts of the model and briefly touching on the challenges involved in operationalising it.

Chapter 3 defines Cameroon Pidgin English and explores the historical and linguistic context in which the language developed. Evidence that CPE had
stabilised by the time that Cameroon was annexed by Germany in 1884 is outlined, establishing the point of colonisation as the earliest time from which records are available of a relatively stable English-lexicalised pidgin/creole being spoken in Cameroon. Based on this timeline, the rest of the chapter seeks to establish who the early speakers of CPE were and which varieties of English they came into contact with, making it possible to establish the most likely substrate languages and superstrate varieties for CPE. This chapter also explores whether any other languages could have had a significant impact on CPE’s development.

Chapter 4 outlines the methodology used in this study. The chapter first gives an overview of the challenges involved in finding sources on CPE and its substrate languages. Next, the chapter outlines the methodology used to address each of the research questions in turn. The chapter then discusses the challenges of operationalising LFG and processability theory as they relate to PILH, and outlines in full the methodology developed to address these challenges. This description is followed by a discussion of what can be considered proof when it comes to evidencing transfer, restructuring, and innovation in pidgin/creole genesis and a description of the methodological approach used to evidence these processes in the CPE data. Then, a methodology for comparing how well different theoretical approaches can account for the CPE data is outlined. Finally, a method is established for exploring the types of features that became part of CPE during stabilisation.

Chapter 5 presents a sketch of CPE as it was spoken in the late nineteenth century, providing an overview of the data that underpins the analysis presented in the chapters that follow.

Chapter 6 presents an LFG analysis of the features of nineteenth century CPE in order to establish the processing level at which each one could have entered an interlanguage. This is followed by a discussion of the findings which broadly support PILH, concluding that, for the most part, the features of CPE resemble those of an early-stage interlanguage.

Chapter 7 first conducts a thorough investigation of the mechanisms by which the grammatical features of nineteenth century CPE might have
entered the language. The rest of the chapter is devoted to comparing how well the data on CPE fits with three models of pidgin/creole genesis: PILH, a relexification approach (Lefebvre et al. 2006), and a feature pool approach (Mufwene 2001, Aboh & Ansaldo 2007). This analysis finds that the features of CPE are better predicted by PILH than either of the other two approaches.

Chapter 8 looks briefly at the types of features that became part of CPE as it stabilised, looking at whether the first speakers had a preference for morphological or syntactic strategies, for superstrate or substrate features, and for features processible at higher or lower processing levels. For the most part, these findings are consistent with the expected patterns of a language which developed from early-stage interlanguages, favouring strategies found in both the superstrate and the substrate.

Chapter 9 summarises the analyses carried out in the previous chapters, assessing how consistent the findings of each analysis are with the predictions of PILH and concluding that the data on CPE provides evidence in favour of Plag’s approach. The chapter goes on to assess the significance of this study as well as its limitations, and to discuss directions for future research.

1.7 Summary

This chapter has provided an introduction to this thesis, first outlining the study’s objectives (§1.2), then discussing the terminology used to discuss pidgin/creole languages (§1.3). Following sections discussed the methodological innovations required to operationalise this study (§1.4), stated the research questions developed address each of the lines of enquiry pursued in this study (§1.5), and provided a concise overview of the chapters that make up the rest of this thesis (§1.6).

Many of the challenges involved in conducting this research result from the intersection of multiple theories. PILH is a model of pidgin/creole genesis, which is built on processability theory, a theory of second language acquisition, which is itself formally underpinned by lexical functional grammar, an approach to formally representing grammar. Before
undertaking any of the analysis for this study, it is necessary to first understand what each of these theories entail and how to operationalise them. The following chapter provides the theoretical background for this study, examining how PILH, processability theory, and lexical functional grammar intersect.
Chapter 2
Theoretical background

2.1 Introduction

The mechanisms by which pidgin/creole languages come about have been the subject of a century and a half of debate. Historically, pidgin/creole languages tend to originate in circumstances where there is little opportunity or appetite for documenting the new language as it develops. Because of the lack of historical record, the details of the linguistic environment that might have contributed to the development of the variety are not always known. The debate has been fuelled by the fact that there is a great deal of structural similarity between many pidgin/creole grammars (Bakker et al. 2011: 6) regardless of their lexifying (or superstrate) languages and despite the many different first languages (or substrates) of their original speakers (Michaelis et al. 2013). This similarity has led scholars to suggest that some developmental factor common to these languages may contribute to their grammars.

This thesis aims to test one of the more recent explanations for this phenomenon, Ingo Plag’s interlanguage hypothesis (PILH). This hypothesis, first proposed in 2008, is based on a cognitive processing account of second language acquisition. PILH posits that pidgin/creole grammars emerge in situations in which early-stage second language (L2) acquisition becomes conventionalised across a population. PILH is underpinned by processability theory, a psycholinguistic theory of second language acquisition which proposes a framework in which learners acquire their L2 by developing an implicational hierarchy of processing abilities. Processability theory is expressed formally using lexical functional grammar. In order to understand PILH, it is necessary to first have a grounding in both processability theory and lexical functional grammar. This chapter gives a critical overview of each of these theories, providing the theoretical background to this study. It is also necessary to understand the context and traditions in which Plag

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3 It should be noted that this is not universally agreed upon, but it is the position taken in this thesis since there is good empirical evidence that pidgin/creoles form a typologically distinct group (see Bakker et al. 2011).
developed his interlanguage hypothesis. While it is beyond the scope of this thesis to present a comprehensive history of pidgin/creole linguistics, this chapter provides a brief overview of theories of pidgin/creole genesis from the earliest studies up to the present day (§2.2). This is followed by an overview of processability theory, situating the theory in the context of earlier theoretical and experimental work on second language acquisition, outlining the theoretical approach, giving an overview of some of the practical studies that have provided evidence for the theory, and providing an overview of lexical functional grammar and how its architecture can be used to represent processability theory (§2.3). This is followed by an overview of PILH and a discussion of how it might be operationalised (§2.4). Finally, (§2.5) summarises the findings of this chapter.

2.2 Historical approaches to pidgin/creole genesis

PILH is one of many different approaches to pidgin/creole genesis that have been put forward over the last 150 years. This section provides an overview of the major theories of the past century and a half, first looking at theoretical developments up to the end of the 1980s (§2.2.1), then providing an overview of more modern approaches to the topic, and how theories of pidgin/creole genesis have intersected with second language acquisition research over the past 30 years (§2.2.2).

2.2.1 Early theories of pidgin/creole genesis

Pidgin/creole languages are found all over the world and theories of their genesis have been debated for the past 150 years. The geographical distribution of 76 of the world’s pidgin/creole languages is shown in Map 2.1.
There are many grammatical features common to most pidgin/creole languages. These include a paucity of inflectional morphology; subject-verb-object (SVO) word order; invariant word order in different sentence types (question, statement, command) highly reduced, multifunctional prepositional systems as compared to their lexifying languages; the use of an invariant relativiser; the use of multiple copular forms; and the use of preverbal words or particles to mark tense, mood, modality, aspect (TMA) and negation (Mühlhäusler 1997: 145 – 174; Holm 2000: 172–198).

The reason for similarities between pidgin/creole languages has been a topic of debate since the earliest studies. Theorists have generally been divided between (i) those who believe that similarities arise due to the innate cognitive processes of first language development in children, (ii) those who believe that they consist of substrate grammars relexified with superstrate vocabulary, and (iii) those who believe that they result from second language acquisition processes in adults. Many theories posit some level of interplay between two or more of these factors. What follows is a necessarily brief overview of the main theoretical trends in pidgin/creole linguistics over the past 150 years.

Pidgin/creoles have been recognised as languages in their own right by at least some researchers since the eighteenth century (Holm 2000: 18). The first systematic study of pidgin/creole languages is thought to be Addison Van Name’s ‘Contributions to Creole grammar’ published in 1869–1870 (Holm 2000: 24). Some of the earliest theories, such as that put forward in
Coelho’s (1881) study of Portuguese lexified pidgin/creoles, sought to explain pidgin/creole features in terms of universal tendencies in L2 learning (Holm 2000: 27–28), while others, such as Adam’s (1883) study of pidgin/creole French, argued that these languages consist of substrate grammars with superstrate lexis (Holm 2000: 28).

Linguistics began to develop into a recognised academic field after World War II. During this time, researchers such as Robert Hall and Douglas Taylor applied new methodology to pidgin/creole languages, reviving interest in them, and paving the way for further research (Holm 2000: 42). The 1960s and 1970s saw an explosion of research and theoretical work into pidgin/creole languages. During these decades, many linguists argued that pidginisation was related to second language acquisition due to similarities between the syntax of early-stage L2 acquisition and that of pidgin/creoles (Siegel 2008: 190–191). However, the field of second language acquisition was only starting to emerge at this time and the mechanisms involved were just beginning to be theorised (Siegel 2008: 191) so, while pidginisation and second language acquisition were believed by many to be linked, the exact processes involved were uncertain. In fact, the belief that pidgin/creole development and second language acquisition are related processes resulted in many second language acquisition researchers looking to pidgin/creole research to inform their own work (Kouwenberg & Patrick 2003: 176; Siegel 2008: 190). The question of substrate influence in pidgin/creole development was debated widely during the 1970s, with many researchers suggesting that ‘universal cognitive strategies of simplification’ were more likely than substrate transfer to determine pidgin/creole features (Siegel 2008: 197).

During the 1980s the question of second language acquisition influence all but disappeared from research on pidgin/creole development in the face of Bickerton’s bioprogram hypotheses (Siegel 2008: 192). Bickerton’s theory posited an explanation for pidgin/creole features based on the Chomskyan generative linguistics of the time (Bickerton 1984: 178; Veenstra 2008: 226). Bickerton claimed that children were the originators of creole languages, developing their parents’ pidgin into a creole in a single
generation, and that creole features ‘derive from a biological program for language’ (Bickerton 1984: 173). The features proposed by Bickerton as common to creole languages (such as SVO word order, the use of preverbal particles to mark TMA, and the emergence of superstrate adjectives as pidgin/creole verbs) were posited to result from an underlying Universal Grammar with variation depending on the access that children had to the lexifying language (Bickerton 1984: 178; Veenstra 2008: 226). Bickerton also emphasised a lack of substrate influence in creole development (Veenstra 2008: 227).

Bickerton’s theory dominated during the 1980s, because it was both influential and controversial, and because of the dominance of the Chomskyan model at that time. Theorists who disagreed with Bickerton put a lot of effort into countering his claims (Siegel 2008: 192). As a result, a lot of the work carried out on pidgin/creole languages in the late 1980s and early 1990s aimed to highlight inaccuracies in the bioprogram hypothesis or to demonstrate that Bickerton’s theory was not applicable to all pidgin/creole languages (Veenstra 2008: 234–235; Bhatt & Veenstra 2013: 2). Regardless of the theorists’ motivations, the result of this focus on the bioprogram hypothesis was that second language acquisition models of development were widely ignored by linguists during the 1980s (Kouwenberg & Patrick 2003: 177). By the early 1990s Bickerton’s theory had lost popularity as it had been repeatedly contradicted by historical information on the development of pidgin/creoles and could not account for the presence of substrate features in many pidgin/creole languages (Siegel 2008: 192–193). As a result, from the early 1990s there was a renewed interest in the influence of substrate languages in pidgin/creole development, with second language acquisition often theorised to be the mechanism by which substrate features transfer into pidgin/creole languages (Siegel 2008: 197–198).

2.2.2 Modern approaches to pidgin/creole genesis

The field of second language acquisition research developed considerably during the 1980s and had become a much bigger academic field than that of
creolistics by the 1990s (Siegel 2008: 193). The concept of interlanguage as the cognitive representation of an intermediate language form which is neither a learner’s first language (L1) nor their L2 target language, was first posited in the early 1970s by Selinker (1972). This theory was tested and developed through the 1970s and 80s and is widely accepted in second language acquisition research today (e.g., Pallotti 2017; Sykes & Cohen 2018). In the 1970s and 80s, the observation that ILs move through predictable, observable stages, independent of a learner’s L1 and L2 led to a number of theories on interlanguage development (Pienemann 2015: 124). These studies were facilitated by an increasing quantity of empirical language acquisition data, such as that of the European Science Foundation’s large scale 1985 study of second language acquisition (Siegel 2008: 194–195). This study found that regardless of L1 and L2, all learners start out using pragmatic communication strategies (Perdue et al. 1993: 259). As their interlanguage develops, these are supplanted by semantic strategies that increasingly allow syntax to be acquired (Perdue et al. 1993: 258–259). If a learner progresses beyond this ‘basic variety’ of their TL, and many speakers will not, then they will start to acquire the morphology of their TL, which supplements the semantic strategy (Perdue et al. 1993: 258–259).

During the 1990s, many creolists looked to the large volume of information on second language acquisition that had developed since the late 1970s, and there was renewed interest in the influence of substrate languages on pidgin/creole development (Siegel 2008: 193). Studies such as those by Mufwene (1990, 2001), Kouwenberg (1992), Arends (1995), Lefebvre (1999) Clements (2003), Helms-Park (2003), Siegel (2003, 2008) and Winford (2003) provided evidence for the role of second language acquisition processes in pidgin/creole development, and this role became more widely accepted in the late 1990s and early 2000s (Siegel 2008: 193). Although not universally agreed upon, it is generally accepted by modern linguists that second language acquisition has a role in pidgin/creole development, although the exact influence of language learning processes can still be contentious. Modern debates on the origins of pidgin/creole
languages tend to focus on factors such as how much influence a Universal Grammar has in the process (Lefebvre 1999; Mufwene 2001), the extent to which pidgin/creole languages constitute a typologically distinct group (Aboh & Ansaldo 2007; Bakker et al. 2011), and the extent to which substrate transfer plays a role in pidgin/creole development (Siegel 2008: 196–198).

In the course of this thesis, two alternative theories to PILH are explored in relation to the Cameroon Pidgin English (CPE) data (§7.7), and so should be mentioned here. The first of these, relexification theory (Lefebvre 1999), is a prominent substratist theory which states that pidgin/creole languages consist of superstrate lexis mapped on to substrate grammar, meaning that almost every pidgin/creole grammatical feature is seen to originate in the substrate (Lefebvre et al. 2006: 5). The second of these theories is the feature pool approach (Mufwene 2001; Aboh & Ansaldo 2007). This model looks at the development of pidgin/creoles at the speech community level, positing that there is a pool of features in the linguistic environment in which the pidgin/creole language develops. This pool is analogous to the gene pool in biology and, according to this model, from this pool the least typologically marked options will be selected over time by the group through processes such as dialect levelling (Aboh & Ansaldo 2007: 41).

In a series of papers in 2008–2009, Ingo Plag outlined an interlanguage hypothesis of pidgin/creole genesis based on the processing stages central to processability theory (2008a; 2008b; 2009a; 2009b). These papers constitute a convincing argument for the role of L2 processing in pidgin/creole development, but the approach has not escaped criticism. In particular, it has been pointed out that Plag’s hypothesis has not been tested in any kind of thorough study (Sprouse 2009: 293). This thesis aims to rectify this gap by testing the claims of PILH on data from Cameroon Pidgin English and its substrate and superstrate languages. Before it is possible to outline a methodology it is necessary to understand both processability theory and how it is operationalised (§2.3), and the ways in which Plag adapts processability theory into PILH (§2.4).
2.3 Processability theory

The cognitive mechanisms proposed by processability theory underpin PILH, and both Pienemann and Plag use lexical functional grammar to formally express the relationships between form and function that are central to their theories. This layering of theories means that in order to develop a methodology to test PILH, it is necessary to understand both processability theory and lexical functional grammar. This section forms an introduction to processability theory, discussing and critiquing its methodology and providing an overview of the studies that have tested its predictions (§2.3.1), before presenting an overview of lexical functional grammar and how Pienemann incorporates it into processability theory (§2.3.2).

2.3.1 An overview of processability theory

The focus on mapping the observable patterns of second language acquisition during the late 1970s and early 1980s meant that by 1990 it was possible to claim that developmental sequences in second language acquisition were a well-established finding (Long 1990: 658–659). Manfred Pienemann’s processability theory, first proposed in 1998, seeks to explain these sequences. Pienemann proposes that these patterns of acquisition come about when learners develop new cognitive processing systems for their L2s. These systems develop as implicational hierarchies of grammatical processing ability, accounting for the developmental sequences observed by researchers (Pienemann 1998: 5; Pienemann & Keßler 2012: 228; Pienemann 2015: 130). The approach grew out of the Multidimensional Model, proposed by Meisel et al. in 1981, which sought to address the question of what constitutes evidence of development in an interlanguage (Pienemann & Keßler 2012: 228). Processability theory also built on Pienemann and Johnston’s 1984 ‘Predictive Framework’ which introduced the idea of processing ability as resulting from incremental growth (Pienemann & Keßler 2012: 228).
Pienemann is very clear that processability theory is not designed to contribute the debate on rationalism versus empiricism as it does not address how linguistic knowledge is acquired, stating that processability theory:

is not designed to contribute anything to the question of the innate or learnt origin of linguistic knowledge or the inferential processes by which linguistic input is converted into linguistic knowledge. Instead, it is the sole objective of processability theory to determine the sequence in which procedural skills develop in the learner (Pienemann 1998: 5)

He states that there are two questions that need to be addressed in second language acquisition research: the logical problem, or the question of how learners develop linguistic knowledge from a limited input; and the developmental problem, or the question of why language acquisition follows universal stages (Pienemann & Keßler 2012: 230). According to Pienemann, the first of these, the logical problem, can be accounted for with universal grammar, while processability theory addresses the developmental problem (Pienemann 1998: 310). He states that in combination, universal grammar and processability account for both first and second language acquisition. In first language acquisition learners have full access to a universal grammar and build a language processor according to the constraints of processability theory (Pienemann 1998: 313). In second language acquisition learners have more limited access to a universal grammar and build a secondary language processor for their target language, also according to the constraints of processability theory (Pienemann 1998: 313). Both first and second language learners have access to hypothesis space in which they can utilise the processing apparatus they have already developed to produce new language based on limited input, essentially by experimenting within the boundaries of their current processing stage (Pienemann & Keßler 2012: 232). The differences between the accuracy with which speakers acquire their L1 and L2 are primarily due to generative entrenchment, a concept borrowed from genetics, in which early errors become fixed in the developing structure, impacting forms that are acquired later (Pienemann 1998: 316). Because of their access to a universal
grammar, L1 learners’ hypotheses are more accurate than those of L2 learners. This allows L1 learners to avoid generative entrenchment of errors that would make accurate acquisition of grammar further up the processing hierarchy impossible.

At the core of processability theory is the concept of a ‘language processor’ (Pienemann & Keßler 2012: 230). The language processor is a cognitive system in which language is processed incrementally. As Pienemann and Keßler (2012: 230) put it: ‘The architecture of the language processor accounts for language processing in real time and within human psychological constraints’. Pienemann (1998: 5) conceptualised this processor as ‘the computational mechanisms that operate on (but are separate from) the native speaker’s knowledge’. According to processability theory, a language learner will have a fully developed L1 processor, but this processor cannot be used to produce their L2 as it is language specific. To produce the L2, a second processor must be developed (Pienemann 2000: 107). This new processor starts as a sort of blank slate. The learner has no access to their L1 processing knowledge within the L2 interlanguage processor. This lack of L1 processing apparatus means that complete beginners can only access individual L2 words they may have learned and have no access to any information about the lemma, much as children building their L1 processors start with single words (Pienemann 2000: 107). Gradually, the learner will develop the processing capacity for other elements of language, progressing through a series of interlanguage stages in which the procedural skills required to process the L2 grammar are developed (Pienemann 1998: 1).\(^4\)

The visual representation of incremental processing that is used in much of the processability theory literature is reproduced in Figure 2.1.

\(^4\) Or L3, L4 etc. Each new language acquired creates a new interlanguage which requires a new processing apparatus.
The diagram in Figure 2.1 shows part of a fully developed, that is L1 speaker’s, processor for the sentence ‘a child gave a cat to the mother’. The idea is that the information in the conceptualiser is expressed in terms of lexical roles mapped onto the specific words in the clause. From here, the information is passed into the grammatical encoder where the information associated with each lemma is ‘called’ from the lexicon. Information such as whether the noun is singular, or plural, is passed from noun to determiner as the noun phrase is formed within the grammatical encoder allowing the correct determiner to be selected. The thematic role of the noun phrase is also associated with a grammatical function within the grammatical encoder incrementally building a grammatical clause. The processing of each part of
the clause does not happen sequentially, rather there are multiple processes running simultaneously (Pienemann 2011: 31–32). Pienemann explains:

‘The conceptual material first activates the lemma CHILD in the lexicon. The lemma contains the category information N, which calls up the categorial procedure noun phrase. This procedure can build noun phrases. The categorial procedure inspects the conceptual material of the current iteration (the material currently being processed) for possible specifiers and provides values for diacritic features (such as number). Depending on certain aspects of the conceptual material the noun phrase procedure attaches the branch Det to noun phrase, and the lemma for ‘A’ is activated which causes the lexeme ‘a’ to be inserted. […] noun phrasesubj calls up the procedure S, which accepts the noun phrase as its subject and stores the diacritic features deposited in the noun phrase, namely the values for person and number. The outcome of all this is depicted by a tree structure […]. While this structure was being produced and the associated lemmata were being activated the next conceptual fragment would have been processed in parallel, and the output of the Formulator would have been delivered to the Articulator’. (Pienemann 2011: 31–32).

Pienemann emphasises that this processing capacity is only available in full to ‘mature users’ of a language, that is L1 speakers or highly proficient L2 speakers (Pienemann 2011: 33). Second language learners have to develop the procedures involved. These procedures are, in incremental order:

1) The lemma

2) The category procedure, or ability to identify lexical category of lemma

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5 Pienemann has described this processor in varying detail in a number of places, but for the most straightforward overview see his 2011 textbook (Pienemann 2011: 28–33).
3) The phrasal procedure

4) The S-procedure and word order rules

5) The subordinate clause procedure, where this is applicable (list adapted from Pienemann 2011: 33).

The incremental development of these procedures by L2 learners is what causes the predictable stages of L2 development (Pienemann 2011: 33).

Processability theory’s hierarchy has five sequential levels based on the five processes which the language processor requires to develop fully. Each level builds upon the processing procedures acquired in previous stages (Pienemann 2000: 107). These stages are as follows:

1) Lemma access: single words are added to a speaker’s interlanguage lexicon. Grammatical information cannot be processed at this stage, so words have no syntactic or morphological information associated with them in the interlanguage. Language can only be formed in fixed phrases learnt as a single lexical unit (Pienemann 1998: 83, 2000: 107).

2) The category procedure: lexical items are assigned a grammatical category related to a semantic role in the conceptualiser. The exchange of grammatical information between elements of the clause, or agreement, is not a feature of the interlanguage at this stage. Instead, simple sentences can be formed using the speaker’s L1 knowledge of semantic roles, which can be accessed in the L2 conceptualiser at stage two. This use of semantic roles to form sentences results in what Pienemann calls canonical word order, in which the actor is placed in the sentence initial position with the less salient action and patient information following in either order, resulting in either subject-object-verb (SOV) or subject-verb-object (SVO) word order (Pienemann 1998: 84, 2000: 107).\footnote{Pienemann’s reasoning for referring to SOV/SVO word ordering as ‘canonical’ is somewhat opaque the term canonical is not clearly defined in any of the processability theory literature consulted for this study so an exact definition cannot be stated here.}
3) The phrasal procedure: phrasal morphemes can be produced automatically in the grammatical encoder as the ability to parse phrases has developed. This ability means that information exchange is possible at the intra-phrasal level making, for example, number agreement between determiner and noun possible within a noun phrase. At this stage, information exchange between phrases is still not possible (Pienemann 1998: 84–85, 2000: 107).

4) The S-procedure: inter-phrasal morphemes can be produced, as the ability to parse sentence level grammar has developed. This development makes inter-phrasal information exchange such as subject-verb agreement possible in the grammatical encoder. *Appointment rules* are also developed at this stage, these determine the grammatical function of the phrase and allow speakers to gather them into sentences. This additional functional information means that word order according to the L2’s constraints is now available to the learner (Pienemann 1998: 85, 2000: 107).

5) The subordinate clause procedure: at this stage *lemma functions* are applied to the verb. This access to additional information about the lemma allows the speaker to call up the correct procedure and arguments for different functions of a verb, meaning that they can accurately produce subordinate clauses, relative clauses etc. They can also distinguish between main and subordinate clauses and accurately produce the L2 word order associated with each (Pienemann 1998: 85–86, 2000: 107).

Based on this information, Pienemann claims, it is possible to state what types of constructions we might expect to find in the interlanguage of any given L2. In his work on processability theory, Pienemann has produced a

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7 Some iterations of processability theory divide level four into two stages (level four and level five), with different word ordering rules developing at level four or level five based on the value +/- saliency. In these cases, the subordinate clause procedure becomes level six (Pienemann 2000: 111). Such granularity is not considered necessary for this particular application of the theory and therefore the five processing levels outlined by Pienemann (1998: 83–86) are used throughout.
list of English L2 features and the associated processing levels from which each one is predicted to be possible. These are summarised in Table 2.1.

<table>
<thead>
<tr>
<th>STAGE</th>
<th>PHENOMENA</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Words</td>
<td>hello, five, dock, central</td>
</tr>
<tr>
<td></td>
<td>Formulae</td>
<td>How are you? What’s your name? Where is X?</td>
</tr>
<tr>
<td>2</td>
<td>S neg V(O)</td>
<td>Me no live here/I don’t live here 8</td>
</tr>
<tr>
<td></td>
<td>SVO</td>
<td>Me live here 9</td>
</tr>
<tr>
<td></td>
<td>SVO?</td>
<td>You live here?</td>
</tr>
<tr>
<td></td>
<td>-ed</td>
<td>John played</td>
</tr>
<tr>
<td></td>
<td>-ing</td>
<td>Jane going</td>
</tr>
<tr>
<td></td>
<td>Plural -s (noun)</td>
<td>I like cats</td>
</tr>
<tr>
<td></td>
<td>Poss -s (noun)</td>
<td>Pat’s cat is fat</td>
</tr>
<tr>
<td>3</td>
<td>Do SV(O) -?</td>
<td>Do he live here?</td>
</tr>
<tr>
<td></td>
<td>Aux SV(O) -?</td>
<td>Can I go home?</td>
</tr>
<tr>
<td></td>
<td>Wh SV(O) -?</td>
<td>Where she went? What you want?</td>
</tr>
<tr>
<td></td>
<td>Adverb first</td>
<td>Today he stay here</td>
</tr>
<tr>
<td></td>
<td>Poss (pronoun)</td>
<td>I show you my garden. This is your pencil</td>
</tr>
<tr>
<td></td>
<td>Object (pronoun)</td>
<td>Mary called him</td>
</tr>
<tr>
<td>4</td>
<td>Copula S (x)</td>
<td>Is she at home?</td>
</tr>
<tr>
<td></td>
<td>Wh copula (x)</td>
<td>Where is she?</td>
</tr>
<tr>
<td></td>
<td>V -particle</td>
<td>Turn it off!</td>
</tr>
<tr>
<td>5</td>
<td>Neg/aux 2(^{nd}) -?</td>
<td>Why didn’t you tell me? Why can’t she come?</td>
</tr>
<tr>
<td></td>
<td>Aux 2(^{nd}) -?</td>
<td>Why did she eat that? What will you do?</td>
</tr>
<tr>
<td></td>
<td>3sg -s</td>
<td>Peter likes bananas</td>
</tr>
<tr>
<td></td>
<td>Cancel aux 2(^{nd})</td>
<td>I wonder what he wants</td>
</tr>
</tbody>
</table>

**Table 2.1** The processability stages of English interlanguages, adapted from Pienemann et al. (2011: 132)

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8 It is not entirely clear from the published work on processability theory why or how a construction such as ‘I don’t live here’ would be possible at level two, as such constructions clearly require a level of intra-phrasal information exchange within the verb phrase in order for the auxiliary to be inserted. Perhaps it is presented as a language chunk or formulae, but in that case, this type of clause should be possible from level one and is not a true example of negation development as set out in processability theory. However, this construction is given as level two in multiple published works on processability theory. See for example: Pienemann (2011), Pienemann et al. (2011); Spinner (2013).

9 Pienemann does not engage with the question of why those learning SVO languages tend to use SVO word order while those learning SOV languages tend to use SOV order from processing stage two. Since both orders are canonical and neither L2 nor L1 word ordering rules are available to the interlanguage at that stage, one might expect to see fairly free variation between the two-word orders regardless of the order found in the input languages, but this is not the case. The lack of variation could perhaps be due to the mapping of semantic roles from the L1, but in that case you would expect L1 word order to dominate, which does not seem to be the case, for example Japanese L1, English L2 learners tend to use SVO from the earliest stages (Sprouse 2009: 294).
The processing hierarchy follows an implicational pattern, which means that for a procedure at any level to be processable all processing levels further down the hierarchy must already have been acquired (Pienemann 2000: 107; Pienemann 2011: 36). The processing stages apply to any linguistic forms which might become part of the interlanguage, either from L2 acquisition, from L1 transfer of any processible L1 features, or from innovation within the hypothesis space. Pienemann makes clear that just because a speaker attains a certain processing stage is no guarantee that they will acquire all of the L2 language phenomena possible at that stage (Pienemann 1998: 123). Speakers may favour non-L2 strategies acquired at earlier stages either through transfer from the L1 or innovation within the hypothesis space. It can also take time to acquire new linguistic phenomena even where they are theoretically processable, so they may not develop immediately (Pienemann 1998: 123). The amount of time that it may take an individual to develop these processing procedures varies as the rate of progress depends on a wide range of personal, sociological, and geographical factors, such as where they use their L2, their personal motivations for learning the language, and whether they are regularly exposed to their target language outside of a formal language learning environment. It is also possible for speakers to acquire functional use of a language, that is one that allows them to communicate sufficiently for their needs within the environment in which they speak their L2, without ever achieving the higher processing levels (Pienemann 2015: 135–136).

One crucial aspect of the hierarchy is that there is no scouting possible. Pienemann uses scouting to mean a speaker acquiring the processing capacity for a single linguistic phenomenon (or group of phenomena) from a higher processing level without acquiring the processing capability at that level for anything else (Pienemann 1998: 153). This lack of scouting means that if a feature associated with a given processing level has been acquired in the interlanguage as it is used in the L2 (as opposed to having been

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10 It might be argued that a language feature failing to develop constitutes evidence that it is not possible for that feature to develop. However, Pienemann here is specifically referring to whether the processing capability exists for the feature rather than whether there are any other factors that might prevent its development.
learned as a chunk or being a default such as SVO word order in stage two), then the processing apparatus for that level has been attained regardless of how much of the language possible at this stage is actually being used (Pienemann 1998: 153). Evidence of acquisition is assessed using the \textit{emergence criterion} (Lenzing et al. 2019: 3). Once the emergence criterion is met, the specific syntactic structure or morpheme is considered to have been acquired within the interlanguage (Lenzing et al. 2019: 3). For syntax, the emergence criterion is three or more accurate usages of the structure by a single learner. For morphology, there must be evidence that inflection is being used with different lexical items (e.g., 3\textsuperscript{rd} person marking on multiple verb types) (Lenzing et al. 2019: 4). However, Lenzing et al. point out that different emergence criteria are used by different processability theory researchers, so the method for assessing the emergence criterion varies between studies (Lenzing et al. 2019: 4).

Once the emergence criterion for a structure has been met, the processing level associated with that structure is considered to have been acquired and any use of structures found at lower processing levels is considered to be \textit{trailing} (Pienemann 1998: 153). That is, the higher processing level apparatus has developed fully, but the speaker has not yet acquired all of the linguistic constructions possible at that level, and so some of the linguistic constructions they use are associated with lower levels (Pienemann 1998: 153).

Variation occurs within the hypothesis space and may involve incorporating features from the speaker’s target language or their L1, as well as linguistic innovations found in neither. Crucially these will all be features that are processible at the learner’s current processing level or at the processing levels that precede it. The difference between meeting emergence criterion for a structure and this type of variation within the speaker’s current processing capability is, according to processability theory, the difference between learner development and intra-speaker variation (Pienemann 1998: 238, 2005: 48, 2015: 129; Pienemann & Keßler 2012: 232).
Pienemann’s assertion that all variation comes from trailing, and that scouting is not possible is a core feature of processability theory, but it is difficult to see how this claim could be falsified. If a learner acquires a single level four feature and otherwise uses only level three constructions, the only difference between the level four feature being an instance of scouting and the level three features being instances of trailing is whether or not you believe that scouting is possible.

It is interesting to note that in a 2009 study that used processability theory to examine the acquisition of English by Mandarin speakers, Dyson found that the acquisition of morphology followed the sequence predicted by processability theory, but lagged behind the acquisition of syntax considerably, with learners acquiring the syntax associated with processing stage three or four while using only morphology associated with processing stage two (Dyson 2009: 375). These findings are in line with those of the European Science Foundation in the 1980s which suggested that the acquisition of morphology comes after the acquisition of syntax (Perdue et al. 1993: 258–259). From a processability theory perspective, this observation might suggest that there is something different about the ways in which syntax and morphology are processed but this possibility is not addressed in the processability theory literature consulted for this study.

Pienemann states that, ‘in the processability theory framework, second language acquisition research starts with theory, and predictions derived from the theory are tested empirically’ (Pienemann 2015: 128). To this end, there have been a number of studies using processability theory methodology over the past twenty years, going beyond the observations of English and German L2 development that processability theory was primarily designed upon. These include: L2 Arabic (Alhawary 2003; Mansouri 2005), L2 Japanese (Kawaguchi 2005); L2 Mandarin (Zhang 2005, 2019); L2 Russian (Artoni & Magnani 2013, Magnani & Artoni 2015; Artoni 2019; Magnani 2019); L2 Hindi (Baten & Verbeke 2015); and L2 Italian (Magnani 2019); as well as further studies of L2 German (Jansen 2008; Baten 2011, 2013); and L2 English (Sakai 2008; Dyson 2009; Spinner 2013). Many of these studies, particularly those contributing to volumes
edited by Pienemann such as Kawaguchi (2005), Mansouri (2005), Zhang (2005, 2019), Artoni (2019), and Magnani (2019) have generated findings that are in line with the predictions of processability theory.

However, not all of these studies have such consistent findings. As previously mentioned, Dyson found that the acquisition of English morphology by Japanese L1 speakers lagged behind their syntactic acquisition (Dyson 2009). Jansen (2008) found good evidence that the processing stages of German are acquired in the order predicted by processability theory and that these stages are acquired cumulatively by English speakers, but she did not find strong evidence that the acquisition of features in stages was sequential (Jansen 2008: 202–208). Sakai’s results broadly support processability theory, but he makes the point that the speakers involved had all attained features from the two highest processing levels and that this factor limited the scope for counterevidence (Sakai 2008: 547). Alhawary (2003), examining the acquisition of L2 Arabic by L1 English learners found that the predictions of processability theory were not borne out by the data gathered for the study, with some inter-phrasal level four agreement features consistently emerging before some intra-phrasal level three ones (Alhawary 2003: 136). Baten (2011) found that in L2 German, the differentiation between accusative and dative morphology in both preposition phrases and noun phrases developed sooner with personal pronouns than with determiners. This finding, he points out, is ‘unpredicted by processability theory’ and requires more scrutiny from a theoretical perspective (Baten 2011: 494–495). Finally, Spinner highlighted that while the predictions of processability theory held for production of English in her study, the subjects’ reception (or comprehension) of English did not follow the same pattern (Spinner 2013: 734).

This finding raises the question of whether separate ‘processors’ are required for comprehension and production of language. In the epilogue to his first book Pienemann states that alternative techniques would need to be developed in order to research the differences in comprehension and production (Pienemann 1998: 335). However, based on the published
processability theory literature he does not appear to have given comprehension much further attention in the subsequent decades.

It seems clear that processability theory often does predict the sequence in which L2 features are acquired but this is perhaps to be expected from a theory that was developed to account for the predictable stages of acquisition observed in large scale studies. This observation is particularly true in relation to L2 German and English, as these are the languages that processability theory was primarily developed on. This circularity is problematic and is not addressed in the primary processability theory literature. However, PILH is based on processability theory and must be tested on processability theory’s terms. That is to say, for the purposes of this study it is assumed that there is no scouting, as this is a foundational principle of processability theory. It is also assumed therefore that if any evidence of higher processing levels in early CPE is found they must be the result of a majority of speakers achieving the associated processing level. Similarly, since processability theory is theoretically underpinned by lexical functional grammar, the examination of the features of CPE will be conducted using lexical functional grammar analysis. The following section provides an overview of lexical functional grammar and how Pienemann applies the approach to his theory.

2.3.2 Representing processability theory with lexical functional grammar

Lexical functional grammar is the grammatical theory adopted by Pienemann to provide a formal representation of language within processability theory. At its most basic, the theoretical assumption underpinning processability theory is that the difference between processing levels is the amount of information exchange possible between the elements within a clause. This information consists of grammatical features such as case, gender, and number. (Pienemann & Keßler 2012: 233). For example, in order to produce the English sentence ‘John eats the meal’ it is necessary for person and number information to be exchanged between the subject John and the verb eat in order for the speaker to produce the correct form eats. Any formal representation of processability theory needs to be able to
express such information exchange or any lack thereof. Pienemann states that he uses lexical functional grammar to interpret grammatical structures in processability theory as it is ‘a convenient reference point which has been sufficiently formalised and tested to be practical for this purpose’ (Pienemann 2011: 37–38).

Lexical functional grammar (LFG) was developed during the 1970s and 1980s (Dalrymple 2001: 1–3). It is a generative theory that assumes a universal grammar which in LFG is conceptualised not as a set of parameters, as in the Chomskyan model, but rather as a universal correspondence between the functions within a clause and its argument structure. Joan Bresnan, one of the originators of lexical functional grammar describes this as ‘the relational design of universal grammar’ (Bresnan et al. 2016: 9). Functions in the clause are expressed in different ways in different languages. For example, in English the function of subject and object are distinguished through the structure of the clause. In a non-configurational language, such as Warlpiri, an Aboriginal Australian language, these functions are expressed through the shape of the words themselves, that is they are marked for ergative and absolutive case, and, in an LFG analysis, there is no underlying phrase structure as the language is non-configurational (Bresnan et al. 2016: 9). LFG assumes that there are no underlying grammatical forms at all, instead aiming to describe and represent natural language as it occurs (Dalrymple 2001: 3). This representation is achieved using a system of parallel architectures to represent the different elements of meaning for a given utterance (Bresnan et al. 2016: xi). This architecture consists of three types of structures: 

- a(rotation)-structures, which represent the thematic roles within a clause;
- c(onstituent)-structures, which represent the syntactic relationship between elements within the clause; and
- f(unctional)-structures, which represent the function and requirements of each element of a clause (Bodomo 1996: 11).

The a-structure maps thematic roles to the constituents of a clause. This a-structure mapping for the English sentence John eats the meal can be seen in Figure 2.2.
Figure 2.2 A-structure showing mapping from phrase to semantic role

The c-structure for the same sentence can be seen in Figure 2.3

Figure 2.3 C-structure showing syntactic relationship between constituents

The c-structure, seen in Figure 2.3 is based on x-bar theory which is adopted in LFG for endocentric languages, that is languages in which all phrasal categories project from a head (Falk 2001: 48). The x-bar structure distinguishes between the types of dependants of the head, with modifiers attaching at a higher bar level than complements, and specifiers attaching at the phrasal node. For exocentric languages, such as non-configurational languages, which do not have specifier-head-complement structures, an alternative, W-star clause structure is adopted (Falk 2001: 48). These represent the phrase structure rule $S \rightarrow W$, where $W$ is a word (Falk 2001: 48). An example of an exocentric clause, from Malayalam, a Dravidian language spoken in India, can be seen in (1). Malayalam, according to LFG, does not have the category verb phrase (Falk 2001: 48). This means that an x-bar structure is not appropriate to represent the sentence seen in (1), instead, in LFG, it can be represented with the w-star clause structure seen in Figure 2.4.
(1) Aanaye  

kuṭṭi  

kaṇṭu  

elephant.ACC  

child.NOM  

saw  

‘The child saw the elephant’ 

Malayalam: (Falk 2001: 48) 

Figure 2.4 C-structure representing w-star phrase structure of Malayalam 

The final element of the LFG architecture is the f-structure, which shows the functional relationship between the elements of the clause. An f-structure for the English sentence *John eats the meal* can be seen in Figure 2.5. 

Figure 2.5 F-structure showing functional relationship between elements of the clause 

F-structures consist of a series of nested feature matrices (or f-structures) each represented by brackets. An f-structure can represent a phrase or clause and each one provides all of the necessary functional information for the feature it represents. If the f-structure represents a clause it can have phrasal f-structures nested inside it, which may in turn have further phrasal f-structures nested within them, depending on the level of embedding within the clause. This nesting can be seen in Figure 2.5, in which the subject
(SUBJ) and object (OBJ) feature matrices are nested inside the main clausal f-structure. The feature matrices for any subordinate clauses will also be nested within the main f-structure.

Every matrix within the f-structure has its own predicate, or PRED value, essentially the most important element of the clause or phrase it represents. In the case of a clausal f-structure this PRED corresponds to the lexical verb, for a phrasal f-structure the PRED will be the head of the phrase. The f-structure for each predicate will specify any arguments it requires. This specification can be seen in the main f-structure in Figure 2.5, in which the PRED value includes both the lexical verb eat and a specification of the subject, SUBJ, and object, OBJ, arguments that are required by a transitive verb. The matrix for each feature will also contain any attributes of the predicate required to resolve the f-structure into a fully formed c-structure.

In the f-structure shown in Figure 2.5, the verbal predicate is marked for present tense, the SUBJ and OBJ arguments both have number, and definiteness attributes, and the SUBJ is also marked for person. This information is required to ensure that in the c-structure the subject, John, is not marked as plural, eat, is in its present tense, third person singular form, and that the object, meal, has the correct determiner and is not marked as plural.

Each f-structure must meet the well-formedness conditions of (i) completeness, that is, it should contain all information required by the predicate, and (ii) coherence, that is it should not contain any information not required by the predicate (Bresnan et al. 2016: 17). However, information not directly relevant to the construction of the c-structure can be underspecified. For example, in the f-structure in Figure 2.5, the OBJ argument does not have a person attribute, since its inclusion would not alter the c-structure seen in Figure 2.3, although it could of course be marked as third person.

These structures can be linked in order to map the relationship between the different types of information they contain, providing all of the information
about a given clause. The mapping of the three structures for the sentence *John eats the meal* can be seen in Figure 2.6.

![Figure 2.6 Mapping between a-, c-, and f- structure](image)

The arrows in Figure 2.6 show the mapping of c-structure to f-structure. The a-structure and f-structure could also be linked visually with the agent mapping to the subj, the verb to the pred and the patient to the obj. LFG does not allow underlying forms or transformations, so any differences in the utterance are reflected in all three structures. For example, if the sentence shown in Figure 2.6 is passivised, then the mapping of semantic role to argument remains unchanged except for the order of the arguments, reflecting the changed order of the sentence, this can be seen in Figure 2.7.
Passivising the sentence does alter the f-structure considerably, however, reflecting the different functions of the elements in the clause triggered by the addition of a passive value in the PRED matrix. This in turn maps to an altered c-structure, reflecting the addition of passive be, and the optional inclusion of a preposition phrase representing the agent role in the clause.

Comparing the architecture of LFG to Pienemann’s language processor it is clear why Pienemann chose LFG to represent processability theory.

Pienemann’s language processor diagram, introduced in the previous section is reproduced in Figure 2.8.
There are obvious parallels between the processes that occur in the conceptualiser and the representation of thematic roles with a-structures. Similarly, the trees produced in the grammatical encoder map to the c-structures used in LFG, while the information exchanged between the lexicon and the grammatical encoder is similar to the linking of information between the f-structure and c-structure. Despite these similarities, Pienemann rarely uses much of the formal notation associated with LFG’s parallel architecture in his published work on processability theory. Instead,
he condenses c-structure architecture into phrase structure rules annotated for grammatical function. Figure 2.9 shows such a representation based on the c-structure in Figure 2.3.

![Figure 2.9](image)

**Figure 2.9** Simplified c-structure (or phrase structure) rules for English based on Pienemann (2011: 39)

In addition to these annotated phrase structure rules, the concept of *feature unification* is central to the representation of processability theory with LFG. Feature unification is the exchange of grammatical information between two or more elements of the clause. In his 2011 textbook Pienemann uses annotated c-structures to demonstrate feature unification, an annotated example of the c-structure shown above in Figure 2.3 can be seen in Figure 2.10.

![Feature unification](image)

**Figure 2.10** Feature unification in the phrasal procedure and the s-procedure, based on Pienemann (2011: 41)
The c-structure in Figure 2.10 demonstrates Pienemann’s explanation of how feature unification works. Essentially, the c-structure shows why information can only be exchanged between elements of a phrase or clause at a specific stage of processing. The point at which the information on different elements is gathered together in the c-structure is the point at which the branches for each feature meet in a node. For example, in Figure 2.10, in order for the speaker to produce the correct determiner in the object noun phrase the meal, the exchange of number and definiteness values relating to meal is required between the noun and the determiner. This information exchange can only happen at the point where the noun phrase is formed since it is at the noun phrase (NP) node that the branch carrying information about the noun comes in contact with a branch carrying information about the determiner. If information exchange occurs at the NP node, then it is possible to state that this is phrase-level information exchange. Therefore, in order to process this construction and accurately produce the noun phrase the meal a speaker would need to have developed the phrasal procedure, or level three of the processing hierarchy. It is only at stage three that a speaker has the processing capacity to store information such as number and definiteness values long enough to form a noun phrase and use this information to select the correct determiner. Similarly, the person and number information traveling up the branch from the subject noun phrase does not come into contact with a branch that carries information about the predicate verb until the IP node, meaning that the S procedure, or processing stage four, would need to have been acquired in order for subject-verb agreement to be accurately marked on the verb by the speaker.

Pienemann has not significantly expanded his early list of English interlanguage features introduced in his first book on processability theory (Pienemann 1998:171), shown previously in Table 2.1, so there are many

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11 It might be more intuitive if the arrows showed the direction of information flow with the arrow on the determiner branch reaching down from the NP to the determiner to illustrate that the head noun specifies which determiner it requires based on its number and definiteness values. However, this is not how Pienemann represents this information exchange.
elements of English L2 interlanguages that do not currently have a specified processing level assigned to them. These missing elements include features highly relevant to pidgin/creole typology such as relative clauses, attributive adjectives, and copular clauses. Additionally, there are features of pidgin/creole languages that are not present in standard English such as pre-verbal particles marking tense, mood, aspect, and negation, and the use of serial verb constructions. The presence of these features means that in order to give a full account of the processing levels required to produce an English lexified pidgin/creole such as CPE, it is first necessary to establish the processing levels at which many of its features could have become part of an interlanguage.

Pienemann does not explicitly outline the LFG work behind the stated processing levels for specific English interlanguage features, which means that there is no specified way of using LFG to establish the processing level at which a feature might first emerge. However, based on the information outlined in this chapter it seems reasonable to say that to state with any certainty the processing level required for any given feature to become part of an interlanguage, it is necessary to establish two things:

First: what information exchange is happening within the clause (or phrase)
Second: at which c-structure node feature unification is possible for that feature

This issue is explored in more detail when methodology for operationalising PILH is outlined in Chapter 4 (§4.3.2).

2.4 The interlanguage hypothesis

At the core of Ingo Plag’s interlanguage hypothesis is the concept that pidgin/creoles are conventionalised early-stage interlanguages, comparable to the early-stages of interlanguages as defined by processability theory. This hypothesis was first outlined in a series of four articles published between 2008 and 2009. These deal sequentially with how the theory can account for the morphology (Plag 2008a), syntax (Plag 2008b), phonology (Plag 2009a), and lexis (Plag 2009b) of pidgin/creole languages.
Subsequently, Plag has published several other short pieces on PILH, including an article comparing the predictions of his hypothesis to a feature pool approach to pidgin/creole genesis (Plag 2011a), a chapter on PILH for a textbook on processability theory (Plag 2011b), and a short reply to an article by Rex A. Sprouse comparing PILH to a Full Transfer/Full Access account of the development of pidgin/creole features (closely related to relexification theories of pidgin/creole genesis) (Plag 2009c).

Plag argues that the kinds of grammatical features found in early-stage interlanguages are also characteristic of many pidgin/creole grammars (Plag 2008b: 308). The parallels between early-stage interlanguages and pidgin/creole morpho-syntax highlighted by Plag include the use of distinct subject and object pronouns (Plag 2009a: 127), SVO word order (Plag 2008a: 127), a lack of person and number agreement on verbs and adjectives, and a lack of case markings on nouns (Plag 2008a: 119).

PILH accounts for the common grammatical features of pidgin/creole languages as being the result of conventionalised interlanguages. That is, interlanguages that have undergone processes at the population level that have combined them into a language common to a population of speakers (Plag 2008a: 115). Plag does not discuss the specific linguistic mechanisms that this process might involve at the population level, as his focus is on the cognitive processing ability of individual speakers (Plag 2008a: 115), but he does discuss the social factors that might lead to the formation of a pidgin/creole.

Plag argues that it is well established in second language acquisition research that attainment of a target language depends on many factors, including the speaker’s contact with other speakers of their L2, their age, their attitude towards the language and its L1 speakers, whether they are exposed to variable input, and whether they have any motivating factors for learning (financial, social etc.) (Plag 2008b: 309–310). However, in

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12 Plag’s initial series of articles cover lexis and phonology in addition to grammar, however, only grammatical features are considered here. This is in part because such a broad investigation is considered beyond the scope of this study, but also because processability theory is not a theory designed to account for lexical or phonological development.
language contact situations and highly multilingual environments, the target language may serve as a lingua franca, even where speakers have limited motivation to learn the language to an advanced level, or limited exposure to L1 speakers. In such cases these speakers’ early-stage interlanguages may start to coalesce into a unified form which itself may become the target language of new speakers joining the community, a process known as target shift (Plag 2008b: 309). If target shift happens then the language may start to stabilise, and the early interlanguage forms that were part of individual speech may become conventionalised within the language. It is this process, Plag argues, which causes the common features of pidgin/creole languages (Plag 2008a: 128). Situations in which there is more exposure to the superstrate/L2, or more motivation to learn, may result in more features from later processing stages being present in the pidgin/creole language (Plag 2008a: 115–117).

Since PILH is a theory that is based on processability theory, any attempt to operationalise the hypothesis into a methodology must necessarily draw substantially on processability theory literature. Plag’s initial series of papers provides a good theoretical overview of PILH but not a great deal of methodological information that might be useful in establishing a methodology, aside from the overview of processability theory he provides. His 2011 paper on the morpho-syntax of Surinamese creole noun phrases (Plag 2011a) uses a discursive comparative approach to explore how his hypothesis could account for the similarities and differences between the noun phrases of the Surinamese creoles, Gbe, a West African substrate of the creoles, and English, their superstrate. Although this comparison provides a starting point for a typological study, Plag’s approach in this paper does not constitute a suitable methodology for this present study for two reasons. Firstly, Plag is not aiming to collect evidence for PILH but rather to compare his model to another approach. Secondly, the data is highly oversimplified, combining Sranan and Saramaccan into one, using a single substrate language for the analysis, and focussing on English as the

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sole superstrate, ignoring the influence of Dutch and Portuguese on these creoles.¹⁴

Some of Plag’s papers focus on broad overviews of PILH while others provide a narrow comparative analysis. None of them provide a systematic methodology that might be applied more widely to a study exploring the predictions of PILH. Such a methodology must be developed in order to achieve the aims of this thesis. Since at its core PILH is based on processability theory, it is relatively straightforward to establish such a methodology. The approach adopted for this work is outlined in detail in Chapter 4 (§4.3).

As Plag himself points out, it would be misguided to assume that there is a single mechanism at play in the development of a pidgin/creole language (Plag 2011b: 110). Pidgin/creole languages are subject to the same processes as any other, and languages change. One might reasonably suggest that any feature present in the modern language that points to early speakers attaining a higher processing level might actually be the result of later development. Such later development is certainly possible in the case of CPE, a language that has definitely been spoken in some form for over 150 years, and possibly more than 350. One way to control for such developments is to use a dataset consisting of samples of CPE as it was spoken soon after target shift had occurred but before the language had a chance to develop further. As the next chapter discusses in detail, establishing when target shift occurred is not a straightforward task for a language with little historical record and no real orthographic tradition. However, there are some records of CPE as it was spoken in the late nineteenth century, and these can be assessed for evidence of stabilisation. Identifying when the target shift might have happened helps to control, in as much as it is possible, for language internal developments such as

¹⁴ To be clear, the data is taken from a paper on feature pools by Enoch Oladé Aboh and Umberto Ansaldo (Aboh & Ansaldo 2007) so these sampling choices in relation to the data are not Plag’s.
grammaticalisation and external factors such as language contact after the point of stabilisation.

Once the point of stabilisation has been addressed, then the question is how much of a role the input languages of CPE played in shaping its features. Plag states that many pidgin/creole features that are generally attributed to substrate transfer can be better accounted for as features that stem from processing constraints ‘universally characteristic of early-stages of second language acquisition’ (Plag 2008a: 117). L1 transfer is a topic that processability theory says very little about. But Pienemann does state that transfer is only possible when there is no prohibitive typological contrast between the L1 feature and the L2, and that the L1 feature must be generally processible at the processing level which the interlanguage speaker has attained (Pienemann 1998: 333). Since substrate transfer is a dominant theory in pidgin/creole linguistics, Plag’s claim is tested systematically in the later chapters of this thesis (Chapters 6–8) to establish whether the substrate features found in CPE are, as Plag claims, universally characteristic of early-stage second language acquisition, or might better be attributed to some other mechanism of pidgin/creole genesis. The methodological approach for this analysis is outlined in Chapter 4.

2.5 Summary

This chapter has discussed the theoretical background for this study, contextualising and introducing Ingo Plag’s interlanguage hypothesis, which this thesis aims to test. The chapter began with an overview of the historical background of pidgin/creole research up to the late 1980s (§2.2.1), before examining the ways in which second language acquisition research has informed theoretical approaches to pidgin/creole genesis since the early 1990s (§2.2.2). This outline was followed by a discussion of processability theory, the cognitive theory of second language acquisition that underpins PILH, first providing an overview (§2.3.1) and then outlining how processability theory work can be represented using lexical functional grammar (§2.3.2). The following section (§2.4) introduced PILH, outlining the origins of the model, exploring how it accounts for pidgin/creole
genesis, providing a critique of the approach, and briefly exploring the ways in which it can be operationalised, a topic covered in more detail in Chapter 4.

In order to carry out a systematic study based on PILH, it is necessary to have linguistic data, not just from CPE but also its substrate and superstrate languages, as well as any early adstrate influences that might have contributed to its development. There is no definitive guide to the history and linguistic influences of CPE, so one of the goals of this study is to trace the history of the language and identify these influences. As discussed above (§2.4), it is also necessary to consider what CPE data to use. Ideally, any potential for language internal change or adstrate influence beyond the point at which CPE stabilised should be eliminated. The next chapter explores the history of CPE in order to establish the extent to which eliminating such factors is possible and to identify the substrate and superstrate languages of CPE.
Chapter 3
The development of Cameroon Pidgin English: identifying historical and linguistic influences

3.1 Introduction

The origins of the Atlantic pidgin/creole languages lie in the transatlantic slave trade, which was operated by Europeans between the middle of the fifteenth century and the later decades of the nineteenth century (Burnard 2011: 80). Written accounts of the early histories of pidgin/creole languages are rare. Developing pidgin/creole languages were often thought of as ‘bad’ or ‘broken’ versions of their lexifiers and most people at this time, both in Europe and Africa, were illiterate. The early written accounts that exist of the area which became Cameroon and the people who lived there were written by Europeans and are mostly in the form of trade records and missionary reports. There are accounts of a form of restructured English being spoken in Cameroon from the 1820s, in the form of anecdotes from European travellers and explorers, but the first records of the language consisting of more than a sentence or two are from the 1880s. Because of this, any historical account of the language and its origins must be pieced together providing at best a patchy record. However, this is a necessary endeavour. To conduct an assessment of Plag’s interlanguage hypothesis (PILH) based on Cameroon Pidgin English (CPE) requires data on which to test the predictions of the approach. Creating a dataset entails identifying when CPE stabilised, and which languages are most likely to make up its substrate as well as which English varieties the early speakers were in contact with.

Since PILH is based on the concept of a conventionalised interlanguage, it is necessary to ensure that any CPE analysed in this study is from a point where the language was relatively stable, and thus conventionalised to some extent. Somewhat at odds with this requirement is the need to use the earliest possible data sources to minimise the amount of language-internal development and language contact related changes that might shape a language beyond the early-stage interlanguage structures hypothesised by
Plag’s approach. To balance these two requirements, it is first necessary to examine the available early sources to establish whether they contain evidence of a stable form or whether more modern data should be used for the study.

This chapter first provides a brief overview of the history of European contact with Cameroon, to provide context, before outlining the linguistic and historical evidence which suggests that CPE stabilised prior to 1884, when the Germans annexed Cameroon (§3.2). The following sections examine who was in the area that became Cameroon during this precolonial era, what kinds of relationships and interactions they had with one another and what languages they spoke. These first of these sections examines trade practices, the people involved in trading, and the languages they spoke (§3.3); the next discusses other English speakers active in the area at the time and their potential influence on the emerging pidgin/creole (§3.4); this is followed by an exploration of other possible candidates for substrate influence (§3.5); and a discussion of potential adstrate influences for CPE (§3.6). The final section summarises the findings of this chapter (§3.7).

3.2 Establishing a time frame for the development of Cameroon Pidgin English

The types of contact, relationships, and interactions the people of Cameroon had with Europeans were very different in the pre-colonial era from those that they had in the colonial period, which began with the annexation of Cameroon by Germany in 1884.15 Because of this, the first step towards identifying candidate substrate languages for CPE is to try to establish whether CPE developed and stabilised before or during the colonial period. Both socio-historical and linguistic factors can be useful for such analysis. The following sections provide a brief overview of the history of European

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15 It should be stated that prior to the colonial era there was no concept of ‘Cameroon’ in its modern sense of a country bordering Nigeria and Equatorial Guinea on the coast and stretching inland as far as Chad. Similarly, ‘Nigeria’ was not conceptualised in its modern sense by the people who lived there for most of its history. The names of these countries are used here in their modern sense to aid understanding when discussing geographical regions, but it is important to note that neither the African inhabitants of these places nor the Europeans who travelled to these areas would have conceptualised the geography or the local peoples’ identities in this way.
contact in Cameroon (§3.2.1); and, using Bakker’s (2008) social and linguistic criteria as a framework, outline evidence to suggest that CPE had stabilised to the point where it could be called a pidgin (and possibly an extended pidgin) by the time the Germans annexed Cameroon (§3.2.2).

3.2.1 A brief history of European contact with Cameroon

European contact with Cameroon likely began with the Portuguese. Fernão do Pó sighted the island known today as Bioko (marked with an arrow in Map 3.1) off the coast of Cameroon in around 1472 (Huber 1999: 10) and with a humility typical of the early European explorers he named it Fernando Po.

Map 3.1. Bioko’s position in the Gulf of Guinea adapted from FreeworldMaps (2021a)

The Portuguese dominated trade on the West African coast for over 150 years, between 1470 and 1600 (Huber 1999: 14–15). This long period of contact has been cited as evidence that CPE is a relexified version of an early Portuguese based pidgin (Ngefac 2013: 128–131). Given the presence of Portuguese lexical items in CPE, this is a claim worth investigating. The Portuguese definitely had a linguistic influence on the west coast of Africa while they were trading there. Magnus Huber, investigating the evidence for a Portuguese lexified pidgin during this time, concludes that ‘the Portuguese-lexified variety used as a […] medium for inter-ethnic
communication […] on the Lower Guinea Coast appears to have been a trade jargon rather than an expanded pidgin’ (Huber 1999: 19).

However, the historical record suggests it is unlikely that the Portuguese spent very much time in Cameroon or ever really traded consistently there. The Portuguese found Bioko inhospitable due to the hostility of the indigenous Bubi people, the difficult terrain, and the prevalence of diseases to which they had no immunity (Sundiata 1996: 14). They struggled to access the coastal mainland, as European shipbuilding technology at the time produced ships which could not easily navigate the difficult waters around Cameroon (Sundiata 1996: 13). Because of this, the Portuguese focussed their attention in the area on the islands of São Tomé and Príncipe, further south off the coast of modern Gabon (Sundiata 1996: 13). Given that they never established a base either on Bioko or on the mainland, and that they found accessing the mainland difficult, it seems unlikely that the Portuguese had much opportunity to trade in the area that is modern Cameroon. Under these circumstances, it seems unlikely that Portuguese had a significant impact on the linguistic environment in Cameroon, whatever its influence further along the coast.

With this lack of Portuguese input in mind it seems reasonable to state that CPE is unlikely to be a relexified Portuguese pidgin. CPE does contain a few lexical items from Portuguese, such as pikin, ‘child’, from Portuguese pequenino, ‘small child’, and sabi, ‘know’/’understand’, from Portuguese saber, ‘know’. But it is very possible that these words came into CPE via contact with either Nigerian Pidgin English (NPE) or Krio. This hypothesis receives support from the fact that the first record of pikin in CPE dates from the 1960s (Huber 1999: 85).

British contact with Cameroon began when British merchants started trading in the Bight of Biafra in the mid seventeenth century (Fonlon 1969: 28). At this time, the British were one of a number of European nations trading in the area (Fonlon 1969: 28). In 1777, the Portuguese handed over the island they called Fernando Po to the Spanish, after which they had no further significant involvement with Cameroon (Sundiata 1996: 19). By the early
nineteenth century, the British had become the biggest transatlantic slave traders in the Bight of Biafra (Eltis & Richardson 1997: 19–21). After they declared slave trading illegal in 1807, they continued to dominate in the area, switching to palm oil and ivory (Eltis & Richardson 1997: 20). The British Navy set up a base on Bioko in 1827 in order to intercept slaving ships still operating out of Nigerian and Cameroonian ports (Fonlon 1969: 28). During this era, a form of restructured English was used to facilitate the trade deals struck between the African and European traders in the area (Todd 1982: 7; Holm 1989: 430). The first English speaking missionaries arrived in Cameroon in 1841 and Baptist missionaries remained in the area until the mid-1880s (Vassady 1979: 29).

During the late nineteenth century, the coastal chiefs of Cameroon were persuaded to sign a series of agreements with the British Consul, towards Cameroon becoming a British Protectorate (Todd 1982: 6). The British parliament took some time to reach an agreement on this course of action, and in the meantime, German representatives in the area convinced the local chiefs to sign over control to them instead, creating in 1884 the German colony of Kamerun (Holm 1989: 430). The Germans ran the country as a colony until World War I. During their colonisation of Cameroon, the German policy of moving people from the Grassfields in the interior to work camps on the coast created the need for a lingua franca among the workers (Holm 1989: 431). Although the Germans did not encourage the use of CPE for this purpose, it spread quickly, and the language was transported inland by workers returning home from camps on the coast (Holm 1989: 431).

In 1919, Cameroon was divided into two parts, mandated to Britain and France at the treaty of Versailles (Holm 1989: 431; Schröder 2003: 18). A

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16 ‘Convinced’ is perhaps euphemistic. European colonisation in Africa was physically and culturally violent (Khapoya 1998: 114–115).
17 Very few of the people trafficked from the interior to the coast were able to return. The inhabitants of the Grassfields had no natural defences against the diseases endemic to the coastal areas, such as malaria. This lack of immunity combined with often horrendous working conditions in the labour camps meant that huge numbers of people died. Only an estimated 10% ever made it home. This practice did not end with the Germans but continued for some time under British and French colonial rule (Webster et al. 1980; Argenti 2007).
strip of land down the western edge of the country, bordering Nigeria, became British Cameroons, while the rest became French Cameroun. Both the French and British colonial governments continued the German policy of moving inland people to work on the coast, and so CPE remained a useful lingua franca in much of the country (Webster et al. 1980: 234).

In 1960 French Cameroun declared independence (Todd 1982: 6–7). The following year, British Cameroons was split in two by a public vote, with the northern part of the territory becoming part of Nigeria, while the southern part joined the Republic of Cameroon (Todd 1982:6–7).

A timeline providing an overview of the history of contact between Europeans and Cameroon can be seen in Figure 3.1.
Since 1961, Cameroon has been, at least nominally, a parliamentary republic, with language policies aimed at promoting bilingualism in the two official languages, French and English (Atanga 2012: 141). In reality, many people do not speak both, and there are more than 280 other languages currently spoken in Cameroon (Eberhard et al. 2021). This linguistic environment makes the need for a lingua franca as pressing as it ever has been in Cameroon, and CPE is the largest, spoken by roughly half the population (Tanda 2015: 19; Eberhard et al. 2021). Although it is still rarely written formally, CPE is increasingly used on social media (Tanda 2015: 19; Eberhard et al. 2021).
and in some online news sources, notably Domot, the BBC world service website in West African Pidgin (BBC 2021).

There is almost no evidence of German influence on CPE (Ayafor & Green 2017: 18–19). This lack of influence may be because Cameroon only remained a colony of Germany for 32 years. But it also suggests that there may have been a reasonably stable variety in place by the time they arrived. The following section examines the social and linguistic evidence that also suggests this is the case.

### 3.2.2 The historical and linguistic evidence for stabilisation

There is general agreement in the existing literature on CPE that an English lexified method of communication was being used on the coast of Cameroon by the early nineteenth century (Todd 1982: 7–8; Holm 1989: 430; Huber 1999: 44). Todd calls this language ‘a reasonably well-formed pidgin’, while Huber suggests that it was a jargon (Huber 1999: 94). There are no records of CPE prior to the 1830s. There are some historical sources from the mid-nineteenth century on, almost all of them accounts of CPE from Germans involved in the colonisation of Cameroon after 1884. Given the lack of earlier accounts, and the suggestions that what was spoken during the nineteenth century may have been a simple trade jargon, it is necessary to establish whether there is any evidence of a stable language in these accounts. In order to determine this, Peter Bakker’s approach for differentiating pidgins, creoles, and jargons (Bakker 2008) is employed, since it is systematic, empirical, and well regarded (Jacobs 2012; Good 2013; Hall et al. 2014; Velupillai 2015; Kouwenberg 2017).

Bakker defines contact languages as those that ‘display considerable reduction attributable to contact’ (Bakker 2008: 130–131). Based on social and linguistic criteria, he identifies four categories of contact languages: jargons, pidgins, creoles, and pidgincreoles (equivalent to extended/expanded pidgins) (Bakker 2008: 131). The social criteria for identifying each of these varieties can be summarised as follows:

- Jargons are used when there is a specific need for communication but no shared language (Bakker 2008: 131). Because they are
unsystematic strategies they cannot be learned and vary from
speaker to speaker (Bakker 2008: 135–136).

➢ Pidgins are defined as ‘normative systems of communication that
have to be acquired, but which are not yet mother tongues’ (Bakker
2008: 131). They are often used in a single domain, such as trade.
(Bakker 2008: 136).

➢ Creoles are the main language of a speech community and the
speakers’ mother tongue (Bakker 2008: 131).

➢ Pidgincreoles have the social characteristics of pidgins, but their use
has extended, either to become the main language of the speech
community or because they have some mother tongue speakers
(Bakker 2008: 137).

While the historical record is far from complete, it is reasonably certain that
CPE did not fulfil the social criteria of a creole in the late nineteenth
century. There are no records of CPE being spoken as a first language at this
time. Additionally, present-day CPE would be defined by Bakker’s criteria
as a pidgincreole (Ayafor & Green 2017: 29) making it unlikely that the
language could have been a creole 150 years ago. Beyond these facts, there
is not enough information to state with any certainty which of the social
criteria outlined by Bakker is most similar to the social situation on the coast
of Cameroon during the late nineteenth century. So, it cannot be established
whether the language was a jargon, pidgin, or pidgincreole based on the
social criteria proposed by Bakker.

Turning to the linguistic criteria, Bakker defines the differences between the
four language types as follows:

➢ Jargons are unsystematic strategies that differ between individuals
and may include gestures (Bakker 2008: 135–136). They are typified
by simple structures, short phrases, a lot of variation and almost no
structural norms (Bakker 2008: 132–133).

➢ Pidgins are characterised by more structural norms than jargons.
They also have less variation, and less speaker experimentation.
Pidgins have less morphology than their lexifying languages and
markers of tense, mood, aspect, modality (TMA), and plurality are usually optional (Bakker 2008: 133–134). Pidgins may have any of the word orders found in the world’s languages and Bakker states that pidgin word order varies in the same proportions as any other language. That is, most pidgins have ‘verb medial or verb final word order’ (Bakker 2008: 141). Pidgins do not have TMA particles instead expressing tense adverbially or morphologically, aspectual marking is rare (Bakker 2008: 142).

➢ Creoles and pidgincreoles have the same structural features as one another (Bakker 2008: 140). Subject-verb-object (SVO) word order is found almost exclusively (Bakker 2008: 140). They tend to use preverbal particles to mark TMA (Bakker 2008: 140–141) and productive reduplication is an ‘almost universal’ feature (Bakker 2008: 143)

Bakker really only specifies a small number of features that reliably differentiate jargons from pidgins and pidgins from creoles and pidgincreoles, although he does state that there are a number of other features that can also be considered indicative (Bakker 2008). The differentiating features he lists are summarised in Table 3.1.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>JARGONS</th>
<th>PIDGINS</th>
<th>CREOLES AND PIDGINCREOLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural norms</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Variation</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Word order</td>
<td>variable</td>
<td>any possible</td>
<td>SVO</td>
</tr>
<tr>
<td>TMA marking</td>
<td>-</td>
<td>tense optional, aspect rare</td>
<td>+</td>
</tr>
<tr>
<td>TMA markers</td>
<td>-</td>
<td>adverbial or morphological</td>
<td>pre-verbal particles</td>
</tr>
<tr>
<td>Reduplication</td>
<td>variable</td>
<td>non-productive</td>
<td>productive</td>
</tr>
</tbody>
</table>

**Table 3.1. Differentiating structural features of jargons, pidgins, and creoles/pidgincreoles after Bakker (2008)**

The data used to assess CPE against the criteria outlined in Table 3.1 are the earliest available accounts. These mostly consist of written accounts of speech observed by Germans during the period in which Cameroon was a
German colony between 1884 and 1919 (Buchner 1885; Buchner 1887; von Uslar 1899; Hutter 1902; von Schkopp 1905; Buchner 1914). Alfred Saker, an English Baptist missionary active on the coast of Cameroon in the mid to late nineteenth century, kept a diary in which he recorded some snippets of conversation recognisable as CPE. These were included his biography published by his daughter in 1908 (Saker 1908). There are also a few quotes that can be found in records kept by Europeans travelling in the area during the nineteenth century (Owen 1833; Laird & Oldfield 1837). These sources are not unproblematic, not least for the small quantity of CPE they contain. None of the authors were aiming to document CPE in a systematic way. However, these are the available sources. For a more detailed discussion, see Chapter 4, where a description of this data is provided (§4.2) Appendix A, which provides an overview of all of the language sources used for this study, and Appendix B which provides a full transcript of each example of CPE in the historical dataset along with a translation.

Analysis of these sources reveals that CPE had definite structural norms by the late nineteenth century, particularly in terms of word ordering both at the phrase and the clause level. For the most part, TMA and negation was marked preverbally with a word or particle although there was some variation in this. There is also evidence that serial verb constructions were in use at the time.

Based on this evidence, it seems reasonable to rule out the possibility that CPE was still a jargon by the nineteenth century, particularly given that word-ordering rules seem to have been well established. Since social factors rule out the possibility of CPE being a creole, what remains is the question of whether it can be defined as a pidgin or pidgincreole according to Bakker’s criteria.

Although SVO word order is found almost universally in creoles, and by extension pidgincreoles, this factor is not especially helpful for determining what kind of language CPE might have been at this time, since SVO word order is also possible in pidgins. Therefore, any categorisation of nineteenth-century CPE needs to be based on TMA marking and
reduplication, since these are the main ways in which pidgins and pidgincreoles differ.

For the most part, CPE seems to have used TMA particles or context to mark TMA during the late nineteenth century but there are also examples of inflection in the texts. It is notable that, with the exception of a single instance of the third person singular verbal agreement marker, -s, none of the inflection in evidence is regular in either modern English or the standard variety spoken during the nineteenth century. There are eight examples of inflected forms of present tense be, and four examples of irregular past tense inflection involving get and leave. Otherwise, TMA is either unmarked but clear from the context, or achieved with a pre-verbal TMA word (1) – (7).

(1) Me go for Joe Mandenne for

1S.SUBJ go PREP Joe Mandenne INF

find a woman

find DET woman

‘I went to Joe Mandenne to find a woman’

(Buchner 1885: 676)

(2) No, you no go write them

NEG 2S.SUBJ NEG FUT write 3PL.OBJ

‘No you are not going to write to them’

(Saker 1908: 92)

18 Gloss and translation of CPE throughout this thesis is based on a combination of information from the historical dataset, information from Magnus Huber’s (1999) book on the early grammars of West Africa pidgin/creoles, and the author’s knowledge of the present-day language, all errors are my own.
(3) My father **done** leave you for

1s.poss father pf leave 2pl.obj prep

we

1pl.obj

‘My father left you to us’

(Saker 1908: 92–93)

(4) He **live.for** come

3s.subj prog come

‘He is coming’

(Buchner 1887: 215)

(5) We **will** fight for you

1pl.subj mod fight prep 2pl.obj

‘We will fight for you’

(Saker 1908: 92)

(6) You no **can** go

2s.subj neg mod go

‘You can’t go’

(Saker 1908: 92)

(7) He say Joe Mandenne **must** give

3s.subj say joe Mandenne mod give

my woman back

1s.poss woman back

‘He said ‘Joe Mandenne must give my woman back’

(Buchner 1885: 677)
The presence of preverbal TMA marking words suggests that CPE had pidgincreole features at this time, although the continued presence of unmarked verbs expressing TMA is more in line with a pidgin (Bakker 2008: 142).

There is no evidence of reduplication of any sort in the available sources. Bakker states that ‘reduplication is almost universal in creoles but virtually absent in pidgins’ (Bakker 2008: 143). But of course, the absence of reduplication in the sources is not definitive, particularly since in each case the data is interpreted through the pen of a European language speaker. Since absence of evidence cannot be considered evidence of absence, the lack of reduplication cannot be seen as definitive when categorising nineteenth-century CPE.

Bakker’s approach provides quite robust social evidence that CPE as it was spoken in the late nineteenth century was not a creole, and linguistic evidence that it was not a jargon. But, when it comes to establishing whether CPE was a pidgin or a pidgincreole at this point, the evidence is less clear cut. Although it might be nice to be able to categorise late nineteenth-century CPE conclusively, it is not actually necessary to make this distinction in order to proceed. What is clear based on the criteria set out by Bakker is that, by the time the Germans colonised Cameroon, CPE had stabilised to the point where it could reasonably be described as ‘conventionalised’ in line with PILH. That is, it was a relatively stable form spoken beyond a single domain.

Since CPE was relatively stable by the late nineteenth-century, it is likely that target shift had occurred by this point. This suggests that the search for substrate languages and superstrate varieties should be focussed on the period prior to German colonisation. The danger with this decision is that if CPE stabilised substantially earlier than this point, then languages which did not influence the emerging pidgin/creole until after it stabilised may be included. However, there are no earlier records of CPE available so there is little choice but to include the first languages of those who spoke CPE prior to the end of the nineteenth century in the list of potential substrate
languages. This is a limitation of this study but an inevitable one given the paucity of historical records.

Based on the available information, it seems reasonable to state that the substrate languages of CPE were the languages spoken by any Cameroonian people who came into regular contact with English speakers prior to 1884. It also seems reasonable to state that the superstrate of CPE likely consists of the varieties spoken by any English speakers who came into contact with these Cameroonian people regularly prior to 1884. In addition, any other pidgin/creole languages that might have had enough contact with CPE to have influenced it prior to the end of the nineteenth century should also be considered, as well as any other potential adstrate languages that can be identified.

3.3 Trade between the coastal peoples of Cameroon and the British: identifying the substrate and superstrate languages of Cameroon Pidgin English

Trade was the primary reason that Cameroonians came into contact with the English language prior to the 1880s, so to identify the substrate languages of nineteenth-century CPE and the varieties of English which might have formed the superstrate, it is necessary to know who the people involved in trading were, and what kinds of interactions and relationships they had with one another. The British started trading in Cameroon during the seventeenth century (Eltis & Richardson 1997: 21). They traded with the Cameroonian people living along the coast, first for people to traffic, and later for palm oil and ivory (Eltis & Richardson 1997: 19–20). This section provides an overview of the people who lived and traded on the coast of Cameroon during the precolonial trade era, and the languages they spoke (§3.3.1); looks at the social and geographical make-up of the crews of British transatlantic slave ships, and explores what varieties of English they might have spoken (§3.3.2); and examines the trade practices common on the coast of Cameroon during this period to establish how much contact there might have been between different groups and the languages they spoke (§3.3.3).
3.3.1 The coastal people of Cameroon

The coastal groups who traded with the British in Cameroon are most likely the originators of CPE. These people had regular sustained contact with the Europeans who arrived to trade on their coast from the mid seventeenth century onwards, and the earliest forms of CPE were spoken in coastal areas (Todd 1982: 5–6). Because of this, it is reasonably certain that these people’s first languages make up at least part of the substrate of CPE. This section outlines the main indigenous groups trading on the coast of Cameroon and the languages they spoke, before briefly discussing the possible influence of other people living in the area and their languages.

The three main groups trading on the Coast of Cameroon during the precolonial era were the Duala, the Isubu and the Malimba people, each presiding over a trading zone which stretched many miles inland (Grenfell 1882: 593). They maintained monopolies by using a credit system and acting as middlemen between the Europeans and people who lived further inland (Austen 1983: 3). They guarded these monopolies jealously as they were highly lucrative (Grenfell 1882:592).

The Duala were the most powerful group on the coast of Cameroon in the pre-colonial era, dominating much of the coastal trade with Europeans (Vassady 1979: 29). They established themselves in the Wouri river estuary during the sixteenth century (Austen 1983: 3) and quickly became the dominant group in the estuary absorbing or ousting any people that might have already lived in the area (Vassady 1979: 29).
Map 3.2 Approximate pre-colonial trading zones of the coastal groups of Cameroon (maximum possible extent based on historical accounts). KEY: Isubu in red, Duala in green, Malimba in blue. Adapted from FreeworldMaps (2021b)

Map 3.2 shows in green the approximate extent of the Duala trading zone in what is the Littoral region of modern Cameroon. The Duala started trading in enslaved people from the late eighteenth century (Sundiata 1996: 18) and were extremely successful in their role as middlemen between the Europeans and groups inland (Austen 1983: 3). By the nineteenth century, their trading zone stretched up to 150 km inland and comprised mostly people who spoke languages closely related to their own such as Bankon, and Bafaw-Balong, and languages considered to be dialects of Duala such as Pongo (Austen 1983: 8). Duala power was not centralised and by the nineteenth century, Duala society consisted of several towns, or wards, each
with its own leader, rule of law, and trade partnerships (Vassady 1979: 29). The most significant of these during the nineteenth century were Bell town and Akwa town, situated along the bank at the mouth of the Cameroons river (Grenfell 1882; Vassady 1979: 29). The Duala are the group that the British came into contact with the most on the coast of Cameroon, and Duala has to be considered to be considered the strongest candidate among the possible substrate languages of CPE.

The Isubu of Bimbia were the second most commercially important group on the coast, occupying the land between the Duala’s territory and the Cross River region, which marks the modern border with Nigeria (Vassady 1979: 29). Map 3.2, above, shows in red the approximate extent of the area of the coast known as Bimbia. Similar to the Duala, the Isubu were middlemen with a monopoly on trade in their area of the coast and the hinterland beyond it, which they guarded jealously (Grenfell 1882:592). Less has been written about the extent of their trading zone inland but given that the Duala were the most successful trading group in the area it is reasonable to assume that it did not surpass the Duala’s in reach. The Isubu were also in regular contact with the British, and as a result, their language, Isu, can also be considered a likely substrate of CPE.

The third important coastal group in what became modern Cameroon were the Malimba people, occupying lands to the south of the Duala, towards modern Equatorial Guinea (Grenfell 1882:593). Less has been written about this group than the other two and it seems that, while they did trade with the British, they were not in such regular contact with the British as the Duala and Isubu, perhaps because their lands were further from Bioko. Map 3.2, above, shows in blue the approximate extent of the Malimba trading zone. As with the other two groups the Malimba operated as middlemen and held a monopoly over trade in the areas they controlled (Grenfell 1882: 593). The Malimba spoke Malimba, a language closely related to Duala (Austen 1983: 11).

There were some other groups in the area around the coast who might have come into contact with the British, such as the Bakweri, who lived on the
east of Mount Cameroon (Ngoh 1996: 28). These groups seem to have been to some extent subsumed by the Duala, as they were considered by them to be subservient, and they were often referred to by the Duala people as slaves (Austen 1983: 3–5). Some even assimilated with the Duala during the eighteenth and nineteenth century, adopting their culture and their language (Austen 1983: 8). Members of these groups may have come in contact with the British to some extent but did not trade directly. They also all spoke languages closely related to Duala (Austen 1983: 8).

The British also came into regular contact with the Bubi people of Bioko. There was a pidgin/creole spoken on the island, but it was considerably different from the one spoke on the mainland (Huber 1999: 78–86). Bioko had no involvement with the transatlantic slave trade, other than as an occasional provisioning station (Sundiata 1996: 18). There also does not seem to have been much of a relationship, if any, between the islanders and the coastal groups on the mainland. King Akwa, a Duala chief, had no compunction about leading a raiding party on Bioko in 1820 to carry off 150 people, after entering into a slaving agreement with the Spanish (Sundiata 1996: 20). This suggests that the Bubi were not people that the Duala had a friendly relationship with. This theory is consistent with the European experience of hostility from the islanders towards outsiders (Sundiata 1996: 19) and suggests that languages spoken on the island cannot be considered to be substrate languages of CPE, as the islanders kept themselves separate from the mainland and its trade.

Given that the Duala, Isu, and Malimba people dominated trade on the coast of Cameroon, it seems reasonable to state that their languages are good candidates for the substrate of CPE. There seems to have been quite limited contact between Europeans involved in trade and any other groups in the area, so Duala, Isu, and Malimba are the only languages considered in relation to these interactions. The other group involved in this trade were the captains of the British ships and their crews. The following section explores who these people were and what varieties of English they spoke.
3.3.2 The British traders

The English-speaking traders in Cameroon were a major source of exposure to English for the locals in the area. The majority of ships trading in the Bight of Biafra sailed from Liverpool (Eltis & Richardson 1997: 20; Rediker 2007: 93; McDade 2011: 1092). Liverpool ships took 61% of all enslaved people from Biafran ports prior to 1807, with Bristol ships accounting for another 20% (Lovejoy & Richardson 1999: 338). Slaving ships were not pleasant or popular places to work, and there was a high mortality rate among the crews (Christopher 2006: 27–28). Most sailors only joined slave ship crews out of immediate financial need or to escape their circumstances on land (Christopher 2006: 30). Because of this, sailors were often from the lowest rungs of society and considered to be ‘the dregs of the nation’ by their captains and the merchants who owned the ships (Christopher 2006: 28; Rediker 2007: 227). Many English sailors came from the city where their ship was registered (Christopher 2006: 24). Slave ships were so unpopular that sailors often had to be tricked into signing contracts to work onboard. Encouraged by unscrupulous pub landlords to run up large debts while drunk, they were then pressed, or ‘crimped’ into service onboard to pay off their debts (Christopher 2006: 30). Because this work was so unpopular with British sailors, merchant ships often had quite diverse multiracial crews. Records from English slaving ships list, among others, African, African American, Asian, Danish, Dutch, German, Greek, Hungarian, Irish, Italian, Portuguese, Scottish, and Swedish crew members (Christopher 2006: 51–53; Rediker 2007: 229; Delgado 2019: 63). In many cases, British crew members are likely to have been in the minority and in some cases, particularly at times of war, British merchant ships were almost exclusively manned by foreign crews (Delgado 2019: 63).

By contrast, captains and ships’ surgeons were recruited directly by the merchants who owned the ships, and these men could negotiate their terms (Christopher 2006: 33). Slave ship captains usually came from much higher socioeconomic backgrounds than the sailors they commanded (Christopher 2006: 39). Captains were often the sons or nephews of slaving merchants or other captains (Christopher 2006: 37–38). This nepotism meant there was
little room in the industry for social mobility. It was very unusual for a common sailor to be promoted above the rank of junior officer (Christopher 2006: 36–37). Captains, and sometimes ships’ surgeons, would usually get commission on their cargo. As a result, these lucrative roles were almost always the preserve of middle-class gentlemen (Rediker 2007:193).

Although there was little room for upward movement, ships’ crews were rarely static and there is evidence to suggest that regular mixing of many working-class English dialects, along with sailors with a variety of different first languages, created a distinct 'ship English’ (Delgado 2019). It is likely that some version of ship English would have been spoken by the majority of sailors arriving on British ships in Cameroon between the seventeenth and nineteenth centuries. The middle-class captains and surgeons likely spoke a version of the standard English dialect, a precursor to RP, which had developed by this time (Görlach 1994: 17). Ship English and the standard English of the time are therefore the most likely candidates for the superstrate of CPE.

3.3.3 Trade practices

The way in which trade was conducted between the people of Cameroon and the British traders reveals the level of contact and types of relationships these people had with each other. The British were very active on the Atlantic coast of Africa. Nearly 50% of all enslaved people transported forcibly from Africa across the Atlantic between 1660 and 1807 were shipped by British traffickers (Lovejoy & Richardson 1999: 334). The British tended to trade in areas where the Portuguese had not previously had a significant presence, and to negotiate their relationships from scratch (Huber 1999: 29). As with most European traders, they made little effort to learn local languages (Huber 1999: 40–41). In contrast, it was noted in the late eighteenth century that West African traders were often multilingual, able to speak multiple African languages and to talk to Europeans in a variety of their languages (Lovejoy & Richardson 1999: 341). This situation was especially true in the high-volume port of Old Calabar in Nigeria but seems also to have been the case in Cameroon, where British traders aimed
to assert their dominance by using English, rather than trying to learn the local language (Austen 1983: 7).

Slave trading was declared illegal by the British in 1807 (Fonlon 1969: 28), after which British traders switched to purchasing palm oil and ivory (Austen 1983: 3). For a while, traders from other nations, particularly the Spanish, continued to trade in people in the area (Eltis & Richardson 1997: 20). Despite this, the British remained the most dominant European nation trading in Cameroon (Fonlon 1969: 28). After the British abolished slave trading in 1807, Bonny, Old Calabar and Cameroons became the main trading rivers for palm oil and ivory because they were big enough to accommodate the large ships required to make these cargos profitable (Owen 1833: 357–358). The British paid for the people and goods supplied by the Cameroonian with a variety of utensils, weapons, semi-precious metals, and other European goods (Austen 1983: 3).

In his account of the development of Ghanaian Pidgin English, Huber examines the relationships between the British traders and the Gold Coast natives. He concludes that the English lexified language spoken there was only ever used for limited inter-ethnic communication, and thus remained a jargon into the twentieth century (Huber 1999: 57). The linguistic evidence suggests that Huber’s conclusions do not necessarily apply to the language situation in Cameroon (§3.2.2.). The relationship between traders on the Bight of Biafra appears to have been quite different from the one Huber describes on the Gold Coast. Trade on the Gold Coast was conducted from forts and castles, whereas there were no permanent settlements built by European merchants on the Bight of Biafra. All trade was conducted from the European ships (Austen 1983: 6).

Perhaps because of this, British slave traders courted good relationships with the coastal merchants (Lovejoy & Richardson 1999: 339). The trade

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19 It should be noted that slave trading was declared illegal, not slavery. That took several more years to be passed into law and involved large compensatory payments for merchants who had already built huge fortunes people trafficking. Nor were British anti-slavery efforts in the seas around the Gulf of Guinea especially altruistic. No efforts were made to return recaptured enslaved people to their homes or families. Instead, they were processed and shipped to ‘freedom’ in Sierra Leone, where they became indentured servants who had to work for some years to secure actual liberty, far from their homelands.
relationships in this area were often precarious and relied to a great extent on the good will of the local chiefs. Owen (1833) describes how merchants treated King Peppel, who was the King of Bonny, present day Nigeria, where trade was conducted in a similar fashion to Cameroon:

‘Although Peppel dresses shabbily he has a great idea of his rank and power, and is exceedingly presumptuous in asserting it; but were he not naturally vain, the deference and respect with which he is treated by the traders would be more than sufficient to render him so. They administer to his whims and caprice, as if the advantages derived from their traffic were not mutual; and when his anger is raised, instead of opposing his menaces they try to win him back to good humour by the most servile flattery and gifts.’

(Owen 1833: 31)

As this quote illustrates, European traders in the Bight of Biafra were not able to fully assert their dominance over their African trade partners at this time, aiming instead to build relationships with the local chiefs.

The ships’ captains were in charge of trade negotiations, as representatives of the British merchants they worked for (Rediker 2007: 57). Having had previous experience of trading in an area was a big advantage, particularly in the case of the ‘boat trade’ that was practised in the Bight of Biafra (Rediker 2007: 206). Captains were often unwilling to change the port(s) they visited regularly (Eltis 2001: 32). From around 1750 there were usually no more than about 15 individual British firms trading in the Bight of Biafra, so these firms were familiar to the locals (Lovejoy & Richardson 1999: 339). The relatively low number of traders on each side led to personal relationships between members of the two groups ‘based on business, education, and friendship’ (Lovejoy & Richardson 1999: 336). The British captains in the Bight of Biafra socialised with the local chiefs. They regularly attended dinner parties thrown by local merchants at their homes and threw reciprocal parties on their ships (Lovejoy & Richardson 1999: 343).
When trading, the price of enslaved people or other goods was agreed prior to their being acquired by the coastal middlemen, and the British would then wait for the people or goods to be sourced inland and brought to the coast (Fenton 2012: 29). European ships could sometimes wait for up to a year while the middlemen fulfilled their order (Fenton 2012: 29). Although both sides worked hard to cultivate personal relationships, these were not felt by the British to be sufficient to safeguard the credit they extended to Cameroonian traders (Lovejoy & Richardson 1999: 336). Instead, trade in Cameroon was based on a system known as ‘trust’, which involved a credit agreement, often shored up with temporary hostages known as pawns. These people were held by the British in lieu of the goods they were waiting for (Austen 1983: 3). Trust was extended to the middlemen by the British, and by the middlemen to the people inland with whom they traded (Austen 1983: 3).

Women were also used to shore up business deals. The Duala used a system of hypergamous marriage exchange to bolster trade deals with inland groups. This system, in which a woman from a lower status group is married to a man from a higher status group in order to facilitate trade, was extended by the Duala to the British captains (Austen 1983: 5). These ‘marriages’ were likely to have been seen as temporary arrangements not far off prostitution by the European men involved (Austen 1983: 5). The women remained part of their own society and any children born as a result of these interactions would likewise be part of their mother’s family (Huber 1999: 56).

Relationships with the local people do not seem to have been the sole preserve of the captains (Christopher 2006: 136–137). When in Africa, sailors treated the coastal towns as they did any other port, as places to drink, meet women, and buy food (Christopher 2006: 127). It seems likely that an ability to communicate in English would have created financial opportunities for a wide range of people in these coastal communities while the sailors waited for cargo.
It seems clear that in the Bight of Biafra, the relationship between the traders and the locals was far closer than it was on the Gold Coast (Huber 1999: 57). Closer contact between the local people and the sailors on a given ship was necessitated by the different environment in which trade was conducted. This closer contact is evidenced by how widely English was understood and spoken by the Duala and Isubu people by the nineteenth century. When Grenfell, a missionary, arrived in Cameroon in the 1870s, he reported that so many of the locals had a ‘considerable knowledge of English’ that he was able to start work evangelising immediately without having to first learn the local vernaculars (Baptist Missionary Society 1875: 18). Grenfell’s report also serves to highlight that there were a number of other English-speaking groups operating along the coast of Cameroon during the nineteenth century.

3.4 Exploring other possible superstrate influences

In addition to traders, there were two other influential groups of English speakers active in the coastal areas of Cameroon prior to 1884: the British consul to West Africa, based for a time at Bioko; and the Christian missionaries who worked on the coast. These groups interacted with the locals in ways that were different from the traders. In the process they opened up more domains in which English might have been spoken and provided more ways for the locals to come into contact with and learn English. This section discusses the ways in which the British consul interacted with the locals (§3.4.1), and then looks at English speaking missionary activity on the Cameroon coast (§3.4.2).

3.4.1 British political activity in Cameroon

British political activity in Cameroon originated with the anti-slave trading activities of the navy based on the island of Bioko (Sundiata 1996: 22). The British used Bioko as a base from 1827, when they established the settlement of ‘Clarence’, modern day Malabo, which was used as a base by the British Navy for their anti-slave trading efforts in the Bight of Biafra (Fonlon 1969: 28; Sundiata 1996: 22). The location was a convenient point geographically, giving ships access to the Gulf of Guinea, but it was also
chosen due to the belief that it was a healthier spot for Europeans than the mainland (Sundiata 1996: 24). The British maintained a political presence in the area after the Spanish reclaimed the island in the 1850s, with the first consul to West Africa being appointed in the 1840s (Austen 1983: 6). The consul’s power was backed up by the anti-slavery squadron of the British Navy and those holding this post often had considerable influence in the area (Austen 1983: 7).

It has been claimed that European motivation on the Guinea coast became political only in the later stages of the nineteenth centuries (Huber 1999: 33). While this claim might be true of the British Government, British palm oil traders regularly involved themselves in local disputes and conflicts up until the 1840s, when this role was taken over by the British Consul in the area (Austen 1983: 6). There were a number of agreements signed between the Cameroonian chiefs and representatives of the British Government during the nineteenth century, including with the Duala in 1841, and the Isuubi in 1848 (Ngoh 1996: 48). The power of the British consul in the area was such that by the 1880s he decided disputed lines of succession in Cameroon (Fonlon 1969: 30). During the late nineteenth century, coastal chiefs wrote to both the British government and Queen Victoria requesting that Britain annex Cameroon (Todd 1982: 6; Ngoh 1996: 51–52). While ultimately that did not happen, the settlement of Victoria (modern day Limbe), first set up by Baptist missionaries in the area, was considered a British colony until 1887 (Ekali 2005: 324).

There was regular contact between the British consul to West Africa and Cameroonian chiefs during the nineteenth century. The consul had considerable power in the area; by the second half of the nineteenth century consuls adjudicated disputes, settled succession issues, and negotiated political relationships (Fonlon 1969: 30), much of which is likely to have been carried out in English (Huber 1999: 40–41). While some of this communication would primarily have been carried out with the local chiefs, adjudication in legal matters would have involved a wider range of people, suggesting that English may have been used quite widely for legal matters by the latter half of the nineteenth century.
3.4.2 Missionary activity in Cameroon

There was fairly continuous missionary activity on the coast of Cameroon after 1843 (Vassady 1979: 29). Although there were only a small number of missionaries active in Cameroon at any given time during the pre-colonial era, they are likely to have been influential in the development of CPE because they had particularly close contact with the people of Cameroon. Unlike the traders and consuls, they lived on the mainland and interacted with Cameroonians on a daily basis. As Huber points out, we need to consider missionaries in relation to the development of West African pidgin/creole languages because ‘missionary activity, however unsuccessful, implies a closer and more prolonged contact than mere trading’ (Huber 1999: 12). This was certainly the case in Cameroon where missionaries set up schools and churches in several coastal locations, travelled further inland than other Europeans, and founded the town of Victoria (Limbe) (Ekali 2005: 322).

The first missionaries to arrive in Cameroon were English and Jamaican Baptists working for the English Baptist Society. The Baptist missionaries started to arrive in 1841 setting up first on Bioko (Austen 1983: 7–8). Jamaican missionaries were brought to Cameroon primarily because it was believed that their skin colour offered them protection against the illnesses that Europeans were so prone to catching in West Africa (Vassady 1979: 22–23). It quickly became evident that this was not the case and many of the Jamaicans returned home due to illness, poor planning, group infighting, and the racial prejudices of the white missionaries (Vassady 1979: 22–23). The Baptist missionaries made first contact with the Duala in 1842. They were less successful with their early attempts to engage William of Bimbia, the leader of the Isubu, who was still actively trading in enslaved people with the Spanish at that time (Ngoh 1996: 48–49). Joseph Merrick, a Jamaican who chose to remain in Africa, was the first missionary to move to the mainland from Bioko in 1845 (Vassady 1979: 23). Between 1845 and 1846 the Spanish, who claimed ownership of Bioko, started to police the teaching and practice of religions other than Roman Catholicism on the
island, and the remaining Baptist missionaries, led by the English Alfred Saker, moved to the mainland (Vassady 1979: 28; Ngoh 1996: 49).

The Baptists aimed to teach literacy and Christianity but had limited success (Austen 1983: 7–8). They operated primarily in the areas run by the Duala and the Isubu but found the coast of Cameroon a challenging environment to work in due to the prevalence of diseases they had no immunity to and sporadic warring over trade between chiefs (Vassady 1979: 29). In their annual reports, the missionaries mention having to temporarily, or sometimes permanently, abandon locations due to warring between groups or sudden hostility towards them from the local chiefs. However, they had some successes: by 1846 Merrick was preaching in both the Isubu and Duala languages (Baptist Missionary Society 1846: 35), and in 1858 they built a permanent settlement in Victoria (now Limbe) as a base for English speaking missionaries (Todd 1982: 5). By the early 1880s they had managed to penetrate some way into the interior with a mission station on the far side of Mount Cameroon (Baptist Missionary Society 1875: 18; Baptist Missionary Society 1881: 29). In addition to teaching and evangelising, the Baptists also played a role in local politics, often being asked to intercede in disagreements (Baptist Missionary Society 1867:19). From their accounts it seems that over the forty years they were operating in Cameroon they became, at least to some extent, a normal part of the lives of the Duala and Isubu people. As a result, these groups had a lot of exposure to and knowledge of English (Baptist Missionary Society 1875: 18). The extent to which the Baptists had contact with other groups in the areas controlled by the Duala and Isubu is less clear, but it seems likely that they would have had contact with other groups at least some of the time, as their aim was to convert as many people as possible to Christianity.

There are no nineteenth-century sources that provide a comprehensive guide to the languages spoken on the coast at that time. Modern sources show a variety of Bantu languages spoken in the area once controlled by the Isubu. These are all from the Bantu A-B10–B20–B30 group, predominantly Sawabantu languages closely related to Isu and Duala (Hammarström et al. 2021; Eberhard et al. 2021). In contrast, the area in which the Duala were in
charge is almost exclusively Duala speaking (Eberhard et al. 2021). Given the possibility for frequent interactions between these groups in the Isubu controlled area and the Baptist missionaries, these Bantu languages should also be considered potential substrate languages of CPE.

The other main group of missionaries active in Cameroon prior to the colonial period were the American Presbyterian Mission (Todd 1982: 9). It is unlikely that they had a great deal of influence on the development of CPE, as they arrived not long before the colonisation of Cameroon by the Germans. They were active only in the southern-most portion of the Cameroonian coast, around Batanga, from 1879, where they opened a school (Vernon-Jackson 1968:73–74). Like the Baptists, they aimed to evangelise through education (Todd 1982: 9). But the Presbyterians were wary of the popularity of English as a mode of instruction among local parents, who saw it as a way to get their children work with European traders (Vernon-Jackson 1968: 78). Their main aim was to teach in the local languages where at all possible (Vernon-Jackson 1968: 81).

The late arrival of the Presbyterians relative to the Baptists is due to the earlier focus of their missionary activity in Gabon (Vernon-Jackson 1968: 72). They handed these missions over to French speaking missionaries in 1884, and only then turned their attention fully to their mission in Cameroon (Vernon-Jackson 1968: 80). Because of this, their first contact with the villages surrounding Batanga was not until the late 1880s, meaning that their influence was very late and very localised (Vernon-Jackson 1968: 111). Given this lack of influence it seems unlikely that American English would be part of the superstrate of CPE. The lack of sustained missionary activity in the area controlled by the Malimba people prior to the late 1880s means that the other languages spoken in the area are less likely to have contributed to the substrate, since the Malimba people had a monopoly on trade in that area.

The other missionaries that need to be considered in relation to the development of CPE are the Krio speaking missionaries from Sierra Leone that were active in Cameroon during the second half of the nineteenth
century. It has been suggested that the Krio was a major influence in forming and stabilising modern CPE (Todd 1982; Holm 1989). Krio speaking missionaries from Sierra Leone first started arriving in Cameroon in the mid nineteenth century as part of the Baptist missionary project (Todd 1982: 7–8). Additionally, recaptured enslaved people who had been taken to Sierra Leone by the British began to move down the coast of West Africa from the 1840s, making their way home (Huber 1999: 128). By the 1880s, Christian Krio speakers from Sierra Leone had settled in Cameroon as missionaries and business owners (Webster & Boahen 1967: 138).

There is no doubt that CPE has been influenced by Krio at some point in the last two centuries. The languages share many features which have been shown to have originated from Krio (Huber 1999: 78–86). However, there is good evidence to suggest that the influence of Krio may have occurred later than some accounts have suggested.

Huber’s work on West African pidgin/creole languages casts doubt on the role of Krio in the early development of CPE. His research shows that most Krio features were first attested in CPE in the early twentieth century, after the Germans had left and the country had been divided between France and Britain (Huber 1999: 78–86). Huber hypothesises that political changes after WWI allowed Krio features to spread to CPE from NPE. These features had entered NPE from the 1890s when large numbers of Krio speaking recaptives from Sierra Leone began to migrate to Nigeria. When the British took over the Western edge of Cameroon, these features may have spread to CPE through contact and movement of people in the jointly administered area (Huber 1999: 128).

Huber also makes the point that there were very few Krio missionaries active in Cameroon at any given time prior to 1860 (Huber 1999: 121). Additionally, these missionaries were socially separate from the locals and taught in standard English or local languages (Huber 1999: 123–124), meaning that they were unlikely to be regularly speaking Krio with the Cameroonians they came in contact with. As late as the 1880s, Krio speaking business owners operating in Cameroon were calling for more
missionaries to be sent there, as they did not feel the country was sufficiently Christian, highlighting both the small number of Krio speakers in the area and their ongoing social separation from the locals (Webster & Boahen 1967: 138).

Huber’s account is convincing. From a historical perspective it makes sense that large numbers of migrants working alongside Cameroonian people and communicating in pidgin, would have a bigger impact than a small number of socially distant Krio missionaries and business owners. This account also explains the available linguistic data which shows virtually no Krio influence in CPE by 1884. Given the evidence that suggests Krio influence on CPE occurred later, any analysis of the CPE spoken in the late nineteenth century need not consider Krio and its substrate languages.

Although there were never large numbers of missionaries working in the areas controlled by the Duala and Isuku, they did work closely with the people there. In particular, they had regular contact with children who they taught in their schools. The English Baptist missionaries appear to have predominantly been members of the emerging English middle classes and, for the most part, would have spoken the emerging standard.

3.5 Exploring other possible substrate influences

Despite the monopolies of the coastal groups in Cameroon, it is not inconceivable that the British could have come into regular contact with the inhabitants of the interior during the precolonial era. Exploration, expanding missions, and the transatlantic slave trade are all possible reasons for such contact. However, the available historical evidence suggests that such contact did not happen, European contact in Cameroon was almost exclusively limited to the people living on the coast. This limitation of contact means that, prior to colonisation, the languages spoken in the interior are unlikely to have had any real influence on the development of CPE. In this section, the evidence that Europeans only ever managed to travel a few miles inland prior to 1884 is explored (§3.5.1), followed by a discussion of slavery practices which demonstrates that neither the people kept as slaves by the coastal groups, nor people who were trafficked from
the interior to the coast as part of the transatlantic slave trade, were likely to have had any real linguistic influence over the developing pidgin/creole (§3.5.2).

3.5.1 European incursions into the interior of Cameroon

If English speakers had regular contact with any of the people living inland of the coast in Cameroon, then their languages must also be considered possible substrates of CPE. There were three groups of English speakers active in Cameroon in the precolonial period: traders, the Royal Navy, and missionaries. Each group had different reasons for being in Cameroon and therefore different levels of motivation when it came to trying to travel inland.

It seems unlikely that there was regular sustained contact between British traders and people who lived inland from the coast. Prior to 1807, slave raiding, and capture happened inland at the behest of the middlemen and these people were then brought to the coast to be exchanged for money and goods with the Europeans (Falola & Heaton 2008: 54). This system was maintained when the British switched to transporting palm oil and ivory (Owen 1833: 343). Cameroonian coastal chiefs would not allow the people living inland to come to the coast to trade with European ships, nor would they permit the Europeans to travel inland (Owen 1833: 343; Grenfell 1882: 592; Austen 1983: 3; Lovejoy & Richardson 1999: 103; Falola & Heaton 2008: 54). This type of monopoly was found along the coast of West Africa, and the coastal groups’ trading zones were jealously maintained (Grenfell 1882: 593). Although this system allowed the coastal tribes to inflate prices, it also benefited the European traders to some extent as they did not have to find or maintain trade routes or relationships inland (Huber 1999: 33).

As with the traders, the navy does not seem to have made a great deal of effort to gain access to the hinterlands. According to Austin, there was a British naval expedition up the Wouri river in 1842 (Austen 1983: 11) but the navy does not otherwise seem to have spent much time trying to explore the area. Since the Wouri river would not have been navigable for a European ship more than 70 miles upriver (Grenfell 1882: 586), it seems
unlikely that their exploration took them beyond the area controlled by the
Douala people. It is perhaps unsurprising that the navy did not spend a great
deal of time exploring, given that their primary reason for being in the area
was to intercept ships attempting to transport enslaved people (Austen 1983:
7). There was also the risk of disease, and the mainland was considered
particularly unhealthy for Europeans (Sundiata 1996: 24). Additionally, the
coastal middlemen did not tend to differentiate between white men in their
efforts to maintain their monopolies (Grenfell 1882: 593), and exploration
further inland by the navy would have likely risked British trade
relationships. It therefore seems unlikely that any inland groups had
sustained contact with representatives of the British Navy.

Unlike the other groups discussed, the Baptist missionaries living on the
coast made a great deal of effort to travel inland. Initially at least, they saw
Cameroon as a potential gateway to the interior of Central Africa (Vassady
1979: 29). Over the 40 years they were active in the coastal region of
Cameroon, they faced repeated setbacks, eventually moving their focus to
the Congo in the late 1870s (Baptist Missionary Society 1879: 12–13).
There is no doubt that they got further inland than other English-speaking
groups, however their records suggest that they never managed to travel
beyond (or even to the edge of) the areas controlled by the coastal groups.

The setbacks faced by the Baptists were at least in part due to how highly
the coastal people valued their monopolies. The missionaries were often not
trusted to be in contact with the inland people. Grenfell, a Baptist
Missionary active in the area in the 1870s, had to sneak up the Mungo River
at night in order to explore inland, ultimately failing to travel even 100
miles upriver before he was brought back to the coast ‘by a party of eighty
armed men’ (Grenfell 1882: 593). In their annual reports, the Baptists in
Cameroon listed many attempts to engage with people in the interior, but
they never reported getting further than the far side of mount Cameroon,
less than 100 miles inland, and rarely managed to maintain the relationships
they set up in the interior as they were sent back to the coast by disease,
tragedy, or hostility (Baptist Missionary Society 1866: 18; Baptist
Missionary Society 1872: 18; Baptist Missionary Society 1875: 18–19;
Baptist Missionary Society 1881: 29). After 40 years of trying, it seems they gave up. By 1879 they had started scouting out the Congo as a way into the interior of the continent, and they were no longer reporting attempts to reach further inland in Cameroon (Baptist Missionary Society 1879: 12–13). In 1887, the Germans’ presence in Cameroon led to an end of Baptist activity in the country. Ultimately, the first missionaries did not reach the Grassfields until the Germans had opened up a route to the interior in 1889 (Warnier 1979: 410–412). The Presbyterians, as previously discussed (§3.4.2) were not in contact with the villages surrounding the coastal town where they set up their first Cameroonian mission station until after the Germans had taken power (Vernon-Jackson 1968: 111).

The historical evidence that none of these groups gained access to the interior is consistent with the available linguistic evidence. When the Germans started exploring inland after 1884, they did not find English or Pidgin speakers in the interior, despite the great deal of linguistic diversity in the area (Warnier 1979: 410–412). Pidgin only became a lingua franca inland due to the German policy of forced labour that moved thousands of people from the Grassfields to labour camps on the coast (Webster et al. 1980: 234). This large-scale movement of people radically altered society in the coastal area, creating the need for a shared language. The Germans initially encouraged the use of Bali, a Grassfields language spoken by the Bali people, as a lingua franca (Warnier 1979: 410). However, as the few people who survived the work camps returned home to the Grassfields, they brought CPE with them, and by 1913 it had become their lingua franca (Rudin 1938: 358). The fact that the Germans found no use of CPE inland, nor any need for it prior to their disruption of the way of life in that area, suggests that there had been no sustained contact with English speakers, or use of an English lexified language in these areas before 1884.

Although English speakers never managed to gain access to the interior in the precolonial era, the Baptist missionaries did spend some time on Mount Cameroon, in the Isubu controlled area, and it seems that the Isubu were not quite so linguistically dominant as the Duala. There is good evidence that languages spoken in the area controlled by the Duala were subsumed by the
Duala language. It is not clear that the Isu language similarly subsumed other local languages in the same way. Therefore, it seems reasonable to assume that other languages spoken on the coast of Cameroon in the area controlled by the Isubu may have comprised part of the substrate of CPE, along with Duala and possibly Malimba. There is no available linguistic survey of the coast of Cameroon circa 1884, so it is necessary to base the list of languages spoken in the Isubu controlled area on those that are currently spoken there. All of these belong to one of three branches of the Sawabantu group: Duala and Malimba to the Duala-Malimba branch; Bakole and Isu(bu) to the Kole-Isubu branch, and Wumboko, Mokpwe, and Bubia to the Kpwe branch (Hammarström et al. 2021; Eberhard et al. 2021).

As for the languages of the interior, the only other way that they could have contributed to the substrate is if the people of the interior came to the coast. This did happen as enslaved people were brought to the coast either to work or to be shipped across the Atlantic by European traffickers. The next section explores whether they could have influenced the development of CPE in this context.

### 3.5.2 Enslaved people in Cameroon

Since CPE is likely to have been developing during the period in which the British were still buying enslaved people on the coast of West Africa, it is necessary to consider whether these people could have had any impact on the developing pidgin. When considering slavery on the coast of Cameroon, a distinction must be made between enslaved people kept by the coastal tribes themselves, and the people who were moved into the area to be sold and then shipped to the Caribbean and the Americas as part of the transatlantic slave trade.

The type of slavery practised by the coastal groups was very different from the chattel slavery of the Europeans (Austen 1983: 3–5). Enslaved people kept by the coastal groups were not considered full members of these societies and were sometimes sacrificed or executed for witchcraft (Vassady 1979: 29; Ngoh 1996: 52). However, they did the same types of work as full members of society, working alongside them, and were not otherwise
treated significantly differently (Austen 1983: 3–5). Enslaved people were often absorbed into Duala and Isubu society, becoming full members, and could even prosper (Austen 1983: 16). The Duala and Isubu definition of a slave was also looser than that of the Europeans; the Duala tended to refer to the inland groups they traded with as *bakom* or ‘slaves’ although the relationship was more like a junior trading partner (Austen 1983: 3–5). Because of the potential rewards associated with becoming part of the more powerful society, enslaved people tended to learn the language of the group they worked for and thereby assimilate (Austen 1983: 8). Given these incentives to speak the local languages, it is unlikely that their first languages contributed directly in any significant way to the substrate of CPE, although they might have influenced the Duala or Isubu languages themselves. In any case, many of these people are likely to have had first languages closely related to the coastal languages, as it is not clear that any of the coastal people kept large numbers of enslaved people from outside the areas they traded with.

The treatment of the enslaved people who were shipped out of Africa as chattel slaves was very different. They were not treated as human by any of the groups involved in the transatlantic slave trade. They were commodified from the moment they fell into slave raiders’ hands, part of a calculation which weighed the cost of feeding them against the need to keep them alive and able to work (Smallwood 2007: 43). The accounts of how enslaved people were treated by both their African and European kidnappers suggest that there would have been little in the way of verbal interactions between the groups. These enslaved people were kept apart from the villages in which the traders lived, and were not given clothing or toilet facilities, often fed from troughs, and kept chained together (Migeod 1924: 182–183; Smallwood 2007: 45; Marcum & Skarbek 2014: 240–241). They were considered goods to be traded rather than people with whom interaction was necessary. Given this, it seems unlikely that much conversation took place between the captive people and their traffickers, whether African or European.
European traders also had a great fear of onboard attempts by enslaved people to overthrow their ships, as such ‘mutinies’ were dangerous and expensive (Marcum & Skarbek 2014: 254). For this reason, they often aimed to acquire groups of enslaved people with as many different first languages as possible in order to make communication between them more difficult (Marcum & Skarbek 2014: 254). Under these circumstances, it seems unlikely that British traders would have been pleased to find that the enslaved people they had purchased shared a lingua franca. This desire to prevent enslaved people from communicating with one another means that there were incentives for keeping captives ignorant of pidgin.

Finally, unlike on the Gold Coast, where enslaved people were kept in British forts waiting for ships to arrive and fill up, traders in the Bight of Biafra had to wait for their cargo to be brought from inland. This system cost them money, so they were usually keen to leave as soon as their ships were loaded (Fenton 2012: 29). Adding to the urgency, their captives were often so afraid that they would commit suicide rather than board the boats (Marcum & Skarbek 2014: 241). These circumstances mean that it is likely that there was often a fast turnover between the enslaved people’s arrival at the coast and the ship sailing, limiting the amount of time they would have spent in the vicinity of the local speakers of the developing pidgin/creole language.

Given the incentives for the enslaved people kept by the coastal groups to assimilate, and the treatment of the people trafficked out of Africa, it seems unlikely that either group contributed to the substrate of CPE. The final factor that needs to be considered in relation to the earliest influences on CPE is whether there are any other languages that might have come into contact regular contact with the first speakers.

3.6 Exploring possible adstrate influences

In addition to the coastal people of Cameroon there are two other groups of people whose languages may have had regular contact with the emerging pidgin/creole during the precolonial era: speakers of European languages other than English, and speakers of Nigerian Pidgin English (NPE). This
section examines the available historical information to determine the extent to which either of these factors might have influenced the development of CPE, first examining whether there is evidence of adstrate influence from other European languages (§3.6.1), and then exploring the relationship between CPE and NPE (§3.6.2).

3.6.1 The influence of other European traders in Cameroon

The British, while the dominant European group trading in Cameroon, were far from the only Europeans trading in the area during the precolonial era. At various points between the mid-sixteenth and late-eighteenth centuries, Danish, Dutch, French, German, Portuguese, Spanish, and Swedish ships are all attested to have been actively trading in the area (Fonlon 1969: 28; Nwokeji & Eltis 2002: 194). It is difficult to say with certainty how much influence each of these languages might have had on the emerging pidgin/creole, but the easiest place to identify such influence is in the lexicon. Aside from a few Portuguese lexical items common to many of the Atlantic pidgin/creole languages, there is very little evidence for lexical influence from any of these European languages prior to 1884 (Huber 1999: 97–105). Of course, there is limited evidence of CPE itself during the precolonial era, so this cannot be seen as definitive. Even so, the low levels of influence evidenced by the lexicon of CPE suggests that the impact that these languages might have had on the morphosyntactic development of the emerging language may have been negligible. For this reason, they are not considered further for analysis.

3.6.2 The influence of Nigerian Pidgin English

There is clear linguistic evidence that CPE and NPE have been in contact with each other for a long time. In his thorough survey of West African English lexified pidgins, Huber presents data demonstrating that CPE and NPE have been closely related since the earliest accounts (Huber 1999: 78–86). Looking at Huber’s evidence it is possible to see that these two languages developed parallel to one another, and particularly early on, had few syntactic differences (Huber 1999: 78–86). It is impossible to say with certainty whether the two varieties developed as part of a continuum of a
single language spoken between Douala and Bonny, or if it would be better to consider NPE an influential adstrate with which speakers of CPE came into regular contact. Huber’s earliest sources for NPE are from the late eighteenth century, more than a hundred years earlier than the first available sources for CPE (Huber 1999: 78–86) suggesting that perhaps NPE developed first. Certainly, the Nigerian ports had a higher volume of trade than their Cameroonian neighbours (Eltis & Richardson 1997: 21). But the fact that the English spoken by Nigerians was recorded earlier than that spoken by Cameroonian does not mean that NPE developed earlier. Since both varieties originated due to trade that commenced more than 100 years before the first records of NPE, the direction of influence is difficult to trace. It does seem likely that the volume of trade in the Nigerian ports and the subsequent wealth of their Kings would have made NPE quite dominant. But there is also evidence to suggest that some features, such as fit as a preverbal particle expressing ability, originated in Cameroon, and then spread to Nigeria (Huber 1999: 80). It is also important to keep in mind that at the time these varieties were developing, the modern countries of Nigeria and Cameroon did not exist, and the people living along this coast were not necessarily making any distinction between the types of English they were speaking, although some European observers did (Laird & Oldfield 1837: 290). In any case, from the linguistic evidence it seems clear that there was influence in both directions and that these languages have always been closely related or at the very least, in close contact. This linguistic contact means that the first speakers of NPE and the languages that they spoke must also be considered in relation to the substrate of CPE.

NPE originated within the same timeframe and trading system as CPE (Fenton 2012: 30). Trade in Nigeria was mostly concentrated in the far southeast coastal region bordering modern day Cameroon (Huber 1999: 128), Map 3.3.
The British primarily traded in two Nigerian towns: Old Calabar, and Bonny (Owen 1833: 357–358; Eltis & Richardson 1997: 21). The Efik people were the dominant trading group in Calabar (Lovejoy & Richardson 1999: 340), while Bonny was ruled by the Peppel kings throughout the pre-colonial trading era, with power centralised in the King (Dike 1956: 25). As in Cameroon, access to the interior was limited by the most powerful members of the coastal societies, who acted as a middleman and had a monopoly on trade with the Europeans (Dike 1956: 25; Fenton 2012: 30).

The type and quantity of contact that these people had with their coastal neighbours in Cameroon is not entirely clear. At least some social and geographical mobility was possible in the area during this time. In particular, women were often married into other groups in order to create kinship ties and further business arrangements (Austen 1983: 5). In Cameroon, this kind of mobility was a prominent feature of the relationship between the coastal people and those living inland from the coast. It is less clear whether people could move along the coast between Cameroon and the Nigerian ports, but it is certainly possible that they could have. The arrival of the Europeans seems to have increased the amount of movement between coastal groups within Cameroon (Ngoh 1996:6), and as already observed, the modern national borders did not exist. Since there is less than 100 miles between the Isubu lands and Old Calabar, it seems reasonable to suggest that the groups would have known of one another and could well have been in contact, potentially negotiating trading zone boundaries with one another. Additionally, it seems likely that the Nigerian and Cameroonian chiefs
would have been members of secret societies, in particular Ekpe, an organisation which was used to consolidate power and to police trade in the area.  

Ekpe was a political and cultural powerhouse along the coast of Nigeria and Cameroon (Fenton 2012: 15). The origins of the society are uncertain, but it is believed to have started in the forest regions around the border between modern day Cameroon and Nigeria at some point prior to the mid-seventeenth century (Ekpo 1978: 74; Miller & Ojong 2012: 267; Miller 2016: 155). Ekpe regulated and adjudicated trade along the Atlantic coast from at least the mid-seventeenth century (Lovejoy 2014: 67–68), acting as an enforcement group for debt recovery for both African and European traders (Lovejoy & Richardson 1999: 347; Agbor 2017: 151). Ekpe also served as government beyond the local level (Fenton 2012: 23), creating social cohesion between groups (Miller & Ojong 2012: 269) and allowing greater freedom of movement for members travelling in the areas where the society was active (Agbor 2017: 34). Ekpe was adopted particularly enthusiastically in Old Calabar (Ekpo 1978: 74), but there were related societies in Bonny, the other major port in Nigeria (Jones 2000: 19), and in Cameroon, where the Duala people used secret societies as a tool for enforcing law and order (Vassady 1979: 29).

The historical record is unclear on exactly what contact there may have been between coastal Nigerians and Cameroonian, but it suggests that such contact was possible. The linguistic evidence suggests that this contact was regular and influential on both CPE and NPE. This suggests that the languages spoken by the coastal people in the trading towns of Nigeria must also be considered in relation to the substrate of CPE. The Efik people of Calabar spoke Ibibio (Lovejoy & Richardson 2004: 104), a Delta Cross language of the Benue-Congo group (Hammarström et al. 2021). At Bonny,

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20 It should be noted that Ekpe/Mgbe still exists today, and the Ekpe Supreme Council have mandated the use of Mgbe rather than Ekpe to refer to the organisation (Agbor 2017: 33). While I wish to acknowledge this preference, I will continue to refer to the society as Ekpe here for the sake of clarity, as in some literature there appears to be a distinction between the two, with Ekpe often used more generally. For the purposes of this work, Ekpe refers to any branch of the secret society known as either Ekpe or Mgbe, that has been used in the Cross River region or along the coast of Nigeria and Cameroon in the last four centuries.
trade was dominated by King Peppel’s people, the Ibani, who spoke Ijaw, but Igbo was also an important language (Lovejoy & Richardson 2004: 383). Ijaw is part of the Ijoid group of languages which does not have clear links to other language families (Hammarström et al. 2021). Igbo is part of the Igboid branch of the Benue-Congo language group (Hammarström et al. 2021). None of the three dominant languages spoken in the Nigerian ports were especially closely related to each other or to the languages spoken on the coast of Cameroon, as shown by Figure 3.2, which shows a simplified language family tree for the potential substrate languages of CPE identified in this chapter.

Figure 3.2 CPE substrate language family tree adapted from Hammarström et al. (2021). KEY: Languages spoken in Bonny and Calabar in purple; Duala area languages in green; Malimba area languages in red; Isubu area languages in blue

The tree shown in Figure 3.2 may provide some insight into why NPE and CPE were able to exert such an influence on each other. Multilingualism was common in West Africa and most groups would learn the languages of their nearest neighbours to facilitate trade (Grenfell 1882: 588) but they would not necessarily have been familiar with those spoken by people further along the coast. It seems possible that if these groups, used to
conducting trade in pidgin, were in regular contact, they might have seen their similar trade languages as useful lingua francas. Certainly, pidgin was used as such by the Efik (Lovejoy & Richardson 2004: 104).

The difficulty with distinguishing the exact role of NPE in the development of CPE remains. However, ultimately, whether NPE is considered an adstrate or part of a West African pidgin/creole continuum, it can be stated that NPE and CPE have had a considerable amount of influence on one another for hundreds of years. Given this, it is assumed for the remainder of this thesis that the substrates languages of NPE are to some extent also the substrate languages of CPE (and vice versa, although this is less relevant to the research conducted here). For this reason, the Cameroonian and Nigerian languages analysed for this study are given equal consideration. Therefore, the languages spoken in the main Nigerian ports of Old Calabar, and Bonny (Ibibio, Ijaw, and Igbo) are considered to be additional substrate languages of CPE.

3.7 Summary

This chapter has presented linguistic and historical evidence in order to establish the best candidate substrate languages and superstrate varieties for CPE. The first section presented analysis that suggests CPE had developed into a stable pidgin and might have been undergoing further development towards becoming an extended pidgin by the point at which Germany colonised Cameroon in 1884 (§3.2). This was followed by an exploration of coastal trade practices in Cameroon during the late nineteenth-century to establish the most likely substrate languages and superstrate varieties of CPE (§3.3). The next section discussed other English speakers active in the area (§3.4), and other African languages that might have influenced the emerging pidgin/creole (§3.5). Finally, the influence of potential adstrate languages was explored, concluding that Nigerian Pidgin English is the only language that can be identified as a potentially strong candidate for adstrate influence and that the history of contact between CPE and NPE means that it is not possible to make a clear delineation between the two languages (§3.6).
The history of Cameroonian contact with Europeans provides many clues as to who the earliest speakers of CPE might have been and therefore what the best candidate substrate languages might be, pointing to the coastal languages of Cameroon and suggesting that the languages spoken further inland are much less likely to have had any significant influence. The use of ‘boat trade’ in Cameroon combined with the use of regular routes by a small group of captains means that English speakers had prolonged contact with Cameroon. Additionally, the presence of a small group of Baptist missionaries in the area throughout the mid to late nineteenth century added to the early speakers’ contact with the emerging middle-class standard. The historical evidence points to this standard English, along with ship English, as being the two varieties most likely to comprise the superstrate. The history of contact between CPE and NPE also suggests that this second West African variety and by extension its substrates may had significant influence over the forms found in CPE. A summary of the languages that may have contributed to the substrate of CPE is given in Table 3.2

<table>
<thead>
<tr>
<th>POSSIBLE SUBSTRATE LANGUAGE</th>
<th>AREA SPOKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duala</td>
<td>Duala controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Isu</td>
<td>Isubu controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Bakole</td>
<td>Isubu controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Bubia</td>
<td>Isubu controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Mokpwe (Bakweri)</td>
<td>Isubu controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Wumboko</td>
<td>Isubu controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Malimba</td>
<td>Malimba controlled area, present-day Cameroon</td>
</tr>
<tr>
<td>Ibibio</td>
<td>Calabar, present-day Nigeria</td>
</tr>
<tr>
<td>Igbo</td>
<td>Bonny, present-day Nigeria</td>
</tr>
<tr>
<td>Ijo (Ijaw)</td>
<td>Bonny, present-day Nigeria</td>
</tr>
</tbody>
</table>

Table 3.2. A summary of the potential substrate languages identified for CPE

The issues with operationalising these languages for analysis is discussed further in Chapter 4 in relation to the methodology designed for this study (§4.2).
Chapter 4
Methodology

4.1 Introduction

This chapter outlines the methodological approach applied in this study, setting out the steps taken to operationalise Plag’s interlanguage hypothesis (PILH). The research questions that underpin this study, first outlined in the introduction to this thesis (§1.5), are reproduced here. There are three questions each with two related parts:

1. a. Does the list of English interlanguage features proposed by processability theory encompass all of the identified features of Cameroon Pidgin English?
   b. Can a processability theory-based analysis of the features of Cameroon Pidgin English that aren’t on the list of English interlanguage features provide support for PILH?

2. a. Is there clear evidence that any of the features of Cameroon Pidgin English became part of the language through transfer, restructuring, or speaker innovation?
   b. Does the analysis carried out to address question (2.a) provide any evidence in support of PILH or does it better support an alternative model of pidgin/creole genesis?

3. a. Are there any observations that can be made about the types of features that were conventionalised/adopted to create Cameroon Pidgin English?
   b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?

To answer any of these research questions, it is necessary to collect data on Cameroon Pidgin English (CPE), and its substrate and superstrate languages. Perhaps unsurprisingly when conducting research into historical
varieties of African languages, one of the main issues is finding sources. The next section discusses these challenges and describes the sources identified for this study (§4.2). The following section outlines the approach used to address each of the research questions in turn (§4.3). The final section summarises (§4.4).

4.2 Data sources

Addressing the research questions outlined in the previous section (§4.1) requires data collection to be carried out on several languages. To address any of the research questions requires a typological profile of the grammar of early CPE. To address research questions two and three requires typological information on the grammars of as many of the identified substrate and superstrate varieties as possible, as a point of comparison as well as typological information on how common the features being studied are both across the world’s languages and across pidgin/creole languages.

The rationale for choosing to analyse CPE from this era is outlined in detail in the previous chapter (§3.2.2), but to summarise, the late nineteenth century is the earliest point at which there is available data for CPE and analysis of this data shows clear evidence that the language had already undergone stabilisation by the late nineteenth century. Using this data ensures that any features that might have developed in CPE in the subsequent 140 years are eliminated from the analysis. This elimination of later developments means that the features present in the nineteenth-century CPE dataset are more likely to result directly from the processes that formed the pidgin/creole.

This approach is not perfect. Firstly, using this dataset does not guarantee that the aim of eliminating all post stabilisation developments will be achieved, as this depends on when CPE stabilised. The language could have stabilised at any point between the seventeenth and nineteenth centuries but there are no sources on CPE from before the 1800s. Whether the sources used in this study represent a version of CPE from a point before any language internal changes or post stabilisation influences is impossible to state with certainty. However, in order to carry out any form of analysis the
dataset has to be treated as though it more or less represents the form of the language shortly after stabilisation. This compromise is an unavoidable limitation of a study centred on historical versions of under-documented languages.

A further limitation is the size of the nineteenth-century CPE dataset. The available sources on CPE from the pre-colonial era are briefly outlined in the previous chapter (§3.2.2). They consist of observations from a variety of sources on the English spoken by Cameroonians, all written by Europeans, and a single letter written in CPE. For a full list of language sources, see appendix A, for transcripts of the CPE sources, see appendix B.

In total, these sources make up a corpus of 1,040 words. None of the sources contains a large amount of CPE and none of them are written by trained linguists. Most of the sources consist of a sentence or short passage quoting Cameroonians at an unknown remove and with uncertain levels of accuracy. This data is far from ideal, but it is the data that is available. Fortunately, these disparate sources show some clear patterns in the grammar of nineteenth-century CPE that they report and there are many similarities with the grammar of present-day CPE, suggesting some level of accuracy in the records.

There are also several letters in one of the sources (Buchner 1914). These letters are problematic for analysis. They are primary documents ostensibly written by Cameroonian leaders to Germans active in the area in the precocolonial era, but for the most part they are written in what is clearly standard English. Given literacy rates and the British interest in the area at the time, it seems possible that many of them were authored by British men on behalf of the Cameroonians, or by literate Cameroonians educated in standard English. Many of the Cameroonian signatories of these letters marked their names with a cross, suggesting that they were not literate in English. There is one letter that is quite different from the others and seems to have been written in CPE. The grammar used in this letter is very different from the grammar used in the other letters. For comparison, Figure
4.1 shows a letter written in standard English and Figure 4.2 shows the first page of the letter written in CPE, translations follow each letter.

**Figure 4.1.** Letter written in English, dated 1884, reproduced from Buchner (1914: 113)

This text reads as follows:

Dear Sir,

We are very sorry tonight for what we have done, our Kings have settled the palavers and we thought you ought to give us some dashes also. So now you must forgive us for the wrong we have done to you we did not understand your fashions proper. We are [name illegible] and [name illegible] Aequa.
We beg Mr David Meetom to write this because he is the secretary of our country if anything to say please write to him and we shall hear from him better. As Mr D Meetom don’t know your name he will endorse the Great Schmidt name on the envelope then he shall deliver it to him.

[name illegible] and [name illegible] Aequa

Mr Schmidt this letter is for the new doctor.

---

21 Where it is not possible to be certain of what is written I have not attempted to insert a guess and have instead made it clear that some element has been omitted. In this case inserting a guess would have been relatively unproblematic as the uncertainty is about the names of the letter’s senders and this is a letter written in English which does not form part of the CPE dataset. However, for the CPE texts that make up the dataset used for this study it is not acceptable to include any elements of the texts that are unclear. For consistency I have adopted the same approach to this letter as I have for the CPE texts.
Sir

We never believe any white man fit to do like that no man buy we and what the matter you try take us so Mr [name illegible]. Lock Priso son came told you we only want English but you no [uncertain] for him and you put flag up before we get time to look you. We beg you to pull that flag down no man buy we we want English to take us by [uncertain] that time. You turn leave we German trouble us plenty and want to give us plenty crack we

Figure 4.2. First page of letter written in CPE, dated 1884, reproduced from Buchner (1914: 121)

This text reads as follows:

Sir

We never believe any white man fit to do like that no man buy we and what the matter you try take us so Mr [name illegible]. Lock Priso son came told you we only want English but you no [uncertain] for him and you put flag up before we get time to look you. We beg you to pull that flag down no man buy we we want English to take us by [uncertain] that time. You turn leave we German trouble us plenty and want to give us plenty crack we
plenty and want to give us plenty dash we […] (Buchner 1914: 121)

As Figures 4.1 and 4.2, and their translations, illustrate, there is a clear difference between the language used in the two letters. The letter shown in Figure 4.2 is the only one in the sources that is not clearly written in standard English rather than CPE, and as a result, the only one included in the dataset for the study. The final dataset, consisting of 1,040 words cannot be considered a truly representative corpus but it is big enough to show patterns of usage and to build a small typological profile.

A further limitation of this study is that when it comes to creating a typological profile of the substrate languages, the amount of data available varies a great deal between languages. Ideally, the data would be collected on each language from a series of comparable nineteenth-century grammars, in order to facilitate direct comparison with the nineteenth-century CPE data. But no such set of grammars exists, and as with the sources on CPE, it is necessary to make the best of the data that is available. All of the languages identified as part of the substrate of CPE are members of the Benue-Congo group spoken along the coast of Cameroon and southern Nigeria. The tree showing the relationships between each of these languages, first presented in Chapter 3, is reproduced here in Figure 4.3.
Figure 4.3 CPE substrate language family tree adapted from Hammarström et al. (2021). KEY: Languages spoken in Bonny and Calabar in purple; Duala area languages in green; Malimba area languages in red; Isubu area languages in blue

There are sources available for just two of the Sawabantu languages, Duala, a Dualaic language (Gaskin 1927; Epale 1973; Epée 1975; Epée 1976; Ittmann & Meinhof 1978; Arsene 2015), and Mokpwe (Bakweri/Bakueri), a Kpwe language (Atindogbe 2013). For a full list of sources and a description of each text see appendix A. Historical linguistics texts such as those by Guthrie (1967–1971), and Greenberg (1963) are not especially useful as sources as their focus on classification means that they do not contain useful information on specific constructions in a given language.

Since these are the only sources on the coastal Cameroonian languages that are available, these are the languages used to represent the Cameroonian substrate. Duala represents the Dualaic branch that encompasses all three languages of the dominant coastal groups: Duala, Malimba, and Isu, as well as Bakole. Mokpwe, represents the Kpwe branch, encompassing languages

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22 Much of the research for this thesis was carried out during the Covid-19 pandemic when options for travel and library exchanges were severely restricted. Globally, other sources may exist, but these were not accessible at the time of writing.
spoken a little further inland and along the coast in the Isu dominated region: Mokpwe, Wumbokoko, and Bubia.

The question of whether Duala and Mokpwe are suitable representatives of each branch is one that is worth asking, even though there is no available alternative to assigning them this role. Duala and Malimba are very closely related, with a high degree of mutual intelligibility (Lamberty 2009: 12). Wumbokoko and Mokpwe are also closely related (Hammarström et al. 2021). How representative Duala can be considered of Isu and the related Bakole is less clear. They are all Sawa people and have shared ethnic and linguistic origins (Austen 1983: 3), and the Duala who arrived in the area in the sixteenth century grew increasingly dominant over the proceeding centuries (Austen 1983: 3–8). Ultimately, while information from just two of the coastal languages of Cameroon is not an ideal dataset, the evidence suggests that Duala and Mokpwe can be considered broadly representative of the languages spoken in the area.

There are available sources of varying levels of detail on all three of the Nigerian substrate languages: Ibibio (Jeffreys 1935; Kaufman 1968; Essien 1990; Udosen 2004; Baker & Willie 2010; Anyanwu 2011; Josiah & Udoudom 2012; Major 2014; Martinez-Garcia 2014; Etim 2016; Ekah 2018; Duncan et al. 2019; Willie 2019), Igbo (Adams 1932; Green & Igwe 1963; Maduka-Durunze 1990; Uwalaka 1991; Biddulph 1992; Agbo & Yuka 2011; Amaechi 2013; Emenanjo 2015; Uchechukwu 2015; Osuagwu & Anyanwu 2020; Obiamulu 2014), and Ijaw (Williamson 1965). For a full list of sources and a description of each text see appendix A.

The sources for the coastal African languages from both Cameroon and Nigeria vary in quality and quantity. In some cases, such as Igbo, there is a full modern grammar available (Emenanjo 2015), for others, such as Duala, one of the main sources is a learner grammar from the 1920s written for English speakers, adapted from previous work aimed at German speakers (Gaskin 1927). With the information available, precisely recreating these languages as they were spoken 150 years ago is impossible. In each case, the dataset for a given substrate language comprises any available source
containing grammatical information, regardless of the era in which it was
written or its intended purpose. Although it is not ideal to have to use
datasets differing in size and from sources published across a century, it is
still possible to gain insight about grammatical patterns based on these
datasets. A full list and description of these sources can be found in
appendix A.

In addition to these African languages, sources for the European superstrates
are also required. As the previous chapter concludes (§3.7), the superstrate
of CPE most likely consists of ship English and the emerging nineteenth
century standard, so sources for both of these are required. Sources for the
superstrate varieties are inevitably much easier to find than sources for the
substrate languages. For ship English, there are two well researched sources
(Bailey & Ross 1988; Delgado 2019) that can be consulted to establish how
this variety differed from the emerging standard of the time. For standard
English a variety of historical textbooks are available. The superstrate
sources are also listed in appendix A.

The final datasets required for the study are typological surveys of features
both across the world’s languages, and in pidgin/creole languages. These
datasets are sourced almost exclusively through two online resources. The
World Atlas of Language Structures (WALS) (Dryer & Haspelmath 2013) is
used for comparison across the world’s languages, while the Atlas of Pidgin
and Creole Structures (APiCS) (Michaelis et al. 2013) is used for
comparison across pidgin/creole languages. There are a number of benefits
to using these resources. Firstly, the datasets are comparable to one another,
both resources explore similar types of features. Secondly, both resources
are presented in a way that makes collation of data straightforward. Thirdly,
online resources are readily and legally accessible during a global pandemic.
However, not every feature explored in this study is featured on WALS and
APiCS and this is a limitation of the approach. Although other sources could
be considered in cases where a feature is not included on these databases,
very few resources with comparable surveys are available.
The data collected from the sources described in this section are used to create typological profiles for each language and form the raw datasets for this study.

4.3 Method

This section outlines the methodology employed in this study to address each of the research questions in turn. The first section establishes a methodology for addressing question (1.a) by comparing nineteenth-century CPE to English interlanguage features (§4.3.1). The following section outlines a methodology to answer question (1.b) by establishing the processability level of CPE features using LFG analysis (§4.3.2). The next section outlines a method for establishing the most likely point of origin for each CPE feature, in order to address question (2.a), (§4.3.3). The following section details a method for evaluating three different models of pidgin/creole genesis as they relate to the CPE dataset in order to answer question (2.b), (§4.3.4). The final section details the methodology employed to address questions (3.a) and (3.b), designed to explore whether there are any patterns relating to the types of features that became part of CPE as it stabilised (§4.3.5).

4.3.1 Comparing Cameroon Pidgin English to the English interlanguage features

The first research questions (1.a) and (1.b) are the primary test of Plag’s interlanguage hypothesis (PILH), and therefore it is important to establish a clear, logical methodology for operationalising each question. This section addresses the methodology for research question (1.a).

The first part of research question 1 is:

1. a. Does the list of English interlanguage features proposed by processability theory encompass all of the identified features of Cameroon Pidgin English?

The processability theory literature has established a set of features possible at each stage of an English interlanguage, reproduced in Table 4.1.
<table>
<thead>
<tr>
<th>STAGE</th>
<th>PHENOMENA</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Words</td>
<td>hello, five, dock, central</td>
</tr>
<tr>
<td></td>
<td>Formulae</td>
<td>How are you? What’s your name? Where is X?</td>
</tr>
<tr>
<td>2</td>
<td>S neg V(O)</td>
<td>Me no live here/I don’t live here</td>
</tr>
<tr>
<td></td>
<td>SVO</td>
<td>Me live here</td>
</tr>
<tr>
<td></td>
<td>SVO?</td>
<td>You live here?</td>
</tr>
<tr>
<td></td>
<td>-ed</td>
<td>John played</td>
</tr>
<tr>
<td></td>
<td>-ing</td>
<td>Jane going</td>
</tr>
<tr>
<td></td>
<td>Plural -s (noun)</td>
<td>I like cats</td>
</tr>
<tr>
<td></td>
<td>Poss -s (noun)</td>
<td>Pat’s cat is fat</td>
</tr>
<tr>
<td>3</td>
<td>Do SV(O) -?</td>
<td>Do he live here?</td>
</tr>
<tr>
<td></td>
<td>Aux SV(O) -?</td>
<td>Can I go home?</td>
</tr>
<tr>
<td></td>
<td>Wh SV(O) -?</td>
<td>Where is she? What you want?</td>
</tr>
<tr>
<td></td>
<td>Adverb first</td>
<td>Today he stay here</td>
</tr>
<tr>
<td></td>
<td>Poss (determiner)</td>
<td>I show you my garden. This is your pencil</td>
</tr>
<tr>
<td></td>
<td>Object (pronoun)</td>
<td>Mary called him</td>
</tr>
<tr>
<td>4</td>
<td>Copula S (x)</td>
<td>Is she at home?</td>
</tr>
<tr>
<td></td>
<td>Wh copula (x)</td>
<td>Where is she?</td>
</tr>
<tr>
<td></td>
<td>V -particle</td>
<td>Turn it off!</td>
</tr>
<tr>
<td>5</td>
<td>Neg/aux 2nd -?</td>
<td>Why didn’t you tell me? Why can’t she come?</td>
</tr>
<tr>
<td></td>
<td>Aux 2nd -?</td>
<td>Why did she eat that? What will you do?</td>
</tr>
<tr>
<td></td>
<td>3sg -s</td>
<td>Peter likes bananas</td>
</tr>
<tr>
<td></td>
<td>Cancel aux 2nd</td>
<td>I wonder what he wants</td>
</tr>
</tbody>
</table>

Table 4.1 The processability stages of English interlanguages, adapted from Pienemann et al. (2011: 132)

The first step in investigating PILH is to establish whether all of the known features of CPE, as it was spoken in the nineteenth century, can be found on this list. To achieve this aim, it is necessary to create a typological overview of nineteenth-century CPE, requiring a standard to be established for what counts as evidence of a feature being part of the stabilised language.

In processability theory, a feature is considered part of an interlanguage when it meets the emergence criterion, described in (§2.3.1). With no opportunity to examine the language of the early speakers of CPE it is impossible to establish an emergence criterion in the way a processability theory-based study ordinarily would. In my dataset the speaker in any given text is rarely identified by the author reporting their speech. Even where the speaker’s identity is clear, there is not enough information provided on any single speaker to draw conclusions about their speech, and even if there were, this type of analysis would not be an appropriate measure for this
The premise of PILH is that pidgin/creoles are conventionalised interlanguages, that is, some element of standardisation has occurred. It would therefore be meaningless to assert that utterances from an individual speaker in the CPE dataset meet a given emergence criterion, as the utterances of a single speaker cannot be seen to represent the language as a whole. Nineteenth-century CPE is therefore treated as a single, conventionalised language for the purposes of this study, and as a single interlanguage for the processability theory analysis.

The concept of setting a criterion for the inclusion or exclusion of a feature from the typological overview of nineteenth-century CPE is still useful as a means for eliminating interspeaker variation. In the sociolinguistic context of early CPE, speakers are likely to have had some access to the superstrate and their individual level of contact and motivation to learn standard English would have varied. It is useful therefore to have a criterion for distinguishing between stabilised nineteenth-century CPE features and those more likely to belong to an individual speaker’s idiolect. A set of criteria for establishing the features of CPE, based on Lenzing et al.’s emergence criteria (2019: 3–4), should therefore be developed in order to lower the possibility of such inclusions.

For syntax, the inclusion criterion adopted here is: three or more uses of a syntactic structure, at least two by different speakers.

For morphology, the inclusion criterion adopted here is evidence that a morphological process can be applied to multiple lexical items. Given the small quantity of data available a strategy only needs to be applied to more than one lexical item by more than one speaker in order to qualify as meeting the criterion.

The typological overview of nineteenth-century CPE based on these criteria is presented in Chapter 5.

Once a typological overview for nineteenth-century CPE has been established, it is possible to check the features of CPE against those on the list of English interlanguage features seen in Table 4.1. If all of the features of CPE can be accounted for using this list, then no further research is
required to answer research question 1. However, there are multiple features of nineteenth-century CPE not accounted for by this list; the details of this analysis can be found in Chapter 6 (§6.2). Therefore, further analysis within the processability theory framework is required to establish (i) whether such analysis is possible for that feature, and if so, (ii) at what processing level the feature could have become part of a speaker’s interlanguage. The methodology for establishing processing levels is outlined in the following section.

4.3.2 Establishing processing levels for other Cameroon Pidgin English features

Since there are many nineteenth-century CPE features that do not appear on Pienemann’s list of English interlanguage features, the next step is to establish whether the theoretical framework of processability theory can be expanded on its own terms, to account for these features, addressing research question (1.b).

The second part of research question 1 is:

1. b. Can a processability theory-based analysis of the features of Cameroon Pidgin English that aren’t on the list of English interlanguage features provide support for PILH?

Since processability theory methodology incorporates lexical functional grammar (LFG), this is also the approach taken here. The methodology for establishing the processing level for any given feature consists of the following steps:

➢ First, f-structure analysis is used to establish whether there is any information exchange involved in the accurate production of the feature.

➢ Second, an annotated c-structure is used to establish where feature unification is possible in the production of the feature.

➢ Finally, the results from the previous two steps are compared to the processability theory processability stages to establish, wherever
possible, the processing level a speaker would need to have attained for the feature to become part of their interlanguage.

This method can be demonstrated by returning to the LFG structures first introduced in Chapter 2 (§2.3.2).

The first step is to represent the functions of each element in the clause using an f-structure. This stage also serves to reveal any information exchange that might be required between elements in order for a speaker to correctly produce the sentence. The f-structure for the sentence *the cat likes mice* can be seen in Figure 4.4.

```
PRED 'like <SUBJ,OBJ>'
TENSE PRES
NUM S
PERS 3

SUBJ
PRED 'cat'
NUM S
PERS 3
DEF +

OBJ
PRED 'mice'
NUM PL
PERS 3
DEF -
```

**Figure 4.4** F-structure demonstrating information exchange required for accurate production

The f-structure in Figure 4.4 reveals that quite a lot of information exchange needs to occur between constituents to accurately produce the English sentence *the cat likes mice*.

Firstly, number and person values are shared between the verb and the subject in order for the correct form of the verb to be produced. Secondly, the subject *cat* has a definiteness value that needs to be exchanged between the noun and the determiner slot in the noun phrase for the correct determiner to be selected. There are also number values for each noun which are required to select the correct form of the noun in each case, but since this selection occurs at the lemma level (that is, there is no information exchange between two different elements) they are not considered here.
Before it is possible to explore the annotated c-structures proposed by Pienemann for showing feature unification it is first necessary to define what a c-structure is for the purposes of this study. Different theoretical approaches use syntax trees in different ways. For the most part LFG uses x-bar trees (Falk 2001: 48–49), and this is the approach adopted here. Figure 4.5 shows the structure for a nineteenth-century CPE noun phrase, given in (1).

(1) one big goat

INDEF big goat

‘a big goat’

(Buchner 1885: 677)

Figure 4.5 Noun phrase structure

The c-structure shown in Figure 4.5 consists of a head noun, goat, a modifier adjective phrase, big, which attaches at the second noun-bar (N’) node, and indefinite determiner one, which is a specifier and therefore attaches at the noun phrase (NP) node. There is also an N’ node below the modifier where a complement would attach if the noun took a complement. It should be noted that LFG generally labels these phrases determiner phrase
rather than noun phrase. This approach is not adopted here primarily for transparency, but nothing of significance to the thesis hinges on this decision, as it does not alter the analysis as it relates to processing levels.

Figure 4.6 shows the structure of the monotransitive clause in (2).

(2)  
I 
\_S.SUBJ 
\_die 

‘I die’/ ‘I am dying’

adapted from (von Schkopp 1905:103)

Figure 4.6 Monotransitive clause structure

The clause shown in Figure 4.6 consists of a verb phrase and a noun phrase which meet at the inflection phrase (IP) node as the subject noun phrase is considered the specifier within the clause. Although it is not possible in lexical functional grammar to have empty branches, empty nodes are permissible. Here an underspecified inflection-bar (I’) node can be assumed since overt tense, mood, modality, and aspect (TMA) marking is possible but not obligatory in nineteenth-century CPE.
Figure 4.7 shows the structure of the same monotransitive clause with the addition of overt TMA marking, the clause is given in (3).

(3) I\hspace{1cm}go\hspace{1cm}die  \\
    1_{S.SUBJ}\hspace{1cm}FUT\hspace{1cm}die

‘I will die’/ ‘I am going to die’

(von Schkopp 1905: 103)

**Figure 4.7** Monotransitive clause structure with overt TMA marking

The clause shown in Figure 4.7 has an overt future marker in the form of the TMA word *go*. As this adds tense information to the clause it is labelled ‘I’ and joins the c-structure at the I’ node.
Figure 4.8 shows the structure of a transitive clause, given in (4)

(4) We fear him

\[ \text{1PL.SBJ} \quad \text{fear} \quad \text{3S.OBJ} \]

‘We fear him’

(Buchner 1914: 290)

Figure 4.8 Transitive clause structure

The clause shown in Figure 4.8 introduces a clausal element not present in the previous examples, the object noun phrase, him. This attaches to the verb phrase at the verb-bar (V’) node as it is the complement of the verb, fear. Otherwise, the clause structure is identical to that of a monotransitive clause.
Figure 4.9 shows the structure of the same transitive clause with the addition of overt TMA marking. This clause is given in (5).

(5) We\text{go} fear\text{him}

\begin{tabular}{lll}
\text{IPL.SUBJ} & \text{FUT} & \text{3S.OBJ} \\
\end{tabular}

‘We will fear him’

adapted from (Buchner 1914: 290)

\textbf{Figure 4.9} Transitive clause structure with overt TMA marking

As with intransitive clauses, the TMA particle is labelled ‘I’ and attaches to the c-structure at an I’ node between the verb phrase and IP nodes. This would be the case for any of the TMA particles used in nineteenth-century CPE, outlined in (§5.4.1) and is not specific to the future marker, \textit{go}.
Negation also attaches at the I’ node. A negated version of the same transitive clause can be seen in (6). Figure 4.10 shows its c-structure.

(6)  

\[ \text{We no fear him} \]

\[ \text{1PL.SUBJ NEG fear 3S.OBJ} \]

‘We don’t fear him’

adapted from (Buchner 1914: 290)

Figure 4.10 Transitive clause structure with negation

In LFG negation is treated as an inflectional feature (Falk 2001: 13). Therefore, just as with the TMA particles, the negation particle can be labelled I and attaches an I’ node.
Figure 4.11 shows the structure of a ditransitive clause, given in (7).

(7) The Germans give us dash

   DEF Germans give 1PL.OBJ dash

   ‘The Germans give us dash [bribes/gifts]’

adapted from (Buchner 1914: 121)

Figure 4.11 Ditransitive clause structure

The tree given in Figure 4.11 has multiple branching from the V’ node to incorporate both objects. This is the way that ditransitive arguments are represented in LFG (Falk 2001: 63), and therefore the way in which they are represented in this study.
Figure 4.12 shows the structure of the same transitive clause with the addition of overt TMA marking. This clause is given in (8).

(8) The Germans go give us dash

DEF Germans FUT give 1PL.OBJ dash

‘The Germans will give us dash [bribes/gifts]’

adapted from (Buchner 1914: 121)

Figure 4.12 Ditransitive clause structure with overt TMA marking

The only difference between Figures 4.11 and 4.12 is the addition in 4.12 of an overt I’ node at which the TMA particle, go, attaches.

Having outlined the structures of CPE assumed in this study, the next step is to establish the c-structure node at which the information exchange revealed by the f-structure in Figure 4.4 could occur. Since there is generally more agreement marking in English than there is in CPE, English is used here to demonstrate feature unification for the sentence the cat likes mice. An f-
structure is given for this sentence in Figure 4.4, above. Feature unification can be demonstrated using annotated c-structures, as outlined in (§2.3.2). The annotated c-structure for the sentence the cat likes mice can be seen in Figure 4.13.

![Annotated c-structure showing feature unification](image)

**Figure 4.13** Annotated c-structure showing feature unification

In the annotated c-structure in Figure 4.13, any information about an element of a clause that is shared by another element of the clause, as revealed in the f-structure, is listed below the word in brackets. The arrows show the point at which information exchange is possible in each case. Information about the noun and the determiner that make up the subject noun phrase meets at the NP node; therefore, this information exchange is intra-phrasal. Information about the subject noun phrase and the verb meets at the IP node, therefore this information exchange is inter-phrasal.

Based on this analysis, it is possible to complete the final step and state that correct production of English determiner forms can be considered a processability level three phenomenon, while correct production of the third person singular present tense form of verbs is a processability level four phenomenon, based on the processing levels outlined in Chapter 2 (§2.3.1).
The final stage of this analysis is to compile the results of analysis for every feature of nineteenth-century CPE analysed for this study and compare the results to the predictions of PILH to establish whether CPE closely resembles an early-stage interlanguage, answering research question (1.b). This analysis and a discussion of the findings resulting from it can be found in Chapter 6.

4.3.3 Identifying the origins of each Cameroon Pidgin English feature

In addition to establishing whether nineteenth-century CPE resembles an early-stage interlanguage, it is also necessary to determine whether the structures of the language can be accounted for just as convincingly by an alternative theoretical approach, this is addressed with research question 2.

The first part of research question 2 is:

2. a. Is there clear evidence that any of the features of Cameroon Pidgin English became part of the language through transfer, restructuring, or speaker innovation?

The major question that most theories of pidgin/creole genesis aim to address, and the point on which they most often differ, is where the features of a given pidgin/creole language originate from. To properly assess PILH it is therefore necessary to investigate the available evidence on the origins of each of the CPE features. Just because a feature is typical of an English interlanguage does not mean that interlanguage development must be the mechanism by which it entered CPE. It might also be a substrate feature, a superstrate feature, a typological universal, or cross-linguistically very common. If any of these can be shown to be the case, then it cannot be concluded that interlanguage processing must be the origin of the feature. Of course, a high quantity of features that are typical of English interlanguages could be used to build a case for interlanguage development, but it must first be established that there is no clear evidence for an
alternative source for each feature’s presence in the pidgin/creole. This analysis requires a methodology for evidencing the origins of a feature.

The criteria put forward by Parkvall (2000:24) for establishing the source of a given pidgin/creole feature are adopted for this study. Parkvall lists four possible sources for pidgin/creole features: (i) certain lexifier retention/transfer, (ii) certain substrate transfer, (iii) certain independent development, (iv) certain restructuring universal (Parkvall 2000: 24). The criteria for evidencing these are as follows:

➢ To show certain lexifier retention/transfer a feature must be present in the lexifier, absent from the substrate languages, cross-linguistically uncommon, and not generally present in other, unrelated pidgin/creole languages (Parkvall 2000:24).

➢ To show certain substrate transfer a feature must be present in the substrate languages, absent from the lexifier, cross-linguistically uncommon, and not generally present in other, unrelated pidgin/creole languages (Parkvall 2000:24).

➢ To show a certain independent development a feature must be absent from lexifier and substrate languages, and not generally present in other unrelated pidgin/creole languages (Parkvall 2000:24).

➢ To show a certain restructuring universal a feature must be absent from both lexifier and substrate languages, cross linguistically uncommon, and generally present in unrelated pidgin/creole languages (Parkvall 2000:24).  

23 To present an obvious oversimplification, it is not appropriate to look at a pidgin/creole language and state that since early-stage interlanguages always contain nouns, and the pidgin/creole contains nouns this constitutes evidence that pidgin/creoles are conventionalised interlanguages.

24 Note that this final category evidences restructuring universals rather than interlanguage development. Restructuring universals are those which arise from restructuring regardless of the substrate or superstrate language. Interlanguage development may involve restructuring universals but is not limited to them since other factors related to the speaker’s first and second languages may also play a role.
A final category that could be added to this list is that of typological universals. True universals are rare, but it would be interesting to consider the role of language features that are cross-linguistically very common. The issue with this is that of certainty. In order to show with certainty that a feature became part of CPE due to its being cross-linguistically common it would need to be absent from the lexifier and substrate languages, in order to rule them out as sources, but cross-linguistically common. Such an occurrence would presumably be rare. Since the feature is common across the world’s languages, we can expect to find it in at least one of the substrate or superstrate languages of CPE, and Chapter 7 demonstrates that this is indeed the case for typologically common features of CPE (§7.6). For this reason, typological universals are not added to Parkvall’s list.

Parkvall’s (2000) criteria for evidencing the origin of pidgin/creole features are summarised in Table 4.2

<table>
<thead>
<tr>
<th>SOURCE OF FEATURE</th>
<th>EVIDENCE REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain lexifier transfer</td>
<td>Present in lexifier</td>
</tr>
<tr>
<td></td>
<td>Absent from substrates</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Not generally present in unrelated pidgins/creoles</td>
</tr>
<tr>
<td>Certain substrate transfer</td>
<td>Present in substrates</td>
</tr>
<tr>
<td></td>
<td>Absent from lexifier</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Not generally present in unrelated pidgins/creoles</td>
</tr>
<tr>
<td>Certain case of independent development</td>
<td>Absent from both lexifier and substrates</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Not generally present in unrelated pidgin/creoles</td>
</tr>
<tr>
<td>Certain restructuring universal</td>
<td>Absent from both lexifier and substrates</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Generally present in unrelated pidgins/creoles</td>
</tr>
</tbody>
</table>

Table 4.2 Criteria for establishing the source of pidgin/creole features, adapted from Parkvall (2000: 24)

Based on these criteria it is possible to outline a methodology for evidencing a clear source for nineteenth-century CPE features.

Comparing each of the nineteenth-century CPE features under investigation to the criteria laid out in Table 4.2 allows research question (2.a) to be addressed systematically:
First, the strategy used for a given feature in CPE can be compared to the strategy used in the substrate languages to establish whether the feature is present in the substrate of CPE.

Second, the strategy used for a given feature in CPE can be compared to the strategy used in the superstrate varieties to establish whether the feature is present in the superstrate of CPE.

Since absence from either the superstrate, or the substrate, or both is a prerequisite for all categories, presence of a feature in both the substrate and superstrate languages makes determining a clear origin for it impossible. If a feature is present in just the superstrate or just the substrate languages, or if the feature is absent from both, then further analysis can establish whether there is any clear evidence of a source for that feature.

Third, the strategy used for a given feature in CPE can be compared to the strategies used in the world’s languages to establish whether the feature is cross-linguistically uncommon using data from the *World Atlas of Language Structures* (Dryer & Haspelmath 2013). To conduct this analysis, *uncommon* needs to be defined since Parkvall does not set a specific value for this term. For the purposes of this study, ‘uncommon’ is defined as: present in fewer than 25% of the languages sampled. This is quite a narrow definition. However, it can be justified.

It seems reasonable to define ‘common’ as: present in more than 50% of languages sampled. Based on this logic, ‘uncommon’ could then be defined as: present in fewer than 50% of languages sampled. The issue with this is that if a feature is present in for example, 52% of languages then it is common, whereas if it is present in 48% it is uncommon, and nobody can reasonably argue that 52% versus 48% is a clear margin of difference. So perhaps fewer than 50% is better defined as ‘less common’ and fewer than 25% as ‘uncommon’. A case could be made for 32% as the cut off for ‘uncommon’ as it relates to standard deviation from the mean, but ultimately it does not seem reasonable to describe a grammatical strategy present in nearly a third of the world’s languages as ‘uncommon’.
Finally, the strategy used for a given feature in CPE is compared to the strategies used in unrelated pidgin/creoles to establish whether the CPE feature is also a feature of these languages. For this analysis, the *Atlas of Pidgin and Creole Structures* (Michaelis et al. 2013) is used. To operationalise this step *not generally present* is considered to be equivalent to *uncommon* and is defined in the same way, as being present in fewer than 25% of the languages in the sample consulted. *Unrelated* is a difficult term to operationalise in relation to West African pidgin/creoles as the transatlantic slave trade dispersed people from this area so widely. For the purposes of this study, pidgin/creole languages related to CPE are defined as: (i) any English lexified pidgin/creole language spoken anywhere in the world and (ii) any pidgin/creole spoken in West Africa, on the east coast of the Americas, or in the Caribbean, regardless of the lexifying language. All other pidgin/creole languages are considered to be ‘unrelated’ to CPE. This approach is not a perfect one, but it does eliminate the languages most likely to be closely related to CPE. Any thorough analysis of the interrelatedness of pidgin/creole languages would require historical investigation beyond the scope of this study.

The findings of this analysis can then be compared to the criteria laid out in Table 4.2 to establish whether there is clear evidence of a specific source for each feature. Once this analysis is complete, the findings can be collated to create an overview of the sources of CPE features, answering research question (2.a). This analysis and a discussion of the findings resulting from it can be found in Chapter 7.

4.3.4 Evaluating competing theoretical accounts in relation to the features of nineteenth-century Cameroon Pidgin English

Once the previous analysis is complete, it is possible to compare the predictions of PILH for the features of CPE to those of two alternative models of pidgin/creole genesis, addressing research question (2.b).

The second part of research question 2 is:

2 b. Does the analysis carried out to address question (2.a) provide any evidence in support of PILH or does it
better support an alternative model of pidgin/creole genesis?

The models of pidgin/creole genesis that are considered in relation to the data on nineteenth-century CPE, in addition to PILH, are the substratist relexification approach championed by Clare Lefebvre (1999), and the feature pool approach, described by Aboh and Ansaldo (2007). These were selected as two of the more prominent and influential theoretical approaches of the past 20 years and because the predictions of each of these theories differ substantially from those of PILH, as discussed in Chapter 2 (§2.2.2), and from each other.

It is beyond the scope of this work to run detailed parallel investigations based on each of these theories. Instead, the methodology outlined in this section takes a broad approach, applying the most significant arguments of the three models to the nineteenth-century CPE data, in order to establish which of them, if any, it best supports. To confirm any findings in favour of relexification or feature pools would require a great deal more thorough research. However, the methodology outlined here is sufficient to establish whether PILH, relexification, or feature pools provide the best possible theoretical account for the features of nineteenth-century CPE. The three approaches can be briefly recapped, and tested against the data, as follows:

- **PILH** states that pidgin/creole languages are conventionalised interlanguages and that the expected features of an English lexified pidgin/creole would be those typical of early-stage English interlanguages (Plag 2008a). Therefore, evidence in support of PILH should consist of English interlanguage features and superstrate features processible at an early interlanguage stage (stages 1–3). Features could also have entered the language from the superstrate, but only if they are processible within an early-stage interlanguage.

- **Relexification theories** state that pidgin/creoles consist of substrate grammars relexified with superstrate lexis (Lefebvre 1999). Evidence in support of relexification would consist of large quantities of substrate features and very few superstrate features.
Feature pool theories argue that there are multiple competing strategies in the linguistic environment of a developing pidgin/creole language. These may come from a variety of sources, but the least marked forms will generally end up in the stable language that emerges (Aboh & Ansaldo 2007). Support for a feature pool approach would consist of evidence that the most unmarked forms available in the linguistic environment were the ones which became part of the pidgin/creole language. ‘Markedness’ is a difficult concept to operationalise since there is no commonly agreed upon definition for the term. Aboh & Ansaldo define markedness as ‘a manifestation of frequency, regularity, and salience’ (Aboh & Ansaldo 2007: 45). Here, the most common strategy cross-linguistically is considered the most unmarked, addressing both regularity and frequency. ‘Salience’ is set aside since it is another concept with no clear definition that cannot be straightforwardly operationalised. This methodological decision is discussed further in Chapter 7 (§7.8).

The predicted findings of each approach are summarised in Table 4.3.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SUBSTRATE</th>
<th>SUPERSTRATE</th>
<th>MARKED</th>
<th>INTERLANGUAGE FEATURE</th>
<th>PROCESSABILITY THEORY LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILH</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
<td>+</td>
<td>1–3</td>
</tr>
<tr>
<td>Relexification</td>
<td>+</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Feature pools</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 4.3. Criteria for comparing theories based on sources of CPE features.

In Table 4.3, the top row lists possible attributes for each feature of CPE. If a given model predicts that the features of CPE will have that attribute, then it receives a + value in the column below for that model. If a given model predicts that the features of CPE will not have that attribute, then it receives a – value. The exception to this is the attribute ‘processability theory level’
which relates to the processability theory processing levels, for this a number range is listed. If an attribute has no relevance to a model, then it is given an N/A value.

The nineteenth-century CPE data can then be compared to the criteria set out for each model in Table 4.3, in order to answer research question (2.b). This comparison means that PILH is not analysed in isolation but rather assessed against alternative explanations for the same dataset, allowing a more empirical assessment of the model. This analysis and a discussion of the findings resulting from it can be found in Chapter 7 (§7.7).

4.3.5 Looking for population level patterns in the features of Cameroon Pidgin English

The final research question requires the data to be analysed for patterns in relation to the types of features that ended up in the stable form of CPE, as opposed to those which did not. This section examines how both parts of research question 3 can be operationalised. PILH has little to say about the selection of any given feature at the community level, something Plag acknowledges, stating that the various process that might be involved come under the umbrella of ‘conventionalised’ (Plag 2008a: 115). However, given the typological investigations required to address research questions one and two, there is an opportunity to investigate this missing element and explore whether there are any patterns that can be observed in the types of grammatical features that became part of the stable form of CPE, and if so, whether these patterns can contribute to the assessment of PILH.

The first part of the research question 3 is:

3. a. Are there any observations that can be made about the types of features that were conventionalised/adopted to create Cameroon Pidgin English?

There are many ways in which the data on the features of CPE and the strategies used by its superstrate and substrate languages could be divided up for analysis. The relatively low number of nineteenth-century CPE grammatical features for which there is evidence means that the more fine grained the analysis the less reliable the findings. Therefore, this research
question is addressed by subdividing it into four avenues of enquiry based on the following questions:

➢ Are nineteenth-century CPE grammatical features more likely to be shared with its substrate languages, its superstrate, or both?

➢ Are the grammatical features that nineteenth-century CPE shares with its substrate and/or superstrate languages more likely to be syntactic or morphological?

➢ From a processability theory perspective, are nineteenth-century CPE grammatical features more often processible at a higher or lower processing level than alternative strategies in its substrate or superstrate languages?

➢ When the answers to the previous questions are combined, can any patterns be observed? Are there patterns in the types of substrate and superstrate features which became part of nineteenth-century CPE versus the types of substrate and superstrate features that did not?

The choice to explore substrate versus superstrate features, and syntactic versus morphological features is straightforward. Both analyses involve elements of the substrate grammars that are reliably calculable, even with a small dataset, and both are parameters by which pidgin/creole languages are often analysed.

Processing levels are also included as this thesis aims to evaluate PILH. Although no stance is taken during this analysis on whether a processability theory approach is the best method for explaining how the grammars of pidgin/creole languages develop, it is important to incorporate elements of processability theory analysis into the methodology to ensure that PILH is assessed on its own terms.

Together, the four questions listed above address research question (3.a). This analysis can be found in Chapter 8 (§8.2).

The final research question assesses PILH in relation the findings of the analyses conducted to address research question (3.a). The second part of research question 3 is:
3. b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?

To answer this question, it is necessary to consider what findings an interlanguage hypothesis approach might predict in relation to the analysis carried out to answer question (3.a).

Looking first at the distribution of superstrate versus substrate language features, we might expect the majority of pidgin/creole features to be shared with the superstrate since this was the earliest speakers’ target language. Features shared by the substrate and superstrate might also be expected to have become part of CPE, since they would have been part of the target language and also familiar to the speakers. Features found only in the substrate are less likely from this perspective but would still be possible so long as they are processible in an early-stage interlanguage.

Looking next at morphology versus syntax, from the perspective that pidgin/creole languages are conventionalised interlanguages, both morphological and syntactic features could have become part of CPE. According to Pienemann both morphological and syntactic strategies are predicted in early-stage English interlanguages (Pienemann et al. 2011: 132), although syntactic strategies are more common. Therefore, we might expect to find mostly syntactic strategies with a few morphological features, all of which should be processible in an early-stage interlanguage.

The final individual analysis is the processability of each feature compared to other possible strategies in the substrate and superstrate languages. If language learners develop their interlanguages because it makes their second language more communicatively useful, it seems reasonable to suggest that the first speakers of CPE would have adopted strategies as far up the processability hierarchy as their language processor development allowed. A speaker who has developed level three processing apparatus would be likely to adopt level three strategies in favour of level two strategies in order to increase their communicative ability. If this is the case then, where there are competing strategies in the substrate and superstrate
languages of CPE, it is predicted that higher level strategies (within the ‘early-stage’ processing range) are more likely to be part of CPE.

It is less straightforward to make predictions about what the expected patterns of combining these analyses might be from the perspective of PILH. This is discussed further in Chapter 8 (§8.3), which presents this analysis and a discussion of the findings resulting from it.

4.4 Summary

The previous sections have outlined the methodology used in this study, laying the groundwork for the chapters that follow. The first section outlined the sources used to create the datasets used for this study and the challenges and limitations associated with historical language sources. It also discussed the methodological choices taken to mitigate these limitations wherever possible (§4.2). The following section outlined in detail the methodology developed for this study. First, methodology designed to answer research question 1. This analysis involves a comparison of the features of nineteenth-century CPE and Pienemann’s list of English interlanguage features (§4.3.1). The following section detailed the LFG based methodology developed in order to establish the processing levels of CPE features (§4.3.2). The next section outlined a methodology for identifying the origins of CPE features, designed to address research question 2.(a) (§4.3.3). This was followed by a methodological approach for comparing interlanguage hypothesis predictions for the features of CPE with the predictions of a relexification approach and a feature pools approach to pidgin/creole genesis, addressing research question 2.(b) (§4.3.4). Finally, to address research question 3, a methodology to explore population level patterns in the features of CPE was described (§4.3.5).

The chapters that follow apply the methodology outlined in this chapter to the nineteenth-century CPE dataset, discussing the findings arising from the analysis and exploring any issues relating to the methodological approach arising from its application.
Chapter 5
A sketch of nineteenth-century Cameroon Pidgin English

5.1 Introduction

This chapter presents a typological sketch of Cameroon Pidgin English (CPE) as it was spoken in the late nineteenth century. In order for a feature found in the historical dataset, which can be found in appendix B, to be included for analysis it must meet the inclusion criteria outlined in the previous chapter (§4.3.1) and briefly summarised here.

Syntax:

➢ There must be evidence of three or more uses of a syntactic structure in the historical dataset
➢ At least two of these uses must be by different speakers.

Morphology:

➢ There must be evidence in the historical dataset that a morphological process can be applied to more than one lexical item
➢ The morphological process must be used by at least two different speakers

Each of the following sections outlines a different element of nineteenth-century CPE grammar, beginning with the noun phrase (§5.2), followed by the pronominal system (§5.3), the verb phrase (§5.4), and an outline of the different types of clauses in evidence in the texts (§5.5). A summary of the features of nineteenth-century CPE concludes the chapter (§5.6).

5.2 The noun phrase

This section presents a sketch of the CPE noun phrase based on what can be established from the historical dataset. The nineteenth-century CPE noun phrase consists minimally of a head noun. Additional features of the noun phrase for which there is evidence are outlined in turn; first the determiner system (§5.2.1), then nominal premodifiers (§5.2.2), followed by plural marking (§5.2.3), and finally, possessive constructions (§5.2.4).
5.2.1 Determiners

There is evidence in the nineteenth-century CPE sources to suggest that both *one* (1) and *a* (2) were in use at the point of German annexation in 1884. Regardless of its form, the indefinite determiner precedes the head noun and any premodifiers in the noun phrase.

(1) pay **one** small goat for Kroo

   pay DET.INDEF small goat PREP Kroo

   ‘[I] paid a small goat to the Kroo [man/men]’

   (Buchner 1885: 677)

(2) Me go for Joe Mandenne for find

   1S.SUBJ go PREP Joe Mandenne PREP find

   a woman

   DET.INDEF woman

   ‘I went to Joe Mandenne to find a woman’

   (Buchner 1885: 676)

Both *the* (3) and *them* (4) are used as definite determiners in nineteenth-century CPE. Again, both precede the head noun and any premodifiers.

(3) All **the** town be yours

   DET.QUANT DET.DEF town COP PRO.POSS

   ‘All of the town is yours’

   (Saker 1908: 92–93)
Them other boy no fit to learn

DET.DEF other boy NEG MOD INF learn

him

3s

‘The other boy can’t learn it’

(Buchner 1887: 216)

In addition to being a definite determiner, them is also used as a demonstrative determiner (5), as are this (6) and that (7).

I take them girl Yellow

1S.SUBJ take DET.DEM girl Yellow

Hawkin give me and give him for

Hawkin give 1S.OBJ CONJ give 3S.OBJ PREP

Joe Mandenne

Joe Mandenne

‘I took that girl Yellow Hawkin gave me and gave her to Joe Mandenne’

(Buchner 1885: 677)

This man no like play

DEM man NEG like play

‘This man does not like fun’

(Buchner 1914: 288)
We beg you to pull that flag down

‘We beg you to pull that flag down’

(Buchner 1914: 122)

There are also multiple examples of possessive determiners in the historical dataset (8).

My father done leave you for we

‘My father left you to us’

(Saker 1908: 92–93)

There is evidence of a separate possessive determiner for almost every person and number combination in the texts, the full paradigm can be seen in Table 5.1. For comparison, the present-day CPE paradigm is given in Table 5.2.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>POSSESSIVE DETERMINER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>My</td>
</tr>
<tr>
<td>2s</td>
<td>Your</td>
</tr>
<tr>
<td>3s</td>
<td>Him</td>
</tr>
<tr>
<td>1pl</td>
<td>We</td>
</tr>
<tr>
<td>2pl</td>
<td>[unknown]</td>
</tr>
<tr>
<td>3pl</td>
<td>Them</td>
</tr>
</tbody>
</table>

*Table 5.1* Possessive determiners in nineteenth-century CPE
Table 5.2 Possessive determiners in present-day CPE, adapted from Ayafor and Green (2017: 92)

Finally, there are a few examples of quantificational determiners in the sources: all (9), any (10), and plenty (11).

(9) You are close to all place

2s.SUBJ COP close PREP DET.QUANT place

where you want to go

PRO.REL 2s.SUBJ want INF go

‘you are close to all the places that you want to go’

(Buchner 1914: 288)

(10) We never believe any white

1PL.SUBJ never believe DET.QUANT white

man fit to do like that

man MOD INF do like PRO.DEM

‘We never believed any white man could do something like that’

(Buchner 1914: 121)
And want to give us plenty dash

CONJ want INF give 1PL.OBJ DET.QUANT dash

‘And [the Germans] want to give us lots of dash [bribes/gifts]’

(Buchner 1914: 121)

Present-day CPE has the same noun phrase word order, with determiners preceding the head noun (Ayafor & Green 2017: 86–87). The standard English *a* is no longer used as an indefinite determiner, but present-day CPE still has *one* and, also uses *some* as an indefinite determiner. Although *them* is still part of the present-day CPE vocabulary, it is no longer used as a demonstrative determiner although *this* and *that* still are (Ayafor & Green 2017: 90). The present-day definite determiner is *de* from standard English *the* (Ayafor & Green 2017: 86). The loss of *them* as a demonstrative and definite determiner may be due to its reanalysis as a marker of plurality, discussed below (§5.2.3).

5.2.2 Nominal modifiers

CPE nouns could be pre-modified by adjectives (12), nouns (13), and numerals (14).

(12) But bloody fool too

CONJ bloody fool too

‘But [you are a] bloody fool too’

(Buchner 1914: 139)
There are a few instances of preposition phrases postmodifying nouns in the spoken texts. In each case, these postmodifying preposition phrases are part of a possessive construction. Possessives are discussed further in (§5.2.4).

There are also a few examples of relative clauses postmodifying nouns. These are discussed in the section on subordinate clauses (§5.5.4).

5.2.3 Plural marking

There is no evidence in the sources for the standard English plural -s but there is one example of an inflected plural, *men*. The plural, *men* is irregular, it is also common in standard English and uncommon in the sources, so it does not add much to the discussion of plurals. From a processability theory perspective, *men* could have entered a level one interlanguage as a discrete form. Therefore, *men* is treated as a lexical, rather than morphological, phenomena for the purposes of this study and is not considered further for analysis. The majority of plural marking in nineteenth-century CPE appears to be achieved with prenominal *them*, as illustrated by (15) and (16). Analysis of these constructions as plurals is complicated by the fact that *them* is also a definite determiner, a
demonstrative determiner, and a possessive determiner in nineteenth-century CPE (§5.2.1).

(15) He wants them thing plenty

3S.SUBJ wants PL thing plenty

‘He wants lots of those things’

(Buchner 1887: 216)

(16) Smiti sabe them road too much

Smiti know PL road too much

‘Smiti knows the/those roads very well’

(Buchner 1897: 215)

In addition, in instances such as them road in (16), them appears to have both plural and definite meaning. This observation is in line with research carried out by Magnus Huber on West African pidgin/creole languages. Huber found that in many of these languages prenominal them underwent reanalysis from definite determiner to plural marker when preceding plural nouns, at some point around the early twentieth century (Huber 1999: 96–97). Huber concludes that in the case of prenominal them it is often impossible to know for sure whether the intended meaning was definiteness, plurality, or both. In many present-day West African pidgin/creoles, including CPE, plural them is postnominal. According to Huber, this construction is not attested in any of these language prior to the mid twentieth century (Huber 1999: 96–97), with the first attested example in CPE from 1960 (Huber 1999: 81). However, there is a single instance of what appears to be postnominal plural them in the historical dataset (17).
We want English them come dill

1PL.SUBJ want English PL come deal

We

1PL.OBJ

‘We want the English to come and deal with us’

(Buchner 1914: 122)

With a single example, postnominal plural them does not meet the threshold for inclusion in the nineteenth-century CPE dataset used for analysis but it is interesting to note what looks very much like an example of this construction from more than 70 years before it has previously been attested.

There are also examples of other plural forming strategies in the historical dataset. In each case, the noun phrase is marked as plural either with a plural possessive determiner (18), or a plural quantificational determiner (19).

(18) Who fill we belly all year

Q fill DET.Poss belly DET.QUANT year

round?

round

‘Who fills our bellies all year round?’

(Buchner 1914: 106)

(19) You are close to all place where

2S.SUBJ COP close PREP DET.QUANT place PRO.REL

you want to go

2S.SUBJ want INF go

‘You are close to all the places where you want to go’

(Buchner 1914: 288)
5.2.4 Possessive constructions

In addition to possessive determiners, there are three types of possessive constructions in the historical dataset. The first is an *XY construction* involving the juxtaposition of two nouns with the possessor preceding the possessum, shown in bold in (20). The second is similar but with a possessive determiner, coreferential with the possessor noun, interceding between the two nouns, an *X possessive determiner Y* construction, seen in brackets in (20).

\[\text{(20) } \begin{array}{c} 
\text{Charly} \quad \text{people} \quad \text{they} \quad \text{look} \quad [\text{Green Hawkin} \\ \text{Charly} \quad \text{people} \quad 3.\text{pl.subj} \quad \text{look} \quad \text{Green Hawkin} \\
\text{him} \quad \text{girl} \quad \text{pass} \\
\text{det.poss} \quad \text{girl} \quad \text{pass} \\
\end{array} \]

‘Charly’s people they watch Green Hawkin’s girl pass’

(Buchner 1885: 676)

It is also possible that the construction type in (20) contains a possessive pronoun rather than a determiner. This possibility is discussed further in relation to the analysis conducted in Chapter 6 (§6.3.2).

In the final construction type the possessum is followed by a possessor preposition phrase headed by *for*, in brackets in (21).

\[\text{(21) } \begin{array}{c} 
\text{I} \quad \text{top} \quad \text{them} \quad \text{girl} \quad [\text{for} \quad \text{Yellow} \\
1.\text{s.subj} \quad \text{stop} \quad \text{det.def} \quad \text{girl} \quad \text{prep} \quad \text{Yellow} \\
\text{Hawkin}] \\
\text{Hawkin} \\
\text{Hawkin} \\
\text{‘I stopped the/that girl of Yellow Hawkin/ Yellow Hawkin’s girl’} \\
\end{array} \]

(Buchner 1885: 676)
Present-day CPE does not use a possessive XY construction, but the other two types of possessives remain a feature of the language (Ayafor & Green 2017: 98–99).

### 5.3 Pronouns

This section outlines the pronominal systems of nineteenth-century CPE that can established from the historical dataset, discussing personal, possessive, demonstrative, and interrogative pronouns.

The personal pronouns that are found in the historical dataset can be seen in Table 5.3.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>SUBJECT</th>
<th>OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>I/me</td>
<td>Me</td>
</tr>
<tr>
<td>2s</td>
<td>you</td>
<td>You</td>
</tr>
<tr>
<td>3s</td>
<td>he/him/it</td>
<td>Him</td>
</tr>
<tr>
<td>1pl</td>
<td>we</td>
<td>us/we</td>
</tr>
<tr>
<td>2pl</td>
<td>you</td>
<td>You</td>
</tr>
<tr>
<td>3pl</td>
<td>they</td>
<td>Them</td>
</tr>
</tbody>
</table>

**Table 5.3.** Personal pronouns in nineteenth-century CPE

For the most part, nineteenth-century CPE appears to have some elements of a case system for personal pronouns, in that certain pronouns can only appear in subject or object position. First person singular and third person singular pronouns, I and he can only be used in subject position, while me and him can be either subject or object pronouns. First person plural pronoun, us can only be used as an object whereas we can be either subject or object. There are numerous examples of most of these pronouns in the sources conforming to this pattern, the exceptions being third person plural pronouns of which there are only two examples and the use of him as a third person singular subject pronoun, for which there is a single example.

In present-day CPE, object pronouns are also used as topic pronouns (Ayafor & Green 2017: 104), so it is possible that the use of him in subject position in the nineteenth-century CPE data is an early example of this usage.
The evidence that there are restrictions on which pronouns can occur in subject or object positions in nineteenth-century CPE, combined with the presence of a partial case system in present-day CPE, lends weight to the conclusion that there is some element of a nominative-accusative case system in the personal pronouns of nineteenth-century CPE.

There is a single example of a feminine gender distinction in the personal pronouns found in the sources (22).

(22) White mammi  me  look  her

White mammy  1S.SUBJ  look  3S.F.OBJ

‘The white mammy, I looked at her’

(von Schkopp 1905: 142)

A single example does not meet the threshold for inclusion for analysis (§4.3.1) and therefore the personal pronominal system of CPE is assumed here to have no masculine/feminine gender distinction, as is the case for the present-day language. This is supported by the observation that there are several examples in which him is clearly used to refer to a woman or girl (23).

(23) I  pick  woman  to  marry  and  I

1S.SUBJ  pick  woman  INF  marry  CONJ  1S.SUBJ

call  him  for  my  place

call  3S.OBJ  PREP  DET.POSS  place

‘I picked a woman to marry and I called her to my place’

(Buchner 1885: 676–677)

There is also a single example of me in a clause initial topic position, followed by a coreferential subject pronoun (24).
This is a construction that is common in present-day CPE, in which the object pronouns are also as topic pronouns (Ayafor & Green 2017: 108) and lends weight to the possibility that nineteenth-century CPE may also have a set of topic pronouns formally identical to object pronouns.

The nineteenth-century CPE pronoun paradigm differs in a number of ways to that of present-day CPE. The personal pronouns of present-day CPE are presented in Table 5.4 for comparison.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>SUBJECT</th>
<th>OBJECT/TOPIC/FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>a</td>
<td>Mi</td>
</tr>
<tr>
<td>2s</td>
<td>yu</td>
<td>Yu</td>
</tr>
<tr>
<td>3s</td>
<td>i</td>
<td>yi/am</td>
</tr>
<tr>
<td>1pl</td>
<td>wi (wu)</td>
<td>Wi</td>
</tr>
<tr>
<td>2pl</td>
<td>wuna</td>
<td>Wuna</td>
</tr>
<tr>
<td>3pl</td>
<td>dey</td>
<td>dem/am</td>
</tr>
</tbody>
</table>

Table 5.4 Present-day CPE personal pronouns, adapted from Ayafor and Green (2017: 104)

Spelling aside, the main differences between the pronouns of present-day CPE and its nineteenth-century ancestor are the forms of the third person singular object pronouns, and the second person plural pronouns. Present-day CPE also has an additional third person clitic pronoun, am used in the object position for both singular and plural referents. This pronoun is not present in the historical dataset for early CPE.

There are only two examples of possessive pronouns in the historical dataset, both yours and both from the same speaker (25). This means that they do not meet the threshold for analysis as a feature of CPE, particularly
since this source was written at an even greater remove than many of the others, coming from a biography of Albert Saker, which was written by his daughter Emily after his death, based on his diaries.

(25) This land be yours all

<table>
<thead>
<tr>
<th>DET.DEM</th>
<th>land</th>
<th>COP</th>
<th>PRO.POSS</th>
<th>DET.QUANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>the</td>
<td>town</td>
<td>be</td>
<td>yours</td>
<td></td>
</tr>
</tbody>
</table>

‘This land is yours, all the town is yours’

(Saker 1908: 92–93)

Present-day CPE has a set of analytic expressions that serve as possessive pronouns which are formed using a possessive determiner and the expression *oun*, ‘own’, (Ayafor & Green 2017: 118). The present-day possessive pronouns can be seen in Table 5.5, adapted from Ayafor and Green (2017: 118).

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>POSSESSIVE PRONOUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>ma-oun</td>
</tr>
<tr>
<td>2s</td>
<td>ya-oun</td>
</tr>
<tr>
<td>3s</td>
<td>yi-oun</td>
</tr>
<tr>
<td>1pl</td>
<td>wi/wu-oun</td>
</tr>
<tr>
<td>2pl</td>
<td>wuna-oun</td>
</tr>
<tr>
<td>3pl</td>
<td>dia/dem -oun</td>
</tr>
</tbody>
</table>

**Table 5.5** Present day CPE possessive pronouns, adapted from Ayafor and Green (2017: 118)

It is possible that this system was in place in CPE in the late nineteenth century and there is no record of it. Certainly, there is a full set of possessive determiners in the nineteenth-century CPE dataset (§5.2.1). However, this hypothesis cannot be supported by the single example of a possessive pronoun that is available. Given this, there is little that can be said about possessive pronouns in nineteenth-century CPE, and they are not discussed further.
There is evidence of both *this* (26), and *that* (27), being used as demonstrative pronouns in the historical dataset.

(26) **This** no be good man

PRO.DEM NEG COP good man

‘This is not a good man’

(Buchner 1914: 288)

(27) **He** got best for **that**

1.S.SUBJ got best PREP PRO.DEM

‘He got the best of that’

(Buchner 1885: 677)

There is evidence of two interrogative pronouns in the texts, one example of *who* used as a subject interrogative pronoun (28), and one example of *what* used as an object interrogative pronoun (29).

(28) **Who** fill we belly all year

Q fill DET.POSS belly DET.QUANT year round?

round

‘Who fills our bellies all year round?’

(Buchner 1914: 106)

(29) **What** you be do now?

Q 2.S.SUBJ PST do now

‘What have you done now?’

(Saker 1908: 92)

There are also two interrogative phrases in the source texts, one example of *what for* (30), and one of *what the matter* (31) both used as adverbial interrogatives.
The interrogative phrases in (30) and (31) are fronted as single units and so are considered here to be functionally identical to interrogative pronouns. Further evidence for this analysis can be found in modern CPE which has several interrogative pronouns that have developed from phrases such as weitin, ‘what’, from English what thing, and wusai,’where’, from English which side (Ayafor & Green 2017: 120).

Finally, there is a single example of the English contracted form what’s (32).
In a note on the English spoken by Cameroonians in the 1880s, Max Buchner, a German doctor who was one of the representatives of Germany in Cameroon during the German annexation of the country, claimed that *what’s the matter* was used as an expression to introduce scolding (Buchner 1887: 214). Based on Buchner’s analysis and the context in which it is used in (32), the use of *what’s the matter* appears to be an example of a language chunk used as a discourse marker and is not included for analysis in later chapters.

There is no evidence of reflexive pronouns in the corpus texts, but there are examples of indefinite pronouns, three instances of *all*, and one example each of *one*, and *nothing*, all functioning as objects.

### 5.4 The verb phrase

This section provides a brief sketch of the nineteenth-century CPE verb phrase, noting where this differs from present-day CPE. It examines the strategies used in nineteenth-century CPE for expressing tense, mood, and aspect as well as negation and modality (§5.4.1). It also discusses serial verb constructions (§5.4.2). Passive constructions are not discussed since there are no instances of passive constructions in the historical dataset, nor is there a passive construction in present-day CPE (Ayafor & Green 2017: 261) suggesting that this may never have been a feature of CPE.
5.4.1 Tense, mood, modality, aspect, and negation

The majority of the infinitives in the historical dataset use the standard English infinitive marker *to* (33).

(33) What for you go to live in King Bell’s town?

(34) Me go for Joe Mandenne for find a woman

There are also a number of infinitives marked with *for* which is the infinitive marker in present day CPE (Ayafor & Green 2017: 135). The exact number of *for* infinitives depends on how the progressive marker *live* for is analysed. There are two unambiguous uses of *for* as a preverbal marker of the infinitive in the texts, (34) and (35).

(34) Me go for Joe Mandenne for find a woman

(35) Me go for Joe Mandenne for find a woman

‘I went to Joe Mandenne to find a woman’

(Buchner 1885: 676)
‘Joe Mandenne did not agree to go to Mandenne’

(Buchner 1885: 677)

According to Huber, progressive live for (36) grammaticalised from the locative copular construction live (for) (Huber 1999: 93).

‘After tomorrow we are going to go into the bush’

(von Schkopp 1905: 100)

It is possible that in such examples live for should be considered a kind of compound TMA particle. Alternatively, the structure may be similar to that of the modal construction fit to (37), found relatively frequently in the historical dataset.

‘He can put me in irons’

(Buchner 1887: 215)

According to this analysis, for is considered an infinitive marker introducing a subordinate clause, just as to does in fit to. In present-day CPE, fit is a

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25 Rather confusingly, in the story from which this example is taken, there are two characters with the name Mandenne, so here Joe Mandenne and Mandenne are not the same person.
modal marker which does not take an infinitival complement but rather precedes the invariant verb form. However, this construction is unattested in the historical dataset, in which *fit* is always followed by an infinitive. *Live for* was replaced by *de* both as a progressive marker and a copula around the 1930s due to influence from Krio (Huber 1999: 87). Therefore, present-day comparison is not informative for this construction. Although there are only two definite examples of *for* as an infinitive marker, its presence in *live for* progressive markers combined with the fact that it is the infinitive marker in present-day CPE (Ayafor & Green 2017: 135) means that infinitive marking *for* is considered to be a feature of nineteenth-century CPE. However, *to* as an infinitive marker is much more common in the historical dataset.

Present-day CPE uses a range of preverbal TMA markers, these include infinitive marker *foe*, anterior tense marker, *bi*, irrealis mood marker, *goe*, perfective aspect marker, *don*, imperfective aspect marker, *di*, modality markers, *fit* and *mos*, and negation particle * noe* (Ayafor & Green 2017: 73–73). For the most part, both tense and aspect are marked only by context in the nineteenth-century CPE texts. For the purposes of this study, the preverbal TMA markers in the texts are grouped together as a single grammatical feature, with differing TMA values, rather than each being considered a single feature. This grouping is for two reasons. Firstly, from the perspective of an LFG/processability theory analysis, the information exchange within the verb phrase for the TMA particles differs only in what specific information is being exchanged and so they can be analysed as a single feature (§6.5.1). Secondly, because preverbal TMA markers appear in such small numbers that unless taken together as a single feature several would have to be excluded from analysis. All of the TMA particles observed in the historical dataset are also a feature of present-day CPE, and with the exception of *fit to*, discussed above, there has been no change in either form or function for these words in the past 150 years. Given this, treating the TMA particles as a single syntactic feature seems justified. The nineteenth-century CPE TMA particles present in the historical dataset, in addition to *live for* and *fit to*, are past tense marker *be* (38), future marker *go* (39), and completive *done* (40).
(38) What you be do now?

Q 2s.SUBJ PST do now

‘What did you do now?’

(Saker 1908: 92)

(39) Never mind I go give you other one

Never mind 1s.SUBJ FUT give 2s.OBJ other one

‘Never mind, I will give you another one’

(Buchner 1885: 676)

(40) My father done leave you for we

POSS.DET father COMPL leave 2s.OBJ PREP 1PL.OBJ

‘My father left you to us’

(Saker 1908: 93)

In addition, there are examples of both shall and will as markers of future time (41) and (42).

(41) No man shall take you from we

NEG man MOD take 2s.OBJ PREP 1PL.OBJ

‘No man shall take you from us’

(Saker 1908: 92)

(42) We will fight for you

1PL.SUBJ MOD fight PREP 2s.OBJ

‘We will fight for you’

(Saker 1908: 92)

There are also examples of can (43), may (44), and must (45) in the historical dataset, all used to express modality.
(43) You no can go!

2S.SUBJ NEG MOD go

‘You can’t go!’

(Saker 1908: 92–93)

(44) Charly tell me say I top

Charly tell 1S.OBJ COMP 1S.SUBJ stop

them girl for Yellow Hawkin

DET.DEM/PL girl PREP Yellow Hawkin

and tell me so ‘and may go back

CONJ tell 1S.OBJ so CONJ MOD go back

for Yellow’

PREP Yellow

‘Charly told me ‘I stopped Yellow Hawkin’s girl(s)’ and told me that I should go back to Yellow’

(Buchner 1885: 676)

(45) He say Joe Mandenne must give my

1S.SUBJ say Joe Mandenne MOD give DET.POSS

woman back because he got

woman back CONJ 1S.SUBJ get

best for that

best PREP PRO.DEM

‘He said Joe Mandenne must give my woman back because he had got the best of that [situation]’

(Buchner 1885: 677)
There are also a few examples of verb inflection, in each case of an irregular verb. There are examples of both is (46) and are (47) in the historical dataset, as well as got (48).

(46) We fear him that is all

1PL.SUBJ fear 3S.OBJ PRO.DEM COP.3S all

‘We feared him, that is all’

(Buchner 1914: 290)

(47) You are close to all place where

2S.SUBJ COP.2S close PREP all place PRO.REL

you want to go

2S.SUBJ want INF go

‘You are close to all the places where you want to go’

(Buchner 1914: 288)

(48) Them other boy no got sense enough

DET.DEF other boy NEG get sense enough

‘The other boy doesn’t have enough sense’

(Buchner 1887: 216)

As with previous examples of irregular inflection, the presence of only a few examples, combined with a complete lack of regular inflection, points to their having been learned as discrete lexical items. One point that might contradict this analysis is the collocation of is with the third person singular subjects and are with second person subjects. However, closer inspection reveals that are, which only occurs twice in the historical dataset, is preceded by you in each case, while is is always preceded by it (except in the phrase what is the matter), suggesting that in each case the collocation or phrase may have been learned as a discrete lexical unit.
In the historical dataset, negation is marked exclusively with preverbal *no* (49) and (50), with a single exception where it is marked with *never*.

(49)  
You  no  buy  we,  no  buy  we  
2PL.SUBJ  NEG  buy  1PL.OBJ NEG  buy  1PL.OBJ  
‘You can’t buy us, can’t buy us’

(Buchner 1914: 109)

(50)  
Me  no  be  old  man?  me  no  
1S.SUBJ NEG  be  old  man  1S.SUBJ  NEG  
sabe  fashion?  
understand  fashion  
‘Am I not an old man? Do I not understand how things are done?’  

(Buchner 1887: 214)

5.4.2 Serial verb constructions

The final feature of the nineteenth-century CPE verb phrase that can be observed in the historical dataset is the serial verb construction (SVC). SVCs are mono-clausal complex predicates consisting of two or more independent verbs with no overt markers of subordination or coordination (Dixon 2006: 39–344). The verbs in these constructions usually share TMA values and at least one argument and make up a single conceptual event (Durie 1997: 289–291). Present-day CPE has a wide range of SVCs from a number of semantic classes, including motion SVCs using *kam*, ‘come’, and *goe*, ‘go’, (Ayafor & Green 2017: 196–197). As with TMA markings the examples of SVCs in the historical dataset are treated as a single phenomenon that is applied to different verb types. The dataset contains examples of motion SVCs with *come* (51) and (52), and several possible examples of motion SVCs with *go*, such as (53).
(51) We want English them come dill

1PL.SUBJ want English PL come deal

we

1PL.OBJ

‘We want the English to come and deal with us’

(Buchner 1914: 122)

(52) Mandenne come buy him

Mandenne come buy 3S.OBJ

‘Mandenne came and bought her’

(Buchner 1885: 676)

(53) This place live.for man go wash

DEM place PROG man go wash

‘This is the place where people can wash’

(Buchner 1897: 215)

The go constructions are ambiguous because in most examples go could be interpreted either as a marker of irrealis mood/future tense, or as a motion serialising verb. These are both functions that go has in present-day CPE (Ayafor & Green 2017: 143, 197) and the two have a common root in English go, which means that changing the interpreted function of go does not necessarily impact the meaning of the clause significantly in the examples found in the historical dataset.

There is also a single example of a comparative SVC using pass, a construction common in present day CPE. In these constructions the serialising verb follows the lexical verb (54).
‘We can find a road better than that one’

(Buchner 1887: 217)

The final SVC is a symmetrical one (55), in which two open class verbs of equal status in the clause are combined in an SVC (Ayafor & Green 2017: 215).

(55) What.the.matter you try take us
    Q 2PL_SUBJ try take 1PL_OBJ

so

so

‘Why did you try to take us like that?’

(Buchner 1914: 121)

In standard English, the two verbs would be combined with a conjunction, *try and take*, or *take* would form part of an infinitival subordinate clause, *try to take*. The SVC in (55) lacks any such conjunction or marker of subordination and it is found in a letter rather than reported speech. Given the presence of the other SVCs in the language it seems plausible to analyse *try take* as a symmetrical SVC in this instance.

5.5 Clause type

This section provides an overview of the types of clauses found in the historical dataset for CPE, discussing declarative clauses (§5.5.1), copular clauses (§5.5.2), interrogative clauses (§5.5.3), and subordinate clauses (§5.5.4). There are no examples of imperative clauses in the historical dataset and so they are not discussed here.
5.5.1 Declarative constituent order

There is no evidence in any of the sources of morphological case marking in nineteenth-century CPE outside of the pronominal system (§5.3). The basic declarative word order in nineteenth-century CPE is SVO(O) in clauses with a lexical verb, (56) and (57), and subject-predicate in copular clauses, (58).

(56) Yellow Hawkin borne son
     Yellow Hawkin bear daughter
     ‘Yellow Hawkin had a daughter’
     (Buchner 1885: 676)

(57) We dash him plenty cloth, tobacco
     1PL.SUBJ dash 3S.OBJ plenty cloth tobacco
     and gin
     CONJ gin
     ‘We gifted him plenty of cloth, tobacco, and gin
     (Buchner 1914: 290)

(58) This land be yours
     DET.DEM land COP PRO.POSS
     ‘This land is yours’
     (Saker 1908: 92)

5.5.2 Copular clauses

There are three different constructions found in the historical dataset for CPE that might be categorised as copular constructions: (i) the be construction, (ii) a possible zero copular construction, and (iii) the live (for) construction. The invariant copula, be, is used with predicative noun phrases (59) and pronouns (60) and can be negated with the negative particle no (61).
(59) You be boy for me

2s.subj cop boy prep 1s.obj

‘You are a boy to me’

(Buchner 1887: 53).

(60) This land be yours

Det.dem land cop pro.poss

‘This land is yours’

(Saker 1908: 92–93)

(61) This no be good man

Pro.dem neg cop good man

‘This is not a good man’

(Buchner 1914: 288)

There are also a few instances of inflected _be_ copulas, as seen in (62) and (63).

(62) We fear him that is all

1pl.subj fear 3s.obj pro.dem cop.3s all

‘We feared him, that is all’

(Buchner 1914: 290)

(63) You are close to all place where

2s.subj cop.2s close prep all place pro.rel

you want to go

2s.subj want inf go

‘You are close to all the places where you want to go’

(Buchner 1914: 288)
In each case, the form of be used is second person are or third person singular is. As previously discussed, (§5.4.1), it seems likely that these copular forms along with their pronominal subjects may have entered the language as discrete lexical items and are not analysed here as morphological phenomena.

There are three possible analyses of the predicative adjective construction in CPE, shown in (64) and (65).

(64) Him father dead
det.poss father dead

‘His father is dead’

(Buchner 1887: 217)

(65) Canoe alright
canoe alright

‘The canoe is alright’

(von Schkopp 1905: 156)

These may be zero copula constructions, alternatively they could be adjectival verbs. The final possibility is that such constructions did not require a verb in nineteenth-century CPE and these examples comprise a subject and an attributive expression/adjective with no verbal element. Which of these analyses is more convincing within a processability theory, LFG based framework is discussed in the following chapter (§6.6.2).

The final copula in evidence in the historical dataset is the locative live for. As previously discussed, (§5.4.1), it is not clear from the source texts whether live for is better analysed as a two-word copula followed by a locative noun phrase (66), or as a copula live followed by a locative preposition phrase headed by for (67).
(66) My belly live for Bell

DET.POSS belly COP Bell

‘My heart is in Bell [town]’

(Buchner 1887: 217)

(67) He live for water!

3s.SUBJ COP PREP water

‘He is in the water!’

(von Uslar 1899: 179)

Present-day CPE has three copulas: identificational copular verb, bi; locative copular verb, deiy; and a non-verbal equative copula, na. (Ayafor & Green 2017: 72–73). Magnus Huber’s data on West African pidgin/creoles suggests that both na and deiy became part of CPE as a result of influence from Sierra Leonean Krio during the twentieth century (Huber 1999: 79).

5.5.3 Interrogatives

The polar interrogatives in the historical dataset have SVO word order with, for the most part, no overt interrogative markers or inversion, as illustrated by (68), (69), and (70).

(68) Me no sabe fashion?

1s.SUBJ NEG understand fashion

‘Do I not understand how things are done?’

(Buchner 1887: 214)

(69) You want boy?

2s.SUBJ want boy

‘Do you want the/a boy?’

(Buchner 1914: 107)
(70) You live?
   2S.SUBJ live
   ‘Are you alive?’

(von Schkopp 1905: 121)

There are also two examples of what marking polar interrogatives (71) and (72).

(71) What you be King?
   Q 2S.SUBJ COP King
   ‘Are you King?’

(Buchner 1887: 53)

(72) What me no be old man?
   Q 1S.SUBJ NEG COP old man
   ‘Am I not an old man?’

(Buchner 1887: 214)

These examples suggest that what may be a question particle used to mark polar interrogatives but there are not enough examples of this usage for the strategy to be included for analysis in the chapters that follow.

It seems likely that polar interrogatives were marked using intonation since there are no other overt markers. This possibility seems especially likely given that intonation is how polar interrogatives are marked in present-day CPE (Ayafor & Green 2017: 185). However, without specific mention of intonation as a question marking strategy this remains hypothetical.

There is a single example of subject-operator inversion in a polar interrogative, which means that this feature does not meet the criteria for inclusion.

There are just four examples of constituent interrogatives in the historical dataset. In each case the interrogative expression is clause initial rather than
in situ. There is a single example of *who* (73), and the remainder of the examples contain *what*, either alone, meaning ‘what’ (74) or as part of an interrogative phrase meaning ‘why’ (75) and (76).

(73) **Who** fill we belly all year

Q fill DET.POSS belly DET.QUANT year

round?

round

‘Who fills our bellies all year round?’

(Buchner 1914: 106)

(74) **What** you be do now?

Q 2S.SUBJ PST do now

‘What have you done now?’

(Saker 1908: 92)

(75) **What.for** you go to live in King

Q 2S.SUBJ go INF live PREP King Bell-’s town?

Bell-POSS town

‘Why are you going to live in King Bell’s town?’

(Saker 1908: 92–93)

(76) **What.the.matter** you try take us

Q 2PL.SUBJ try take 1PL.OBJ

so?

so

‘Why did you try to take us like that?’

(Buchner 1914: 121)
The interrogative expressions found in nineteenth-century CPE differ from those of present-day CPE, which uses the set of interrogative pronouns and adverbs shown in Table 5.6. Present-day CPE interrogative expressions may also be used in situ (Ayafor & Green 2017: 189).

<table>
<thead>
<tr>
<th>INTERROGATIVE EXPRESSION</th>
<th>GLOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>hu</td>
<td>‘who’</td>
</tr>
<tr>
<td>weiti(n)</td>
<td>‘what’</td>
</tr>
<tr>
<td>wusai</td>
<td>‘where’</td>
</tr>
<tr>
<td>wishtaim</td>
<td>‘when’</td>
</tr>
<tr>
<td>wai/foseka weiti</td>
<td>‘why’</td>
</tr>
<tr>
<td>hau</td>
<td>‘how’</td>
</tr>
</tbody>
</table>

Table 5.6. Present day CPE interrogative expressions, adapted from Ayafor and Green (2017:121)

Based on the available sources, it is impossible to say how nineteenth-century CPE speakers expressed ‘where’, ‘when’, and ‘how’. It seems plausible to suggest that what for and what the matter meaning ‘why’ might have co-existed in early CPE with the present-day foseka weiti, ‘why’. There could well have been multiple competing phrases that were eventually lost. But, as with so many features of early CPE, without further data it is impossible to know if this was the case.

5.5.4 Subordinate clauses

There are a number of different subordinate clause types in the historical dataset. S-like complement clauses, that is, complement clauses with an overtly expressed subject, bracketed in the examples below, could occur both with a complementiser (77) and without (78).
(77) Charly tell me say ['I stop
Charly tell 1s.OBJ COMP 1s.SBJ stop
them girl for Yellow Hawkin’]
DET.DEF/PL girl PREP Yellow Hawkin

‘Charly told me ‘I stopped Yellow Hawkin’s girl(s)’
(Buchner 1885: 676)

(78) King Akwa say ['Him got best for
King Akwa say 3s.SBJ get best PREP
them palava’]
DET.DEF/PL palava

‘King Akwa said ‘He got the best of that/those situation(s)’
(Buchner 1885: 677)

The only complementiser in the sources is say, which in each case is used to introduce a direct quotation. The majority of S-like complement clauses without a complementiser are also utterance clauses but there is an example of a non-utterance S-like clause introduced by look (79).

(79) Charly people they look [Green Hawkin
Charly people 3PL.SBJ look Green Hawkin
girl him pass]
girl 3S.SBJ pass

‘Charly’s people watched/saw Green Hawkin’s girl pass’
(Buchner 1885: 676)

There are also infinitival complement clauses in the texts, introduced by the infinitive form of the verb, and almost all without an overt subject (80), although there is a single example with a subject. There is also one example of a complement clause containing a bare infinitive. With just a single
example each these last two constructions do not meet the criteria for inclusion.

(80) Joe Mandenne no agree [for go for
Joe Mandenne NEG agree INF go PREP Mandenne]
Mandenne

‘Joe Mandenne did not agree to go with/to Mandenne’

(Buchner 1885: 677)

There are also two adverbial clauses in the historical dataset, one temporal clause (81), and one reason clause (82), both in brackets.

(81) You put flag up [before we
2PL.SBJ put flag PRT PREP 1PL.SBJ
get time to look you]
get time INF look 2PL.OBJ

‘You put a flag up before we had time to see you’

(Buchner 1914: 121)

(82) He say Joe Mandenne must give my
3S.SBJ say Joe Mandenne MOD give DET.POSS
woman back [because he got best
woman PRT CONJ 3S.SBJ get best
for that]
PREP PRO.DEM

‘He said Joe Mandenne must give my woman back because he got the best of that [situation]’

(Buchner 1885: 677)
Finally, there are three examples of relative clauses in the historical dataset, one subject relative clause (83), one direct object relative clause (84), and one adverbial relative clause (85), each bracketed with relative pronouns in bold. Since these are variations on the same construction, the three are considered together to meet the criteria for inclusion for analysis.

(83) Man top him Green girl for your part money [who left]

part money PRO.REL left

‘The man took the Green girl for your part of the money which was left’

(Buchner 1885: 676)

(84) I take them girl [Yellow Hawkin give me]

give 1S.OBJ

‘I took the girl(s) Yellow Hawkin gave me’

(Buchner 1885: 677)

(85) You are close to all place [where you want to go]

2S.SBJ COP close PREP DET.QUANT place

PRO.REL 2S.SBJ want INF go

‘You are close to all the places where you want to go’

(Buchner 1914: 288)

In each case, the relative clause follows the head noun. The subject relative seen in (83) employs a relative pronoun, who. The direct object relative (84)
employs a gap. Finally, the locative adverbial relative clause (85) employs relative pronoun, where.

Present-day CPE also has relative clauses that follow the head noun. Otherwise, present-day CPE relative clauses differ in several ways from those observed in the historical dataset. Firstly, present-day CPE uses an invariant relativiser, we, to introduce finite relative clauses (Ayafor & Green 2017: 234). Secondly present-day CPE shows consistent pronoun retention in subject relative clauses and also in direct object relatives with human referents (Ayafor & Green 2017: 234–236).

The nineteenth-century CPE relative clause appears to employ a variety of relative pronouns, however, all of the examples of CPE in the historical dataset, with the possible exception of the letter, are European interpretations of the CPE that they heard. It is possible that both who and where in the examples above are actually representations of an invariant relativiser, and that the written examples reflect assumptions made by the man who wrote them down. As with so many of the features of nineteenth-century CPE, more data would be required to explore this possibility.

5.6 Summary

This chapter has provided a typological overview of the features of CPE as it was spoken in the late nineteenth century, first outlining the features of the noun phrase that can be observed in the historical dataset (§5.2), then the pronominal system of nineteenth-century CPE(§5.3), followed by the features of the verb phrase (§5.4), and an overview of the types of clauses found in the dataset (§5.5).

This outline is almost certainly incomplete as the available data is so scarce. It is also possible that there are inaccuracies in the reports of the Europeans who wrote most of the source material available, based on their interactions with Cameroonians. Despite these limitations, the risk of drawing unsupported conclusions has been mitigated by requiring each feature to meet a set of criteria for inclusion in the dataset. Additionally, while present-day CPE is clearly different in a number of ways from the language spoken 150 years ago, there are many evident similarities between CPE as it
is spoken today and its nineteenth-century ancestor, suggesting a level of accuracy in the historical dataset.

For ease of reference, and clarity, the features of CPE outlined in the sections above, and included for analysis in the chapters that follow, are summarised here.

The features of the noun phrase are:

- Indefinite determiner-noun word order
- Definite determiner-noun word order
- Demonstrative determiner-noun word order
- Use of demonstrative as definite determiner (preferred strategy)
  AND
- Use of definite determiner distinct from demonstrative
- Use of indefinite determiner distinct from one (preferred strategy)
  AND
- Use of one as indefinite determiner
- Adjective-noun word order
- Numeral-noun word order
- Use of a plural word/particle
- Plural word-noun word order
- Use of X/Y possessive
- Use of X possessive determiner Y possessive
- Use of postnominal possessor PP

The features of the pronominal system are:

- Evidence of some nominative/accusative case alignment in personal pronominal system
- Lack of gender distinction in personal pronouns
The features of the verb phrase are:

➢ Tense, mood, and aspect marked only by context (preferred strategy)

    AND

➢ Use of preverbal word to mark TMA
➢ Use of preverbal word to mark negation
➢ Presence of SVCs in the language

The clausal features are:

➢ SVO declarative word order
➢ Use of an overt copula with predicative noun phrases
➢ Use of an overt copula with predicative locatives
➢ Use of different copula for predicative noun phrases, and locatives
    (and for predicative adjectival meaning)
➢ Predicative adjectival meaning expressed with no overt copula
➢ No grammatical marking of polar interrogatives
➢ Use of constituent interrogative expressions to mark constituent interrogatives
➢ Constituent interrogative expressions clause initial
➢ Use of complementiser with S-like subordinate clause
➢ Complementiser subordinate clause initial
➢ Use of infinitival subordinate clauses
➢ Noun-relative clause word order

Not all features are relevant to every analysis, and so in each of the chapters that follows the features relevant to the analysis at hand are outlined and discussed. The next chapter applies a processability theory-based analysis to the features of nineteenth-century CPE and discusses the results of this analysis and its implications for PILH.
Chapter 6
Analysis: identifying processability levels

6.1 Introduction

This chapter explores the features of nineteenth-century Cameroon Pidgin English (CPE) by applying a processibility theory-based analysis to the CPE data in order to address research questions (1.a) and (1.b):

1. a. Does the list of English interlanguage features proposed by processability theory encompass all of the identified features of Cameroon Pidgin English?

b. Can a processability theory-based analysis of the features of Cameroon Pidgin English that aren’t on the list of English interlanguage features provide support for PILH?

The first step of this analysis is to compare the features of nineteenth-century CPE to the list of English as a second language (L2) features and their associated processability levels, as assigned in the processability theory literature. This analysis, presented in the following section (§6.2) reveals that not every feature of nineteenth-century CPE can be accounted for using the current information available on the processability of English interlanguage features.

The second step is to apply a lexical function grammar (LFG) -based analysis to the features of nineteenth-century CPE to establish the processing level at which each feature could become part of a learner’s interlanguage. This analysis is not limited to those features typical of English interlanguages. LFG is applied to every feature of nineteenth-century CPE suitable for such analysis because it is not impossible for first language (L1) features or innovations unrelated to both L1 and L2 to become part of an interlanguage. From a processability theory perspective, no feature, regardless of its origin, can enter an interlanguage prior to the point at which the speaker develops the processing capacity required to produce the feature. Therefore, exploring the processability level at which
the features of nineteenth-century CPE could have become part of an interlanguage makes it possible to establish whether early CPE resembles an early-stage interlanguage, as predicted by PILH. The results of this analysis for the most part support the predictions of PILH, but there are several constructions in nineteenth-century CPE that could not have become part of an interlanguage prior to level four, a higher processing level than PILH predicts. The implications of this finding for PILH are discussed at the end of the chapter (§6.7).

Not every feature of nineteenth-century CPE identified in the historical dataset is suitable for such analysis. Firstly, for any feature to be considered part of CPE it has to reach the inclusion criteria outlined in the methodology chapter (§4.3.1). These are:

For syntax: three or more uses of a syntactic structure, at least two by different speakers.

For morphology: evidence that a morphological process can be applied to multiple lexical items.

Secondly, processability theory is a theory concerned with syntactic and morphological development, so features such as the choice between two different indefinite determiner forms cannot reasonably be analysed within a processability theory framework as it is a lexical choice.

Table 6.1 lists, by category, the elements of nineteenth-century CPE grammar suitable for a processability theory-based analysis.
The methodology for establishing the processing level at which a given feature could become part of an interlanguage is outlined in Chapter 4 (§4.3.2). The steps required are as follows:

➢ First, f-structure analysis is used to establish whether there is any information exchange involved in the accurate production of the feature.

➢ Second, an annotated c-structure is used to establish where feature unification is possible in the production of the feature.

➢ Finally, the results from the previous two steps are compared to the processability theory processability stages to establish, wherever possible, the processing level a speaker would need to have attained for the feature to become part of their interlanguage.
The following sections outline this analysis in detail. First a comparison of
nineteenth-century CPE features with the processability theory list of
English interlanguage features is conducted (§6.2), then nineteenth-century
CPE noun phrase features are analysed using the three steps outlined above
(§6.3). This is followed by analysis of the nineteenth-century CPE
pronominal system (§6.4), the nineteenth-century CPE verb phrase (§6.5),
and nineteenth-century CPE clause types (§6.6). The findings of this
analysis are then compiled, and their implications for PILH are discussed
along with methodological issues arising from the analysis (§6.7), this
discussion is followed by a chapter summary (§6.8).

6.2 Comparing nineteenth-century Cameroon Pidgin English to the
processability theory list of interlanguage features

The list of English interlanguage features used for most processability
theory analysis is short and is therefore unlikely to encompass all of the
features of nineteenth-century CPE. Table 6.2 reproduces the table of
English interlanguage features created by Pienemann with an additional
column on the right stating whether the phenomenon in question can be
observed in the nineteenth-century CPE data. A guide to the abbreviations
used by Pienemann to describe each phenomenon can be found on Page
xvii.
<table>
<thead>
<tr>
<th>STAGE</th>
<th>PHENOMENON</th>
<th>EXAMPLES</th>
<th>IS PHENOMENON OBSERVED IN THE NINETEENTH-CENTURY CPE DATA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Words</td>
<td>hello, five, dock, central</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Formulae</td>
<td>How are you? What’s your name? Where is X?</td>
<td>Possibly</td>
</tr>
<tr>
<td>2</td>
<td>S neg V(O)</td>
<td>Me no live here/I don’t live here</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>SVO</td>
<td>Me live here</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>SVO?</td>
<td>You live here?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>-ed</td>
<td>John played</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>-ing</td>
<td>Jane going</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Plural -s (noun)</td>
<td>I like cats</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Poss -s (noun)</td>
<td>Pat’s cat is fat</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Do SV(O) -?</td>
<td>Do he live here?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Aux SV(O) -?</td>
<td>Can I go home?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Wh SV(O) -?</td>
<td>Where she went?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Adverb first</td>
<td>Today he stay here</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Poss (determiner)</td>
<td>I show you my garden.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Object (pronoun)</td>
<td>This is your pencil</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mary called him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Copula S (x)</td>
<td>Is she at home?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Wh copula (x)</td>
<td>Where is she?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>V -particle</td>
<td>Turn it off!</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Neg/aux 2nd -?</td>
<td>Why didn’t you tell me? Why can’t she come?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Aux 2nd -?</td>
<td>Why did she eat that? What will you do?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>3sg -s</td>
<td>Peter likes bananas</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Cancel aux 2nd</td>
<td>I wonder what he wants</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 6.2 The features of nineteenth-century CPE compared to the processability stages of English interlanguages, adapted from Pienemann et al. (2011: 132)

Of the 22 English interlanguage features listed in Table 6.2, only eight are present in the nineteenth-century CPE data. Of these, two, the use of single
words and formulaic chunks of language learned as a single lexical unit, are not useful to this analysis. Both are stage one features and so neither reflect the acquisition of grammar. Of the remaining six features on the list that are present in the nineteenth-century CPE data, Pienemann lists three of them as level two features and three as level three features.

For completeness, in the sections that follow all of the features of nineteenth-century CPE listed in Table 6.1 (§6.1) undergo the same process of analysis, including those whose English interlanguage equivalents have already been assigned a processing level by Pienemann. Analysing all of the features of CPE is important to ensure consistency of analysis. Pienemann does not outline the specifics of the LFG analysis that underpins his theory and so it is possible that his methodology differs from that used in this thesis and might yield different results, and this, in fact, appears to be the case. During the analysis conducted for this chapter, two features: the use of object pronouns (§6.4), and fronted constituent interrogative expressions (§6.6.3), are analysed as being processible at a different level to those stated by processability theory. These differences are discussed further at the end of the chapter (§6.7).

6.3 Establishing Processing levels: the noun phrase

There are six features of the nineteenth-century CPE noun phrase present in the historical dataset suitable for processability theory analysis. These are:

- The use of prenominal determiners
- The use of nominal premodifiers
- The use of a prenominal word to mark plurals
- The use of an X/Y possessive construction
- The use of an X/possessive determiner/Y possessive construction
- The use of a postnominal possessive preposition phrase construction

For analysis, these features are divided into two groups. Prenominal expressions comprising determiners, modifiers, and plural marking (§6.3.1); and possessive constructions (§6.3.2).
6.3.1 Prenominal features

The analysis presented in this section explores three prenominal features of the nineteenth-century CPE noun phrase.

➢ The use of prenominal determiners
➢ The use of nominal premodifiers
➢ The use of a prenominal word to mark plurals

The sentence below (1) demonstrates that determiners and adjectives can both occur in the same noun phrase in nineteenth-century CPE.

(1) a good bob

‘a good bob [palaver/affair]’

adapted from (Laird & Oldfield 1837: 290)

To analyse the processability level at which each of these features could become part of an interlanguage it is first necessary to establish what grammatical information, if any, needs to be exchanged to accurately form the noun phrase. This is achieved with an f-structure analysis, as outlined in the methodology chapter (§4.3.2). The f-structure for (1) can be seen in Figure 6.1.

![F-structure for indefinite noun phrase with adjective modifier shown in (1)]

In the f-structure in Figure 6.1 the head noun has a negative definiteness value and also a singular number value. Since nineteenth-century CPE marks (in)definiteness with a prenominal determiner, definiteness values need to be exchanged between the head noun and the determiner slot in the
noun phrase so that the correct determiner is used. In contrast, no grammatical information exchange is required to produce the adjective, *good*, also seen in (1). The adjective *good* is invariable and shares no grammatical features with the head noun, reflected by a lack of associated values in the f-structure.

Since production of the phrase in (1) requires grammatical information exchange between the head noun and the determiner, it is necessary to identify the c-structure node at which this information exchange is possible. That is, the node at which feature unification between the head noun and determiner occurs. Figure 6.2 shows a c-structure for the noun phrase in (1), annotated to demonstrate feature unification.

![Annotated c-structure for indefinite noun phrase with adjective modifier shown in (1)](image)

**Figure 6.2** Annotated c-structure for indefinite noun phrase with adjective modifier shown in (1)

The c-structure in Figure 6.2 is annotated to demonstrate the node at which feature unification between head noun and determiner is possible. Both the head noun *bob* and the determiner *a* are annotated as singular and indefinite. This grammatical information about the two words can only be unified, or exchanged, at the noun phrase (NP) node which is the node the two words share.

Based on this analysis, it is possible to state that unification of definiteness and number values between the nineteenth-century CPE head noun and determiner is possible at the level of the phrase and therefore that accurate
production of an indefinite determiner in nineteenth-century CPE indicates that the first speakers had acquired the phrasal procedure in their English L2 interlanguages. This assessment of the nineteenth-century CPE determiner as a level three feature remains consistent whether the determiner is (in)definite, possessive, or demonstrative, as in each case the determiner acts as a specifier and grammatical information about head noun and specifier can only be unified, or exchanged, at the noun phrase (NP) node. Therefore, the determiner system of nineteenth-century CPE can be analysed as a processing level three feature.

Although no feature unification is required to accurately produce a modifying adjective in nineteenth-century CPE, there is a specific premodifier (post determiner) position in the noun phrase for adjectives and pre-modifying nouns. For this premodifier slot to be a feature of nineteenth-century CPE requires specific noun phrase word ordering rules. Pienemann does not specify the level at which such phrasal word order rule acquisition might be possible but does state that clausal word ordering rules cannot be learned until learners acquire clausal procedure rules in a level four interlanguage (Pienemann 1998:85). It is not obvious how an LFG analysis could be used to determine the point at which phrasal word order rules develop. But if clausal procedures must be acquired in order for a function to be assigned to a phrase within the clause it would follow that phrasal procedures must be acquired in order for a function to be assigned to a word within the phrase. Based on this analysis, the use of pre-modifying adjectives and nouns in the nineteenth-century CPE noun phrase can be analysed as a level three interlanguage feature.

Analysis of the prenominal plural marking found in nineteenth-century CPE (2) is complicated by the fact that them serves as both a definite determiner and a pluralising word.
(2) \textbf{them} girl

\textit{PL.(DEF)} girl

‘(the) girls’

(Buchner 1885: 677)

Figure 6.3 shows the f-structure for (2).

\begin{center}
\begin{tabular}{c}
\text{PREP} \text{‘girl’} \\
\text{DEF} + \\
\text{NUM} \text{PL}
\end{tabular}
\end{center}

\textbf{Figure 6.3} F-structure for plural noun phrase shown in (2)

The f-structure shown in Figure 6.3 assumes that \textit{them} marks the noun phrase as both definite and plural. If this analysis is accurate, then \textit{them} can be analysed as a determiner which also encodes number and is therefore a specifier. An annotated c-structure for (2), based on this analysis can be seen in Figure 6.4.

\begin{center}
\text{NP} \\
\text{D} \quad \text{N}
\end{center}

\begin{center}
\begin{tabular}{c}
\text{NUM = PL} \\
\text{DEF = +}
\end{tabular}
\begin{tabular}{c}
\text{NUM = PL} \\
\text{DEF = +}
\end{tabular}
\end{center}

\textbf{Figure 6.4} Annotated c-structure for plural noun phrase shown in (2)

Alternatively, it is possible that \textit{them} is multifunctional, in some cases encoding definiteness and others encoding plurality. If this analysis is accurate, and the use of \textit{them} in (2) is marking just plurality then the f-structure in Figure 6.5 would be correct.
The c-structure for this analysis is shown in Figure 6.6.

If *them* encodes just plurality and does not also carry a definiteness value then it can be analysed as a modifier, rather than a specifier. In this case, the information exchange occurs at the noun-bar (N’) node rather than the NP node. Although feature unification occurs in this c-structure below the level of the NP node the analysis of the plural marker as a level three interlanguage feature remains. It is only possible to have an N’ node if you have an NP node. It is only possible to have an NP node if the phrasal procedure has developed.

The annotated c-structures shown in Figures 6.4 and 6.6 demonstrate that to correctly produce the nineteenth-century CPE pre-verbal plural marker requires feature unification at the NP node. This requirement makes the preverbal plural marking found in nineteenth-century CPE another phenomenon that can be analysed as a level three interlanguage feature.
6.3.2 Possessive constructions

The analysis presented in this section explores three nineteenth-century CPE possessive constructions.

➢ The use of an X/Y possessive construction

➢ The use of an X/possessive determiner/Y possessive construction

➢ The use of a postnominal possessive preposition phrase construction

The first of these constructions, the X/Y possessive can be seen in (3).

(3) Charly people
    Charly people
    ‘Charly’s people’
    (Buchner 1885: 676)

The f-structure for this phrase can be seen in Figure 6.7.

\[
\begin{array}{c}
\text{PRED} \quad \text{‘people’} \\
\text{NUM} \quad \text{PL}
\end{array}
\]

\[
\begin{array}{c}
\text{POSS} \quad \begin{array}{c}
\text{PRED} \quad \text{‘Charly’}
\end{array}
\quad \text{NUM} \quad \text{SG}
\end{array}
\]

**Figure 6.7** F-structure for XY possessive noun phrase shown in (3)

The f-structure in Figure 6.7 represents the fact that no grammatical information exchange is required to accurately produce this type of possessive construction. The two nouns do not share number values. Because there is no information exchange no feature unification is required, reflected by a lack of annotation in the c-structure for (3), shown in Figure 6.8.
The lack of feature unification means that this type of construction could theoretically be produced in a very early-stage interlanguage. However, as with the premodifiers in the previous section (§6.3.1) word ordering must also be considered. In the historical dataset, the possessor always precedes the possessum in this possessive construction. This consistent word ordering suggests that, as with nominal premodifiers, phrasal procedure rules had to be processible in the interlanguage. Therefore, this phenomenon can be analysed as a level three interlanguage feature.

The X/possessive determiner (or pronoun)/Y construction, (4), does not look considerably different from the XY possessive, involving the addition of a possessive determiner or pronoun between the two nouns, coreferential with the possessor.

(4)  Green Hawkin him girl  
  Green Hawkin DET/PRO.Poss girl  
  ‘Green Hawkin’s girl’
  (Buchner 1885: 676)

However, this construction is considerably different from the XY possessive in terms of the information exchange involved. An f-structure for (4) can be seen in Figure 6.9.
The f-structure in 6.7 shows agreement between the possessor noun and the possessive determiner, or pronoun, in terms of person, number, and definiteness values. *Green Hawkin*, indexed as $i$ in the f-structure, and the possessive determiner, or pronoun, *him*, also indexed as $i$ are coreferential.\(^{26}\)

The grammatical information they share needs to be unified in order for the correct possessive determiner to be produced. What is less clear is how to represent this type of construction in the c-structure. An annotated c-structure based on the analysis of *him* as a possessive determiner can be seen in Figure 6.10, while one based on the analysis of *him* as a possessive pronoun can be seen in Figure 6.11.

\(^{26}\) Strictly speaking the f-structure in Figure 6.9 is not accurate if *him* is analysed as pronoun since in keeping with LFG convention its predicate value should be ‘PRO’ rather than ‘him’, however this representation does not alter the analysis that follows.
Figure 6.10 Annotated c-structure for X-det-Y possessive noun phrase shown in (4)
Whether *him* is analysed as a possessive determiner or a possessive pronoun, feature unification between *him* and its co-referential possessor noun phrase, *Green Hawkin*, is only possible at the N' node. As with previous features of the nineteenth-century CPE noun phrase, the specific word order means that such a construction requires the phrasal procedure to have been acquired for accurate production. It is, therefore, analysed as a level three interlanguage feature.

The final possessive construction found in the nineteenth-century CPE sources is the postnominal possessive preposition phrase construction, bracketed in (5).

```
(5)  them money [for Charly]

DET.DEF money PREP Charly

‘the money of Charly’s/ Charly’s money’
```

(Buchner 1885: 676)
An f-structure for (5) can be seen in Figure 6.12.

\[
\begin{array}{c}
\text{FRED} & \text{‘money \langle NCOMP\rangle’} \\
\text{NUM} & \text{PL} \\
\text{NCOMP} & \begin{array}{c}
\text{PRED} & \text{‘Charly’} \\
\text{NUM} & \text{SG}
\end{array}
\end{array}
\]

**Figure 6.12** F-structure for possessive preposition phrase construction shown in (5)

The f-structure in Figure 6.12 reveals that no information exchange in relation to the features of the noun phrase is required to accurately produce this type of possessive construction. This lack of information exchange is reflected in the lack of annotation for this construction in the c-structure, shown in Figure 6.13.

\[
\begin{array}{c}
\text{NP} \\
\text{N’} \\
\text{PP} \\
\text{N’} \\
\text{P’} \\
\text{N} \\
\text{money} \\
\text{P} \\
\text{for} \\
\text{NP} \\
\text{N} \\
\text{Charly}
\end{array}
\]

**Figure 6.13** C-structure for possessive preposition phrase construction shown in (5)

The possessor preposition phrase seen in Figure 6.13 is one that is not required by or specified for by the head noun, but as with the XY possessive construction, there are specific word order rules involved in its production. The nineteenth-century CPE possessor preposition phrase always postmodifies the head noun. The fact that there is no evidence of post positions in CPE, diachronically or synchronically, suggests that adposition
phrases also have a set word order in nineteenth-century CPE. In each case these are phrasal word ordering rules since the order of noun and postmodifying preposition phrase is a noun phrase word ordering rule, while the order of preposition and its noun phrase complement is a preposition phrase word ordering rule. As with previous phrase level word orders it is assessed that phrasal procedure rules must be accessible in the speaker’s interlanguage to accurately produce these constructions. Therefore, the possessive preposition phrase construction is analysed as a level three interlanguage feature.

6.4 Establishing Processing levels: the pronominal system

Pronouns in nineteenth-century CPE appear to be subject to the same word ordering rules as lexical nouns. Therefore, the only feature of the pronominal system analysed here is the presence of nominative/accusative case alignment in the personal pronoun system. As outlined in the previous chapter (§5.3), the nineteenth-century CPE personal pronominal system consists of person-number stems with no gender distinctions, and usage that suggests partial nominative-accusative case alignment.

The processability theory literature does not have a great deal to say about personal pronouns. Pienemann et al. include object pronouns as a processing level three feature of English interlanguages but do not specify why, nor do they discuss when subject pronouns might enter an interlanguage (Pienemann et al. 2011: 132). However, subject pronouns are used accurately from stage three in the examples Pienemann et al. give of other phenomena (Table 6.2).

English pronouns are person-number stems, that is, there is no element of affixation involved in forming them, so all of the information about an English pronoun is stored in its lexical entry. The processing level at which these pronominal forms can be used accurately in an interlanguage depends on whether it is possible for the subject and object pronouns to map to different semantic roles without grammatical information exchange occurring. If it is possible for subject and object pronouns to map to different semantic roles, then these pronouns should all be processible in a
level two interlanguage. If it is not possible then, while object pronouns could be possible in a level three interlanguage, it is not clear how subject pronouns could enter an interlanguage prior to processing level four.

According to processability theory, during the second processing stage of an interlanguage, canonical word order develops, based on the learner’s knowledge of semantic roles. If a learner can map an object pronoun form onto the role of patient, and a subject pronoun on to the role of agent, then it follows that nominative/accusative case alignment should be possible from this early stage. A more in-depth discussion of canonical word order can be found in the section on declarative word order later in this chapter (§6.6.1). Alternatively, if this mapping between pronoun forms and semantic roles is not possible, then full nominative/accusative alignment should only be possible in a stage four interlanguage, although object pronouns could form part of a stage three interlanguage. A sentence containing two personal pronouns he and him can be seen in (6).

(6) \[ \text{He} \quad \text{top} \quad \text{him} \]

\[ 3s.\text{subj} \quad \text{stop} \quad 3s \]

‘He stopped him’

(Buchner 1885: 676)

If the analysis of these pronouns as stage two interlanguage features is inaccurate, the verb needs to specify the case requirements of its arguments in the f-structure. An f-structure for the sentence in (6) demonstrating this specification can be seen in Figure 6.14.
Figure 6.14 F-structure for clause containing nominative and accusative personal pronouns shown in (6)

In Figure 6.14, the predicate top requires two arguments, a subject with a positive value for nominative case, and an object with a positive value for accusative case.

An annotated c-structure for the sentence in (6) can be seen in Figure 6.15.

Figure 6.15 Annotated c-structure for clause containing nominative and accusative personal pronouns shown in (6)

The annotated c-structure shown in Figure 6.15 reveals that feature unification for the verb and the object pronoun occurs at the verb-bar (V')
node. Feature unification for the verb and subject pronoun however is only possible at the inflection phrase (IP) node. This means that if the nineteenth-century CPE verb specifies case requirements for its arguments, then producing the correct object pronoun would require intra-phrasal information exchange, requiring the phrasal procedure to have been acquired, whereas producing the correct subject pronoun would require inter-phrasal information exchange requiring the clausal procedure to have been acquired. This would mean that object pronouns are a processing level three feature, while subject pronouns would be a processing level four feature.

These f-structures and c-structures represent how information would be exchanged were it being exchanged. What they cannot do is demonstrate the most plausible analysis. The analysis of CPE subject pronouns as level four interlanguage features is problematic for PILH as level four interlanguage features cannot be considered especially early-stage. However, this is just one possible interpretation of the data and without good evidence it is not possible to conclude that it is the correct one. Additionally, accurate pronoun use does develop relatively early in many interlanguages (Saville-Troike 2012: 63), lending support to an analysis of both subject and object pronouns as level two interlanguage features. What is less clear is why Pienemann analyses object pronouns as level three interlanguage features but does not list a processing level for accurate subject pronoun production. It is possible that subject pronouns map more readily to semantic roles than object pronouns, but it is not apparent why that should be. Based on the assessment presented in this chapter, nominative/accusative alignment in nineteenth-century CPE personal pronouns is tentatively analysed as a level two interlanguage feature since the alternative analysis contradicts observed patterns of language acquisition.

The other set of pronouns that reach the criteria for analysis are interrogative pronouns. Since these are used exclusively in interrogative clauses, they are discussed in relation this clause type (§6.6.3).
6.5 Establishing Processing levels: the verb phrase

There are four features of the nineteenth-century CPE verb phrase present in the historical dataset that are suitable for processability theory analysis. These are:

➢ The use of preverbal TMA marking words
➢ The use of preverbal words such as *shall*, and *will*, which are modal auxiliaries in standard English
➢ The use of a preverbal negation marking word
➢ The use of serial verb constructions

For analysis, these verb phrase features are divided into two groups: preverbal markers, comprising TMA, modal auxiliaries, and negation (§6.5.1); and serial verb constructions (§6.5.2).

6.5.1 Tense, mood, modality, aspect, and negation

The features analysed in this section are:

➢ The use of preverbal TMA marking words
➢ The use of preverbal words such as *shall*, and *will*, which are modal auxiliaries in standard English
➢ The use of a preverbal negation marking word

Most of the tense and aspectual information expressed in the historical dataset is marked contextually. The only processing constraint for such examples are those which apply to the rest of the clause. Therefore, this method of expressing tense and aspect cannot have a specific processing level assigned to it.

The verbal premodifiers used to mark tense and aspect can be discussed as a group since they all occupy the same preverbal slot in the nineteenth-century CPE verb phrase. The modal markers, identical to English auxiliary verbs, are analysed separately below in order to establish whether there are any discernible differences between the two types of verbal modifier. In present day CPE, several TMA markers can occur in a single verb phrase.
(Ayafor & Green 2017: 152), but there is no evidence of such combinations in the historical dataset. However, there are a few examples of negated verb phrases in which the verb is also preceded by a TMA marking word in the historical dataset (7).

(7) You no go write them
    2s.subj neg go write 3pl.obj

‘You are not going to write to them’

(Saker 1908: 92)

Where TMA marking and negation both occur in the same verb phrase, the negation particle no precedes the TMA word suggesting that there may have been a specific negation position preceding the TMA position in the word order rules of nineteenth-century verb phrase.

As discussed in the previous chapter (§5.4.1), nineteenth-century CPE had a variety of preverbal TMA markers: infinitival marker for, progressive live for, past tense marker be, completive marker done, and future marker go (8).27

(8) I go die
    1s.subj fut die

‘I will die’

(von Schkopp 1905: 103)

Figure 6.16 shows an f-structure for the sentence in (8).

---

27 For many of these words the analysis of their exact function is tentative. It is very possible that live for could be more accurately described as imperfective, that done should be labelled perfective, and that go is a marker of irrealis mood. However, the precise functions of each of these words does not alter the analysis of processability that follows so for the purpose of this thesis the labels assigned above to each word are sufficiently indicative of their function.
Figure 6.16 F-structure for clause with preverbal TMA marker shown in (8)

In the f-structure shown in Figure 6.16, the verb *die* has a future tense value. For this tense value to trigger the use of future *go* in the clause, the tense information needs to be exchanged between the verb and the TMA position in the verb phrase. An annotated c-structure for the sentence in (8) can be seen in Figure 6.17.

![Figure 6.17 Annotated c-structure for clause with preverbal TMA marker shown in (8)](image)

The c-structure in Figure 6.17 demonstrates that feature unification is possible for the verb and its TMA particle at the inflection-bar (I’) node. Because there is a single TMA position in the verb phrase, the tree in Figure 6.17 would be the same regardless of the TMA marker used. The unification of TMA features, therefore, occurs above the level of the verb phrase.

Whether accurate production of these TMA words requires intra- or inter-phrasal information exchange is one that depends on the direction in which information is passed between the verb and the TMA position in the clause. It is clear from the f-structure in Figure 6.16 that it is the verb which has a TMA value and that this value is what determines the form of the word
which occupies the TMA slot in the clause, or indeed whether there is any word in that position at all. Based on this analysis, the verb selects a TMA particle rather than the other way round. Therefore, feature unification for these constructions occurs at a node above the phrase in which the feature originates, i.e., the verb phrase. Based on this analysis, it is possible to state that single word preverbal TMA particles are features that require interphrasal communication in order to be accurately produced, and that these constructions can be analysed as features not possible to process before a level four interlanguage has been acquired.

Negation in nineteenth-century CPE (9) also entails feature unification at the I’ node.

(9)  Me  no  sabe  her

   1s  NEG  sabe  3s.OBJ

‘I don’t know her’

(Buchner 1887: 214)

An f-structure for (9) can be seen in Figure 6.18.

```
  PRED   ‘sabe  <SUBJ, OBJ>’
  NEG +
  SUBJ [PRED ‘me’]
  OBJ [PRED ‘her’]
```

**Figure 6.18** F-structure for negated clause shown in (9)

The verb in (9) is negated, represented in the f-structure in Figure 6.18 by a positive value for negation in the verb’s feature matrix. This value needs to be exchanged between the verb and the negator position in the verb phrase to trigger the use of the CPE negation word, *no*. The annotated c-structure for (9) can be seen in Figure 6.19.
The annotated c-structure in Figure 6.19 shows feature unification at the I’ node. Pienemann lists this type of \textit{no} negation as possible in a level two interlanguage as an extension of canonical word order, see Table 6.2. However, that analysis does not work for nineteenth-century CPE as negation can occur in the same clause as TMA markers, always preceding the TMA word (10).

(10) You \textbf{no go} write them

\texttt{2S.SUBJ NEG go write 3PL.OBJ}

‘You are not going to write to them’

(Saker 1908: 92)

This means that nineteenth-century CPE has clause level word ordering rules for negation, requiring the clausal procedure to have been acquired. These rules cannot be analysed as phrase level rules, as in each case feature unification occurs above the level of the verb phrase at the I’ node. Preverbal negation marking can therefore also be analysed as a level four interlanguage feature.
The TMA markers analysed so far all have a clear link with modern CPE TMA markers, but there are also multiple examples in the historical dataset of words that in Standard British English would be classed as modal auxiliary verbs. The modal words found in the historical dataset are *can, may, must, shall,* and *will* (11), of these only *must* has a modern CPE descendent in the form of modal TMA marker *mos* (Ayafor & Green 2017: 145–147).

(11) We **will** fight for you

1PL.SBJ FUT fight PREP 2PL.OBJ

‘We will fight for you’

(Saker 1908: 92)

It is impossible to be certain what status these words had for early CPE speakers, but their use appears to be identical to that of other TMA markers. The f-structure for the sentence in (11) can be seen in Figure 6.20.

![Figure 6.20](image-url) F-structure for clause with preverbal future word shown in (11)

In Figure 6.20, the predicate *fight* has a future value for tense. A c-structure for the clause can be seen in Figure 6.21.
Figure 6.21 Annotated c-structure for clause with preverbal future word shown in (11)

In the c-structure shown in Figure 6.21, *will* occupies the same slot as any other TMA marker and reflects the future tense of the verb *fight*. There is further evidence that these words were used identically to other TMA words in their collocations with negation. There are just two examples of a negated modal in the historical data set, in each case this word is *can* and both examples are from a single speaker, so this evidence cannot be viewed as definitive. However, in each case the negator precedes the modal word (12) rather than following it, as it would in Standard English.

(12)  You  no can go

2s.SUBJ NEG MOD go

‘You can’t go’

(Saker 1908: 92)
Regardless of their exact status in nineteenth-century CPE, these modal words are processible only once the clausal procedure has been acquired. This is a more advanced stage than PILH posits for most pidgin/creoles, but TMA particles are also not typical interlanguage features. The implications of this finding for PILH are discussed towards the end of this chapter (§6.7).

6.5.2 Serial verb constructions

A serial verb construction (SVC) is a complex predicate consisting of a single verb phrase that contains two predicative verbs. There is a degree of interplay between the semantics of the two verbs, as the meaning of an SVC is often non-compositional (Durie 1997: 291). Prototypically, SVCs also act as a syntactic unit in terms of TMA marking (Durie 1997 289–291; Dixon 2006; 339–344).

Serialising verbs and other complex predicates present a challenge for LFG. Complex predicates cannot be represented within the standard LFG architecture, as this architecture was designed specifically for clauses with a single predicate value (Andrews and Manning 1999: 2). In order to represent SVCs using LFG, it is necessary to alter the existing architecture in some way. There have been several approaches suggested over the past thirty years (Butt 1997; Andrews and Manning 1999; Bodomo et al. 2003). None of these compromises are considered suitable to adopt here since they either require a huge amount of supplementary LFG architecture to be incorporated for the sake of a single construction type, or for SVCs to be misrepresented as instances of subordination despite a lack of subordination being one of the defining features of an SVC (Durie 1997 289–291; Dixon 2006; 339–344).

The difficulty with using LFG to analyse SVCs does not make it impossible to establish the most likely processing stage at which SVCs might have entered an interlanguage. But it does mean that any processing level assigned must be considered an ‘educated guess’ rather than analysis rooted in well-grounded theory. Since the two verbs in an SVC form a single clause, it follows that no inter-clausal feature unification is required for their production. On the other hand, the non-compositional nature of SVCs
suggests that some sort of information exchange, or feature unification, between the two verbs is required for accurate production. Therefore, the accurate production of SVCs cannot be considered a simple case of canonical word ordering. Given these considerations, it seems justifiable to suggest that SVCs can be analysed as features that would be processible in a level three interlanguage.

6.6 Clause types

There are eight clause types present in the nineteenth-century CPE historical dataset that are suitable for processability theory analysis. These are:

- The use of SVO declarative word order
- The use of unique nominal and locative copulas
- The use of predicative adjectives without a copula
- The use of grammatically unmarked polar interrogatives
- The use of interrogative expression-SVO word order in constituent interrogatives
- The use of an initial complementiser with SVO subordinate clauses
- The use of infinitival subordinate clauses
- The use of noun-relative clause word order

The clausal features are divided into four groups for analysis: firstly, declarative word order (§6.6.1), then copular clauses and predicative adjectives (§6.6.2), followed by interrogative clauses (§6.6.3), and finally, subordinate clauses, including relative clauses (§6.6.4).

6.6.1 Declarative constituent order

Pienemann states that SVO and subject-object-verb (SOV) word orders are the two types of ‘canonical word order’ possible in level two interlanguages. Canonical word ordering is possible at an early interlanguage stage due to the mapping of words onto L1 knowledge of thematic roles, which becomes accessible in the interlanguage at processability level two (Pienemann 1998: 84). As mentioned in Chapter 2 (§2.3.1), it is not entirely clear from the
processability theory literature why such thematic roles should be accessible in an interlanguage at this stage. As the analysis that follows demonstrates, it is also not possible to determine the plausibility of canonical word ordering as a concept using an LFG analysis. However, it is possible to use LFG to illustrate what Pienemann states is happening in the interlanguage when canonical word ordering develops. A declarative nineteenth-century CPE sentence can be seen in (13).

(13) Yellow Hawkin borne son

Yellow Hawkin bear daughter

‘Yellow Hawkin had a daughter’

(Buchner 1885: 676)

An f-structure for (13), modified to reflect the canonical word order theorised by processability theory can be seen in Figure 6.22.

```
<table>
<thead>
<tr>
<th>PRED</th>
<th>'borne &lt;AGENT, PATIENT&gt;'</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGENT</td>
<td>[PRED 'Yellow Hawkin']</td>
</tr>
<tr>
<td>PATIENT</td>
<td>[PRED 'son']</td>
</tr>
</tbody>
</table>
```

**Figure 6.22** F-structure for declarative clause reflecting a processability stage two interlanguage analysis shown in (13)

In the f-structure in Figure 6.22, the predicate specifies for agent and patient semantic arguments rather than subject and object functional arguments. This is not a standard LFG representation, but rather adapted to reflect the partial development of the interlanguage processes hypothesised by Pienemann. The arguments in the f-structure are organised into a c-structure based on a-structure Mapping, seen in Figure 6.23.

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28 The original makes it clear that here, ‘son’ refers to a girl, see Appendix B.
Figure 6.23 Linked c- and a-structures for declarative clause reflecting a processability stage two interlanguage analysis shown in (13)

The c-structure in Figure 6.23 is also not a standard LFG x-bar representation. The tree does not contain phrases, since in a stage two interlanguage the phrasal procedure has not developed. Using the w-star alternative tree structure discussed in (§2.3.2), words are gathered into a sentence based on their semantic roles. The word ordering results from the agent being the most salient feature in the sentence for the speaker and being placed first, with other elements following in any order, producing either SVO or SOV word order.

As this section has demonstrated, it is possible to create an LFG-based representation of nineteenth-century CPE declarative word order that reflects Pienemann’s claims about canonical word ordering. However, it would be just as straightforward to create an LFG representation showing SVO word order as resulting from clause level information exchange, as Pienemann states that it does in a level four interlanguage. What these LFG representations cannot do is to provide empirical support for either analysis. Pienemann’s assertion that SVO declarative word order is a level two interlanguage feature is adopted for the purposes of this study since it reflects observable data on English interlanguages. Studies of English L2 acquisition over the past 40 years have consistently shown that SVO word order is an early-stage English interlanguage feature. Canonical word order is discussed further towards the end of this chapter (§6.7).
6.6.2 Copular clauses

The analysis presented in this section explores two features of the nineteenth-century CPE copular clause, or perhaps more accurately, clauses containing a subject predicative complement.

➢ The use of unique nominal and locative copulas
➢ The use of predicative adjectives without a copula

There are three types of clause containing subject predicative complements in the nineteenth-century CPE historical dataset: (i) nominative subject predicative complements which are used with copular *be*, (ii) locative subject predicative complements which are used with copular *live for*, and (iii) adjectival subject predicative complements which follow the subject with no copula present in the clause.

The *be* copula, used with predicative noun phrases can be seen in (14).

(14) This land **be** yours

DET.DEM land COP PRO.POSS

‘This land is yours’

(Saker 1908: 92–93)

The best way to represent copular clauses in LFG is not universally agreed upon. The main difficulty for LFG in representing clauses containing predicative adjectives, nouns, and locatives is that the verb and the predicate are not the same word. In LFG, the clause level f-structure has a single predicate (PRED) slot. This slot is generally filled by a lexical verb which is the semantic core of the clause, and also dictates the clause structure by specifying the arguments it requires. In verbal copular clauses, the verb still specifies the arguments it requires within the f-structure, but this copular verb is not the semantic predicate of the clause. The f-structure needs to be altered in some way to accommodate the existence of a semantic predicate without violating the well-formedness conditions of coherence and
Here, Mohammed Attia’s proposed approach to representing copular clauses in LFG is adopted. An f-structure for the clause in (14) can be seen in Figure 6.24.

![F-structure for copular clause with predicative noun shown in (14)](image)

**Figure 6.24** F-structure for copular clause with predicative noun shown in (14)

Attia’s approach retains the copular verb as the predicate in the f-structure and incorporates the function PREDLINK as an argument of the verb (Attia 2008: 16–18). This approach essentially links the semantic value of the predicative noun, locative, or adjective to the predicate slot. This representation is not necessarily a perfect solution but does serve to allow these constructions to be represented within an LFG framework without drastically altering the architecture. It also serves to highlight the link between the semantic predicate and the functional predicate. In Figure 6.24 the semantic predicate *yours* is linked to the functional predicate *be* via the PREDLINK function.

According to Pienemann, English copular clause word order should be possible as an extension of canonical word order in a stage two interlanguage. This is because English uses a single copula, *be*, with all possible semantic predicates. This allows the semantic role corresponding with the subject to be fronted by the speaker, as the most salient information, followed by the verb *to be* and any other clausal elements.

Nineteenth-century CPE uses a different copula strategy with each type of semantic predicate and so the processing level associated with the CPE copula cannot be assumed to be identical to the one associated with the standard English copula. The existence of different copular strategies for

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29 For a more comprehensive overview of the issues involved in analysing copular clauses in lexical functional grammar see Attia (2008).
different semantic predicate types requires speakers to accurately produce the correct copula for a given predicate, or alternatively the correct type of predicate for a given copula. This means that information exchange must occur between the semantic predicate slot in the clause and the verb phrase slot. The questions that remain are: (i) where in the c-structure can feature unification occur? And (ii) which direction is the information travelling in? Feature unification for the sentence in (14) can be seen in the annotated c-structure in Figure 6.25.

**Figure 6.25** C-structure for copular clause with predicative noun shown in (14)

In the c-structure in Figure 6.25, information that the semantic predicate is a noun phrase is shared between the predicative noun phrase and the verb. Feature unification is possible at the V’ node. What is not clear from this representation is whether the semantic predicate determines the copular form or if the copula determines the type of semantic predicate. This is an important distinction since the direction of information exchange in the c-structure dictates whether the process can be seen to be intra- or inter-phrasal and thus whether the use of distinct copular forms would be possible in a level three or level four interlanguage. If the type of copula determines the type of semantic predicate, then feature unification can be observed to occur within the verb phrase from which the feature (+NOMPRED) is specified. If the semantic predicate determines the form of the copula, then
feature unification occurs at the node above the noun phrase in which the feature (+NOMPRED) is specified. Since it is not possible to find empirical evidence to support either analysis over the other, the more conservative analysis, as it relates to processibility, is adopted here. For the purposes of this study, it is assumed that the copula determines the type of semantic predicate that follows it.

The analysis of *be* copular clauses as level three interlanguage features also applies to the locative copula *live for*. This construction can be analysed either as a copula comprised of two words, seen in (15a) or as a copula, *live*, followed by a preposition phrase headed by *for* (15b).

(15) a. He *live for* water!

\[
\begin{array}{c}
3S\text{.SUBJ} \\
\text{COP} \\
\text{water}
\end{array}
\]

‘He is in the water!’

(von Uslar 1899: 179)

b. He *live for* water!

\[
\begin{array}{c}
3S\text{.SUBJ} \\
\text{COP} \\
\text{PREP} \\
\text{water}
\end{array}
\]

‘He is in the water!’

(von Uslar 1899: 179)

Figure 6.26 shows an f-structure for the sentence in (15a), and Figure 6.27 shows an f-structure for the sentence in (15b).

![F-structure](image)

**Figure 6.26** F-structure for compound copular clause with predicative locative noun shown in (15a)
Figure 6.27 F-structure for copular clause with predicative locative preposition phrase shown in (15b)

The f-structure in Figure 6.26 represents *live for* as a single copula comprising two words and requiring SUBJ, *he*, and locative noun phrase PREDLINK, *water*. The f-structure in Figure 6.27 represents *live* as the copula requiring SUBJ, *he*, and locative preposition phrase PREDLINK *for* *water*. In both cases the PREDLINK function links the semantic predicate with the functional one.

Figure 6.28 shows an annotated c-structure for the sentence in (15a), while Figure 6.29 shows an annotated c-structure for the sentence in (15b).

Figure 6.28 Annotated c-structure for compound copular clause with predicative locative noun shown in (15a)
Figure 6.29 Annotated c-structure for copular clause with predicative locative preposition phrase shown in (15b)

In both Figure 6.28 and Figure 6.29 feature unification is possible at the V’ node and the analysis of the direction of information exchange outlined for predicative noun phrases is also adopted for predicative locatives, that is, that the copula dictates the type of semantic predicate. Arguably, the analysis of *live* as the locative verb and *for* as a preposition, shown in (15b) and Figures 6.27 and 6.29 is the more cognitively plausible given the existence of copula, *be*, which is also followed by a nominal predicate. But there is insufficient data in the nineteenth-century CPE data to explore the alternative analyses empirically, and neither analysis alters the conclusion that the nineteenth-century CPE locative copular construction could develop in a level three interlanguage.

Predicative adjective clauses also have three possible analyses. They either consist of subject, predicate and zero copula (16a) or, if they consist of a
subject and adjectival predicate with no copula (16b), the predicative adjective may be either an attributive expression or an adjectival verb.

(16)  

a. Canoe Ø alright

Canoe COP alright

‘The canoe is alright’

(von Schkopp 1905: 156)

b. Canoe alright

Canoe (be.)alright

‘The canoe is alright’

(von Schkopp 1905: 156)

The f-structure for (16a) can be seen in Figure 6.30.

```
[ PRED 'null <SUBJ, PREDLINK(<ADJ/PRED)>)
   SUBJ [PRED ‘canoe’]
   PREDLINK [PRED ‘alright’]
```

**Figure 6.30** F-structure for zero copula clause with predicative adjective shown in (16a)

Attia states that his PREDLINK system allows both overt and zero copulas to be represented in a unified way (Attia 2008: 16–18); this approach can be seen in the f-structure in Figure 6.30 in which the PRED slot is filled with a ‘null’ value representing a zero copula. The issue with this analysis is that it requires there to be a verb phrase (verb phrase) node in the c-structure that does not branch to a verb. The annotated c-structure for (16a) can be seen in Figure 6.31.
Figure 6.31 Annotated c-structure for zero copula clause with predicative adjective shown in (16a)

The c-structure in Figure 6.32 contains a verb phrase (VP) node corresponding to the PRED value in the f-structure. This requires there to be a verb phrase without an overtly realised verb in the c-structure, suggesting that there is an underlying verb not overtly realised by the speaker. This is problematic from an LFG perspective and also unnecessary, outside of Eurocentricity, there is no inherent need for a predicate adjective to follow a copula.

The f-structure for the alternative analysis, that these constructions consist of a subject and an attributive expression, which may or may not be a verb (16b) can be seen in Figure 6.32, while the c-structure for a non-verbal analysis is given in Figure 6.33.

```
PRED 'allright' <SUBJ>
 SUBJ [PRED 'canoe']
```

Figure 6.32 F-structure for predicative adjective clause with no copula shown in (16b)
In this analysis there is no PREDLINK because the sentence in (16b) is not a copular construction but rather a combination of adjectival predicate *allright* and subject *canoe*. This analysis is more consistent with LFG principles than the zero-copula approach. In addition, this second analysis reflects the observable data on CPE and therefore it is adopted here. This means that the sentence in (16b) is not a copular construction but rather a case of ‘canonical’ word ordering of subject and predicate and so this construction can be analysed as a level two interlanguage feature. This analysis holds if *allright* in (16b) is considered an adjectival verb, in which case the c-structure in Figure 6.34 would be the correct representation.

Ultimately, there are not enough examples of adjectival predicates in nineteenth-century CPE for any analysis of verbal attributes to be conducted. In any case, the c-structure representation shown in Figure 6.34
could still be produced using canonical word ordering and so the analysis of
this construction as possible in a level two interlanguage remains unaltered.

It seems clear from the analysis carried out in this section that the copular
system of nineteenth-century CPE could have developed within a level three
interlanguage, while nineteenth-century CPE predicative adjective clauses
could have developed in a level two interlanguage.

6.6.3 Interrogatives

The analysis presented in this section explores the two interrogative clause
types found in nineteenth-century CPE.

➢ The use of grammatically unmarked polar interrogatives

➢ The use of interrogative expression-SVO word order in constituent
interrogatives

Nineteenth-century CPE uses both polar and constituent interrogatives. The
polar interrogatives (17) are not marked as questions either syntactically or
morphologically, although it is likely that they were marked with intonation
(§5.5.3).

(17) You want boy?

2s.SUBJ want boy

‘Do you want the/a boy?’

(Buchner 1914: 107)

This lack of grammatical marking means that polar interrogatives are
subject to the same processing constraints as declarative clauses (§6.6.1)
and can be analysed as a level two interlanguage feature.

The nineteenth-century CPE constituent interrogative is marked with a
fronted constituent interrogative word or phrase, (18). According to
Pienemann such constructions are possible in a level three interlanguage.
Pienemann states that a fronted interrogative word followed by SVO word order in constituent interrogatives (which he labels wh-SVO) can become part of an interlanguage once processing level three has been acquired due to these constructions being ‘a modification of the serial order principle which allows the learner to map conceptual structures directly onto linguistic form’ (Pienemann 2000: 113). I interpret this to mean that these constructions are an extension of his canonical word order theory, in which the interrogative word is considered the most salient piece of information and is fronted, followed by the next most salient, the subject (or AGENT), and so on (Pienemann 2000: 113). This extension of canonical word ordering creates a clause initial focus position that can be filled by a limited range of lexical items, these are initially just adverbs and wh-interrogative phrases (Pienemann 2000: 113). Pienemann also makes it clear that at this stage phrasal procedures are in place and so the fronting results from the positioning of phrases rather than words (Pienemann 2000: 113).

This interpretation of Pienemann’s analysis raises several questions. It is not clear how this type of construction could be an extension of canonical word order. The basis of canonical word order is that SVO or SOV word order stems from the mapping of words to semantic roles. Semantic roles are a well-established linguistic concept and there is a clear correspondence between certain types of semantic roles and specific clausal functions, e.g., AGENT and subject, so this mapping can be argued to be cognitively plausible. Extending this concept to fronted elements is much less plausible as there are no semantic roles prototypically associated with focus positions.

Pienemann states that LFG can be used to account for the fronting of constituent interrogative expressions and adverbs (Pienemann 2000: 112).
but the LFG analysis he provides is limited to a set of c-structure rules, shown in Figure 6.35.

\[
S' \rightarrow (XP) \begin{cases} 
WH = c + \\
ADV = c + 
\end{cases} S
\]

**Figure 6.35** C-structure rules for level three focus constructions adapted from Pienemann (2000: 113)

Pienemann’s notation can be difficult to read, as he does not provide a key, so it can be challenging to establish what, for example \( c + \) is supposed to represent. However, he explains that the c-structure rule shown in Figure 6.35 states that this type of construction comprises an \( S' \) consisting of an \( S \) and optional XP or focused phrase. This phrase may consist of a wh-word or an adverb.

This could plausibly be the case. However, it is not clear from this explanation why adverbs, which are generally adjuncts in an English clause, and interrogative expressions, which are essential elements of an English constituent interrogative, should be subject to the same rule (beyond the observation that they are both often fronted at a reasonably early stage of English L2 development).

An f-structure for the nineteenth-century CPE constituent interrogative seen in (18) is shown in Figure 6.36.

**Figure 6.36** F-structure for constituent interrogative clause shown in (18)

The type of fronting seen in constituent interrogative expression-SVO interrogatives involves a gap in the clause and a focussed constituent which
fulfils the function associated with that gap, creating a long-distance dependency between the two (Kroger 2004: 136). The relationship between the focused interrogative word and the gap in the clause can be made explicit in the f-structure. In Figure 6.36 this is done by linking the focussed element of the clause with the object slot it represents, which is empty in the f-structure. This is consistent with LFG assumptions since the linking of the two demonstrates that the function of the empty category is fulfilled by the focussed element in the clause. The f-structure representation also makes it clear that the fronted constituent is still part of the clause it precedes, since the f-structure for the focussed constituent is nested within the main clause f-structure. The link between the focussed constituent and the gap must be made explicit in the f-structure as movement transformations are not part of the LFG theoretical architecture and so the gap is not formally represented in the c-structure.

The focussed constituent is subject to any selectional restrictions associated with the argument of the verb to which it is functionally bound (Kroger 2004: 166). For example, if the verb requires an inanimate object, then the focussed constituent will also be marked for inanimacy, if there is a way to do so in the language being represented. The shared selectional restrictions can be seen in (18), in which the pronoun who would not have been an appropriate choice of constituent interrogative expression as although who was part of nineteenth-century CPE it appears to have only been used to represent human arguments, as in (19).

(19)  **Who** fill we belly all year

       Q fill DET.POSS belly DET.QUANT year

       round?

       round

       ‘Who fills our belly all year round?’

       (Buchner 1914: 106)

The c-structure for the sentence in (18) can be seen in Figure 6.37.
Figure 6.37 Annotated c-structure for constituent interrogative clause shown in (18)

The c-structure in Figure 6.37 is at odds with Pienemann’s claim that such constructions should be possible in a level three interlanguage. Feature unification is required in order for the selectional restrictions associated with the argument structure of the verb to be passed to the fronted interrogative word. Features associated with these elements of the clause can be unified at the CP node, meaning that the feature unification is happening above the level of the phrase in which the feature originates. This analysis suggests that fronted interrogative expressions are an example of inter-phrasal communication.\(^{30}\) Since LFG does not allow transformations it is not possible to claim that the information exchange occurs at the V’ node where the object would attach in a declarative clause. The information exchange can only occur at the actual node shared by the fronted expression

\(^{30}\) Although the c-structure in Figure 6.37 reflects the X’ structure used throughout this chapter, the analysis here would remain unchanged were the CP node to be relabelled ‘S’ and the IP node relabelled ‘S’, adopting Pienemann’s c-structure rule from Figure 6.35.
and the object. Based on this analysis, the CPE constituent interrogative could only emerge in a level four interlanguage, a higher processing level than PILH predicts for pidgin/creole features. The difference in analyses presented in this section is discussed further towards the end of this chapter (§6.7).

6.6.4 Subordinate clauses

The analysis presented in this section explores three types of nineteenth-century CPE subordinate clause.

➢ The use of an initial complementiser with SVO subordinate clauses

➢ The use of infinitival subordinate clauses

➢ The use of noun-relative clause word order

As outlined in (§5.5.4), there is sufficient evidence in the historical dataset for analysis of just three types of nineteenth-century CPE subordinate clauses. These are s-like subordinate clauses with a clause initial complementiser and a subject, and infinitive subordinate clauses without a subject. There is also enough evidence in the historical dataset for analysis of the word ordering of head noun and relative clause in nineteenth-century CPE.

There appears to be a single, invariant nineteenth-century CPE complementiser, *say* (§5.5.4), which introduces s-like subordinate clauses, seen bracketed in (20).

(20) Charly tell me say [I top them

Charly tell 1S.OBJ COMP 1S.SUBJ STOP DET.DEM/PL

girl for Yellow Hawkin]

girl PREP Yellow Hawkin

‘Charly told me (that) ‘I stopped Yellow Hawkin’s girls’

(Buchner 1885: 676)

An f-structure for (20) can be seen in Figure 6.38.
Figure 6.38 F-structure for clause with embedded complementiser clause shown in (20)

In the f-structure in Figure 6.38, the PRED *tell*, requires an SCOMP argument in addition to a subject and an object. An SCOMP is a complementiser clause that is a full s-like clause with a subject. In Figure 6.38, both the matrix and embedded clauses are unmarked for TMA, but it is not clear that the two have shared values for any specific grammatical features. A c-structure for (20) is shown in Figure 6.39.
Figure 6.39 C-structure for clause with embedded complementiser clause shown in (20)
The c-structure in Figure 6.39 is not annotated, reflecting that no grammatical information exchange in terms of, for example tense, or number values, is required to produce this clause. The specification of an SCOMP in the f-structure links to a CP in the c-structure. Processability theory only addresses the internal word ordering of subordinate clauses in English interlanguages so it is not clear from the processability theory literature what level interlanguage would be required to process a construction such as that in (20). However, it seems plausible to suggest that to accurately produce subordinate clauses an interlanguage speaker would need to be able to process their second language’s word order since subordination involves one clause being embedded in another. For second language word order rules to be processible, clausal procedures need to have developed in the interlanguage. Therefore, complementiser clauses can be analysed as level four interlanguage features.

The second type of subordinate clause evidenced in the historical dataset is the infinitive clause with no overt subject, bracketed in (21).

(21) Joe Mandenne no agree [for go for
Joe Mandenne NEG agree INF go PREP
Mandenne]

Mandenne

‘Joe Mandenne did not agree to go with Mandenne’

(Buchner 1885: 677)

An f-structure for the sentence in (21) can be seen in Figure 6.40.
There are several differences between the f-structure seen in Figure 6.40 and the one representing a complementiser clause seen above in Figure 6.38. Because the infinitival subordinate clause does not have its own subject, it cannot be an SCOMP and is instead marked as an XCOMP, or subjectless subordinate clause. The infinitive complement clause, as an argument of the verb, is also specified for by the PRED in the f-structure. Although the XCOMP does not have an explicit subject it does implicitly share the subject of the matrix clause. The empty subject slot in the XCOMP f-structure is coindexed with the main clause subject to reflect this shared subject. Coindexing is used, rather than a line linking the two, to reflect the fact that the subject already has a function within the matrix clause and is not simply the XCOMP subject in an unexpected position.

The c-structure for the clause in (21) can be seen in Figure 6.41.
As with the complementiser clause in Figure 6.39, above, there is no real grammatical exchange involved in the c-structure shown in Figure 6.41 although the co-indexation of the overt and null subjects in the matrix and subordinate clauses respectively might be considered a form of information exchange. In any case, to accurately produce this type of subordinate clause, as before, requires that clause level procedures be acquired and therefore this construction can be analysed as a level four interlanguage feature.

There is evidence in the historical dataset of three types of relative clauses, subject relatives (22), direct object relatives (23), and adverbial relatives (24), in each example the relative clause is bracketed.
The issue for analysis is that the examples given in (22) – (24) are the only examples of relative clauses in the historical dataset. Each one is a different type of relative clause and each one uses a slightly different relativisation strategy.

The subject relative in (22) is marked with a relative pronoun, who. In standard English who is used as a relative pronoun almost exclusively in relative clauses with a human head noun. Certainly, the head noun should be animate. In the nineteenth-century CPE example (22) who is coreferential with a head noun, money, that is neither human nor animate. However, as noted in Chapter 5, it is possible that both relative pronouns in evidence in
the historical dataset are European interpretations of a single invariant relativiser (§5.5.4). Unlike the subject relative, the direct object relative (23) employs a gap. The adverbial relative (24) uses what appears to be a locative relative pronoun *where* following the locative head noun *place*.

The presence of multiple relativisation strategies across just three relative clause examples makes analysis of the relativisation strategies used in nineteenth-century CPE impossible as no one strategy meets the criteria for inclusion. However, the presence of three examples of relative clause does mean that the existence of relative clauses in nineteenth-century CPE reaches the inclusion threshold. Therefore, any observation that applies to all three examples can be analysed. In this case, the only feature common to all three relative clauses is the use of head noun-relative clause word order.

This consistent word order within the noun phrase means that phrasal procedures must have been present in the interlanguages of the first speakers for them to produce these relative clauses. However, as discussed above, the presence of word ordering rules relating to embedded clauses implies the development of the clausal procedure, which would suggest that relative clauses are only possible from a level four interlanguage.

### 6.7 Discussion

This chapter aims to address research questions (1.a) and (1.b).

1. a. Does the list of English interlanguage features proposed by processability theory encompass all of the identified features of Cameroon Pidgin English?

   b. Can a processability theory-based analysis of the features of Cameroon Pidgin English that aren’t on the list of English interlanguage features provide support for PILH?

The first of these questions was addressed using a comparison of the English interlanguage features described by Pienemann for processability theory with the list of nineteenth-century CPE features (§6.2). The list of English interlanguage features used by processability theory does not
encompass all the features of Cameroon Pidgin English under investigation and so research question (1.b) also needed to be answered and the chapter, to this point, has outlined the LFG-based analysis conducted to answer this question. The findings of this analysis are summarised in Table 6.3.
For the most part, the findings of this analysis support PILH. Most of the nineteenth-century CPE features under investigation would be processible in an early-stage interlanguage, defined here as a level one, two, or three interlanguage, as discussed in (§4.3.3). However, there are several features revealed by the LFG analysis to be processible only once a speaker has
acquired a level four interlanguage. These features are, the use of preverbal TMA marking words, the presence of fronted constituent interrogative marking expressions, and the presence of subordinate clauses in the language. Level four and five are the highest processing levels posited by processability theory (§2.3.1) and so are not considered here to fall under the definition of ‘early-stage interlanguage’.

However, the presence of some level four features in nineteenth-century CPE cannot be considered definitive evidence against PILH. It is impossible to establish with certainty the point at which CPE stabilised. It is possible that by 1884 CPE had been a stable language for over 100 years. If there was a prolonged precolonial period during which CPE was a stable language, then these higher-level features might be the result of language development processes beyond the interlanguage. One difficulty with this analysis is that the CPE features processible only from level four are also features common to many other pidgin/creole languages. If they cannot be accounted for with PILH then that raises questions of its utility as a model of pidgin/creole genesis.

Plag speculates that greater exposure and/or higher levels of motivation to learn the superstrate (or L2) could lead to the development of later stage features (Plag 2008a: 115–117). Both factors are a real possibility for nineteenth-century CPE. The discussion of the history of British trade with Cameroon presented in Chapter 3 (§3.3) reveals that the British traded on the coast of Cameroon for nearly 250 years prior to the annexation of the area by the Germans. Captains often returned to the same areas repeatedly, aiming to build a working relationship with the powerful men in the area. Ships also had to dock for long periods, sometimes up to a year, to wait for the cargo they were trading to be collected from the hinterland and brought to the coast. This must have meant prolonged contact between English speakers and the coastal people.

The trade with the British was lucrative for the Cameroonians and so they may well have had a financial incentive to learn English to a level that facilitated negotiation, particularly since English captains did not attempt to
learn the local languages. Ships would have needed to restock food and other provisions both for their time anchored on the coast and for their onward journey, and this need could also have led to increased contact with the locals. It is also unlikely that sailors were kept on board for the entire period that their ships were docked so there may well have been some level of social interaction related to their onshore activities. Also discussed in Chapter 3 (§3.4.2), the Presbyterian missionaries noted that learning English was seen as a desirable by local parents as it was viewed as a skill that could lead to lucrative employment.

All of these factors may have led to prolonged contact between the Cameroonians and English speakers and created motivation for the coastal people of Cameroon to learn English to a higher communicative level. Because of this prolonged contact and the motivational factors involved it seems plausible to suggest that some early speakers might have developed a level four interlanguage.

The LFG analysis used in this chapter is not the method of analysis presented by Pienemann in his work on processability theory. Pienemann has always stated that his processability theory work is underpinned by LFG (Pienemann 1998), but the LFG analysis that he presents in his work consists almost entirely of c-structure rules. Although Pienemann discusses annotated c-structures in relation to feature unification (Pienemann 2011: 41), he does not present his workings using these structures when outlining the processing level associated with a given feature. Because Pienemann does not show his analysis it is very difficult to assess how he draws his conclusions about the processability of any given feature. In this study it has not been possible to simply replicate Pienemann’s approach and to list c-structure rules for each feature, because these rules are, presumably, the result of c-structure analysis. Certainly, c-structure rules are not a tool for such analysis. Employing the parallel architecture of LFG means that this study presents analysis consistent with the stated methodology of processability theory. However, it must be acknowledged that this method was not taken from the processability theory literature, and it is for this reason that the analysis of each feature of nineteenth-century CPE has been
clearly outlined allowing the reader to assess the utility of the approach used in every case.

The method of analysis adopted in this chapter has not always produced results consistent with the predictions of processability theory. Specifically, Pienemann states that fronted constituent interrogative expressions and object pronouns are both level three interlanguage features (Pienemann et al. 2011: 132). The LFG analysis presented in this chapter suggests that fronted constituent interrogative expressions might be better analysed as level four features (§6.6.3). If object pronouns are level three features, then subject pronouns can be analysed as possible only from level four interlanguages (§6.4). However, subject pronouns generally develop at a relatively early-stage of interlanguage development (Saville-Troike 2012: 63). If Pienemann’s assertion is correct, this would suggest that either subject and object pronouns develop through different mechanisms, or that subject pronouns develop far earlier than they should.

A further challenge in operationalising processability theory is that it is not always possible to test Pienemann’s claims using LFG. In particular, the concept of canonical word ordering is problematic for such analysis. It is very easy to use LFG to show mapping from c-structure to a-structure in a way that represents the type of canonical ordering Pienemann describes (§6.6.1). However, a representation of Pienemann’s description of canonical word ordering does not equate to an analysis of its plausibility. The issue with canonical word ordering is that it isn’t possible to interrogate the concept in relation to pidgin/creole data because the concept cannot be evidenced nor falsified. Interrogating the concept of canonical word ordering in relation to L2 acquisition data might be possible and it would certainly be interesting to see an empirical test of the claim in relation to L2 data, however such an investigation is beyond the scope of this research.

The limitations of the methodology outlined in this section are mostly to do with issues of operationalising processability theory. However, they do not necessarily present a problem for PILH. The processing levels of processability theory reflect well-established observations of how
interlanguages develop. For example, regardless of whether Pienemann’s canonical word ordering theory is correct, it is true that declarative SVO sentences develop earlier in English interlanguages than more complex embedded constructions (Saville-Troike 2012: 63). The processing levels assigned by processability theory for English interlanguages are generally representative of the ways in which these interlanguages develop. PILH posits that pidgin/creole languages are primarily comprised of features possible within and typical of early-stage interlanguages and the analysis presented in this chapter demonstrates that the first of these claims, that pidgin/creole features are possible in early-stage interlanguages, is broadly upheld by the nineteenth-century CPE dataset.

6.8 Summary

The processability theory-based analysis presented in this chapter demonstrates that the grammatical features of nineteenth-century CPE for the most part resemble those of an early-stage interlanguage. The first step in this analysis was to establish that there are many features of nineteenth-century CPE which have not been assigned a processing level in the processability theory literature (§6.2). The next step was to apply LFG methodology to the grammatical features of nineteenth-century CPE and establish in each case the interlanguage level at which they could have developed, first looking at the noun phrase (§6.3), then personal pronouns (§6.4), then the verb phrase (§6.5), and finally, the different types of clause for which there is evidence in the nineteenth-century CPE sources (§6.6). Finally, findings and limitations of the analytical approach were briefly discussed in relation to the predictions of PILH (§6.7).

According to PILH, pidgin/creole grammars consist of features not just possible in early-stage interlanguages but typical of them (Plag 2008b: 308). Plag also argues that many pidgin/creole features that are described as substrate features are actually ‘universally characteristic of early-stages of second language acquisition’ (Plag 2008a: 117). To effectively assess the predictions of the interlanguage hypothesis in relation to nineteenth-century CPE data these claims need to be explored. It is also necessary to establish
whether the features of nineteenth-century CPE might be as well, or better, accounted for by an alternative model of pidgin/creole genesis. This investigation cannot be achieved using processability theory methodology. In the following chapter, the comparative approach outlined in Chapter 4, (§4.3.3) (§4.3.4), is used to explore Plag’s claims about the features of pidgin/creole languages, and to compare PILH to two alternative models of pidgin/creole genesis.
Chapter 7
Analysis: exploring feature origins

7.1 Introduction

This chapter explores the features found in the nineteenth-century Cameroon Pidgin English (CPE) historical dataset in order to answer research questions (2.a). and (2.b).

2. a. Is there clear evidence that any of the features of Cameroon Pidgin English became part of the language through transfer, restructuring, or speaker innovation?

b. Does the analysis carried out to address question (2.a) provide any evidence in support of PILH or does it better support an alternative model of pidgin/creole genesis?

As outlined in the methodology chapter (§4.3.3), Parkvall’s (2000) criteria for evidencing the source of pidgin/creole features can be applied to the CPE data to answer research question (2.a). The criteria applied to the CPE data in this analysis are outlined in Table 7.1.
### Table 7.1 Criteria for identifying the source of CPE features adapted from Parkvall (2000:24)

Parkvall’s approach involves determining whether there is evidence of a given feature in either the substrate or superstrate of the language, whether the feature is cross-linguistically common, and whether the feature is common in unrelated pidgin/creole languages (Parkvall 2000: 24). Once this analysis is complete, the findings for each feature can be compared to the requirements for showing the origin of a feature. Table 7.2 demonstrates the findings required to evidence each possible origin.

<table>
<thead>
<tr>
<th>SOURCE OF FEATURE</th>
<th>EVIDENCE REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain superstrate transfer</td>
<td>Present in superstrate</td>
</tr>
<tr>
<td></td>
<td>Absent from substrates</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Not generally present in unrelated pidgins/creoles</td>
</tr>
<tr>
<td>Certain substrate transfer</td>
<td>Present in substrates</td>
</tr>
<tr>
<td></td>
<td>Absent from superstrate</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Not generally present in unrelated pidgins/creoles</td>
</tr>
<tr>
<td>Certain case of independent</td>
<td>Absent from both superstrate and substrates</td>
</tr>
<tr>
<td>development</td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Not generally present in unrelated pidgin/creoles</td>
</tr>
<tr>
<td>Certain restructuring universal</td>
<td>Absent from both superstrate and substrates</td>
</tr>
<tr>
<td></td>
<td>Cross-linguistically uncommon</td>
</tr>
<tr>
<td></td>
<td>Generally present in unrelated pidgins/creoles</td>
</tr>
</tbody>
</table>

Table 7.2 Values required to show each possible origin for a feature adapted from Parkvall (2000: 24).

<table>
<thead>
<tr>
<th>ORIGIN</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED P/C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain substrate</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certain superstrate</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certain independent</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certain restructuring</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>universal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.2 lists the possible types of origin for pidgin/creole features in the left-hand column and the possible sources of evidence for those origins.
along the top row. If the condition in the top row is required to evidence an origin, then it is marked with a ‘+’. If a condition in the top row provides counter evidence against an origin, then it is marked with a ‘-’. All required conditions must be met in order to evidence a given origin. So, for example, to evidence certain substrate transfer, a feature must have a + value for ‘present in the substrate’ and a – value for all other categories.

For the purposes of this analysis the Nigerian substrate/adstrate languages discussed in Chapter 3 (§3.6.2) are considered to be part of the substrate rather than a separate category. This can be justified based on the long and close relationship between CPE and Nigerian Pidgin English (NPE). However, when a feature is found only in Nigerian substrate languages and not in Cameroonian ones this is noted and briefly explored. In each of the sections that follow, the first step taken is to establish whether the features are present in the superstrate and/or the substrate languages of CPE. In fact, none of the CPE features analysed in this chapter are absent from both the superstrate and the substrate so none of them meet the criteria for certain independent development or certain restructuring universal.31

If a feature is found in both the substrate and the superstrate there is no way to tell which one it might have originated in. For this reason, if a feature is found to be shared by both the superstrate and one or more of the substrate languages of CPE it is not analysed further as it is impossible to determine a certain source for it. Any feature present in just the superstrate or just the substrate can be analysed further to establish whether the feature is cross-linguistically uncommon and whether it is generally absent from unrelated pidgin/creoles, since these are the remaining requirements for evidencing superstrate or substrate transfer (Parkvall 2000: 24).

The next section explores the nineteenth-century CPE noun phrase in relation to Parkvall’s criteria (§7.2), the following section analyses the CPE pronominal system (§7.3), this is followed by the verb phrase (§7.4), and

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31 Although processability theory describes universal processes of restructuring it does not necessarily deal with restructuring universals as such since there is an interaction between the processor and the L2 and, also, the influence of generative entrenchment, discussed in Chapter 2 (§2.3.1).
clause types (§7.5). Following these analyses is an interim discussion in which the findings of the previous sections are discussed in relation to research question (2.a) (§7.6). The final sections explore three theoretical approaches to pidgin/creole genesis in relation to the analysis of CPE features carried out in the earlier sections of the chapter (§7.7), the findings of this second analysis are discussed (§7.8), before the final section provides a chapter summary (§7.9).

7.2 Exploring the origins of the Cameroon Pidgin English noun phrase

This section explores the available evidence on the origins of CPE noun phrase features, looking first at CPE determiners (§7.2.1), then nominal premodifiers (§7.2.2), plural marking (§7.2.3), and finally possessive constructions (§7.2.4)

7.2.1 Determiners

This section applies Parkvall’s (2000) criteria, outlined in the previous section, to the data on CPE determiners. There are seven CPE determiner features suitable for analysis in this chapter

➢ Indefinite determiner-noun word order
➢ Definite determiner-noun word order
➢ Demonstrative determiner-noun word order
➢ Definite determiner identical to demonstrative determiner
➢ Definite determiner distinct from demonstrative determiner
➢ Indefinite determiner distinct from one
➢ Use of one as an indefinite determiner

The first step in this analysis is to determine whether each of the nineteenth-century CPE features is also present in any of the substrate or superstrate languages of CPE.

The CPE indefinite determiner, regardless of its form, precedes the noun. Indefinite determiner- noun word order is not a feature of any of the substrate languages of CPE identified for this study, but it is a feature of the
superstrate. Standard English determiners were prenominal throughout the precolonial period in Cameroon (Görlach 2001: 119).

The presence of indefinite determiner-noun word ordering in the superstrate but not the substrate languages of CPE means that it is possible that this feature became part of CPE due to superstrate transfer. Based on Parkvall’s (2000) criteria, in order to show that this is a clear case of superstrate transfer, an indefinite determiner that precedes the noun must also be cross-linguistically uncommon, and not generally present in unrelated pidgin/creole languages. As outlined in the methodology chapter (§4.3.3), ‘uncommon’ or ‘not generally present’ are defined here as any feature present in fewer than 25% of the languages in the sample consulted.

No available large-scale cross-linguistic studies on the order of noun and indefinite determiner could be identified at the time of analysis. However, indefinite determiner-noun word order is common in pidgin/creole languages unrelated to CPE. Haspelmath et al. (2013a) surveyed the position of indefinite articles in the noun phrases of 77 pidgin/creole languages. Of these, 32 pidgin/creole languages were lexified by a language other than English and spoken in an area outside of West Africa, the Caribbean, and the East coast of the Americas (the criteria on which a pidgin/creole is judged to be ‘unrelated’ to CPE, as outlined in the methodology chapter (§4.3.3)). Indefinite determiner-noun word order was a feature of 21, or 66%, of these unrelated pidgin/creole languages. Since this feature is common in unrelated pidgin/creoles, indefinite determiner-noun word order cannot be shown to have entered CPE via transfer from the superstrate.

The nineteenth-century CPE definite determiner, regardless of its form, also precedes the noun. This word ordering is also a feature of Duala (1), in bold, and of English (Görlach 2001: 119).
The presence of this word order in both the substrate and superstrate languages means that it is not possible to determine its source in CPE. Because of this ambiguity, further typological investigation has not been conducted for this feature.

As with indefinite and definite determiners, demonstrative determiners precede the noun in nineteenth-century CPE. This is also the case in Duala (2), and in English (Görlach 2001: 119).

(2)  

é-nè  è-lèlà

7-DEM 7-duck

‘this duck’

Duala: (Atindogbe 2013: 43)

The presence of this feature in both the substrate and superstrate means that it is not possible to determine a source for this feature in CPE and because of this, further investigation has not been conducted for this feature.

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32 The examples used in this chapter are adapted from a wide range of sources with publication dates ranging from the 1920s to the present. While care has been taken to ensure that the glossing of these examples is as uniform as possible, I have had to rely on the representation of each language in the sources that I have. Because of this, some examples are orthographic representations while others are phonetic transcriptions. Where authors have represented tone, this is included, likewise where affixation is made explicit in the original this is kept in my representation of the example. However, in cases such as (1), where none of this information is provided by the original author, I have not attempted to edit the presentation of the example, as I do not speak these languages, nor do I have access to the original transcriptions.
Dryer (2013a) divides languages into those with a definite determiner identical to the demonstrative and those with a definite determiner distinct from the demonstrative and this approach is adopted here. There is evidence in the historical dataset that both strategies are used in nineteenth-century CPE.

The most common definite determiner in the CPE historical dataset is, *them*, which is also the demonstrative determiner. Dual functionality of the demonstrative is a feature of Duala, (1), and the Nigerian language Ibibio (3) but it is not a feature of the superstrate.

(3) ébót  ókò  á- bà  mí

  goat  DET.DEIM/DEF  3S- COP  here

‘that/the goat is here.’

Ibibio: Adapted from Anyanwu (2011: 51)

The presence of a multifunctional demonstrative/definite determiner in the substrate but not the superstrate of CPE makes it possible that this feature became part of CPE due to substrate transfer.

In a survey of 620 languages, Dryer (2013a) found that the use of a definite determiner identical to the demonstrative was a feature of 69, or 11%, of the languages. This meets the criterion being for cross-linguistically uncommon used in this study. Haspelmath et al.’s (2013b) survey found 11 out of 31, or 35%, of pidgin/creoles unrelated to CPE had a definite determiner that was identical to the demonstrative. This is too high to be classified as uncommon in unrelated pidgin/creole languages. This finding means that the use of the demonstrative as a definite determiner cannot be shown to have entered CPE via substrate transfer.

Nineteenth-century CPE has a second definite determiner *the*. The use of a definite determiner distinct from the demonstrative is not a feature of any of the substrate languages of CPE but *the* is also used as the definite determiner in English and is distinct from any of the nineteenth-century English demonstratives (Görlach 2001: 119). The use of a definite determiner that is distinct from the demonstrative in the superstrate but not
the substrate of CPE makes it possible that this feature became part of CPE due to superstrate transfer.

In a survey of 620 languages Dryer (2013a) found that the use of a definite determiner distinct from the demonstrative was a feature of 216, or 35%, of the languages surveyed. The number of pidgin/creoles unrelated to CPE that had this feature in Haspelmath et al.’s (2013b) survey was eight out of 31, or 26%. Combined, these findings mean that the use of a definite determiner distinct from the demonstrative cannot be shown to have entered CPE via superstrate transfer, although it is a borderline case. Dryer (2013b) divides languages into those with an indefinite determiner identical to one and those with an indefinite determiner distinct from one and this approach is also adopted here.

The most common indefinite determiner in the nineteenth-century CPE historical dataset is a. An indefinite determiner distinct from the word for one is not a feature of any of the substrate languages. The use of a as an indefinite determiner was a feature of standard English at this time (Görlach 2001: 119). The presence of an indefinite determiner distinct from one in the superstrate but not the substrate of CPE makes it possible that this feature became part of CPE due to superstrate transfer.

In a survey of 534 languages, Dryer (2013b) found that 102, or 19%, used an indefinite word that was distinct from one. This is low enough for the feature to be considered cross-linguistically uncommon. Just three out of 31 pidgin/creoles unrelated to CPE surveyed by Haspelmath et al. (2013c) had this feature, accounting for 10% of the total. This is low enough to state that the use of an indefinite word distinct from one is uncommon in unrelated pidgin/creoles. Taken in combination this analysis suggests that the presence of an indefinite determiner distinct from one is a clear case of superstrate transfer.

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33 For clarity, the feature analysed here is, as stated, *the use of a definite determiner that is distinct from the demonstrative determiner*. What is not in question is the use of the word the as a definite determiner which is a clear case of lexical transfer from English to CPE. Whether these can truly be separated is a question that I do not attempt to answer here.
Nineteenth-century CPE also has a second indefinite determiner, *one*. The use of *one* as an indefinite determiner is a feature of Duala according to Epale (1973: 36), although he does not provide any examples. None of the other substrate languages are described as having an indefinite determiner, and *one* was not used as an indefinite determiner in English at this time. The use of *one* as an indefinite determiner in the substrate but not the superstrate of CPE makes it possible that this feature became part of CPE due to substrate transfer.

Dryer (2013b) found that *one* was used as an indefinite determiner by 112 out of 534, or 21%, of the languages surveyed. This is low enough to be considered cross-linguistically uncommon. However, Haspelmath et al. (2013c) found that 18 out of 31, or 58% of unrelated pidgin/creole languages shared this feature. Taken in combination these findings mean that the use of *one* as an indefinite determiner in CPE cannot be shown to result from substrate transfer.

Table 7.3 summarises the analysis presented in this section

<table>
<thead>
<tr>
<th>Feature</th>
<th>Present in Substrate</th>
<th>Present in Superstrate</th>
<th>Typologically Common</th>
<th>Common in Unrelated P/Cs</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEF-noun</td>
<td>-</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEF -noun</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEM -noun</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEF identical to</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEF and DEM distinct</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>INDEF and <em>one</em> distinct</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>superstrate</td>
</tr>
<tr>
<td>INDEF identical to <em>one</em></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

Table 7.3 Origins of CPE determiner features based on Parkvall’s (2000:24) criteria

This table is adapted from Table 7.2 (§7.1), each feature of the CPE determiner system is listed in the left-hand column and the sources of evidence are listed along the top row. As outlined above, if a feature is
present in both the substrate and superstrate then it is not possible to
determine a clear source for it and no typological investigation is conducted. These features are marked with an ‘x’ in the fourth and fifth columns to show that this analysis was not conducted. The summary presented in Table 7.3 reveals that it is possible to determine a clear origin for just one of the determiner features of nineteenth-century CPE analysed in this study: the use of an indefinite determiner distinct from the word for one which, the evidence suggests, has a clear superstrate source.

7.2.2 Nominal premodifiers

This section explores whether there is evidence for the origin of two nineteenth-century CPE nominal premodifiers.

➢ Adjective – noun word order
➢ Numeral – noun word order

Premodifying nouns are not discussed as there is not enough information on this feature in the substrate languages of CPE for analysis to be possible.

Adjectives always precede the noun in the CPE sources. According to Epale, this word order is possible in Duala for some adjectives including ‘elderly’, and ‘empty’, although he does not provide examples (Epale 1973: 70). Pre-nominal adjectives are also a feature of Ibibio (4), and Ijaw (5), as well as English (Smith 1999: 133; Görlach 2001: 110).

(4) ń- dúfá àfọn

pl- new cloth

‘new clothes.’

Ibibio: Adapted from Martinez-Garcia (2014: 54)

(5) Kósu kimi -bi emí

old man -DEF be.there

‘The old man is there’

Ijaw: Adapted from Williamson (1965: 66)
The presence of this feature in both the substrate and superstrate of CPE means that it is not possible to determine its source and because of this, further typological investigation has not been conducted.

Modifying numerals also precede the noun in nineteenth-century CPE. This word order is not a feature of most of the substrate languages consulted for this study but, according to Williamson, it is a feature of the Nigerian language, Ijaw, although she does not provide an example (Williamson 1965: 43). Numeral-noun word order is also a feature of English (Smith 1999: 133; Görlach 2001: 110).

The presence of this feature in both the substrate and superstrate of CPE means that it is not possible to determine its source with certainty. However, since the only substrate language with this feature is a Nigerian language rather than a Cameroonian one, it is worth briefly considering whether there is any other evidence to support the possibility that this word ordering could have transferred into CPE from the superstrate.

In a survey of 1,154 languages, Dryer (2013c) found that 479, or 41%, of the languages had numeral-noun word order. In a survey of noun and numeral word order in pidgin/creole languages Haspelmath, Michaelis et al. (2013) found that 26 out of 32 or 81% of pidgin/creoles unrelated to CPE had numeral-noun word order. This feature is therefore not uncommon either cross-linguistically or in unrelated pidgin-creoles and so there is no supporting evidence for the hypothesis that this feature entered CPE through superstrate transfer.

Table 7.4 summarises the conclusions drawn from the analysis in this section.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED P/C</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjective-noun</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Numeral -noun</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

Table 7.4 Origins of CPE prenominal modifiers based on Parkvall’s (2000:24) criteria
The analysis summarised in Table 7.4 reveals that it is not possible to
determine an origin for either of the nominal premodifier features of CPE
analysed for this study.

7.2.3 Plural marking

There are two features of plural marking in nineteenth-century CPE suitable
for analysis in this chapter.

- The use of a plural word to mark plurality on the noun
- Pluraliser-noun word order

A prenominal plural particle or word is not a feature found in either of the
Cameroonian substrate languages analysed for this study, but it is found in
of two of the Nigerian languages, Ibibio and Igbo. Essien states that Ibibio
plurals can be marked with either a change of vowel length or the addition
of a prenominal plural marker, ìmmè (Essien 1990: 132). Adams states that
Igbo does not generally use any overt markers to distinguish singular and
plural nouns but when it does there are a large number of possible strategies
and that these include the use of singular or plural words preceding a noun
(Adams 1932: 20–23). Neither of these sources provide examples of this
construction. A prenominal plural marker is not a feature of English;
therefore, it is possible that these features became part of CPE through
substrate transfer.

In a survey of 1,066 languages Dryer (2013d) found that 170 used a plural
word to code nominal plurality. This makes this feature cross-linguistically
uncommon occurring in just 16% of the languages sampled. Haspelmath et
al.’s (2013d) survey of the same feature in pidgin/creole languages found
that, of the 32 languages in their sample not related to CPE, 13, or 41%, of
the languages, used a plural word. Although this feature is cross-
linguistically uncommon, its rate of occurrence in pidgin/creole languages
unrelated to CPE is too high to evidence substrate transfer. These findings
mean that the presence of a plural word in CPE cannot be clearly shown to
result from substrate transfer.
There is no cross-linguistic survey of noun and pluralising word order available so it is not possible to fully assess whether the plural word-noun word order found in CPE might be the result of substrate transfer. But in any case, 12 out of 32, or 37%, of pidgin/creole languages unrelated to CPE that were surveyed by Haspelmath et al. (2013d) had prenominal plural words. Because of this even with an available survey of the world’s languages this feature could not be shown to have clearly entered CPE via substrate transfer.

Table 7.5 summarises the analysis presented in this section.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED P/C</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plural word</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>Plural word - noun</td>
<td>+</td>
<td>-</td>
<td>unknown</td>
<td>+</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

**Table 7.5** Origins of CPE plural features based on Parkvall’s (2000:24) criteria

Table 7.5 shows that it is not possible to determine an origin for either of the plural marking features of nineteenth-century CPE analysed for this study.

### 7.2.4 Possessive constructions

There are three possessive constructions identified in the historical dataset for nineteenth-century CPE.

- An X/Y possessive in which the possessor precedes the possessum
- An X/possessive determiner/Y construction in which a possessive determiner (or possibly pronoun) coreferential with the possessor follows the possessor noun and precedes the possessum.
- A possessive preposition phrase which follows the possessum consisting of preposition *for* followed by the possessor noun phrase.

The X/Y possessor-possessum construction is not a feature of any of the substrate languages of CPE. Two of the Nigerian substrate languages, Ibibio (6) and Igbo (7) have a possessive that juxtaposes possessor and possessum
but in each case the possessor follows the possessum and so this construction is labelled Y/X to distinguish the word ordering.

(6) ètè èkà Ìmí
gfather mother I.S.PRO.POSS

‘my maternal grandfather’

Ibibio: Adapted from (Kaufman 1968: 186–187)

(7) Ada wè -rè akwękwọ Obi nye m
Ada take -PST book Obi give 1.S.OBJ
n- oge

PREP- time

‘Ada gave me Obi’s book on time’

Igbo: Adapted from (Amaechi 2013: 161)

The X/Y possessive with possessor preceding possessum is a feature of ship English, one of the superstrate varieties of CPE (8) and (9).

(8) under Holland colors

Ship English: (Delgado 2019: 152)

(9) the King of Englande paper

Ship English: (Delgado 2019: 152).

The absence from the substrate languages of an X/Y possessive construction suggests that this type of possessive may have become part of CPE through superstrate transfer. However, the typological sources consulted for this study do not contain information on the distribution of specific types of possessive constructions, so it is not possible to state this with any certainty. The presence of a similar construction with different word order in the substrate also casts some doubt on the possibility of superstrate transfer. Ultimately, it is impossible to know and so the origins of this feature in CPE can only reasonably be labelled as undetermined.
There is no evidence of an X/possessive determiner/Y construction in the historical dataset for any of the substrate languages of CPE. However, this construction is a feature of seventeenth-century English (Smith 1999:134; Görlach 2001: 119). Although this is early in the period of contact between the British and Cameroonians it is worth noting that the dates given for such features ceasing to be used in standard English are based on written language, at the time the preserve of the wealthy and educated classes. Some constructions were used for longer by the working classes (Görlach 2001: 100–101) and so it is very possible that working class sailors might have continued to use this construction into the eighteenth century. In any case, the seventeenth century is part of the precolonial era of contact between British sailors and the coastal people of Cameroon and so this construction can be reasonably be considered present in the superstrate of CPE at least for some of the time it was developing. Therefore, it is possible that the X/possessive determiner/Y possessive construction may have become part of CPE through superstrate transfer.

There is no cross-linguistic survey of this feature in the world’s languages available at the time of analysis. However, Nichols & Bickel (2013) do survey the locus of marking in possessive noun phrases in 236 languages. This survey explores whether there is agreement marking on the head (possessed) noun or on the dependent (possessor) noun in possessive NPs. The X/possessive determiner/Y possessive is a type of head marking construction, so it is possible to conduct some analysis in relation to these constructions based on Nichols and Bickel’s (2013) survey.

In their survey Nichols and Bickel (2013) found that 78 or 33% of the 236 languages surveyed had head marking possessive noun phrases. It is impossible to say with certainty how many of these use an X/possessive determiner/Y construction but based on the examples provided (Nichols & Bickel 2013) it is possible to state that at least some of the languages use alternative head marking strategies. This suggests a relatively low percentage of the 236 languages might have this feature, making it reasonable to state that this is likely a cross-linguistically uncommon construction. If just 20 of the 78 head marking languages used an alternative
strategy, then this construction could be labelled cross-linguistically uncommon based on the criteria used in this study.

Haspelmath et al. (2013e) surveyed the use of the X/possessive determiner/Y construction in pidgin/creole languages and found that it was a feature of 5 out of 32 pidgin/creole languages unrelated to CPE, or 16%. Taken in combination with the evidence that this possessive construction may be cross-linguistically uncommon, their findings suggest that that the X/possessive determiner/Y construction could have entered CPE via superstrate transfer.

This conclusion receives some further support from the rate with which this feature is found in English lexified pidgin/creoles versus those with an alternative lexifying language. In Haspelmath et al.’s survey 26% of English lexified pidgin/creoles had an X/possessive determiner/Y construction while just 13% of the pidgin/creoles with lexifiers other than English used this construction (Haspelmath et al. 2013e).

Despite the lack of exact numbers for the distribution of the X/possessive determiner/Y construction cross-linguistically, the evidence presented in this section suggests that the superstrate is the most likely source for this feature in nineteenth-century CPE and based on this evidence, this is the position adopted here.

The possessive PP construction is a feature of Duala, bracketed in (10).

(10) Kuò a- andi mutowa [mwa Nj̄ò]
    Kuo PST-buy car PREP Njo
    kiëlè
    yesterday

‘Kuo bought Njo’s car yesterday’

Duala: Adapted from Epée (1975: 210)

This construction is also a feature of nineteenth-century English (Görlach 2001: 119). The presence of this feature in both its substrate and superstrate
languages means that it is not possible to determine how it became part of CPE.

Table 7.6 summarises the conclusions drawn from the analysis in this section.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED PCS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X/Y possessive</td>
<td>-</td>
<td>+</td>
<td>unknown</td>
<td>unknown</td>
<td>undetermined</td>
</tr>
<tr>
<td>X/POSS.DET/Y</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>superstrate</td>
</tr>
<tr>
<td>Possessor PP</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

Table 7.6 Origins of CPE possessive constructions based on Parkvall’s (2000:24) criteria

The analysis summarised in Table 7.6 reveals that it is possible to determine an origin for one of the possessive constructions of nineteenth-century CPE. The evidence presented in this section is incomplete, but it suggests that the use of an X/possessive determiner/Y possessive construction likely became a CPE feature as a result of superstrate transfer.

7.3 Exploring the origins of the Cameroon Pidgin English pronominal system

There are two features of the personal pronominal system of nineteenth-century CPE which can be analysed in relation to their source.

➢ The presence of nominative/accusative case alignment in the personal pronouns

➢ A lack of gender in the personal pronouns

Interrogative pronouns are not discussed in this chapter since they are integral to CPE interrogative clauses and are therefore discussed in the section on clause types (§7.5.3).

Duala pronouns have neutral case alignment and no gender distinctions. The personal pronouns of Duala are presented in Table 7.7.
Mokpwe personal pronouns have nominative/accusative alignment and are not marked for gender. Mokpwe personal pronouns are shown in Table 7.8.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>SUBJECT</th>
<th>OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td>nà</td>
<td>imbà</td>
</tr>
<tr>
<td>2S</td>
<td>ò</td>
<td>wà</td>
</tr>
<tr>
<td>3S</td>
<td>à</td>
<td>mɔ̀</td>
</tr>
<tr>
<td>1PL</td>
<td>i</td>
<td>ízrɔ́</td>
</tr>
<tr>
<td>2PL</td>
<td>è</td>
<td>ìnɔ́</td>
</tr>
<tr>
<td>3PL</td>
<td>ñá</td>
<td>wɔ́</td>
</tr>
</tbody>
</table>

Table 7.8 Mokpwe personal pronouns adapted from Atindogbe (2013: 73)

Ibibio personal pronouns also have nominative/accusative alignment and are not marked for gender. Ibibio personal pronouns are shown in 7.9.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>SUBJECT</th>
<th>OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td>ámì</td>
<td>miì/mìèn</td>
</tr>
<tr>
<td>2S</td>
<td>áfò</td>
<td>fiìn/fièn</td>
</tr>
<tr>
<td>3S</td>
<td>èñyè́</td>
<td>èñyè́</td>
</tr>
<tr>
<td>1PL</td>
<td>ñnyì́n</td>
<td>ñnyì́n</td>
</tr>
<tr>
<td>2PL</td>
<td>àndúfò</td>
<td>àndúfò</td>
</tr>
<tr>
<td>3PL</td>
<td>ñmmò̞</td>
<td>ñmmò̞</td>
</tr>
</tbody>
</table>

Table 7.9 Ibibio personal pronouns adapted from Essien (1990: 139)
Igbo personal pronouns also have nominative/accusative alignment and no gender distinction. Igbo personal pronouns are shown in 7.10.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>SUBJECT</th>
<th>OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td>mú/mí</td>
<td>mí</td>
</tr>
<tr>
<td>2S</td>
<td>gí/gé/ié</td>
<td>gé</td>
</tr>
<tr>
<td>3S</td>
<td>ó/ó/ya</td>
<td>yá</td>
</tr>
<tr>
<td>1PL</td>
<td>ányí</td>
<td>ányí</td>
</tr>
<tr>
<td>2PL</td>
<td>únù</td>
<td>únù</td>
</tr>
<tr>
<td>3PL</td>
<td>ha</td>
<td>há</td>
</tr>
</tbody>
</table>

**Table 7.10** Igbo personal pronouns adapted from Adams (1932: 37 – 39)

English personal pronouns also have nominative/accusative case alignment but are marked for gender in the third person, singular. English personal pronouns are shown in 7.11.

<table>
<thead>
<tr>
<th>PERSON/NUMBER</th>
<th>SUBJECT</th>
<th>OBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td>I</td>
<td>me</td>
</tr>
<tr>
<td>2S</td>
<td>you</td>
<td>you</td>
</tr>
<tr>
<td>3SM</td>
<td>he</td>
<td>him</td>
</tr>
<tr>
<td>3SF</td>
<td>she</td>
<td>her</td>
</tr>
<tr>
<td>3SN</td>
<td>it</td>
<td>it</td>
</tr>
<tr>
<td>1PL</td>
<td>we</td>
<td>us</td>
</tr>
<tr>
<td>2PL</td>
<td>you</td>
<td>you</td>
</tr>
<tr>
<td>3PL</td>
<td>they</td>
<td>them</td>
</tr>
</tbody>
</table>

**Table 7.11** English personal pronouns

No table is reproduced for Ijaw as it does not have nominative/accusative case alignment and marks gender in its personal pronouns and so is not pertinent to this discussion. The personal pronouns seen in Tables 7.7 to 7.11 demonstrate that nominative/accusative case alignment is a feature of both the substrate and superstrate of CPE. This means that it is not possible to establish a source for this feature in CPE.

The lack of gender marking in the personal pronominal system of CPE is a feature found in its substrate languages but not its superstrate. This suggests that the lack of gender distinction found in CPE personal pronouns might result from substrate transfer.
However, in a survey of 378 languages Siewierska (2013) found that 254 or 74% of languages had no gender distinction in their personal pronouns. Maurer et al. (2013a) surveyed pidgin/creole languages for this feature, the findings of which showed that 25 out of 32 or 78% of pidgin/creoles unrelated to CPE use this strategy. These findings mean that it is impossible to show that this feature entered CPE via substrate transfer.

Table 7.12 summarises the analysis presented in this section.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED PCS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom/acc case</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>No gender distinction</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

**Table 7.12** Origins of CPE pronominal features based on Parkvall’s (2000:24) criteria

The analysis summarised in Table 7.12 reveals that it is not possible to determine an origin for either of the features of the CPE personal pronominal system analysed in this study.

**7.4 Exploring the origins of the Cameroon Pidgin English verb phrase**

This section explores the available evidence on the origins of nineteenth-century CPE VP features, looking first at TMA (tense, mood, modality, and aspect) marking and negation (§7.4.1), and then at serial verb constructions (§7.4.2).

**7.4.1 Tense, mood, modality, aspect, and negation**

Much of CPE’s tense, mood, and aspect is marked only by context. It has proved impossible to ascertain whether the substrate languages allow similar contextual communication of TMA information and therefore this strategy cannot be analysed for this chapter.

There are seven TMA and negation features that can be analysed for this chapter.

➢ The use of a word marking past time
➢ The use of a word marking future time
➢ The use of a word marking progressive aspect
➢ The use of a word marking completive/perfective aspect
➢ TMA word-verb word order
➢ The use of a word marking negation
➢ Negation word-verb word order

Modality is not discussed in this chapter, as it has not been possible to find enough information about how each of the substrate languages of CPE express modality. English modal verbs are therefore mentioned only in relation to their use to mark future time. The features of the CPE TMA system have been broken down in this way for ease of comparison with the substrate and superstrate languages. It is not possible to ascertain with certainty whether any of the preverbal TMA marking words found in the substrate languages can reasonably be considered TMA particles. Instead, for this chapter, these features are analysed based on a. whether a word is used to mark a TMA feature (or negation), and b. whether those words are preverbal.

Duala uses a preverbal word to mark past time (11), immediate future (12), near future (13), progressive aspect (14), and negation (15).

(11) Nà tà nā til -à lëta

1.S.SUBJ PST 1.S.SUBJ write -FV letter

‘I have written a letter’

Duala: Adapted from Arsene (2015: 33)
(12) Bánà bá niyä dà mwëlé

children 3PL.AGR.SUBJ FUT eat plantains

‘Children are not going to eat plantains [now]’

Duala: Adapted from Arsene (2015: 34)

(13) Bánà bá mëndé til -à

children 3PL.AGR.SUBJ FUT write -FV

‘Children will write [at some point in the future]’

Duala: Adapted from Arsene (2015: 34)

(14) Nà diá nà mà- til -à

1.S.SUBJ PROG 1.S.SUBJ PRES write -FV

létà

letter

‘I am still writing the letter’

Duala: Adapted from Arsene (2015: 40–41)

(15) Elame a sí and -èdi mùnjá

Elame 3S.SUBJ NEG buy -PL.APPL wife

aó mûtòà kiëlë

3SM.PRO.POSS car yesterday

‘Elame did not buy a car for his wife yesterday’

Duala: Adapted from Arsene (2015: 107)
Mokpwe uses a preverbal word to mark past time (16), perfect aspect (17), and negation (18).

(16)  ná  mà  kê
       1S.SUBJ  PST  cut
‘I cut’

Mokpwe: (Atindogbe 2013: 79)

(17)  ná  èmáá  kê
       1S.SUBJ  PF  cut
‘I have cut’

Mokpwe: (Atindogbe 2013: 79)

(18)  ná  zrá  ilá
       1S.SUBJ  NEG  eat
‘I don’t eat’

Mokpwe: (Atindogbe 2013: 81)

Igbo uses a preverbal word to mark future time (19).

(19)  Nwaànyi  à  gà  abìa  echi
       Woman  DET.DEM  FUT  come  tomorrow
‘This woman will come tomorrow’

Igbo: Adapted from Emenanjo (2015: 452)

The nineteenth-century English verb phase is much the same as that of modern English. Future time is marked with a preverbal modal verb, perfective and progressive aspect are both marked in part with preverbal auxiliary verbs (Smith 1999: 135; Görlach 2001: 120). English also uses the preverbal negator, not, (Smith 1999: 138), additionally, ship English uses no in the same way (Delgado 2019: 198–202).
The information on the use of a word to mark TMA and negation in each of the substrate and superstrate languages of CPE is summarised in Table 7.13.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>DUALA</th>
<th>MOKPWE</th>
<th>IBIBIO</th>
<th>IGBO</th>
<th>LJAW</th>
<th>ENGLISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word marking past time</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Word marking future time</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Word marking progressive aspect</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Word marking completive/perfective aspect</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Word marking negation</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Pre-verbal TMA and negation position</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

**Table 7.13** Occurrence of CPE TMA features in its substrate and superstrate languages

The information summarised in Table 7.13 reveals that there are no TMA features found in nineteenth-century CPE that can be shown to have originated in its superstrate. But there is a single TMA feature that might have originated in the substrate languages of CPE. This is the use of a word marking past time.

There are no cross-linguistic surveys of TMA marking words available, nor are there any on the distribution of TMA particles. However, in a survey of 1,131 languages Dryer (2013e) found that 152, or 13%, had no tense or aspect inflection. Of course, a lack of inflection does not necessarily mean that a TMA particle, or other word, is used to mark tense or aspect in of any of these languages. Nor does the presence of inflection indicate the absence of analytic strategies, given that the value for each language is the dominant strategy used: English is included in Dryer’s survey as a suffixing language (Dryer 2013e). However, Dryer’s findings do indicate that the presence of tense and aspect marking words could be relatively uncommon cross-linguistically, at least as a dominant strategy.

Maurer et al.’s (2013b) survey of past tense marking in pidgin/creoles found that seven, or 23%, of 31 languages unrelated to CPE used past tense particles. This means that this feature can be considered rare in pidgin/creoles unrelated to CPE. This suggests that, if TMA marking words
are as rare in the world’s languages as Dryer’s survey suggests, past time marking particles are quite likely to be a feature that entered CPE via substrate transfer, and this is the stance adopted here.

The analysis presented in this section is summarised in Table 7.14.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED PCS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past time word</td>
<td>+</td>
<td>-</td>
<td>improbable</td>
<td>-</td>
<td>substrate</td>
</tr>
<tr>
<td>Future time word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>PROG aspect word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>COMPL/PF word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Pre-verbal TMA</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>NEG word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Pre-verbal NEG</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

Table 7.14 Origins of CPE TMA marking, and negation based on Parkvall’s (2000:24) criteria

The analysis summary in Table 7.14 shows that there is evidence of a substrate source for one CPE TMA feature: the presence of a past time marking word. The analysis conducted for this chapter aims to assess how many of the features of nineteenth-century CPE have a source that can be clearly evidenced. The fact that there is only evidence of a substrate source for a single feature of the CPE TMA system does not mean that other TMA features did not also enter CPE through substrate transfer. What it does mean, however, is that claims of a substrate origin for any other CPE TMA features should be clearly marked as speculation, an issue discussed further in the discussion of this analysis later in the chapter (§7.6).

7.4.2 Serial verb constructions

Serial verb constructions (SVCs) are often considered likely candidates for substrate transfer into pidgin/creole languages as they are a common feature
of West African languages but not of European ones. There are two features of the nineteenth-century CPE SVC considered in this section.

- The presence of SVCs in CPE
- The presence of directional SVCs containing ‘come’ and ‘go’ in CPE

The inclusion of directional SVCs as a separate category is due to the presence of multiple examples of this type of SVC in the CPE historical dataset. There are other SVC types in the texts, but this is the only SVC type for which more than one example can be found in the sources.

Serialising verbs are not found in the Cameroonian substrate languages of CPE, but they are a feature of the Nigerian substrate languages. Ibibio has SVCs, including directional SVCs (20).

(20) ǹdùfọ  è- mà  è- dí wùó
2PL-SUBJ  2PL- PST  2PL- go  come

‘You arrived’

Ibibio: Adapted from Major (2014: 129)

Igbo also has serialising verbs, including directional SVCs (21).

(21) Ọ  bjàrà  kọọ  aka
3S  come  knock  hand

‘S/he came and knocked’

Igbo: Adapted from (Amaechi 2013: 159)

Ijaw also appears to have directional SVCs, based on examples given by Williamson (1965: 48 – 49), (22) and (23).
(22) tobou -bí baŋi pa -mi
child -DEF run come/go.out -PST
‘The child ran out’
Ijaw: Adapted from (Williamson 1965: 48)

(23) erí amá dúo go -mi
3SM town go.through come -PST
‘He came through the town
Ijaw: (Williamson 1965: 49)

There is not a great deal of evidence for SVCs in English, although it could be argued that imperatives using ‘come’ and ‘go’ resemble SVCs. However, this argument is not one universally embraced, see for instance Baker (1989: 519) and Aikhenvald (2006: 45). Aikhenvald points out that these constructions in English are restricted in ways that true SVCs are not, they only occur with specific TMA, are limited to a few verb choices, and a conjunction or dependency marker may be inserted between the two verbs without change to their meaning (Aikhenvald 2006: 45–46). This is a convincing analysis, and for the purposes of this study, English is not considered to have SVCs.

There is no cross-linguistic survey available on the distribution of SVCs, however, as Parkvall states, it is relatively well established that these constructions are cross-linguistically rare, for the most part restricted geographically to East Asia, West Africa, and Papua New Guinea (Parkvall 2000: 23).

There is no single survey of SVCs in pidgin/creole languages available either. However, Maurer, Michaelis et al. (2013) survey directional ‘come’ and ‘go’ SVCs, and Maurer et al. have separate surveys of ‘take’ SVCs (2013c) and ‘give’ SVCs (2013d). When the data from these surveys is combined, they contain 32 pidgin/creole languages not related to CPE. Of these, 17, or 53% use SVCs. Based on this data it cannot be stated that the presence of SVCs in CPE is clearly the result of substrate transfer.
Maurer, Michaelis et al.’s (2013) survey of directional SVCs contains 31 pidgin/creoles not related to CPE. Of these, six languages, or 19%, contain directional SVCs. Taken in combination with the rest of the evidence about these constructions presented in this chapter, these findings suggest that the presence of directional SVCs in CPE is likely the result of transfer from substrate languages.

The analysis presented in this section is summarised in Table 7.15.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>SUBSTRATE</th>
<th>SUPERSTRATE</th>
<th>TYPOLOGICALLY UNCOMMON</th>
<th>UNCOMMON IN P/C</th>
<th>ORIGIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVCs</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>undetermined</td>
</tr>
<tr>
<td>Directional SVCs</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>substrate</td>
</tr>
</tbody>
</table>

**Table 7.15** Origins of CPE SVCs based on Parkvall’s (2000:24) criteria

The summary in Table 7.15 shows that it is possible to determine a substrate origin for CPE directional SVCs but not for SVCs in CPE more generally.\(^{34}\)

### 7.5. Exploring the origins of Cameroon Pidgin English clause types

This section explores the origins of the clause types found in CPE, looking first at declarative constituent order (§7.5.1), then at copular clauses (§7.5.2), interrogative clauses (§7.5.3), and finally subordinate clause types (§7.5.4).

#### 7.5.1 Declarative constituent order

The declarative constituent word order of CPE is SVO. This is also the case for Duala (24), (Epale 1973: 67).

(24) Dika nà Elame básí tóndì Ndómè

Dika and Elame P-res- love Ndome

‘Dika and Elame love Ndome’

Duala; Adapted from Arsene (2015: 44)

---

\(^{34}\) This type of finding is frustrating. It is possible that the 17 pidgin/creole languages unrelated to CPE that had SVCs also had substrate languages with SVCs, but this is unknowable within the scope of this project and therefore the finding must be accepted based on the available data and the methodology outlined for this chapter.
Mokpwe is also an SVO language (25), (Atindogbe 2013: 118).

(25) Nà lingáni è- ŋgòndô

1S love.PRES 7.DET 9.girl

‘I love a girl’

Mokpwe (Atindogbe 2013: 118)

As are Ibibio (26), (Essien 1990:153), and Igbo (27), (Green & Igwe 1963: 45).

(26) Okon a- sàsàp a- dòk ekpat

Okon 3S- do.quickly 3S- make bag

‘Okon quickly made a bag’

Ibibio: Adapted from Baker and Willie (2010: 100)

(27) Ó sìřì jí ré.

3S.SUBJ cook yam eat

‘S/he cooked yam and ate.’

Igbo: Adapted from Amaechi (2013: 157)

The dominant English word order for declarative clauses was also SVO throughout the precolonial period (Smith 1999: 138; Görlach 2001: 119).

This means that SVO word order is present in almost all of the input languages of CPE identified for this study. Because it is so widespread it is not possible to identify a clear source for this feature.
7.5.2 Copular clauses

There are four copular features of nineteenth-century CPE that are suitable for analysis in this chapter:

➢ Use of a copula with predicative noun phrases
➢ Use of a copula with predicative locatives
➢ Use of different copular forms with predicative noun phrases and locatives
➢ Predicative adjectival meaning expressed in a clause with no copula.\(^{35}\)


(28) Bítò bá é mbonjí índénè
women 3PL.AGR.SUBJ COP flowers big
ndénè
big

‘Women are very big flowers’

Duala: Adapted from Arsene (2015: 84)

Mokpwe uses the copular ‘morphemic sequence’ *bélì ndì* (29) with predicative noun phrases (Atindogbe 2013: 128).\(^{36}\)

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\(^{35}\) These are not strictly copular clauses but are included here for continuity with chapters 5 and 6, in which the question of whether they contained a zero copula had not been settled (§5.5.2), (§6.6.2).

\(^{36}\) Atindogbe (2013) refers to these copular expressions as ‘morphemic sequences’ and this term is adopted here. However, because of this, it is not clear precisely what the role of each word in the sequence is or if they operate as a sort of compound copula.
(29)  ò  bèli  ndi  ngàngà
2S.SUBJ COP  COP  doctor

‘You are a doctor’

Mokpwe: (Atindogbe 2013: 128)

Ibibio (30) and Igbo (31) also use overt copulas with predicative noun phrases.

(30)  Òkón  á-  dò  inó
Okon  3S-  COP  thief

‘Okon is a thief’

Ibibio: Adapted from Anyanwu (2011: 52)

(31)  ó  bụ  ónyé  ǹkúzi
3S.SUBJ  COP  person  teacher

‘He is a teacher’

Igbo: Adapted from Uchechukwu (2015: 50)

This is also the case for nineteenth-century English, which uses a single copula verb, *be*, with all predicate types (Denison 1999: 228–232). The presence of an overt copula with predicative noun phrases in both the substrate and superstrate languages of CPE means that it is not possible to determine an origin for this feature in the language.

The use of an overt copula with predicative locatives is also a substrate feature, present in Duala (32), Mokpwe, which again uses a morphemic sequence, (33), Ibibio (34), and Igbo (35).
English also uses *be* obligatorily with predicative locatives (Denison 1999: 228–232). The presence of an overt locative copula in both the substrate and superstrate languages of CPE means that it is not possible to determine an origin for this feature.

CPE uses different copulas with predicative noun phrases and predicative locative phrases. The information presented in this section so far reveals that both Mokpwe and Ibibio also use different copulas for predicative nominals, and locatives. Mokpwe uses *βéli ndì* with predicative noun phrases and *βéli ó* with predicative locatives (Atindogbe 2013: 128). Ibibio uses *dò* with predicative noun phrases and has three locative copulas, *bà*, *síné*, and *dórò* (Anyawu 2011: 52).
English has a single copular verb, *be*, used with both nominal and locative predicates (Denison 1999: 228–232). This means that the use of different copula forms for nominal and locative predicates may have become a feature of CPE through substrate transfer.

However, in a survey of 386 languages Stassen (2013a) found that 269 or 70% of the languages surveyed used a different copular strategy for nominal and locative predicates. This means that it is a cross-linguistically common feature. It is also a feature that is not uncommon in pidgin/creole languages unrelated to CPE. Michaelis et al. (2013a) surveyed pidgin/creole languages for their copular strategies. Of the 32 pidgin/creole languages they surveyed that are unrelated to CPE 15, or 47%, of the languages used different copulas for nominal and locative predicates. This means that this feature cannot be shown to have entered CPE through substrate transfer.

In nineteenth-century CPE, predicative adjectival meaning is expressed in a clause consisting of a subject and the predicative adjective. Duala has a similar construction (36) (Gaskin 1927: 32; Epale 1973: 71).

(36) No **kolo**

1S.SUBJ be.robust

‘I am robust’

Duala: Adapted from Epale (1973: 71)

Ijaw also has a construction that juxtaposes subject and predicative adjective (37) (Williamson 1965: 66).

(37) kími -bi **kósu** -mi

man -DEF be.old -PRES

‘The man is old’

Ijaw: Adapted from Williamson (1965: 66)

In English the copula is obligatory with predicative adjectives (Denison 1999: 228–232). This suggests that this feature could have become part of CPE through substrate transfer.
However, once again this is a cross-linguistically common feature. Stassen (2013b) surveyed 386 languages and found verbal encoding of adjectives was a feature of 254, or 66%, of them. Michaelis et al. (2013b) surveyed pidgin/creole languages for the same feature. Of the 32 pidgin/creoles they surveyed that were not related to CPE, 17, or 53%, did not use a copula with predicative adjectives. This means that this feature cannot be shown to have entered CPE through substrate transfer.

Table 7.16 summarises the analysis presented in this section.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED P/C</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt COP with NPs</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Overt COP with LOC</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Different NP and LOC COPs</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>No COP with ADJ</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

Table 7.16 Origins of CPE copular clauses based on Parkvall’s (2000:24) criteria

The data presented Table 7.16 demonstrates that it is not possible to determine a clear origin for any of the copular features of CPE.

7.5.3 Interrogatives

There were three interrogative features of CPE suitable for analysis in this chapter.

- Use of polar interrogatives with declarative word order
- Use of constituent interrogative expressions to mark constituent interrogatives
- Constituent interrogative expressions in clause initial position

The first of these features, polar interrogatives with declarative word order, are also a feature of Duala. Some Duala speakers form polar interrogatives by adding a vowel, è, to the final word of the clause, suggestive of an
interrogative particle, but they are otherwise marked by intonation (Arsene 2015: 52).

Mokpwe also uses rising intonation with declarative word order to mark polar interrogatives (Atindogbe 2013: 127)

Essian states that Ibibio generally has no interrogative-declarative distinction, although if there is ambiguity either intonation or a preverbal interrogative particle, ǹté, can be used (Essien 1990: 155–156).

English at this time, as now, used interrogative word order to mark polar interrogatives (Barber 1997: 157–158).

This means that the use of declarative word order in polar interrogatives may have become a feature of CPE through substrate transfer.

In a survey of 955 languages Dryer (2013f) found that 173 of them marked polar interrogatives with intonation only, while just one had no interrogative-declarative distinction. Combined they account for 18% of the total number of languages surveyed. This means that declarative word order in polar interrogatives is cross-linguistically uncommon. However, of 31 pidgin/creoles surveyed by Haspelmath et al. (2013f) that are unrelated to CPE, 27, or 87%, of them used declarative word order in polar interrogatives. This means that this feature cannot be shown to have entered CPE through substrate transfer.

Duala uses a series of interrogative words to mark constituent interrogatives, and these may be fronted (38).

(38) **Njéi** Dika à and -í -nòti?

Q Dika 3s.SUBJ buy -PST -RES

‘What did Dika buy?’

Duala: (Arsene 2015: 56)

Mokpwe also uses fronted interrogative words to form constituent interrogatives (39), (Atindogbe 2013: 128).
Constituent interrogatives in Ibibio are marked using one of a number of question words (Essien 1990: 157) and these may be fronted (40).

(40) Ñsọ  ké  á- ké  á- nám?

Q  FOC  3s-  PST  3s-  do

‘What did she do?’

Ibibio: Adapted from Duncan et al. (2019: 432)

Igbo also has a wide range of interrogative words used in constituent interrogatives (Green & Igwe 1963: 39). These words may also be used clause initially (41).

(41) ônye  kà  i  hùrù  -tì

Q  DET.DEM  2s.SUBJ  see  -PST

‘Who did you see?’

Igbo: Adapted from Uwalaka (1991: 185)

English also uses clause initial interrogative words to mark constituent interrogatives (Barber 1997: 157–158). This means that a clear origin for this feature in CPE cannot be established since it is present in both the substrate and superstrate.

The analysis presented in this section is summarised in Table 7.17.
The data presented in Table 7.1 shows that it is not possible to determine an origin for any of the interrogative features of CPE analysed for this study. The next section looks for evidence on the origin of CPE subordinate clauses.

### 7.5.4 Subordinate clauses

There are four features of the nineteenth-century CPE subordinate clause suitable for analysis in this chapter.

- The use of a complementiser with S-like subordinate clause
- Subordinate clause initial complementiser position
- The use of infinitival subordinate clauses
- Noun-relative clause word order

The use of a subordinate clause initial complementiser with S-like subordinate clauses is a feature found in Igbo (42) (Osuagwu & Anyanwu 2020: 6).

(42) Echè m [nà Âda ǹzùùlà Èmeka akwukwo]
think 1S.SUBJ COMP Ada buy.PST.PF Emeka
book

‘I think that Ada bought Emeka a book’

Igbo: Adapted from Osuagwu & Anyanwu (2020: 6)
This is also a feature of English, which, during the precolonial period of contact with Cameroon, as today, could introduce s-like subordinate clauses with *that* (Görlach 2001: 128). The presence of this feature in both the substrate and superstrate means that it is not possible to determine an origin for this feature in CPE. But it should be noted that evidence for this type of clause was only found in one of the Nigerian substrate languages.

In previous sections where this was the case, further investigation of the feature was conducted to establish whether there was any other evidence that might support the hypothesis that this feature became part of CPE through superstrate transfer. This analysis was not conducted here for two reasons. The first is that information on complex clauses is not included in many of the substrate sources consulted for this study. Because of this, it is very possible that these types of clauses are a feature of several substrate languages, but this is impossible to know. The second reason is that no surveys could be sourced on this feature either cross-linguistically or in pidgin/creole languages. It must therefore be concluded that it is not possible to determine a source for this construction in CPE.

Infinitival subordinate clauses are also found in Ibibio (45).

(43) Okon a-yem [adi-si-mana

Okon 3SUBJ-want INF- IMPF-do.again

n-nam.]

AGR-do

‘Okon wants to be doing it again’

Ibibio: Adapted from Baker and Willie (2010: 102)
This type of subordinate clause is also a feature of Igbo (46).

(44) O còrò [imà mà únù âna]

3S.SUBJ want know.INF CONJ 2S.SUBJ COP

àzula ji]

buy yam

‘He wants to know how you are getting on with buying yam’

Igbo: Adapted from Green and Igwe (1963: 157)

To infinitive subordinate clauses developed in middle English (Fischer et al. 2017: 172) so they are also a feature of the superstrate. The presence of infinitival subordinate clauses in just the superstrate and the Nigerian substrate suggests that further investigation might be useful. But as with the previous feature this was not possible due to a lack of available information about these constructions in the Cameroonian substrate, cross-linguistically, or in other pidgin/creole languages.

The final CPE subordinate clause feature analysed in this section is noun-relative clause word order. According to Epale (1973: 48) Duala uses noun-relative clause word order although they do not provide an example. This word order is also a feature of Mokpwe (45) (Atindogbe 2013: 127).

(45) Lì- zròŋgá [émA liké’e i jàmà]

5.DEM- tooth REL cut.PRES 9.CD 9.meat

‘the tooth which cuts meat’

Mokpwe: (Atindogbe 2013: 127)

This word ordering rule is also found in the Nigerian substrate as Emenanjo states that the relative clause follows the head noun in Igbo (Emenanjo 2015: 408).

Noun-relative clause word order is also a feature of nineteenth-century English (Smith 1999: 132). The presence of this feature in both the substrate
and superstrate of CPE means that it is not possible to identify a source for noun-relative clause word order in the language.

The conclusions drawn from the analysis in this section are summarised in Table 7.18.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED PCS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of COMP</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>COMP clause initial</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>INF subordinate clauses</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Noun-REL</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

**Table 7.18** Presence of CPE possessive constructions in its substrate and superstrate languages

The data presented in Table 7.18 demonstrates that it is not possible to determine an origin for any of the subordinate clause features of CPE.

This is the final section analysing the origins of the CPE features found in the historical dataset. The next section discusses the findings of the first half of this chapter as they relate to research question (2.a)

**7.6 Interim discussion**

The previous sections applied Parkvall’s (2000) criteria for showing the origins of a pidgin/creole language to the data on CPE and its substrate and superstrate languages in order to address research question:

2. a. Is there clear evidence that any of the features of Cameroon Pidgin English became part of the language through transfer, restructuring, or speaker innovation?

Table 7.19 summarises the findings of this analysis.
<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLOGICALLY COMMON</th>
<th>COMMON IN UNRELATED PCS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEF-noun</td>
<td>-</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEF -noun</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEM -noun</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEF identical to DEM</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>DEF and DEM distinct</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>IDEF and <em>one</em> distinct</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>superstrate</td>
</tr>
<tr>
<td>INDEF identical to <em>one</em></td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>Adjective-noun</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Numeral -noun</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>Plural word</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>Plural word -noun</td>
<td>+</td>
<td>-</td>
<td>unknown</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>X/Y possessive</td>
<td>-</td>
<td>+</td>
<td>unknown</td>
<td>unknown</td>
<td>undetermined</td>
</tr>
<tr>
<td>X/POSS.DET/Y</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>superstrate</td>
</tr>
<tr>
<td>Possessor PP</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Nominative/accusative case alignment</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Lack of gender distinction in personal pronouns</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>Past time word</td>
<td>+</td>
<td>-</td>
<td>improbable</td>
<td>-</td>
<td>substrate</td>
</tr>
<tr>
<td>Future time word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>PROG aspect word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>COMPL/PF word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Pre-verbal TMA</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>NEG word</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Pre-verbal NEG</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>SVCs</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>undetermined</td>
</tr>
<tr>
<td>Directional SVCs</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>substrate</td>
</tr>
<tr>
<td>SVO</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Overt COP with NPs</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Overt COP with LOC</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Different NP and LOC COPs</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

**Table 7.19** Origins of CPE features based on Parkvall’s (2000:24) criteria
The analysis summarised in Table 7.19 contains very few clear sources for the features of nineteenth-century CPE. Of the 37 features, there is clear evidence for just two features becoming part of CPE via superstrate transfer. These are: (i) the use of an indefinite determiner distinct from the word for *one*, and (ii) the use of an X/possessive determiner/Y possessive construction. There is also clear evidence for two features having entered CPE via substrate transfer. These features are: (i) the use of a TMA particle to mark past time, and (ii) the use of directional SVCs. Based on Parkvall’s stringent criteria for evidencing the origins of pidgin/creole features, none of the CPE features can be shown conclusively to result from restructuring and none can be shown to be typological universals. All of the features of CPE analysed in this chapter can be found in the substrate, the superstrate, or both, and of the 37 features, 23 are found in both the superstrate and the substrate. Of course, this does not mean that the many features with undetermined origins did not enter CPE via one of these mechanisms, only that it is impossible to know whether they did with any certainty. Despite the lack of clear results, it is important to include this analysis for three reasons.

The first is that this data does provide evidence that some of the features of CPE became part of the language through transfer either from the substrate or the superstrate. That some features transferred from the superstrate into

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>PRESENT IN SUBSTRATE</th>
<th>PRESENT IN SUPERSTRATE</th>
<th>TYPOLGICALLY COMMON</th>
<th>COMMON IN UNRELATED PCS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No COP with ADJ</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>SVO polar interrogatives</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>undetermined</td>
</tr>
<tr>
<td>Q words in constituent interrogatives</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Q words clause initial</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Use of complementiser</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Complementiser clause initial</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
<tr>
<td>Noun-REL clause</td>
<td>+</td>
<td>+</td>
<td>x</td>
<td>x</td>
<td>undetermined</td>
</tr>
</tbody>
</table>

Table 7.19 continued
CPE means that it was possible for superstrate transfer to occur, and these features provide a small quantity of counter evidence to any theoretical approach which might claim that the superstrate does not influence the grammar of a developing pidgin/creole. Likewise, the finding that some features did transfer from the substrate provides evidence that substrate transfer was possible.

The second reason to include this analysis is that it illustrates that properly evidencing the origins of pidgin/creole features is often not possible. CPE is not a particularly unique pidgin/creole language in terms of its origins. There is nothing special about the features or history of CPE that should make analysing its origins more difficult than analysing the origins of other pidgin/creole languages. This finding demonstrates the importance of providing evidence for any claim of a substrate or superstrate source.

The final reason for inclusion is one encountered across disciplines, that is, the importance of publishing all findings. Without transparency it is not possible to fully replicate a researcher’s methodology. It can also lead to pointless repetition and to false assumptions being made that can impact future studies (Mehta 2019). This is not quite so dangerous in linguistics as it is in a subject like medical science, but it is still important to avoid collective knowledge gaps wherever possible.

Despite the lack of clear origins for many of the features of nineteenth-century CPE, it is still possible to address research question (2.b) and compare the evidence that CPE provides for Plag’s interlanguage hypothesis (PILH) with the evidence it can provide for other theoretical approaches to pidgin/creole genesis. The following section outlines this comparison and its findings.

7.7 Comparing models of pidgin/creole genesis in relation to the features of nineteenth-century Cameroon Pidgin English

This section compares the available information on the features of CPE with the predictions of PILH, as well as a relexification approach to pidgin/creole

37 With the possible exception of some island creoles where substrate languages can be more easily traced.
genesis, and a feature pool approach to pidgin/creole genesis. This analysis is not comprehensive, it is intended to be indicative and as such cannot show conclusively that any one model receives greater support. Rather it provides a brief overview of how well each theoretical approach predicts the CPE data. In doing so, it necessarily reduces complex theories to their most basic claims. The outline of the theories provided in this section is not intended to be anything more than a superficial overview of each. Even so, there is value to this comparison as it allows the level of support that the CPE data provides for PILH to be compared to the level of support that it provides for two other theoretical approaches to pidgin/creole genesis.

The analysis in this section compares the predictions of PILH to those of a relexification approach to pidgin/creole genesis, and to those of a feature pools approach. To do this, each CPE feature is assigned a value based on whether it is found in the substrate and superstrate languages of CPE. Additionally, each feature is assessed for ‘markedness’, a key consideration in a feature pool approach. Markedness is not a concept that is clearly defined in the literature on features pools and difficulties with operationalising this concept are outlined in the methodology chapter (§4.3.3). The final factors that are considered in this analysis relate to PILH. Each feature is assessed to determine whether it is a typical English interlanguage feature and is also assigned a processability level.

The analysis presented in this section is based on the following summaries of each of the theoretical approaches:

- PILH states that pidgin/creole languages are conventionalised interlanguages and that the expected features of an English lexified pidgin/creole would be those typical of early-stage English interlanguages (Plag 2008a). Therefore, evidence in support of PILH should consist of English interlanguage features and superstrate features processible at an early interlanguage stage (stages 1–3). Features could also have entered the language from the superstrate, but again only if they are processible in an early-stage interlanguage.
Relexification theories state that pidgin/creoles consist of substrate grammars relexified with superstrate lexis (Lefebvre 1999). Evidence in support of relexification would consist of large quantities of substrate features and very few superstrate features. Since very little clear evidence for substrate or superstrate transfer was found in the previous sections of this chapter, the presence of a feature in the substrate or superstrate is accepted for the purposes of theoretical comparison. For reasons that should be clear from the preceding sections, this is methodologically questionable but nevertheless allows indicative findings.

Feature pool theories argue that there are multiple competing strategies in the linguistic environment of a developing pidgin/creole language. These may come from a variety of sources, but it will be the least marked forms that generally end up in the stable language that emerges (Aboh & Ansaldo 2007). Support for a feature pool approach would consist of evidence that the most unmarked forms available in the linguistic environment were the ones which became part of the pidgin/creole language.

These definitions are brief and necessarily reduced. The limitations of this comparative analysis are addressed in the discussion that follows this section (§7.8). Despite this they are sufficient for a preliminary exploration. The predicted finding of each approach is summarised in Table 7.20.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SUBSTRATE</th>
<th>SUPERSTRATE</th>
<th>MARKED</th>
<th>INTERLANGUAGE FEATURE</th>
<th>PROCESSABILITY THEORY LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILH</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
<td>+</td>
<td>1–3</td>
</tr>
<tr>
<td>Relexification</td>
<td>+</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Feature pools</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 7.20 Predictions of each approach for the features of nineteenth-century CPE

In table 7.20 a + value means that this is an expected source for a feature in a given model, a - means that this is not an expected source, while a value of N/A indicates that the analysis is not relevant to the model. The values for each feature are calculated in the following ways:
Presence in substrate and superstrate are based on the previous sections of this chapter, a + value means the feature is present, a – value means it is not.

Markedness values are based on comparing the frequency with which the features of CPE and alternative strategies for each feature found in the substrate and superstrate are found in surveys of the world’s languages. The full analysis can be found in appendix C. In Table 7.21 a - value was assigned for markedness to any feature which is the most typologically common option found across the range of strategies in the ‘feature pool’ of CPE. Where a relative markedness value could not be determined the feature is given a value of unknown in the ‘Marked’ column.

The question of whether a CPE feature is typical of English interlanguages is based on the list of English interlanguage features produced by Pienemann in the processability theory literature. If a feature appears on Pienemann’s list it is given a + value, if not, a – value.

Processing levels are based on the analysis conducted in Chapter 6. Where it is not possible to establish a processability level for a feature, that feature receives the value N/A in the ‘processability theory level’ column.

The analysis, based on these criteria, for each feature of CPE is outlined in Table 7.21.
<table>
<thead>
<tr>
<th>FEATURE</th>
<th>SUBSTRATE</th>
<th>SUPERSTRATE</th>
<th>UNMARKED</th>
<th>INTER-LANGUAGE FEATURE</th>
<th>PROCESSING LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEF-noun</td>
<td>-</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>DEF -noun</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>DEM -noun</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>DEF identical to DEM</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>DEF and DEM distinct</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>IDEF and one distinct</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>N/A</td>
</tr>
<tr>
<td>INDEF identical to one</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>Adjective -noun</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>Numeral -noun</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>Plural word</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Plural word -noun</td>
<td>+</td>
<td>-</td>
<td>unknown</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
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<td>-</td>
<td>+</td>
<td>unknown</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>X/POSS.DET/Y</td>
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<td>+</td>
<td>unknown</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Possessor PP</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Nominative/accusative case alignment</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Lack of gender distinction in personal pronouns</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Preverbal past word</td>
<td>+</td>
<td>-</td>
<td>unknown</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Preverbal future word</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>4</td>
</tr>
<tr>
<td>Preverbal progressive word</td>
<td>+</td>
<td>-</td>
<td>unknown</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Preverbal perfective word</td>
<td>+</td>
<td>-</td>
<td>unknown</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>NEG word</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>4</td>
</tr>
<tr>
<td>SVCs</td>
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<td>+</td>
<td>-</td>
<td>unknown</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>SVO</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Overt COP with NPs</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Overt COP with LOC</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Unique NP and LOC COPs</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Verbal adjectives</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>SVO polar interrogatives</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Clause initial Q words in constituent interrogatives</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>4</td>
</tr>
<tr>
<td>Use of complementiser</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Complementiser clause initial</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
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<td>+</td>
<td>unknown</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Noun-REL. clause</td>
<td>+</td>
<td>+</td>
<td>unknown</td>
<td>-</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 7.21 Values for each criterion required for model comparison
The analysis presented in Table 7.21 provides evidence that better supports PILH than it does either of the two alternative models assessed here, although this evidence is not definitive. The data presented in Table 7.21 reveals that only 15 out of 34, or 44%, of the CPE features are typical of English interlanguages. This is low but does not necessarily constitute counterevidence to PILH. This is firstly because Pienemann’s list is arguably not comprehensive, and secondly because Plag does not claim that every feature of a pidgin/creole will be typical of an interlanguage. Most of the features of CPE are processible in an early-stage interlanguage, of the features that can be assigned a processing level in Table 7.21, 23 out of 32, or 71%, of the features are processible in a level three, or lower, interlanguage. This finding is reasonably consistent with the predictions of PILH.

Turning to the predictions of a relexification approach, there are a few more CPE features that are also substrate features than there are CPE features that are also superstrate features. The figures are relatively close though, 29 out of 34, or 85%, of the CPE features are also found in the substrate languages versus 22 out of 34, or 64%, of the features that are also found in the superstrate. There is considerable overlap, with most CPE features found in both the substrate and the superstrate. There are 12 features found in the substrate that are not present in the superstrate, while five, all noun phrase features, are found in the superstrate and not the substrate. As discussed in previous sections of this chapter, only two of these features can be clearly shown to have entered CPE due to substrate transfer and two through superstrate transfer. This means that the data does not support a relexification approach to pidgin/creole genesis. However, it does not really constitute evidence against a relexification approach either. Most CPE features are also substrate features. If evidence could be found that all of the features present in the substrate entered CPE via substrate transfer this would constitute excellent evidence in favour of relexification. The issue is that, as already demonstrated, because most of these features are also found in the superstrate it is impossible to evidence substrate transfer. What the data does highlight is that claims made by relexification theorists about the
substrate origin of pidgin/creole features really must be backed up with empirical evidence that this is the case.

In order to assess a feature pool approach, it is necessary to establish how many of the features of CPE constitute the least marked strategy available in the linguistic environment in which it developed. For this analysis, a number of features are excluded as no cross-linguistic survey is available for them. Many of these are features such as pre-verbal TMA marking words and SVCs that are more common in pidgin/creole languages than cross-linguistically. Because of this, their exclusion does not place the feature pool approach at a disadvantage, but rather their elimination may inflate the amount of data supporting the model since these features typical of pidgin/creole languages, are less common cross-linguistically. Of the 16 features for which cross-linguistic surveys are available, nineteenth-century CPE uses the least typologically marked strategy found in the substrate or superstrate in seven of them, or 44%, of the languages, and uses a more marked, or less cross-linguistically common strategy in nine, 56%. This does not support the predictions of a feature pool approach based on the criteria used in this study.

The data presented in this section broadly supports the claims of PILH. Most features of CPE are processible in an early-stage interlanguage. Most are also present in the superstrate, or typical of English interlanguages, or both. All of which might be predicted based on PILH. Many of the features found in the superstrate of CPE are also found in its substrate but this is not problematic for PILH as there is nothing to suggest that an L2 feature also being present in the L1 would make it more difficult to incorporate into a speaker’s interlanguage. In fact, the opposite seems more likely. The data does not provide strong support for the predictions of either a relexification approach or of a feature pool approach to pidgin/creole genesis. However, it is fair to say that theorists working in these areas might reasonably raise some issues with the somewhat superficial methodology applied in this section. The findings of this analysis along with the limitations of the approach taken here are discussed further in the following section.
7.8 Discussion

The analysis presented in the previous section provides more support for PILH than it does for a relexification or feature pool approach. This conclusion is a fairly straightforward one based on the analysis presented in (§7.7), but a relexification or feature pool theorist could raise some justifiable objections to the approach adopted here.

The data for relexification is inconclusive. If there were more evidence that substrate features found in CPE were the result of substrate transfer, then the evidence for relexification would be excellent. It could be argued that the criteria for evidencing transfer used in this chapter are unreasonably stringent, making evidencing substrate transfer impossible. The counter argument to this is that, if evidencing substrate transfer using stringent methodology is impossible, then claims about substrate transfer should not be made. This is the position taken in this thesis, and from this position the conclusion that the CPE data does not support a relexification approach is justified.

The data used to test the feature pool approach is based on a narrow definition of ‘unmarked’ and does not take into account the arguments made by Aboh and Ansaldo about salience and its importance in feature pool selection (Aboh & Ansaldo 2007: 45). Unfortunately, Aboh and Ansaldo never really define typological markedness beyond it being ‘a manifestation of frequency, regularity, and salience’ (Aboh & Ansaldo 2007: 45). They provide no clear method for operationalising these three factors. Because of this, cross-linguistic distribution is used in this study to operationalise frequency and regularity, while salience, for which there is no straightforward definition that can be tested, is set aside. This approach is a justifiable compromise given the vagueness with which feature pool methodology is presented. However, it would be interesting to see a fully explicated and operationalised feature pool treatment of the CPE data.

Proponents of either approach could also argue that more factors are considered as evidence for PILH than are for the other theories. This is true, but this multi-factorial analysis is due to the nature of PILH rather than any
operational decision. Multiple sources are possible for features of a processability theory interlanguage so long as they are processible.

The data presented above is not intended to constitute a thorough investigation of the three theories but rather a brief, indicative, preliminary comparison of their theoretical predictions with the CPE data. This is done to ensure that PILH is examined not just on its own merits but in comparison to alternative explanations for the same data.

This analysis means that research questions (2.a) and (2.b) can be fully addressed. Research question (2.a) asks whether the origins of each of the CPE features can be identified. The answer to this is that for all but four features no definitive origin can be identified with the analytical method applied. Research question (2.b) asks whether any data on the features of CPE support PILH or if they provide better evidence for another theoretical approach. The answer to this question is that these findings better support PILH than they do other theories, with the caveat that this is based on a very narrow definition of each theoretical approach.

7.9 Summary

This chapter has presented an analysis of the available evidence for the origins of CPE features. First applying Parkvall’s criteria for identifying clear sources for pidgin/creole features to the nineteenth-century noun phrase (§7.2), then to its pronominal system (§7.3), verb phrase (§7.4), and finally clause types (§7.5). This analysis established that there is little clear evidence for where almost any of the features of nineteenth-century CPE originated, a finding discussed in an interim chapter discussion (§7.6). The following section (§7.7) compared the predictions of three models of pidgin/creole genesis: PILH, relexification theory, and the feature pool approach, finding that the data on CPE features better supports PILH than either of the other approaches. Finally, this finding and the limitations of the methodology used for this analysis were briefly discussed (§7.8).

The analysis presented in this chapter, taken in combination with the processability theory-based investigation outlined in Chapter 6, create an expanded case for PILH as an explanation for the grammatical forms found
in nineteenth-century CPE. However, PILH has little to say about feature selection at the speech community level and this is arguably a detrimental gap. The next chapter explores whether there are any observable patterns in the types of features which became part of CPE as it stabilised and discusses these findings in relation to PILH.
Chapter 8

Analysis: exploring which features became part of Cameroon Pidgin English

8.1 Introduction

The final stage of this exercise is more descriptive than theoretical. The analysis described in this chapter takes an overview of the features of nineteenth-century CPE to see whether there is anything that can be gleaned from looking at the language features at a macro level. This chapter is not intended as a substantive part of the main argument, but rather adds to the picture of CPE as it was spoken in the late nineteenth-century. Plag’s interlanguage hypothesis (PILH) does not explore the mechanisms of stabilisation that occur at the level of the speech community when linguistic norms develop in an emerging pidgin/creole language. Processability theory, which underpins PILH, is designed to look at the interlanguages of individual speakers, not the development of a stabilising pidgin/creole language. Without detailed records of CPE as it stabilised, we cannot state with any certainty what factors might have influenced its stable form. However, the types of features which became part of CPE can be observed. It is also possible to compare these features to other strategies present in the linguistic environment in which CPE developed, in order to establish whether the early speakers of the language favoured particular types of strategies. This analysis can inform further assessment of PILH, because certain types of features are more likely to become part of an English interlanguage, and from there part of the emerging pidgin/creole. The analysis presented in this chapter aims to answer research questions (3.a) and (3.b):

3. a. Are there any observations that can be made about the types of features that were conventionalised/adopted to create Cameroon Pidgin English?

b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?
To address these research questions, several further questions need to be answered. These questions, which inform the comparative methodological approach adopted in this chapter, outlined in (§4.3.5), are as follows:

➢ Are nineteenth-century CPE grammatical features more likely to be shared with its substrate languages, its superstrate, or both?

➢ Are the grammatical features that nineteenth-century CPE shares with its substrate and/or superstrate languages more likely to be syntactic or morphological?

➢ From a processability theory perspective, are nineteenth-century CPE grammatical features more often processible at a higher or lower processing level than alternative strategies in its substrate or superstrate languages?

➢ When the analyses for the previous questions are combined, can any patterns be observed in the types of features that became part of nineteenth-century CPE?

The results of this analysis do not contradict PILH and, for the most part, the findings of this chapter are what might be expected if a group of individual interlanguages became conventionalised into a stable pidgin/creole. The rest of this chapter consists of four sections: the first presents comparative analysis exploring the first three of the questions outlined above, exploring substrate versus superstrate features, syntactic versus morphological features, and higher versus lower processing levels (§8.2); the following section explores the fourth question, looking at whether there are any observable patterns in the types of features that became part of CPE as it developed (§8.3); the final sections discuss the implications of this analysis for PILH (§8.4); and provide a chapter summary (§8.5).

8.2 Looking for patterns

The first stage of this analysis is to explore which of the features present in the substrate and superstrate languages of nineteenth-century CPE became part of the developing pidgin/creole, and which did not. The first section
establishes whether the grammatical features of nineteenth-century CPE are more commonly shared with its substrate languages, its superstrate, or with both (§8.2.1). The second, explores whether syntactic or morphological features were more likely to become part of nineteenth-century CPE (§8.2.2). The final section compares the processability levels assigned to features of nineteenth-century CPE features with the processability levels assigned to alternative strategies found in its substrate and superstrate languages (§8.2.3).

8.2.1 Substrate versus superstrate features

The analysis presented in this section suggests that features shared by its substrate and superstrate were more likely to become part of nineteenth-century CPE than any other features. This conclusion is based on answering the following question:

➢ Are nineteenth-century CPE grammatical features more likely to be shared with its substrate languages, its superstrate, or both?

Although the findings of this chapter are not unexpected, and the same information is touched on in the previous chapter (§7.6), it is worth looking at the distribution of substrate and superstrate features in CPE in more detail to establish whether any specific patterns can be observed. The first step in this analysis is to establish whether each of the features of nineteenth century CPE is also present in any of the substrate or superstrate languages of CPE. The second is to establish for each CPE feature whether other strategies in the substrate and superstrate perform the same function. The final step is to compare the features in the substrate and superstrate that became part of nineteenth-century CPE to those that did not, observing any patterns that might exist in the data. For example, in cases where multiple substrate strategies and superstrate strategies exist for the same grammatical function, are substrate strategies more likely to be part of nineteenth-century CPE? As established in Chapter 7, (§7.6), not enough evidence exists to conclusively show a substrate or superstrate source for most of the features of nineteenth-century CPE. Here the use of ‘substrate strategy’ or ‘superstrate strategy’ indicates that a feature is present in the substrate or
superstrate not that transfer necessarily occurred. Appendix D has the full analysis, listing the features of each substrate language, those of nineteenth-century CPE, and of its superstrate. Table 8.1 presents an overview of this analysis.
<table>
<thead>
<tr>
<th>CPE FEATURE</th>
<th>SUBSTRATE FEATURE</th>
<th>SUPERSTRATE FEATURE</th>
<th>OTHER SUBSTRATE STRATEGIES</th>
<th>OTHER SUPERSTRATE STRATEGIES</th>
<th>CROSS REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEF DET - noun</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td>§7.2.1</td>
</tr>
<tr>
<td>Noun – INDEF DET</td>
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<td></td>
<td></td>
<td></td>
<td>§7.2.1</td>
</tr>
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<td>✓</td>
<td>✓</td>
<td></td>
<td>§7.2.1</td>
</tr>
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<td></td>
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<td></td>
<td>§7.2.1</td>
</tr>
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<td>✓</td>
<td>✓</td>
<td></td>
<td>§7.2.1</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td>§7.2.1</td>
</tr>
<tr>
<td>DEF DET identical to DEM</td>
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<td>✓</td>
<td></td>
<td></td>
<td>§7.2.1</td>
</tr>
<tr>
<td>DEF DET distinct from DEM</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>§7.2.1</td>
</tr>
<tr>
<td>One used as INDEF DET</td>
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<td></td>
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<td></td>
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</tr>
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<td>§7.2.1</td>
</tr>
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</tr>
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</tr>
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<td>✓</td>
<td></td>
<td>§7.3</td>
</tr>
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<td>✓</td>
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<td>§7.4.1</td>
</tr>
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</tr>
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<td></td>
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<td>✓</td>
<td>✓</td>
<td></td>
<td>§7.5.2</td>
</tr>
<tr>
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<td>✓</td>
<td></td>
<td>§7.5.2</td>
</tr>
<tr>
<td>Different copulas used with locative and nominative predicates</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>§7.5.2</td>
</tr>
<tr>
<td>No copula with adjectival predicates</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>§7.5.2</td>
</tr>
</tbody>
</table>

Table 8.1 Presence of CPE features and alternative strategies in the substrate and superstrate of nineteenth-century CPE
### Table 8.1 continued

The first column in Table 8.1 lists the features of nineteenth-century CPE. The second column states whether the feature is present in the substrate of CPE; a tick in this column means that the feature is present in one or more of CPE’s substrate languages. The third column states whether the feature is present in the superstrate of CPE. The fourth and fifth columns state whether alternative strategies for the same grammatical function exist in the substrate or the superstrate of CPE, respectively. The final column provides a cross reference to a more detailed overview of each feature in CPE, its substrate languages and superstrate languages. For example, indefinite determiner-noun word order (in the first row) features in the superstrate language of CPE but not the substrate languages. There were alternative strategies for expressing definiteness in the substrate but not in the superstrate. Details of the alternative strategies in the substrate languages can be found in (§7.2.1). A summary of the analysis in Table 8.1 can be seen in Figure 8.1.

<table>
<thead>
<tr>
<th>CPE FEATURE</th>
<th>SUBSTRATE FEATURE</th>
<th>SUPERSTRATE FEATURE</th>
<th>OTHER SUBSTRATE STRATEGIES</th>
<th>OTHER SUPERSTRATE STRATEGIES</th>
<th>CROSS REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar interrogatives marked with intonation only</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>§7.5.3</td>
</tr>
<tr>
<td>Fronted expression marking constituent interrogatives</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>§7.5.3</td>
</tr>
<tr>
<td>S-like complement clauses</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>§7.5.4</td>
</tr>
<tr>
<td>Complementiser - complement clause word order</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>§7.5.4</td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>§7.5.4</td>
</tr>
<tr>
<td>Noun - relative clause word order</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>§7.5.4</td>
</tr>
</tbody>
</table>
Figure 8.1. Selection of substrate versus superstrate features in the development of nineteenth-century CPE

Figure 8.1 reveals that the most common pattern, accounting for 36% of the features analysed, is for a CPE feature to be present in both its substrate and superstrate and for there to be alternative strategies in the substrate languages. The second most common pattern, accounting for 30% of the features analysed, is for a CPE feature to be present in one or more of its substrate languages with an alternative strategy in the superstrate. The third most common pattern, accounting for 15% of the features analysed, is for a CPE feature to be present in its superstrate language with an alternative strategy in the superstrate. The fourth most common pattern, accounting for 12% of the features analysed, is for a CPE feature to be the only known strategy used in the substrate or superstrate. Finally, the least common pattern, accounting for 6% of the features analysed, is for a CPE feature to be present in both its substrate and superstrate and for there to be alternative strategies in both the substrate and superstrate. These findings
are analysed further in combination with the findings of the other analyses conducted for this chapter (§8.3) and discussed later in this chapter (§8.4).

### 8.2.2 Syntactic versus morphological features

The analysis presented in this section suggests that there was a strong preference for syntactic strategies among the first speakers of nineteenth-century CPE. This conclusion is based on answering the following question:

- Are the grammatical features that nineteenth-century CPE shares with its substrate and/or superstrate languages more likely to be syntactic or morphological?

The first step in this analysis is to code each of the features found in CPE, and the alternative strategies for each feature found in CPE’s substrate and superstrate languages, as either morphological, syntactic, or neither. Features that are considered neither morphological nor syntactic in this data include lexical choices, such as the use of a definite determiner identical to the demonstrative versus one distinct from the demonstrative; those for which the alternative strategies are so wide ranging that they cannot be clearly established, such as the use of serial verb constructions; and features which do not employ a strategy that can be termed strictly morphological or syntactic, such as the use of intonation to mark polar interrogatives. Because of these eliminations, the list of features explored in this section is considerably shorter than that used in the other analyses conducted for this chapter. The full analysis listing the features of CPE, its substrate and superstrate languages, each marked as either morphological or syntactic can be found in appendix E. An overview of this analysis is provided in Table 8.2.
<table>
<thead>
<tr>
<th>CPE FEATURE</th>
<th>SYNTAX OR MORPHOLOGY?</th>
<th>SYNTACTIC ALTERNATIVES?</th>
<th>MORPHOLOGICAL ALTERNATIVES?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite determiner - noun word order</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Definite determiner - noun word order</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Demonstrative determiner - noun word order</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Adjective - noun word order</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Numeral - noun word order</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Preverbal plural word plural marking</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>XY possessive</td>
<td>Syntax</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>X possessive determinant Y possessive</td>
<td>Syntax</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Possessor preposition phrase</td>
<td>Syntax</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Nominative - accusative case in personal pronouns</td>
<td>Morphology</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Preverbal word marking past time</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Preverbal word marking future time</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Preverbal word marking progressive aspect</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Preverbal word marking perfective aspect</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Preverbal negation marking word</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>SVO declarative word order</td>
<td>Syntax</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fronted word/expression marking constituent</td>
<td>Syntax</td>
<td>✓ ✓</td>
<td>✓</td>
</tr>
<tr>
<td>interrogatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S - like complement clauses</td>
<td>Syntax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complementiser - complement clause word order</td>
<td>Syntax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
<td>Syntax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noun - relative clause word order</td>
<td>Syntax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8.2 Syntactic and morphological strategies in the linguistic environment of nineteenth-century CPE

The first two columns in Table 8.2 provide a list of each of the nineteenth-century CPE features analysed and state whether each one is a syntactic or morphological feature. The third column is ticked if there are any alternative syntactic strategies used to express the same function in the languages that make up nineteenth-century CPE’s linguistic environment, that is its substrate and superstrate languages. The fourth column is ticked if there were any alternative morphological strategies used in the linguistic
The analysis presented in Table 8.2 is condensed so that a single tick mark may represent more than one strategy. For example, the use of a pluralising word was a feature of nineteenth-century CPE (§5.2.3). Plural words are also a feature of Ibibio and Igbo. However, there were many alternatives in the linguistic environment. These include plural prefixes (Duala), plural suffixes (Igbo, Ijaw, English), the use of plural noun classes (Mokpwe), vowel length changes (Ibibio), and plural reduplication (Igbo). In Table 8.2 these multiple strategies for marking nouns as plurals are condensed into a single tick mark representing the fact that morphological alternatives to a plural word were present in the substrate and superstrate of nineteenth-century CPE, the full analysis can be seen in appendix E. What Table 8.2 does demonstrate is that, without discussing the mechanisms by which such population level selection might take place, it is possible to state that when nineteenth-century CPE stabilised the early speakers incorporated a syntactic strategy for marking plurals rather than any one of a variety of alternative morphological strategies that were also part of their linguistic environment. The preference for syntactic rather than morphological strategies is not a surprising finding, given the prevalence of syntactic strategies in the nineteenth-century CPE data, but it is worth exploring further to establish whether any observable patterns emerge when these findings are compared to the other analyses conducted for this chapter. A summary of the analysis in Table 8.2 can be seen in Figure 8.2.
Figure 8.2 Selection of syntactic versus morphological features in the development of nineteenth-century CPE

Figure 8.2 reveals that there are two equally common patterns that together account for over half of the nineteenth-century CPE features analysed, each representing 29% of the features. The first of these is CPE features that are the only strategy in the linguistic environment, that is that all of the alternative substrate and superstrate strategies for these features are morphological. The other most common pattern is that the CPE feature is a syntactic feature and the alternative strategies in the linguistic environment are also syntactic. The next most common patterns are also equally common, each accounting for 19% of the CPE features analysed are. The first of these is that the feature is both syntactic and the only strategy in the linguistic environment. The second is that the feature is syntactic and there are both alternative syntactic strategies and alternative morphological strategies in the substrate and superstrate languages. The least common pattern is that the feature is morphological and is the only morphological strategy in the substrate and superstrate languages, that is, all alternative strategies are syntactic. This pattern accounts for 5% of the data, but it
should be noted that this Figure represents a single CPE feature, the use of nominative-accusative case alignment in personal pronouns.

These findings are analysed in relation to the other analyses conducted for this chapter in (§8.3) and discussed later in this chapter (§8.4).

8.2.3 Processing levels

Since this thesis explores an interlanguage hypothesis based on processability theory, it is also worth exploring whether there is any pattern in the types of features that became part of CPE as they relate to processibility. The analysis presented in this section suggests that there was a preference for strategies with higher processing levels among the first speakers of nineteenth-century CPE. The question this section aims to answer is:

➢ From a processability theory perspective, are nineteenth-century CPE grammatical features more often processible at a higher or lower processing level than alternative strategies in its substrate or superstrate languages?

The first step in conducting this analysis is to establish the processability level the alternative strategies present in the substrate and superstrate language for each feature of nineteenth-century CPE. It is not possible within the constraints of this thesis to conduct a full LFG analysis for each feature, as conducted in Chapter 6. Instead, a judgement can be made about the processability of each feature based on a combination of the levels established for similar features in Chapter 6 and the levels provided for some features of English interlanguages in the processability theory literature. This method is not perfect, and if the core aim of this thesis were to establish the relative processability of the substrate and superstrate features this method would certainly not be appropriate. For the purposes of this brief exploration, however, the approach is considered sufficient.

For example, it is established in Chapter 6 that the prenominal pluralising word in nineteenth-century CPE is processible in a level three interlanguage, that is, one in which the speaker has acquired the phrasal procedure (§6.3.1).
The other pluralising strategies present in the substrate and superstrate are all analysed here as possible in a level two interlanguage. Suffixing, prefixing, vowel length changes, and reduplication are all word level processes and therefore do not require information exchange at the phrasal level or above. The use of plural tone is a little more complex to judge and without further information cannot be assessed here because tone is outside the scope of the processability theory literature. Based on this analysis, the CPE use of a plural word is the plural feature with the highest processing level that is present in its substrate and superstrate languages. The full analysis can be seen in appendix F, an overview is given in Table 8.3.
<table>
<thead>
<tr>
<th>CPE FEATURE</th>
<th>PROCESSING LEVEL OF CPE FEATURE</th>
<th>PROCESSING LEVELS OF ALTERNATIVE STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite determiner - noun word order</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Definite determiner - noun word order</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Demonstrative determiner - noun word order</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Definite determiner identical to demonstrative</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Definite determiner distinct from demonstrative</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>One used as indefinite determiner</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Indefinite determiner distinct from one</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Adjective - noun word order</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Numeral - noun word order</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Prenominal plural word</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>XY possessive</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>X possessive determiner Y possessive</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Possessor preposition phrase</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Nominative - accusative case in personal pronouns</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>No gender in personal pronouns</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Preverbal word marking past time</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Preverbal word marking future time</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Preverbal word marking progressive aspect</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Preverbal word marking perfective aspect</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Preverbal negation marking word</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>SVCs present</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Directional SVCs present</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>SVO declarative word order</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Overt copula with nominative predicates</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Overt copula with locative predicates</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Different copulas for locative and nominative predicates</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>No copula with adjectival predicates</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Polar interrogatives marked with intonation only</td>
<td>2</td>
<td>2, 4</td>
</tr>
<tr>
<td>Fronted expression in constituent interrogatives</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>S - like complement clauses</td>
<td>4</td>
<td>n/a</td>
</tr>
<tr>
<td>Complementiser - complement clause word order</td>
<td>3</td>
<td>n/a</td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
<td>4</td>
<td>n/a</td>
</tr>
<tr>
<td>Noun - relative clause word order</td>
<td>3</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Table 8.3. Processing levels of CPE features and alternative strategies in the linguistic environment of nineteenth-century CPE
The first column in Table 8.3 lists the features of nineteenth-century CPE. The second gives the earliest processing stage at which the CPE features could have entered an interlanguage. The final column gives the processing stage or stages at which alternative strategies in the substrate and superstrate languages of CPE would have been accessible in an interlanguage, that is, the stage at which they could have entered an interlanguage had they entered one. The analysis presented in Table 8.3 demonstrates that the majority of CPE features were processible at the same processing level as all alternative strategies in the substrate and superstrate languages. A summary of the analysis presented in Table 8.3 can be seen in Figure 8.3.

Figure 8.3 Selection of higher versus lower processing level features in the development of nineteenth-century CPE

As Figure 8.3 demonstrates, the most common pattern, accounting for 54.55% of features, is that the nineteenth-century CPE feature and all of the alternative strategies in the substrate and superstrate languages are processible at the same processing stage. The second most common pattern,
accounting for 30.3% of CPE features is that the CPE feature requires a higher processing level than any of the alternative strategies in the substrate and superstrate languages. The next most common strategy, accounting for 12.12% of features, is that there are no known alternatives to the CPE feature in the substrate and superstrate languages of CPE. A single CPE feature, the use of intonation to mark polar interrogatives, has a lower processing level than alternative strategies in the substrate and superstrate languages. These findings are analysed in relation to the other analyses conducted for this chapter in the next section (§8.3) and discussed later in this chapter (§8.4).

8.3 Combining the patterns

This section combines the analysis presented in the previous three section and presents a methodology for predicting the features of nineteenth-century CPE. The first step in this analysis is to answer the following question:

➢ When the analyses for the previous questions are combined, can any patterns be observed in the types of features that became part of nineteenth-century CPE?

The analyses presented in the previous sections have revealed a number of patterns in the features of nineteenth-century CPE. Most notably:

➢ Features found in both its substrate and superstrate were more likely to become part of nineteenth-century CPE than features found in just one or the other.

➢ When there were no strategies found in both the substrate and the superstrate, features found just in the substrate were more likely to become part of nineteenth-century CPE than superstrate strategies.

➢ Syntactic features found in its substrate and superstrate were more likely to become part of nineteenth-century CPE than morphological ones.

➢ When there were strategies found in the substrate and superstrate associated with different processability levels, the highest processing
level strategy was the most likely to become part of nineteenth-century CPE.

Combining the analyses presented in the previous three sections allows further patterns to be revealed. The preference for syntactic strategies over morphological ones is by far the most consistent finding. When combined, these findings can be used to create a series of criteria which can predict which feature from the pool of substrate and superstrate feature is most likely to also be a feature of CPE with almost complete accuracy. These criteria are as follows:

(i) If there is a single (known) strategy for expressing a grammatical function in the substrate and superstrate languages, then this strategy will be a feature of CPE. If not, then…

(ii) If there is a single syntactic strategy in the substrate and superstrate languages and all other strategies are morphological, then that syntactic strategy will be a feature of CPE. If not, then…

(iii) If there is a single strategy present in both the substrate and superstrate languages of CPE, then that strategy will be a feature of CPE. If not, then…

(iv) If there are competing syntactic strategies in the substrate and superstrate languages, then the superstrate strategy will be a feature of CPE. Or…

(v) If there are competing strategies in the substrate and superstrate languages that are not strictly syntactic (e.g., word choice, or the lack of a feature such as gender or a copula) then the substrate strategy will be a feature of CPE.

When these criteria, in this order, are applied to the data on nineteenth century CPE and its substrate and superstrate languages they predict the correct CPE feature in all but three cases. The full analysis can be found in appendix G. Table 8.4 summarises this analysis.
<table>
<thead>
<tr>
<th>CPE FEATURE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite determiner - noun word order</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Definite determiner - noun word order</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Demonstrative determiner - noun word order</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Definite determiner identical to demonstrative</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
</tr>
<tr>
<td>Definite determiner distinct from demonstrative</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>One used as indefinite determiner</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
</tr>
<tr>
<td>Indefinite determiner distinct from one</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>x</td>
</tr>
<tr>
<td>Adjective - noun word order</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Numeral - noun word order</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Prenominal plural word</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>XY possessive</td>
<td>n/a</td>
<td>✓</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>X possessive determiner Y possessive</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>x</td>
</tr>
<tr>
<td>Possessor preposition phrase</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nominative - accusative case in personal pronouns</td>
<td>n/a</td>
<td>x</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No gender in personal pronouns</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
</tr>
<tr>
<td>Preverbal past time word</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Preverbal future time word</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Preverbal progressive aspect word</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Preverbal perfective aspect word</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Preverbal negation word</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SVCs present</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Directional SVCs present</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>SVO declarative word order</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overt copula with nominative predicates</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overt copula with locative predicates</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Different copulas used with locative and nominative predicates</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>No copula with adjectival predicates</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
</tr>
<tr>
<td>Fronted word/expression marking constituent</td>
<td>n/a</td>
<td>n/a</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>interrogatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S - like complement clauses</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Complementiser - complement clause word order</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Noun - relative clause word order</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 8.4 Selection criteria applied to the data on CPE and its substrate and superstrate languages
The first column in Table 8.4 lists the features of CPE. The following five columns each represent one of the five criteria listed above. Each criterion is applied to the features of CPE in order from left to right. A tick represents that applying the criterion to the data on CPE (and any alternative strategies in its substrate and superstrate languages) correctly predicts the CPE feature. A cross represents that applying the criterion to the data incorrectly predicts an alternative feature to the one found in CPE. A dash signifies that a previous criterion is sufficient to predict (correctly or incorrectly) the feature in CPE. \textit{n/a} means that this criterion cannot be applied to this feature due to the \textit{if} statement in the criterion, for example, criterion one states that it can be applied ‘if there is a single syntactic strategy in the substrate and superstrate languages’, so this criterion cannot be applied to CPE features for which there are multiple alternative syntactic strategies in the substrate and superstrate languages. If a criterion does not apply to a feature, then the next one is applied and so on. There are just three features of nineteenth century CPE that are incorrectly predicted by this method. These are: the use of an indefinite determiner that is not identical to \textit{one}; the X, possessive determiner or pronoun, Y possessive construction; and the presence of nominative-accusative case alignment in personal pronouns. The analysis presented in Table 8.4 is summarised in Figure 8.4.
Figure 8.4. Results of applying the criteria for becoming part of nineteenth-century CPE to the data on CPE and its substrate and superstrate languages.

Figure 8.4 shows that the three features not predicted by applying these criteria account for 8.33% of the features of nineteenth-century CPE. It also shows that criterion 2 and criterion 3 account for half of the features of CPE. Criterion 1 correctly predicts 11.11% of the grammatical features of CPE. Criterion 2 correctly predicts 22.22% of the features of CPE. Criterion 3 correctly predicts a further 27.78% of the features of CPE. Criteria 4 and 5 account for 16.67% and 13.89% respectively.

This analysis does not reveal the mechanisms by which grammatical features found in the substrate and superstrate languages of nineteenth century CPE became part of the emerging pidgin/creole language. However, the accuracy with which predictions can be made about the features of CPE suggests that there were consistent factors at play during the stabilisation of CPE. How this finding might relate to an interlanguage account of pidgin/creole genesis is discussed further in the following section.
8.4 Discussion

This section discusses the analysis presented in the previous sections in order to answer research question (3.b).

3. b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?

For the most part, the analyses presented in this chapter support PILH. As outlined in the previous section, there are some basic observations that can be stated:

➢ Features found in both its substrate and superstrate were more likely to become part of nineteenth-century CPE than features found in just one or the other.

➢ When there were no strategies found in both the substrate and the superstrate, features found just in the substrate were more likely to become part of nineteenth-century CPE than superstrate strategies.

➢ Syntactic features found in its substrate and superstrate were more likely to become part of nineteenth-century CPE than morphological ones.

➢ When there were strategies found in the substrate and superstrate associated with different processability levels, the highest processing level strategy was the most likely to become part of nineteenth-century CPE.

The first of these is unproblematic for PILH. Firstly, it is cognitively plausible that language learners would find second language features that are familiar from their first language easier to incorporate into their interlanguage. Secondly, there are a lot of features shared by the substrate and superstrate of CPE and so it follows that many of the features of an English interlanguage spoken by a Cameroonian could be found in English and also in one or more of the local languages.

The second observation, that substrate features are more common than superstrate is less expected based on PILH, which posits the superstrate as the target language of the first speakers. However, in each case where a
substrate feature is present in CPE and an alternative superstrate strategy for
the same function is also available, the substrate feature is either the only
syntactic strategy found for that grammatical function in the substrate and
superstrate languages, or the feature cannot strictly be categorised as
syntactic or morphological, such as the use of alternative copular forms with
nominative and locative predicates.

What is less clear from an interlanguage hypothesis perspective is why there
would be such a strong preference for syntax. According to processability
theory there is a great deal of English morphology that can be produced at
processing level two. This morphology includes the past tense -ed suffix,
progressive -ing, and plural -s because these are all word level features. But
these are not generally found in the examples of nineteenth-century CPE.
Instead, syntactic strategies are consistently favoured over morphological
ones. These rejected morphological features are often examples of inherent
inflection, which Plag argues are more likely to be retained in pidgin/creoles
than contextual inflectional features (Plag 2008a: 118–119). While the lack
of morphology in pidgin/creole languages has at times been overstated it is
also fair to say that the grammar of CPE is not dissimilar to many other
pidgin/creole languages, many of which consistently use syntactic
alternatives to superstrate and substrate morphology. These syntactic
alternatives are often not possible in the very earliest interlanguage stages
outlined by processability theory, requiring the phrasal procedure to have
developed. One possible explanation for the use of higher-level syntactic
strategies rather than lower-level morphological ones in pidgin/creole
grammars can be found in Dyson’s (2009) processability study first
mentioned in Chapter 2 (§2.3.1). Dyson finds that, morphology is acquired
in the order predicted by processability theory but the rate of acquisition for
morphology lags behind that of syntax considerably, with speakers
acquiring stage two morphology while using stage three or four syntax
(Dyson 2009: 375). If syntactic strategies were more processible for the
early speakers than morphological ones, the strong preference for syntactic
features in early CPE could be accounted for in a way that is consistent with
the predictions of PILH. If speakers had already developed syntactic
strategies by the point at which the English (or substrate) morphological
strategy became processible for them then we would expect to see a great
deal of syntax and very little morphology in CPE.

This disparity between acquisition rates of syntax and morphology would
also account for the adoption of level four and level three interlanguage
features where lower-level features were available in the substrate and
superstrate languages.

The methodological approach designed for this chapter predicts the features
of CPE with some accuracy and it would be very interesting to apply it to
data on other pidgin/creoles and their substrate and superstrate languages.
However, this methodology also has a number of limitations that should be
addressed. The first is the use of incomplete datasets. It is possible that if
there were data available on the types of subordinate and relative clauses
found in the substrate languages of nineteenth-century CPE, then the
findings of this chapter would be altered to some extent. There is also the
question of how any given feature became part of nineteenth-century CPE.
The mechanisms by which features were conventionalised at the population
level are not discussed here, but there is an assumption of equality among
features in the analysis presented in this chapter that is unlikely to be
accurate. The substrate in particular is analysed as a single entity when in
fact it comprises a group of Cameroonian and Nigerian languages. It is
highly unlikely that all these languages would have had equal influence over
the developing pidgin/creole throughout the period in which it was first
spoken. Treating the substrate as a monolithic entity is disingenuous and
makes the analysis more prone to error. However, with such a small dataset
and so many common features in the substrate languages of CPE,
establishing the exact influence that each one might have had on the
developing pidgin/creole is not possible.

Finally, it is worth briefly considering the analysis conducted in this chapter
in relation to the two alternative theoretical accounts of pidgin/creole
genesis that are discussed in the previous chapter, relexification and features
pools.
➢ Are nineteenth-century CPE grammatical features more likely to be shared with its substrate languages, its superstrate, or both?

➢ Are the grammatical features that nineteenth-century CPE shares with its substrate and/or superstrate languages more likely to be syntactic or morphological?

➢ From a processability theory perspective, are nineteenth-century CPE grammatical features more often processible at a higher or lower processing level than alternative strategies in its substrate or superstrate languages?

➢ When the analyses for the previous questions are combined, can any patterns be observed in the types of features that became part of nineteenth-century CPE?

In each case, the third question does not have relevance to the alternative approaches because it directly addresses an element of processability theory that has no bearing on relexification or feature pools.

From a relexification perspective the expected finding for the first question would be that the majority of features present in nineteenth-century CPE should also be present in the substrate and this is in fact the case (§8.2.1). But equally, the majority of nineteenth-century CPE features are also found in its superstrate meaning that substrate transfer cannot be evidenced. Presumably a relexification approach would posit morphology where there is substrate morphology and syntax where there is substrate syntax. The grammar of CPE does not reflect this prediction (§8.2.2). The findings of the analysis conducted to answer the final question, much like the findings for the first question, match the expectations of a relexification approach if you look at them from the perspective of substrate influence but do not if you look at them as they relate to superstrate influence (§8.3).

From a feature pool perspective, the answer to the first question is that features may be found in either the substrate or the superstrate, what matters is whether they are more or less marked than the alternative strategies in the feature pool. As addressed in the previous chapter (§7.7), some features of
CPE are the least marked features in the pool (typologically speaking) and other features are not. Similarly, there is no expectation from a feature pool perspective that either morphology or syntax will be favoured, it depends on how competitive each feature is in the pool. The analysis conducted to answer the final question perhaps matches the predictions of a feature pool approach to some extent. It could be argued that features shared by the substrate and superstrate might in some way be more salient for the first speakers, but without fully operationalising the concepts of feature pool theory, which is beyond the scope of this work, it is not possible to say for certain whether this is the case.

Ultimately, the analysis conducted for this chapter does not support either alternative model especially well, nor does it contradict either model sufficiently to be considered counter evidence. What can be stated is that, were Dyson’s observations on the acquisition of morphology to be adopted into processability theory, the findings of this chapter would be very closely aligned with PILH. Regardless, the analysis presented in this chapter does not contradict PILH and provides greater support for this approach than it does for either relexification or feature pools.

8.5 Summary

This chapter has explored a series of questions relating to the features which became part of nineteenth-century CPE, looking for patterns in order to address research questions (3.a) and (3.b).

3. a. Are there any observations that can be made about the types of features that were conventionalised/adopted to create Cameroon Pidgin English?
   b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?

Four further questions were identified to inform the methodology used to address question (3.a):

- Features found in both its substrate and superstrate were more likely to become part of nineteenth-century CPE than features found in just one or the other.
When there were no strategies found in both the substrate and the superstrate, features found just in the substrate were more likely to become part of nineteenth-century CPE than superstrate strategies.

Syntactic features found in its substrate and superstrate were more likely to become part of nineteenth-century CPE than morphological ones.

When there were strategies found in the substrate and superstrate associated with different processability levels, the highest processing level strategy was the most likely to become part of nineteenth-century CPE.

The first of these questions is addressed in (§8.2.1) which explores the rates of substrate and superstrate features in nineteenth-century CPE. The second question is addressed in (§8.2.2) which compares the rates of morphology and syntax in CPE and its substrate and superstrate languages. The third question is addressed in (§8.2.3) which looks at the processing levels associated with nineteenth-century CPE features. The following section (§8.3) presents a methodology based on combining the findings of these three analyses which accurately predicts nearly all of the features of nineteenth-century CPE. Finally, (§8.4) addresses research question (3.b), discussing the findings of the previous sections in relation to PILH, touching on the limitations of the methodology and, briefly, exploring how the findings of the analysis relate to relexification and feature pools approaches.

The analysis presented in this chapter suggests that as a group the first speakers of nineteenth-century CPE had a preference for syntactic strategies shared by the superstrate and the substrate. The analysis also suggests that strategies processible at higher processing levels were more likely to be incorporated into the developing pidgin/creole than those processible at lower processing levels. These final two observations are perhaps to be expected from the perspective that pidgin/creoles emerge from early-stage interlanguages. However, the first observation, that syntactic strategies were always favoured over morphological ones, is not as compatible with PILH.
Despite this finding, the observation that syntactic features were always favoured is not devastating for PILH, and this analysis generally supports the findings of chapters 6 and 7, contributing some further evidence in favour of PILH.
Chapter 9
Summary and conclusions

9.1 Introduction

The research conducted in the previous chapters addresses the research questions outlined in Chapter 1, achieving the primary goal of this project by testing the claims of Plag’s interlanguage hypothesis (PILH) against the data on nineteenth-century Cameroon Pidgin English (CPE). This analysis shows that the data on nineteenth-century CPE provides evidence in favour of PILH, in that it resembles an early-stage interlanguage.

The first step in this investigation was to establish the earliest point after stabilisation for which there is a record of nineteenth-century CPE, and to use that data to create a typological overview of nineteenth-century CPE as it was spoken at that time. The first half of this objective was met in Chapter 3, which presented linguistic and historical evidence that the variety of CPE recorded by the nineteenth-century German occupiers of Cameroon after the country was first colonised was relatively stable and could be used as a dataset for this study. The second half of this objective was met in Chapter 5 which outlined a typological sketch of nineteenth-century CPE as it was spoken in the late nineteenth century.

The second step in this investigation was to establish what the most likely substrate languages and superstrate varieties were for nineteenth-century CPE, and to source information on the grammar of each, in order to facilitate typological comparison. The first half of this objective was met in Chapter 3 which established the most likely substrate and superstrate languages of nineteenth-century CPE. The substrate languages identified were those spoken in the coastal areas of Cameroon, and those spoken by the local traders in the towns of Bonny and Calabar in Nigeria. The superstrate varieties were the emerging middle-class standard variety of nineteenth-century English, and ship English. The second half of this objective was met in Chapter 4, which identified sources for two of the Cameroonian languages, Duala and Mokpwe, as well as three of the Nigerian languages, Ibibio, Igbo, and Ijaw.
The third step was to create a methodological approach for testing PILH that is replicable in order to facilitate any future research into the model and to ensure transparency. The method was set out in Chapter 4 and is applied in Chapters 6, 7, and 8.

The rest of this chapter summarises the analysis conducted for this study, providing an overview and critical assessment of the work. The next section (§9.2) returns to the analyses presented in the previous chapters, summarising the evidence both in favour of PILH and against it, and assessing Plag’s hypothesis as well as the theories that underpin it, processability theory and lexical functional grammar (LFG), as they relate to the conclusions drawn in this study. The following sections discuss the significance of this research (§9.3), and its limitations, also suggesting directions for future research (§9.4).

9.2 Assessing Plag’s interlanguage hypothesis as a model of pidgin/creole genesis

The aim of this thesis is to assess the predictions of PILH. Chapter 5 outlined the available data on nineteenth-century CPE, providing a sketch of the language which was then used as a dataset for the analysis chapters that followed. This analysis was designed to answer a series of research questions:

1. a. Does the list of English interlanguage features proposed by processability theory encompass all of the identified features of Cameroon Pidgin English?
   b. Can a processability theory-based analysis of the features of Cameroon Pidgin English that aren’t on the list of English interlanguage features provide support for PILH?

2. a. Is there clear evidence that any of the features of Cameroon Pidgin English became part of the language through transfer, restructuring, or speaker innovation?
b. Does the analysis carried out to address question (2.a) provide any evidence in support of PILH or does it better support an alternative model of pidgin/creole genesis?

3. a. Are there any observations that can be made about the types of features that were conventionalised/adopted to create Cameroon Pidgin English?

b. Does the analysis conducted to answer question (3.a) provide any evidence for or against PILH?

Research questions (1.a) and (1.b) aimed to establish whether the nineteenth-century CPE data supports PILH; this analysis was presented in Chapter 6. Research questions (2.a) and (2.b) aimed to establish whether the nineteenth-century CPE data can also support another theoretical approach equally or perhaps to a greater extent than it does PILH; this analysis was presented in Chapter 7. Research question (3.a) and (3.b) aimed to establish which features from the substrate and superstrate of nineteenth-century CPE were selected at a population level as the language stabilised, and which were not, and whether there are any patterns discernible in these selections; this analysis was presented in Chapter 8.

In order to answer research questions (1.a) and (1.b), in Chapter 6 an LFG analysis was applied to the nineteenth-century CPE data. Based on a processability theory approach, this analysis established the processing level at which each of the nineteenth-century CPE features identified in the historical dataset could become part of an interlanguage. The findings of this analysis (§6.7) broadly support the PILH assertion that pidgin/creole languages resemble early-stage interlanguages (Plag 2008b: 308). The features of nineteenth-century CPE are almost all features processible in a level two or three interlanguage. However, the analysis did reveal several clausal features that could not be processed prior to a level four interlanguage when the clausal procedure develops (§6.6). As discussed in Chapter 6 (§6.7) the presence of a few of these features in nineteenth-century CPE is not especially problematic for PILH. The early speakers of nineteenth-century CPE had prolonged contact with English speakers, and
the historical record suggests that there were financial and social incentives for learning English on the coast of Cameroon (§3.3). Contact combined with such motivation could reasonably have led to speakers having more developed interlanguages prior to target shift. Although there are good reasons to think that level four features could have developed in the linguistic and social environment of pre-colonial era Cameroon, their presence in the language made further analysis necessary, this analysis was presented in Chapters 7 and 8.

The analysis presented in Chapter 7 started with a thorough investigation to establish whether a clear source can be identified for each of the nineteenth-century CPE features. This investigation, based on Parkvall’s (2000) criteria for evidencing the source of pidgin/creole features, produced few conclusive results. The data shows clear evidence of origin for just four features, two cases of substrate transfer and two cases of superstrate transfer (§7.6). These results serve to highlight the difficulty with establishing origins for pidgin/creole features and the importance of a systematic, evidence-based approach in any theoretical analysis. The rest of the analysis in Chapter 7 compared the information available on each of the features of nineteenth-century CPE to the claims of three models of pidgin/creole genesis, PILH, relexification, and feature pools. Although the investigation was only indicative, it did suggest that the CPE data better supports the predictions of PILH than those of the other two approaches (§7.7). Limitations of this analysis are discussed in Chapter 7 (§7.8), but the approach is considered sufficiently empirical to offer supporting evidence in favour of PILH.

Chapter 8 examined what features found in the linguistic environment in which nineteenth-century CPE developed became part of the emerging pidgin/creole language. This analysis explored the selection of features at the population level, an element of pidgin/creole development that is not included in PILH (Plag 2008a: 115). The aim of this analysis was to establish whether taking a population level viewpoint of the nineteenth-century CPE data can provide any further supporting evidence, or indeed any counter evidence, for PILH. The findings of this analysis once again broadly support PILH (§8.4). Features shared by both the superstrate and
substrate are more likely to be present in nineteenth-century CPE than those found in just the superstrate or just the substrate languages (§8.2.1). Superstrate syntactic strategies and substrate lexical strategies are also preferred (§8.3). These are all patterns that might be expected if the earliest form of nineteenth-century CPE comprised multiple English interlanguages. Higher processing level features are generally preferred over lower ones (§8.2.3), again a pattern that might be predicted in a developing interlanguage, as earlier strategies get replaced as the interlanguage develops.

However, the analysis also found that syntactic strategies were always preferred over morphological ones (§8.2.1). Although this is not an unexpected finding in relation to pidgin/creole grammar it does need to be discussed in relation to PILH, as processability theory predicts that some English morphology will develop as early as stage two in an English interlanguage (Pienemann et al. 2011: 132). The almost complete lack of morphological features is a little surprising from a processability theory perspective, particularly when there is evidence of prolonged contact and motivating factors for learning the L2. Of course, this could be down to generative entrenchment, but since many pidgin/creoles have very little morphology this is not an especially convincing argument.

One possible explanation for the lack of English morphology in CPE might be Dyson’s (2009) finding that morphological development in interlanguages, while following the pattern outlined by PT, lags behind syntactic development by one to two processing stages. Although these are the findings of a single study, they are in line with Perdue et al.’s findings on the development of L2 syntax and morphology (Perdue et al. 1993: 258–259). It is also tantalising to note that the nineteenth-century CPE data fits with this lagging morphological development scenario perfectly.

None of the analyses conducted for this thesis can be presented as irrefutable evidence for PILH. However, it is possible to say that the analyses carried out in each chapter provide more evidence in favour of PILH than against it. It is also true to say that the analysis carried out in
Chapter 7 provides more evidence in favour of PILH than in favour of the other models considered. Taken in combination, the findings presented in this thesis suggest that PILH is a highly plausible model for which there is a considerable amount of evidence in the nineteenth-century CPE data. Additionally, where there is evidence that runs counter to the predictions of PILH, it is possible to find plausible reasons for why this might be, although in the case of the lack of morphology, further studies are required.

The question over whether morphology and syntax develop in tandem or at different rates is illustrative of the main issue with researching PILH, which is processability theory. Processability theory was designed to explore very valid observations about the development stages of interlanguages. Pienemann has developed a theoretical framework which is for the most part very plausible. It makes sense that language learners would start out with words, then group them together, then create phrases, then clauses. However, conducting analysis involving features not specifically addressed in the processability theory literature highlights the two main challenges associated with operationalising processability theory.

Firstly, as previously discussed (§2.3.2), there is no clearly specified methodology for PT. Pienemann states that his theory is underpinned by LFG but does not show his LFG analysis, relying instead on phrase structure rules. Phrase structure rules can be a useful tool for showing the results of analysis but are not themselves an analytic tool.

Secondly, it is not always clear why Pienemann assigns the processing levels that he does to certain constructions. For example, he states that object pronouns are possible only from a level three interlanguage (Pienemann et al. 2011: 132). As discussed in Chapter 6, (§6.4), if this is the case then, based on the analysis conducted for this thesis, we would expect that subject pronouns could not be used accurately in an early-stage interlanguage. There is good evidence that subject pronouns are a feature of early-stage interlanguages, but Pienemann does not assign them a specific processing level, so it is unclear what his analysis suggests. This lack of detail, combined with the lack of clear methodology, makes processability
theory a challenging approach to work with. As a result, operationalising PILH is not straightforward. Although processability theory provides the theoretical underpinning of PILH, in many ways processability theory, in its current form, is also a limitation of Plag’s model.

A further challenge in operationalising PILH, is the use of LFG as a method for formally modelling PT. There are clear similarities between the parallel architectures of LFG and the language processor hypothesised by Pienemann (§2.3), and so the reasons why processability theory incorporates LFG are clear. However, there are several linguistic structures which cannot easily be analysed using LFG; complex predicates such as SVCs, and copular constructions in particular are not compatible with the LFG architecture, and so establishing processing levels based on LFG for these constructions is challenging.

The challenges of operationalising processability theory raise two related questions. First, given that PILH is based on processability theory, could the two approaches be separated? Methodologically speaking, the answer to this is yes. Processability theory is based on well-established interlanguage development stages. English interlanguages develop through predictable stages, and certain features are known to develop in roughly the same order for most English interlanguage speakers. The stages of development may or may not be as clearly defined as Pienemann states, and the underlying cognitive mechanisms may or may not be those that Pienemann claims, without seriously undermining the underlying principle of PILH: that pidgin/creole grammars resemble early-stage interlanguages. Although, of course, the reason why processability theory is incorporated into PILH is to provide a plausible cognitive model for the similarities observed between early-stage interlanguages and pidgin/creoles. The second question is, is it disingenuous to state that there are methodological problems with processability theory and at the same time to state that the findings of this study support PILH? The answer to this is no. Pienemann’s research is grounded in data that has shown that English interlanguages develop in roughly the order he states and many of the nineteenth-century CPE features are possible in the earlier stages of interlanguage development.
Additionally, the analyses in chapters seven and eight are not based on processability theory but take a comparative, typological approach to analysing the data on nineteenth-century CPE. Therefore, it is possible to say that the evidence presented in this thesis supports PILH while also acknowledging that there are methodological challenges associated with the theory which underpins it.

Since this is the case, it is possible to conclude that the main finding of this study is that nineteenth-century CPE resembles an early-stage interlanguage and the analyses conducted in the previous chapters suggest that PILH offers a good explanation for how the language developed despite the methodological challenges associated with processability theory.

9.3 Significance of study

The work carried out in this thesis makes a significant contribution in a number of ways. Firstly, it provides a thorough, empirical assessment of a theoretical model of pidgin/creole genesis; Plag’s interlanguage hypothesis. As outlined in Chapter 2 (§2.1), the question of how pidgin/creole grammars develop and why so many of them are so similar has been one that has dominated pidgin/creole linguistics for over 50 years. Second language acquisition theories of pidgin/creole genesis have developed considerably over the past two decades, and there are few linguists who would argue today that second language acquisition plays no role. PILH claims to provide a plausible cognitive basis for such second language acquisition theories, and so it is important to test the approach thoroughly on real data.

The importance of evidence and good data are themes which have run through this thesis. Without data, a theory is simply an idea, and yet so many theories in linguistics, particularly those which deal with grammar and/or with pidgin/creole linguistics, are presented with little real evidence. The major contribution of this thesis, then, is providing good evidence, based on clear and replicable methodology, that PILH is a highly plausible model of pidgin/creole genesis. At the same time, this thesis provides a small amount of evidence that points towards relexification and feature pool approaches being less plausible. No great claim is made for these findings,
but they do highlight the need for further empirical assessment of both of these approaches. The plausibility of PILH is significant in itself as it suggests that with further methodological refinement and more empirical research it might be possible to properly establish the mechanisms by which pidgin/creole grammars emerge. This is an exciting prospect and one which could significantly advance our understanding of how languages develop and the mechanisms by which contact languages emerge at the individual level.

Secondly, this thesis serves to highlight the need for better data in pidgin/creole linguistics. An important finding of this study is the lack of clear evidence in the data for any one source of feature development. There is very little good evidence for substrate or superstrate transfer as a mechanism by which nineteenth-century CPE features developed and no certain cases of independent development or restructuring universals can be evidenced. Of course, this does not mean that these mechanisms were not involved in the development of nineteenth-century CPE, the small quantity of clear evidence for substrate and superstrate transfer that is found in the data demonstrates that transfer did occur. What the lack of evidence highlights, however, is that any approach that claims to be able to show transfer as the main mechanism for pidgin/creole genesis really needs to back up that claim with data. Nineteenth-century CPE is not an unusual example of a pidgin/creole language, nor is there significantly less information about its substrate and superstrate languages than for many others. Therefore, it is reasonable to speculate that it might be very difficult to provide, for example, evidence that the majority of the grammatical features of a pidgin/creole language transferred from the substrate, the central claim of relexification approaches. Again, this does not necessarily mean that relexification theories are incorrect, but it does highlight the importance that any claims about the origin of pidgin/creole features should be fully evidenced.

The third main contribution of this thesis is the creation of a detailed methodology for processability theory as it applies to PILH. At the point of writing, no detailed methodology for either approach has been published. In
creating a methodology, however flawed, this thesis also creates a starting point for any researcher wishing to test the claims of PILH on another pidgin/creole language. The methodological approach developed for the analysis in Chapter 6 could also aid researchers who wish to use processability theory to investigate interlanguage features that the processability theory literature to date has not addressed.

There are a number of other contributions that this thesis makes to the field of pidgin/creole linguistics. Firstly, the typological overview of nineteenth-century CPE is, to the best of my knowledge, the first detailed attempt at sketching the language as it was spoken at the point of colonisation. The CPE dataset is therefore a useful tool for other researchers who might wish to study this era of the language’s development. Secondly, the analysis carried out for this thesis required that a list be created of the most likely substrate and superstrate languages of CPE, based on thorough historical investigation. This is also the first attempt of its kind that I am aware of, and again could be of use to other researchers. The final contribution made by this approach is to highlight the need for further research. The available resources on the languages of Cameroon and Nigeria, as well as on other pidgin/creole languages and their substrate and superstrate languages are often patchy or non-existent. Without this type of information, accuracy in analysis is a challenge. This topic is discussed further in the following section which deals with the limitations of this study and suggests directions for future research.

9.4 Limitations and directions for future research

The first and most major limitation of this study is the lack of available data. This is not unexpected, but it is frustrating, nonetheless. The limited nature of the data available on nineteenth-century CPE is inevitable. CPE was not a written language during the nineteenth century, and in fact still has no formal orthography today (Ayafor & Green 2017:43). Those with literacy skills who came in contact with nineteenth-century CPE as it developed tended to record just a few lines in order to discuss the novelty of the ‘broken’ English spoken in Cameroon. Perhaps unsurprisingly, they did not
consider that this attitude did a disservice both to the language they were describing and to any researchers who might try to work with their records over a century later. The lack of data on the languages of Cameroon and Nigeria is, however, disappointing. There is no excuse for the amount of money that is spent each year on research into the nuances of English and other well documented European languages while African languages go extinct without ever being documented.

Where there is documentation of these languages it is often carried out within universities in the areas where these languages are spoken, often by masters and PhD students. Due to a lack of infrastructure and other resources this research is not generally made accessible outside of the institutions where the work was carried out. It is possible to send information from one side of the world to another in seconds, so the fact that there is so little information shared in academia between institutions on different continents is a shame. There is a clear responsibility on the part of Western institutions, educational and governmental, to fund information resources that can open up knowledge and skills sharing and collaboration across borders. This is especially true of the European countries which stole land from indigenous people across the world, in particular, Great Britain, France, Belgium, The Netherlands, Portugal, Spain, and Germany, as well as the USA which was built on the enslaved labour of African people.

Pooling informational resources would open up large quantities of data for researchers across the world saving a great deal of time and money. Such resource sharing would certainly have helped the data collection process for this thesis, much of which was carried out during the Covid-19 pandemic, meaning that physical resources were often difficult to access. Ultimately, however, this study was conducted on incomplete evidence because complete evidence does not exist. The findings of this thesis are accurate based on the available data. However, keeping the methodology transparent and replicable means that, should any further information sources become available, the study could be updated.
It must also be stated clearly that the findings of this study relate to nineteenth-century CPE and only nineteenth-century CPE. They cannot be assumed to be true for any other pidgin/creole languages. The finding that nineteenth-century CPE data supports PILH does not mean that all pidgin/creole languages resemble early-stage interlanguages. A lot of further research would be required to show that this is the case. At a minimum, a similarly in-depth study of a Caribbean pidgin/creole with a different lexifier, and a further study of a pidgin/creole language completely unrelated to nineteenth-century CPE would be required to produce similar findings before any generalisations could be made. The findings of this study suggest that such research projects would be highly worthwhile.

Finally, the work carried out for this thesis also highlights the need for a more open and adaptable way for researchers to share their typological research. The movement towards open access in academia is an essential enterprise and one which continues to grow. But so many typological surveys remain in books, many of them decades old. The online typological resources used for this study were the World Atlas of Language Structures (WALS) (Dryer & Haspelmath 2013) and the Atlas of Pidgin and Creole Structures (APiCS) (Michaelis et al. 2013). Both of these are excellent resources, providing open access to a vast quantity of typological information. But these websites were both published nearly a decade ago and have not been significantly updated since. So many researchers and students collect typological information on a variety of languages each year, it would be invaluable if WALS and APiCS could be revitalised. This could be achieved through making each website editable allowing them to be regularly updated. These websites could be living resources where queries could be answered quickly, and data could be added by researchers from anywhere in the world. Combined with an ongoing fact checking element this would allow these resources to grow, and to be open to debate and refining, making them truly invaluable to researchers at every stage.
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Appendix A

Full list of language sources, including information about the types of texts used.

Cameroon Pidgin English

The following sources were used to create a sketch of nineteenth century Cameroon Pidgin English:

*Narrative of voyages to explore the shores of Africa, Arabia, and Madagascar; Performed in H.M. ships Leven and Barracouta, under the direction of Captain W.F.W. Owen, R.N. by command of the Lords Commissioners of the Admiralty.* (Owen 1833).

A memoir, in English, of an expedition to Africa in the 1830s. Contains a single snippet of reported speech in CPE. Full transcripts of the CPE in this text can be found in appendix B.


A memoir, in English, of an expedition to Africa in the 1830s. Contains a chapter on Cameroon and includes a single mention of the pidgin spoken in the area. Full transcripts of the CPE in this text can be found in appendix B.

*Kamerun-Englisch. Deutsche kolonialzeitung* (Buchner 1885)

A short sketch of the English spoken in Cameroon, written by Buchner either during his time in the country or shortly after leaving. Contains a slightly longer passage of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

*Kamerun. Skizzen und betrachtungen* (Buchner 1887)

A geographical survey, in German, of Cameroon. Contains snippets of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

*Nixe nach Kamerun 1897-1898. Reise-skizzen und bilder* (von Uslar 1899)

A memoir, in German, of von Uslar’s voyage to Cameroon and his time there in the late 1890s. Contains a few snippets of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

*Wanderungen und forschungen im nord-hinterland von Kamerun* (Hutter 1902)

A memoir, in German, of Hutter’s experience exploring inland in Cameroon during the turn of the last century. Contains a few snippets of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

*Kameruner Skizzen* (von Schkopp 1905)

A memoir, in German, of von Schkopp’s time in Cameroon, contains snippets of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

*Alfred Saker the pioneer of the Cameroons* (Saker 1908).
Biography of a Baptist missionary in Cameroon written by his daughter, after his death, from his diaries. Includes a few snippets of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

*Aurora colonialis : Bruchstücke eines Tagebuchs aus dem ersten Beginn unserer Kolonialpolitik 1884-85* (Buchner 1914).

A memoir, in German, of Buchner’s time in Cameroon as part of the group of Germans who colonised Cameroon. This book contains a letter written in CPE as well as snippets of reported speech. Full transcripts of the CPE in this text can be found in appendix B.

**Duala**

*Outline Duala grammar* (Gaskin 1927)

A short descriptive grammar written in English. Contains translations but no gloss and very few sentence-level examples.

*Essentials of Duala grammar* (Epale 1973)

Designed as a textbook for teaching Duala to English speakers. This is a hand-typed book which has translations for some Duala examples but no gloss.

*Grammaire du Duala* (Ittmann & Meinhof 1978)

A descriptive grammar written in French. Contains translations but no gloss.

In addition to these books a master’s dissertation on the left edge of the clause in Duala (Arsene 2015) and two papers on focus constructions in Douala (Epée 1975, 1976) were also consulted.

**English**

*The shape of the superstrate* (Bailey & Ross 1988).

A description of ship English based on historical records.

*Ship English: Sailors’ speech in the early colonial Caribbean* (Delgado 2019)

A thorough survey of the historical record which describes the English spoken on ships between the seventeenth and nineteenth centuries.


**Ibibio**

*Old Calabar and notes on the Ibibio language* (Jeffreys 1935)

This book is not a grammar but rather a history which contains a chapter on the Ibibio language. Examples are translated but not glossed.

*Ibibio grammar* (Kaufman 1968)
Elaine Kaufman’s PhD thesis provides a descriptive overview of Ibibio grammar. There is some gloss, but most examples are just translated.

*A grammar of the Ibibio language* (Essien 1990)

An introductory grammar written in English. For the most part descriptive, contains translations but no gloss.

In addition to these sources there are a number of papers on Ibibio. Papers were consulted for this thesis on modals (Udosen 2004), agreement (Baker & Willie 2010), copular constructions (Anyanwu 2011), inflection (Josiah & Udoudom 2012), serial verb constructions (Major 2014), adjectives (Martinez-Garcia 2014), deixis (Etim 2016), demonstratives (Ekah 2018), coordination (Duncan et al. 2019), and agreement (Willie 2019).

**Igbo**

*A modern Ibo grammar* (Adams 1932)

A short descriptive grammar written in English with examples translated but not glossed.

*A descriptive grammar of Igbo* (Green & Igwe 1963)

A longer descriptive grammar with a focus on tone in Igbo. Examples are translated but not glossed.

*A short Ibo grammar* (Biddulph 1992)

More a self-published pamphlet, this grammar contains a brief sketch of Igbo.

*A grammar of contemporary Igbo: constituents, features and processes* (Emenanjo 2015)

A long, modern, descriptive grammar of Igbo. Examples are translated but not glossed.

In addition to these grammars, papers were also consulted on adjectives (Maduka-Durunze 1990), constituent interrogatives (Uwalaka 1991), transitivity (Agbo & Yuka 2011), serial verb constructions (Amaechi 2013), negation (Obiamulu 2014), copular constructions (Uchechukwu 2015), and focus (Osuagwu & Anyanwu 2020).

**Ijaw**

*A grammar of the Kolokuma dialect of Ijo* (Williamson 1965)

The only available source on Ijaw was a single grammar on the Kolokuma dialect. The language is described using an early generative transformational analysis. Examples are often glossed as well as being translated.

**Mokpwe**

*A grammatical sketch of Mòkpè (Bakweri)* (Atindogbe 2013)

This is a modern descriptive grammar with glossed examples.
Appendix B

Full transcripts of the CPE texts that form the nineteenth-century CPE data set with translations. All translations are based on my own interpretations of historical data for a language in which I am not fluent and should be taken as indicative. Where accurate translation has not been possible this is indicated in the translation in square brackets.

Text 1.

*Narrative of voyages to explore the shores of Africa, Arabia, and Madagascar; Performed in H.M. ships Leven and Barracouta, under the direction of Captain W.F.W. Owen, R.N. by command of the Lords Commissioners of the Admiralty.* (Owen 1833).

(1) Ah! Me sabby now, Cappen, you speakee true; no tellee damn lie

(Owen 1833: 334)

‘Ah! I understand now captain, you are speaking the truth not telling a damn lie’

Text 2.


(2) a good bob (Laird & Oldfield 1837: 290).

‘a good piece of advice/outcome’

(3) a bad bob (Laird & Oldfield 1837: 290).

‘a bad piece of advice/outcome’

Text 3.

*Kamerun-Englisch. Deutsche kolonialzeitung* (Buchner 1885)

(4) **Original text**

Yellow Hawkin borne son [girl] and Mandenne come buy him and pay part money and part left. Yellow Hawkin take them money for Charly and buy small woman [woman] and pay part and part left. Charly people they look Green Hawkin him girl pass and he top [stop] him. Akwa ax [asks] Charly and Charly tell me say’ I top them girl for Yellow Hawkin’ and tell me so’ and may go back for Yellow’. Yellow tell me say’ Never mind I go give you other one’ and Yellow Hawkin go for Mandenne and tell him say’ man top him Green girl for your part money who left’, and Mandenne take him girl and give Yellow Hawkin him girl. Yellow Hawkin take them girl and give me say’ I pay you’
And me go for Joe Mandenne for find a woman. I pick woman [bigwoman] to marry and I call him for my place and I pay five hundred down, pay one big goat for three Kroo, pay one small goat for Kroo, I pay Kroo rum, and I take them girl Yellow Hawkin give me and give him for Joe Mandenne, and I finish for them palaver.

And Mandenne go again and thieve them girl from Joe Mandenne and I send my woman for Joe Mandenne him place, and Joe Mandenne top [stop] my woman and sell him, sell him for other place, and we take court for King Akwa.

King Akwa say’ Him [Green Hawkin] got best for them palava’. He say’ Joe Mandenne must give my woman back because he got best for that; pose [suppose] you want any palaver top Mandenne’ and Joe Mandenne no agree for go for Mandenne. (Buchner 1885: 676-677)

Translation

‘Yellow Hawkin had a daughter and Mandenne came and bought her and he paid part of the money for her and part of the money was left over. Yellow Hawkin took the money to Charly and bought a woman and paid part of the money for her and part of the money was left over. Charly’s people saw Green Hawkin’s girl pass and they stopped her. Akwa asked Charly and Charly told me that ‘I stopped Yellow Hawkin’s girl’ and told me that I should go back to Yellow. Yellow told me, ‘Never mind I will give you another one’ and Yellow Hawkin went to Mandenne and told him that a man stopped Green’s girl for the part of the money you owe’ and Mandenne took his girl and gave Yellow Hawking his girl. Yellow Hawking took that girl and gave her to me and said ‘I pay you’.

And I went to Joe Mandenne to find a woman. I picked a woman to marry and I called her to my place and I paid five hundred down, I paid one big goat to [for?] three Kroo men and paid one small goat the Kroo men. I paid the Kroo rum, and I took that girl that Yellow Hawkin gave me and I gave her to Joe Mandenne, and I finished their palaver.
And Mandenne went again and stole that girl from Joe Mandenne and I sent my woman to Joe Mandenne’s place and Joe Mandenne stopped by woman and sold her, sold her to another place, so we took our argument to King Akwa.

King Akwa said ‘He [Green Hawkin] got the best of the palaver’. He said that Joe Mandenne must give my woman back because he got the best of that deal. [meaning of next sentence unclear…] Joe Mandenne did not agree to go to Mandenne’

Text 4.

*Kamerun. Skizzen und betrachtungen* (Buchner 1887)

(5) What you be King? You be boy for me, you no sabe fashion. You be bloody boy and foolish too much (Buchner 1897: 53).

‘You are the King? You are a boy to me, you don’t understand how things are done. You are a bloody boy and too foolish’.

(6) It is a woman palaver (Buchner 1897: 213)

‘It is a disagreement over a woman/woman trouble’

(7) This be no play palaver (Buchner 1897: 213)

‘This is not a pretend palaver’

(8) You want to make palaver? (Buchner 1897: 213)

‘You want to make trouble?’

(9) You will hear some palaver (Buchner 1897: 213)

‘You will hear some palaver’

(10) It is like a married palaver (Buchner 1897: 213)

‘It is like a marriage trouble’

(11) Me no sabe her (Buchner 1897: 214)

‘I don’t know her’

(12) You no sabe me? (Buchner 1897: 214)

‘You don’t know me?’

(13) What me no be old man? Me no sabe fashion? (Buchner 1897: 214)

‘Am I not an old man? Do I not understand how things are done?’

(14) He want to chop them money (Buchner 1897: 214)

‘He wants to take their money’

(15) You be bushfellow you (Buchner 1897: 214)
‘You are a bushfellow’

(16) He left me market (Buchner 1897: 214)
  ‘He left me at the market’

(17) He live for come (Buchner 1897: 215)
  ‘He is coming’

(18) He live for die (Buchner 1897: 215)
  ‘He is dying’

(19) No live (Buchner 1897: 215)
  ‘Don’t live/ won’t live’

(20) This place live for man go wash (Buchner 1897: 215)
  ‘This is the place where people can wash’

(21) Them other boy, him be gentleman? No fit to do work? (Buchner 1897: 215)
  ‘The other boy, is he a gentleman? Is he not able to do work?’

(22) I no thieve him, I no kiss woman for him place, I do no bade thing for him: He
fit to put me in iron (Buchner 1897: 215)
  ‘I didn’t steal from him, I didn’t kiss his women at his place, I did nothing bad
to him: he could still put me in iron’.

(23) Smiti sabe them road too much (Buchner 1897: 215)
  ‘Smiti knows those roads very well’

(24) You be Mister Woermann him n****r (Buchner 1897: 215)
  ‘You be Mister Woermann’s n*****r’

(25) Them other boy no fit to learn him, them other boy no got sense enough.
(Buchner 1897: 216)
  ‘That other boy can’ be taught, that other boy doesn’t have enough sense’

(26) You no buy we (Buchner 1897: 216)
  ‘You didn’t buy us’

(27) He wants them thing plenty (Buchner 1897: 216)
  ‘He wants plenty of things’

(28) Plenty people don’t come (Buchner 1897: 216)
  ‘Not many people come’

(29) You pass me for big (Buchner 1897: 217)
  ‘You are bigger than me’

(30) Road we can find good one pass that (Buchner 1897: 217)
  ‘We can find a better road than that’
(31) Him be boy for me (Buchner 1897: 217)
   ‘He is a boy to me’

(32) Pose I no live, he fit to go for my backside to thieve my oil
    (Buchner 1897: 217)
    ‘Suppose I die, he can go behind my back to thieve my oil’

(33) Him father dead him be Joss (Buchner 1897: 217)
    ‘His later father was Joss’

(34) I want to sit down for you (Buchner 1897: 217)
    ‘I want to sit down with you’

(35) Cold have you? (Buchner 1897: 217)
    ‘Do you have a cold?’

(36) Woman piss pikanini (Buchner 1897: 217)
    ‘Women give birth to children/a woman gave birth to a child’

(37) Them woman piss me (Buchner 1897: 217)
    ‘That woman gave birth to me’

(38) My belly is full (Buchner 1897: 217)
    ‘My belly is full’

(39) Plenty vexed liv e for my belly (Buchner 1897: 217)
    ‘There is plenty of anger in my heart’

(40) Pose (suppose) me be forced, I go. My belly live for Bell
    (Buchner 1897: 217)
    ‘Suppose I am forced to leave. My heart belongs to Bell town’

Text 5.

_Nixe nach Kamerun 1897-1898. Reise-skizzen und bilder_ (von Uslar 1899)

(41) He live for die (von Uslar 1899: 159)
    ‘He is dying’

(42) you no sabe me? (von Uslar 1899:: 159)
    ‘You don’t understand me’

(43) Me sabe proper (von Uslar 1899:: 159)
    ‘I understand properly’

(44) You want to make palaver? (von Uslar 1899:: 159)
    ‘You want to make trouble?’

(45) to make palava (von Uslar 1899:: 164)
    ‘to make trouble’
(46) Look massa, there live alligator, he live for water! (von Uslar 1899: 179)
   ‘Look master, there is an alligator, he is in the water!’

Text 6.

*Wanderungen und forschungen im nord-hinterland von Kamerun* (Hutter 1902)

(47) me be him (Hutter 1902: 61)
   ‘I am him’

(48) who that (Hutter 1902: 61)
   ‘who is that’

(49) plenty too much (Hutter 1902: 61)
   ‘a lot’

(50) that town be good too much (Hutter 1902: 61)
   ‘That town is really good’

(51) chop plenty too much (Hutter 1902: 61)
   ‘eat a lot’

Text 7.

*Kameruner Skizzen* (von Schkopp 1905)

(52) No, sir, the Portugueses no be white men, no be black men, they be half and half (von Schkopp 1905: 28).
   No, master, the Portuguese are not white men, they are not black men, they are half and half.’

(53) Morning, Massa! Im very glad to see you, fine weather to-day, indeed (von Schkopp 1905: 85).
   ‘Morning, sir! I am very glad to see you, fine weather today, indeed’

(54) Alegobane, after to-morrow we live for go into the bush; but don’t talk about, saby! (von Schkopp 1905: 100).
   ‘Alegobane, after tomorrow we are going to go into the bush; but don’t talk about it, understand!’

(55) dem devil Kill me, I go die, I live for die (von Schkopp 1905: 103)
   ‘Those devils killed me, I am going to die, I am dying’

(56) Massa, by and by Bedtime allright (von Schkopp 1905: 104)
   ‘Sir, by and by it is bedtime alright’

(57) Oe, Massa, I no fit? Look here (von Schkopp 1905: 121)
‘Oe sir, I am not capable? Look here’

(58) Oe, Massa! White mammi me look her; Oe! (von Schkopp 1905: 142)
‘Oe, sir! White woman I looked at her; oe!’

(59) No. Only white mammi; that’s all. Oe! (von Schkopp 1905: 142)
‘No. Only a white woman; that is all. Oe!’

(60) Canoe allright, massa (von Schkopp 1905: 156)
‘The canoe is alright sir’

(61) Oe, Massa, you live? (von Schkopp 1905: 163)
‘Oe, sir, are you alive?’

(62) Massa me I saby dem palaver too much (von Schkopp 1905: 171)
Sir I know those palavers too well’

Text 8.

*Alfred Saker the pioneer of the Cameroons*

(Saker 1908).

(63) What you be do now? (Saker 1908: 92)
‘What did you do now?’

(64) No, you no go write them (Saker 1908: 92)
‘No, you are not going to write them’

(65) **Original text**

No man shall take you from we, - we will fight for you! What for you go to live in King Bell’s town? You no can go! This land be yours, - all the town be yours, but you no can go away! You be “tikki” for we; my father done leave you for we (Saker 1908: 92-93)

**Translation**

‘No man shall take you from us, - we will fight for you! Why are you going to live in King Bell’s town? You can’t go! This land is yours, - the whole town in yours, but you can’t go away! You are our inheritance; my father left you to us’

(66) Then, palava set (Saker 1908: 92)
‘Then the palava is set’
Text 9.

*Aurora colonialis: Bruchstücke eines Tagebuchs aus dem ersten Beginn unserer Kolonialpolitik 1884-85*

(Buchner 1914).

(67) Who fill we belly all year round? He no be Hamburg? He be English? (Buchner 1914: 106)

‘Who fills our stomachs all year round? He’s not from Hamburg? He is English?’

(68) You want boy? (Buchner 1914: 107)

‘You want a boy?’

(69) You no buy we, no buy we (Buchner 1914: 107)

‘You didn’t buy us, didn’t buy us’

(70) Original text

Sir

We never believe any white man fit to do like that no man buy we and what the matter you try take us so Mr [name illegible]. Lock Priso son came told you we only want English but you no [uncertain] for him and you put flag up before we get time to look you. We beg you to pull that flag down no man buy we we want English to take us by [uncertain] that time. You turn leave we German trouble us plenty and want to give us plenty dash we […] (Buchner 1914: 121) dill them no, we want English them come dill we suppose we like their dash we go look trouble. We speak Mr Buchan but him like we no trouble for that but they make plenty many fear man say you want to look we for morning time. We beg you leave us free and not make us plenty trouble

With kind regard

Believe we

(Buchner 1914: 122)
Translation

‘Sir

We never believed that any white man could behave like that, nobody has bought us and why did you try to take us like that Mr ?. Lock Priso’s son came and told you that we only want the English but you didn’t [listen?] to him and you put a flag up before we could see you. We beg you to pull that flag down, nobody has bought us, we want the English to take us […] that time. [Next sentence uncertain meaning]. We spoke to Mr Buchan but he gave us not trouble but they made us afraid and said you wanted to look for us in the morning. We beg you to leave us free and not give us lots of trouble.

With kind regard

Believe us’

(71) in we belly (Buchner 1914: 266)
‘in my heart’

(72) This no be good man, this man no like play (Buchner 1914: 288)
‘this is not a good man, this man does not love cheerfulness’

(73) You are close Boasa, you are close to all place where you want to go
(Buchner 1914: 288)
‘You are close Boasa, you are close to all of the places that you want to go’

(74) We dash him plenty, cloth, tobacco and gin. He give no chop and nothing. We fear him, that is all. (Buchner 1914: 290)
‘We gave him plenty of cloth, tobacco, and gin. He gave us no food, nothing. We feared him, that is all’.
### Appendix C: Calculating markedness of CPE features

Key: features found in CPE highlighted

<table>
<thead>
<tr>
<th>Feature</th>
<th>Strategies in linguistic environment</th>
<th>Distribution</th>
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## Appendix D: The features of CPE, its substrate and superstrate languages

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## Appendix D: catagorising the features of CPE in relation to its substrate and superstrate

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<td>No gender in personal pronouns</td>
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<td>Preverbal past word</td>
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<td>SVCs present</td>
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<td>Directional SVCs present</td>
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<td>Polar interrogatives marked with intonation only</td>
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<td>Definite determiner distinct from demonstrative</td>
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<td>Indefinite determiner distinct from <em>one</em></td>
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<td>X possessive determiner Y possessive</td>
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### Appendix D contd…

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<td>Adjective - noun word order</td>
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<td>Numeral - noun word order</td>
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<td>Possessor preposition phrase</td>
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<td>Nominative - accusative case in personal pronouns</td>
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<td>Preverbal future time word</td>
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<td>Preverbal negation word</td>
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<tr>
<td>SVO declarative word order</td>
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<td>Overt copula with nominative predicates</td>
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<td>Overt copula with locative predicates</td>
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<tr>
<td>Fronted word/expression marking constituent interrogatives</td>
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</table>

#### Shared feature used, other possible substrate and superstrate strategies

- Preverbal progressive aspect word
- Preverbal perfect aspect word

**Total number of features**: 33
### Appendix D: Chart showing relationship of CPE features to its substrate and superstrate

<table>
<thead>
<tr>
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<td>…only known strategy in linguistic environment</td>
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<tr>
<td>…present in substrate, there are other superstrate strategies</td>
<td>30%</td>
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<tr>
<td>…present in superstrate, there are other substrate strategies</td>
<td>15%</td>
</tr>
<tr>
<td>…present in substrate and superstrate, there are other substrate strategies</td>
<td>36%</td>
</tr>
<tr>
<td>…present in substrate and superstrate, there are other substrate and superstrate strategies</td>
<td>6%</td>
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![Chart showing relationship of CPE features to its substrate and superstrate](chart.png)
Appendix E: the syntactic and morphological features of CPE and its substrate and superstrate languages.

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<th>Duala strategies</th>
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<td>Adjective - noun word order</td>
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<td>X possessive Y possessive</td>
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### Appendix E contd.

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<td>S - like comp clause</td>
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<td>Infinitival subordinate clauses</td>
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<td>Noun - relative clause word order</td>
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## Appendix E: catagorising the morphological and syntactic features of CPE its substrate and superstrate

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<td><strong>CPE feature is syntactic and the only known strategy in linguistic environment</strong></td>
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<td>S-like complement clauses</td>
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<td>Infinitive subordinate clauses</td>
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<tr>
<td>Noun - relative clause word order</td>
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<tr>
<td><strong>CPE feature is syntactic, alternative syntactic strategy/ies present in linguistic environment</strong></td>
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<td>Indefinite determiner - noun word order</td>
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<tr>
<td>Definite determiner - noun word order</td>
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<tr>
<td>Demonstrative determiner - noun word order</td>
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<tr>
<td>Adjective - noun word order</td>
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<td>Numeral - noun word order</td>
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<tr>
<td>SVO declarative word order</td>
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<tr>
<td><strong>CPE feature is the only syntactic strategy present in linguistic environment, there are alternative morphological strategies</strong></td>
<td>6</td>
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<tr>
<td>Prenominal plural word</td>
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<td>Preverbal past marking word</td>
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<td>Preverbal future marking word</td>
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<tr>
<td>Preverbal progressive marking word</td>
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<td>Preverbal perfective marking word</td>
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<td>Preverbal negation marking word</td>
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<td><strong>CPE feature is syntactic, alternative syntactic and morphological strategies present in linguistic environment</strong></td>
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<td>XY possessive</td>
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<tr>
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<tr>
<td>Possessor preposition phrase</td>
<td></td>
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<tr>
<td>Fronted word/ expression marking constituent interrogatives</td>
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<td><strong>CPE feature is the only morphological strategy present in linguistic environment, there are alternative syntactic strategies</strong></td>
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<td>Nominative - accusative case in personal pronouns</td>
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<tr>
<td><strong>Total number of features</strong></td>
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Appendix E: chart showing syntactic and morphological features of CPE

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<tr>
<th>CPE feature is…</th>
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<td>…syntactic and the only strategy in linguistic environment</td>
<td>19%</td>
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<tr>
<td>…one of several syntactic strategies in linguistic environment</td>
<td>29%</td>
</tr>
<tr>
<td>…only syntactic strategy in linguistic environment</td>
<td>29%</td>
</tr>
<tr>
<td>…syntactic, there are alternative syntactic and morphological strategies in LE</td>
<td>19%</td>
</tr>
<tr>
<td>…only morphological strategy in linguistic environment</td>
<td>5%</td>
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CPE feature is...

- ...syntactic and the only strategy in linguistic environment: 19%
- ...one of several syntactic strategies in linguistic environment: 29%
- ...only syntactic strategy in linguistic environment: 29%
- ...syntactic, there are alternative syntactic and morphological strategies in LE: 19%
- ...only morphological strategy in linguistic environment: 5%
### Appendix F: the processing level required to process the features of CPE and its substrate and superstrate

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<tr>
<th>Category</th>
<th>Features in linguistic environment</th>
<th>PT level</th>
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<th>Duala</th>
<th>Mokpwe</th>
<th>Ibibio</th>
<th>Igbo</th>
<th>Ijaw</th>
<th>English</th>
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### Appendix F: categorising the features of CPE in relation to processability levels

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<thead>
<tr>
<th>CATEGORIES</th>
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<td><strong>CPE feature processible at a lower processing level than alternative strategies in the substrate and superstrate</strong></td>
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<tr>
<td>Polar interrogatives marked with intonation only</td>
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<tr>
<td><strong>CPE feature processible at a higher processing level than alternative strategies in the substrate and superstrate</strong></td>
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<td>Preverbal word marking past time</td>
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<tr>
<td>Preverbal word marking future time</td>
<td></td>
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<tr>
<td>Preverbal word marking progressive aspect</td>
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<tr>
<td>Preverbal word marking perfective aspect</td>
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<tr>
<td>Preverbal negation marking word</td>
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<tr>
<td>SVCs present</td>
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<tr>
<td>Directional SVCs present</td>
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<tr>
<td>Different copulas used with locative and nominative predicates</td>
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<tr>
<td>Fronted interrogative word/expression in constituent interrogatives</td>
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<td><strong>No alternative strategies</strong></td>
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<tr>
<td>S - like complement clauses</td>
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<tr>
<td>Complementiser - complement clause word order</td>
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<td>Infinitive subordinate clauses</td>
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<td>Noun - relative clause word order</td>
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## Appendix F contd.

<table>
<thead>
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<th>TOTALS</th>
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<td>CPE feature processible at the same processing level as all alternative strategies in the substrate and superstrate</td>
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<td>Indefinite determiner - noun word order</td>
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<tr>
<td>Definite determiner - noun word order</td>
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<td>Demonstrative determiner - noun word order</td>
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<td>Definite determiner distinct from demonstrative</td>
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<tr>
<td>Indefinite determiner distinct from \textit{one}</td>
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<tr>
<td>\textit{One} used as indefinite determiner</td>
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<td>Adjective - noun word order</td>
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<tr>
<td>Numeral - noun word order</td>
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<tr>
<td>X possessive determiner Y possessive</td>
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<tr>
<td>Possessor preposition phrase</td>
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<td>Nominative - accusative case in personal pronouns</td>
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<td>No gender in personal pronouns</td>
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<td>SVO declarative word order</td>
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<td>Overt copula with nominative predicates</td>
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<tr>
<td>Overt copula with locative predicates</td>
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<td><strong>Total number of features</strong></td>
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Appendix F: chart showing CPE features in relation to processability levels

<table>
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<th>CPE feature has...</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>…a lower processing level than the alternative substrate and superstrate strategies</td>
<td>3.03%</td>
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<tr>
<td>…a higher processing level than the alternative substrate and superstrate strategies</td>
<td>30.30%</td>
</tr>
<tr>
<td>…no alternative strategies</td>
<td>12.12%</td>
</tr>
<tr>
<td>…the same processing level as all alternative substrate and superstrate strategies</td>
<td>54.55%</td>
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Appendix G: criteria for predicting the features of CPE.

(i) If there is a single (known) strategy for expressing a grammatical function in the substrate and superstrate languages, then this strategy will be a feature of CPE.

(ii) If there is a single syntactic strategy in the substrate and superstrate languages and all other strategies are morphological, then that syntactic strategy will be a feature of CPE. If not, then…

(iii) If there is a single strategy present in both the substrate and superstrate languages of CPE, then that strategy will be a feature of CPE. If not, then…

(iv) If there are competing syntactic strategies in the substrate and superstrate languages, then the superstrate strategy will be a feature of CPE. Or…

(v) If there are competing strategies in the substrate and superstrate languages that are not strictly syntactic (e.g., word choice, or the lack of a feature such as gender or a copula) then the substrate strategy will be a feature of CPE.

Key:

| ✓ | Predicts this feature is part of CPE |
|   | Incorrectly predicts that feature is not part of CPE |
| X | Already met criteria for a CPE feature |
| N/A | Not applicable to this feature |
## Appendix G: Predicting the features of CPE

<table>
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<th>CPE feature</th>
<th>Criterion 1</th>
<th>Criterion 2</th>
<th>Criterion 3</th>
<th>Criterion 4</th>
<th>Criterion 5</th>
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<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Polar interrogatives marked with intonation only</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td></td>
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<tr>
<td>Fronted word/expression marking constituent interrogatives</td>
<td>N/A</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S - like complement clauses</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complementer - complement clause word order</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infinitive subordinate clauses</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noun - relative clause word order</td>
<td>✓</td>
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</tbody>
</table>
# Appendix G: Predicting the Features of CPE

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature Description</th>
<th>Count</th>
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<tbody>
<tr>
<td><strong>CPE feature the only known feature in the linguistic environment</strong></td>
<td>S-like complement clauses</td>
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<tr>
<td></td>
<td>Complementiser - complement clause word order</td>
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<td></td>
<td>Infinitive subordinate clauses</td>
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<td></td>
<td>Noun - relative clause word order</td>
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<tr>
<td><strong>CPE feature predicted to become part of CPE based on criterion 1</strong></td>
<td>Fronted word/expression marking constituent interrogatives</td>
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<tr>
<td></td>
<td>XY possessive</td>
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</tr>
<tr>
<td></td>
<td>Prenominal plural word</td>
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</tr>
<tr>
<td></td>
<td>Preverbal past time word</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preverbal future time word</td>
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</tr>
<tr>
<td></td>
<td>Preverbal progressive aspect word</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preverbal perfective aspect word</td>
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<tr>
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<td>Preverbal negation word</td>
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<td><strong>CPE feature predicted to become part of CPE based on criterion 2</strong></td>
<td>Definite determiner - noun word order</td>
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<td>Demonstrative determiner - noun word order</td>
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<tr>
<td></td>
<td>Adjective - noun word order</td>
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<tr>
<td></td>
<td>Numeral - noun word order</td>
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<tr>
<td></td>
<td>Possessor preposition phrase</td>
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</tr>
<tr>
<td></td>
<td>Nominative - accusative case in personal pronouns</td>
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<tr>
<td></td>
<td>SVO declarative word order</td>
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</tr>
<tr>
<td></td>
<td>Overt copula with nominative predicates</td>
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</tr>
<tr>
<td></td>
<td>Overt copula with locative predicates</td>
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<td><strong>CPE feature predicted to become part of CPE based on criterion 3</strong></td>
<td>Indefinite determiner - noun word order</td>
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<tr>
<td></td>
<td>Definite determiner distinct from demonstrative</td>
<td></td>
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<tr>
<td></td>
<td>XY possessive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SVCs present</td>
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<tr>
<td></td>
<td>Directional SVCs present</td>
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</tr>
<tr>
<td></td>
<td>Different copulas used with locative and nominative predicates</td>
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<td><strong>CPE feature predicted to become part of CPE based on criterion 4</strong></td>
<td>Definite determiner identical to demonstrative</td>
<td>5</td>
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<tr>
<td></td>
<td>One used as indefinite determiner</td>
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<td></td>
<td>No gender in personal pronouns</td>
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<tr>
<td></td>
<td>No copula with adjectival predicates</td>
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<tr>
<td></td>
<td>Polar interrogatives marked with intonation Only strategy</td>
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<tr>
<td><strong>CPE feature not predicted to become part of CPE</strong></td>
<td>Indefinite determiner distinct from One</td>
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</tr>
<tr>
<td></td>
<td>X possessive determiner Y possessive</td>
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<tr>
<td></td>
<td>Nominative - accusative case in personal pronouns</td>
<td></td>
</tr>
<tr>
<td><strong>Total number of features</strong></td>
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<td>36</td>
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</table>
Appendix G: chart showing the quantity of CPE features predicted by each criterion

<table>
<thead>
<tr>
<th>CPE feature is...</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>...predicted by criterion 1</td>
<td>11.11%</td>
</tr>
<tr>
<td>...predicted by criterion 2</td>
<td>22.22%</td>
</tr>
<tr>
<td>...predicted by criterion 3</td>
<td>27.78%</td>
</tr>
<tr>
<td>...predicted by criterion 4</td>
<td>16.67%</td>
</tr>
<tr>
<td>...predicted by criterion 5</td>
<td>13.89%</td>
</tr>
<tr>
<td>...not predicted</td>
<td>8.33%</td>
</tr>
</tbody>
</table>